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THE
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MEDICAL GAZETTE

A Monthly Journal of
Homœopathic Medicine

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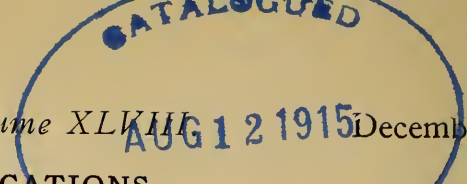
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“Die Milde Macht Ist Gross”

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ORIGINAL COMMUNICATIONS

BOSTON UNIVERSITY SCHOOL OF MEDICINE AND THE REGENTS OF THE STATE OF NEW YORK.

A Review and Statement by the Dean.

On December 12, 1912, the Board of Regents of the State of New York formally registered Boston University School of Medicine as an "approved school of medicine," and two days later sent an official notification of its action to the officers of the School. Friends of the School, together with its Faculty and students, rejoice especially in this action of the Regents, since it removes the stigma which defaced the fair reputation of the School for nearly two months, or, to be exact, since October 16, when for rather trivial reasons the Regents refused to re-register B. U. S. M. among the "approved" schools.

Under the circumstances, and especially in view of the fact that the School is now facing problems of vital importance to its continued existence and success, a frank and full statement of affairs is in order, and without going too much into detail such statement is here offered to those who may desire, or who have a right to know what, if any, defects were discovered in the School by the Regents.

THE STANDARDS OF THE REGENTS.

Something over a year ago the Regents announced that a re-classification of medical schools would be made in October, 1912, and the schools would be judged by new standards. The new standards, which were adopted June, 1911, are to the effect that medical schools "*must by October 1, 1912, have at least six full-time, salaried instructors, giving their entire time to medical work, a graded course of four full years of college work in medicine, and must require for admission not less than the usual four years of academic or high school preparation or its equivalent, in addition to the pre-academic or grammar school studies.*"

According to the old rules which remain unaltered, a medical school, to be recognized as in good standing, "must have apparatus and equipment and resources of \$50,000." . . . "It must require candidates for graduation (1) to be at least twenty-one years of age; (2) to be of good moral character; (3) to have studied medicine not less than four school years, including four satisfactory courses of at least seven months each, in four different calendar years, unless admitted to advanced standing on graduation from a registered college course which was the full equivalent of the first medical year. The medical school must require (1) that before beginning the course for the degree, all matriculants afford evidence of a general preliminary education equivalent to at least a four-year high school course after eight years of elementary preparation, and any condition for deficiency (which must not exceed one year of high school work) will be made up within one year; (2) that no allowance whatever be made in the period of study for work not done in an accredited medical school. Graduates in liberal arts and sciences, in dentistry, in veterinary medicine, in pharmacy, and from other professional and technical schools, under no circumstances receive M.D. degrees in less time."

It was properly ruled by the Regents that medical schools should make formal application for re-registration under the new requirements, and blanks were furnished for that purpose.

THE APPLICATION OF B. U. S. M. FOR REGISTRATION was duly made but not until within a few days of the meeting at which the Regents were to take action. The School having always been classified among those meeting the requirements, did not appreciate any special urgency in the case and naturally expected an opportunity to demonstrate its possessions of adequate facilities if perchance they were to be questioned. The School's application, however, was acted upon adversely, its registration revoked, and, unfortunately, the action of the Regents was published to the world more or less sensationally through the daily press, through which source the knowledge came to the School.

The "INCOMPLETENESS OF THE APPLICATION" for which the School's reputation suffered was subsequently found to consist of two or three technicalities, according to a letter from the Regents in reply to questions addressed to them by the Dean.

- I. "It (the application) was not authenticated by seal or affidavit."
- II. "It did not give the *number* of professors devoting their entire time to instruction."
- III. "It did not give the salaries of those enumerated as giving their entire time to instruction."

A. It so happens no "affidavit" was required; that is, there was no room on the application blank for an "affidavit." There was a corner left, however, for seals, and by an oversight the affixing of the University Seal was omitted,—an offense hardly serious

enough to warrant the punishment meted out to the School. The stationery which accompanied the application, the envelope containing it, the data and statistics given in the application, to say nothing of the signatures of the Dean and Registrar, might have established the genuineness of the document in the minds of even the most skeptical.

B. The application did not contain the *number* of professors devoting their entire time to instruction, but it gave a list of *ten salaried instructors* who should qualify under a reasonable interpretation of the requirement.

C. The application very frankly and intentionally omitted the "salaries" of the instructors who receive remuneration.

- I. Because to declare the salaries would not be unlike the "betrayal of professional secrets."
- II. Because the signers of the application could not see the relationship between a salary received by and the efficiency of an instructor.
- III. And because the school could not acknowledge the moral obligation of telling the world how slender its resources are and how inadequately its staff of able, conscientious, loyal and capable instructors are compensated for the time and labor which they have put into their work.

And on these technicalities and omissions the School was condemned by the Regents.

THE STANDARDS OF BOSTON UNIVERSITY briefly summarized are:

A four-years' high school course or its equivalent as minimum entrance requirement. Applicants for matriculation who have acquired a primary degree in Arts or Science must be certified to having had Latin, Chemistry and Physics. Since graduates in Arts frequently have had no Chemistry or Physics, and graduates in Science have had no Latin, it has become the fixed policy of the School to require in addition to the primary degree in Arts or Science certification that such graduates have had courses in Latin, Chemistry and Physics. Biology is to be added to this list in 1914. Otherwise the applicant must submit, with all others whose certificates are not acceptable, to examination in these subjects.

A full four-years' graded course of eight months each has been its standard for twenty-two years.

A minimum average percentage of 70 for graduation.

Attendance upon all the work of the School in lecture-room, laboratory and clinic.

The completion of one year's work before promotion to the next.

Under no circumstances to allow entrance to senior class with conditions.

To allow no advanced standing whatever to graduates in Arts

and Science or to graduates of schools and colleges below the professional.

To accept students from other medical schools only on demonstration of competency in the curriculum of Boston University School of Medicine up to the year to which entrance is asked.

Candidates for graduation must be at least twenty-one years of age, of good moral character, and must have complied with all the requirements of the school.

Apropos of "standards," the only criticism of our School ever made by any inspector was to the effect that the entrance requirements were not high enough. No one, except the unfortunates who failed, ever criticised the graduation requirements, and the fact that freshman classes lose on an average 50 per cent. of their number by the time they reach the senior grade and graduation testifies to the democratic principles of the School as well as to its adherence to high standards of scholarship.

THE RESOURCES AND EQUIPMENT OF THE SCHOOL far exceed the requirements of the Regents, for the School land and buildings are valued at about \$200,000; it has endowments and other funds amounting to \$70,000; its general laboratory and museum equipment will cost \$10,000 to \$20,000 to replace,—making in all a valuation approximating \$300,000.

The School makes use of eight amphitheatres and lecture halls having capacities of from 50 to 200.

It uses seven laboratories having a student capacity of from ten to fifty.

It has a library of 5300 volumes, besides several thousand monographs and pamphlets, the phenomenal usefulness of which is abundantly testified to by the fact that with an enrollment of about one hundred students loans of books for home use to the number of over 2500 are made annually.

It is affiliated with a hospital having a capacity of four hundred beds, and its clinical facilities exceed 20,000 patients annually.

It has an active faculty of over seventy members representing all branches of medicine, surgery and the specialties.

A BRIEF HISTORICAL SURVEY shows that Boston University School of Medicine was founded in 1873.

From its inception its doors have been open to students of both sexes on uniform terms and conditions.

It was the first medical school in this country to demand entrance examinations of all applicants for admission who were not college graduates.

It was also the first to offer a graded course of three years (1873).

It was one of the first to make the three-years' course compulsory (1877).

It was the first medical school in this country to offer a four-years' course (1878).

It was the first to make the four-years' course compulsory (1890).

In 1878 it offered courses leading to the degree of Bachelor of Medicine and Bachelor of Surgery, and in the same year it lengthened its annual sessions to eight months each. These degrees (M.B. and Ch.B.) are granted to students obtaining a minimum average percentage of 80 in the studies of the first three years, with an average percentage of 85 in certain major courses. Only ninety-one (91) of these degrees have been granted in thirty-four years, an average of less than three a year. This fact may be considered illustrative of the standards maintained by the School.

It was the first medical school in this country to institute an optional five-years' graded course (1907).

In 1908 it offered in conjunction with the College of Liberal Arts of Boston University a six-years' Combination Course, whereby the two degrees, S.B. and M.D., may be acquired.

In 1912 its graduates became eligible, under specified conditions, to the degree Ph.D. from the Graduate School of Boston University.

It is the only medical school which possesses three medals, won (in 1904, 1905 and 1908) on the merits of its anatomical, physiological and pathological exhibits in open competition at national and international expositions and congresses.

Within its brief history its buildings have been more than doubled in size, its course more than doubled in length, its faculty and the subjects included in its curriculum more than doubled in number, and its clinical facilities have been increased more than fourfold.

AFFILIATIONS OF THE SCHOOL. Boston University School of Medicine from its inception has been closely affiliated with the Homœopathic Medical Dispensary, and with the Massachusetts Homœopathic Hospital, which moved into its new building adjoining the School in 1875; was greatly enlarged in 1884 and again in 1891. In 1897 it opened a Maternity Department which has furnished exceptional opportunities for obstetrical experience to the students of the School. In 1908 a Children's Department was added to the hospital facilities, and in 1908 these facilities were further increased by the opening of the John C. Haynes Memorial Hospital for Contagious Diseases, with accommodations for one hundred and twenty or more patients. In 1912 another addition was made by the dedication of the newly-erected Robert Dawson Evans Department of Clinical Research and Preventive Medicine.

In 1875 the hospital and its equipment represented an outlay of \$76,716, and its investments were valued at \$23,120,—a total of about \$100,000.

In January, 1912, the hospital buildings and equipment had reached a valuation of about \$1,200,000, and its funds had reached about \$1,700,000, making a grand total of about \$2,900,000.

From October 1, 1874, to October 1, 1875, the hospital treated a total of 78 in-patients. During the year 1911 there were treated a total of 5213 in-patients, an increase of nearly 670 per cent.

Special emphasis should be laid on the fact that it was through

the influence of the Faculty of the School and the generosity and enthusiasm of the homœopathic laity that the phenomenal growth and success of the hospital, here recorded, was made possible.

To the clinical opportunities of the School there was added in 1886 the Westborough Insane Hospital, where in the course of twenty-five years nearly ten thousand patients were treated. In 1912 the Westborough Insane Hospital had accommodations for about eleven hundred patients, thereby offering special clinics of exceptional value and size.

What may be called the PUBLIC ACTIVITIES of the School may be demonstrated by enumeration of the functions, scientific and educational, it has participated in during the past nine years. For instance, it has made exhibits, chiefly of the work done in its pathological and physiological departments, at the

Louisiana Purchase Exposition at St. Louis, 1904.

Lewis and Clark Exposition at Portland, Oregon, 1905.

International Congress of Tuberculosis at Washington, 1908.

International Congress of Hygiene and Demography at Washington, 1912.

Massachusetts Board of Health, 1904.

Harvard Medical School Dedication, 1906.

New York Board of Health, 1905.

Philadelphia Board of Health, 1905.

American Medical Association at Saratoga, 1903.

American Medical Association at Atlantic City, 1905.

British Medical Association at Toronto, 1906.

American Institute of Homœopathy at Boston, 1903.

American Institute of Homœopathy at Niagara Falls, 1904.

American Institute of Homœopathy at Chicago, 1905.

International Homœopathic Congress at Atlantic City, 1906.

International Homœopathic Congress at London, England, 1911.

In addition, the School has given in June for the last four consecutive years a "Clinical Week," consisting of thirty-five hours of lectures, clinics and demonstrations of clinical methods, to which all physicians of New England have been invited and which have been attended by gratifying numbers.

The School also offered in 1910, and still offers, Post Graduate Courses in fourteen or more subjects.

And in coöperation with noted hygienists, sociologists, settlement workers, etc., members of the School Faculty have participated in the public education lectures given under the auspices of the Evans Memorial.

THE PUBLIC POSITIONS AND OFFICES of responsibility and honor held by graduates of Boston University School of Medicine might here be enumerated.

The Faculty and Administrative Officers are to a large extent composed of its graduates.

Graduates of the School form the majority of the staff of the Massachusetts Homœopathic Hospital, and the alumni and faculty

are represented on the Board of Trustees of said Hospital. The Superintendent and Assistant Superintendent of the Hospital, as well as the Pathologist and Associate Pathologist, are all graduates of the School.

The Superintendent and the Pathologist of Westborough State Hospital are graduates of the School, and on the consulting staff of the institution are graduates and members of the Faculty.

The Superintendent of Fergus Falls (Minn.) State Insane Hospital is a graduate of the School, as are also some of the staff. This hospital has facilities for treating 1200 or more patients.

The Gowanda (N. Y.) State Hospital for the Insane numbers on its staff a graduate of the School.

Other graduates are medical director and medical examiner of a large life insurance company; are county and city medical examiners, and are on local boards of health.

Still other graduates are chairman and member of the Massachusetts Board of Registration in Medicine and are on the Examining Boards of Rhode Island and New Hampshire.

"By their fruits ye shall know them" is as applicable to a medical school as it is to an individual. The financial apple is not the only fruit indicative of a school's life, activities and worth, and this "Statement and Review" has not been drawn up in any boastful spirit, but simply and modestly in the effort to demonstrate that if the School's treasury is not full to the bursting point it has produced fruits of which it need not be ashamed. The records made by the graduates of a school before the Examining and Licensing Boards of the various States, and their success in practice, should be the fruits by which a school should be judged and known. Our graduates have not only shown a creditable degree of proficiency, but have frequently outranked the graduates of other schools in the tests all have been impartially subjected to, and the records thus made show the fruitfulness of the School's efforts.

Were Loeuwenhock's brilliant and life-saving discoveries of micro-organisms made with a modern three hundred dollar microscope or with an insignificant instrument that today could be duplicated for fifteen or twenty dollars? It was the brain behind the imperfect lenses that saw and recognized the seething world of germ life and not a costly and luxurious instrument which did the work.

Did John Hunter have a high school and college training as preliminaries to a four-year medical course to fit him for a life work that has ranked his name among the immortals of medicine? Not if history teaches the truth.

Were J. Marion Sims and Ephraim McDowell taught in superbly equipped laboratories and schools by a corps of "full-time" adequately paid instructors? Did they acquire their daring skill, their superb courage and ingenuity in their medical schools? Not if the stories of their lives have been faithfully told. And yet no one would care to deny the usefulness of their labors or deny the fact

that through their inventive genius many thousands of lives have been saved and inestimable suffering prevented.

Can one attribute Pasteur's insight into the mysteries of nature and the marvelous discoveries made by him to his training in any medical school possessing the "requisites" of the Regents of New York?

The names of many eminent physicians and scientists, physicians, chemists, etc., might be enumerated to emphasize the fact that it is not always or perhaps often the school or the adequately paid instructor who moulds the character and develops the skill, ingenuity and power of the individual. Not that we would undervalue high-grade instruction or decry high standards of education in any branch of science, but we would make a plea for allowing the continuance of the principles underlying this liberty-loving country of ours and giving a fair show to any ambitious and earnest man to demonstrate what kind of stuff he is made of. It is the possession of knowledge and insight and natural endowments and personal acquirements that should be the criterion of a man's fitness, and not the particular school he has studied in. The possession of means (money) is not always an advantage to a man or to an institution. Useful and desirable as affluence may be, it is not infrequently a disadvantage in the formation of character and the development of ability.

When Robert Louis Stevenson wrote his noble tribute to the physician,—“the flower of our civilization,”—he was not thinking in the least of the financial question in any of its aspects, but of something far more worthy.

A CONDITION AND NOT A THEORY, a fact and not sentiment, is what confronts the School at the present time. The future can be assured only by funds. “Financial adequacy” is to be the gauge by which medical schools, among other things, are to be measured. “The old order changeth giving place to the new,” and the new order demands that teachers of the fundamental medical sciences (Anatomy, Histology, Embryology, Chemistry, Physiology, Bacteriology, Pathology) must be research workers, investigators, students themselves, as well as teachers, and must therefore be able to devote their time unreservedly to acquiring and imparting knowledge in their special department of science. In order to do this they must be salaried, and therefore the school itself must have the necessary means. B. U. S. M., through a generous donation by the New England Hahnemann Association and by special vote of its Faculty, has been able to rearrange its salary list so as to meet the requirements of the Regents along this one line in which *only* it was deficient. The retention of its position among the “approved” and its ability to continue its useful and successful career depend upon the generosity of its friends in rallying to its support. Plans for a fund-raising campaign are being thoughtfully matured, and it is to be hoped that the School's confidence in the loyalty and interest and responsiveness of its graduates and friends, professional and lay, will be rewarded by the addition of sorely-needed funds to its treasury.

DIAGNOSTIC PROBLEMS.*

BY GEORGE F. LAIDLAW, M.D., New York.

I present this group of case histories as diagnostic problems because each one of them was a problem to someone. They are records of cases seen in consultation. Here are a group of liver cases which were diagnosed as atrophic cirrhosis of the liver on what I believe to be entirely insufficient evidence, that is, the percussion outline seemed to show a diminution in the size of the liver. It is true that it would be a splendid thing for the patient if we were able to recognize atrophic cirrhosis of the liver at an early stage, but the fact is that we can never make such a diagnosis until the appearance of ascites. In none of these cases was there any ascites, the diagnosis of cirrhosis of the liver was not confirmed, and the clinical history showed later that they were cases of simple hyperæmia.

Next come several cases that were thought to be locomotor ataxia, but which turned out to be syphilitic neuritis. It is not safe to diagnose locomotor ataxia because the patient has at one time had syphilis and now has pain in the legs. One of these patients happened to have a fixed pupil. Remember that, as in one of these cases, a severe neuritis may obliterate the knee reflex; but there was no Romberg, and the pupil reaction was normal. Two of these patients recovered on arsenic, and one of them on injections of the salicylate of mercury. Arsenic is one of the best drugs for the cure of neuritis of all types. In the syphilitic cases the cure is often hastened by the use of mercury.

One odd case in this group of bad legs is that of a little girl, twelve years of age. Two weeks after what appeared to be a mild tonsillitis, she complained of difficulty in going upstairs. There was a weakness of the legs, an inability to manage them. The attending physician thought at once of a possible diphtheric paralysis, though he was positive that the angina had been light and simple, such as the child had often suffered from previously. On examining the child, I found the reflexes normal, the muscles well nourished and no evidence of organic disease either of the viscera or of the nervous system. Remembering the cases of false paralysis in boys with phimosis, I examined the clitoris and found the hood adherent. I regarded the case as a neurosis due to one of two things, either a reflex from the adherent clitoris or possibly an odd forerunner of the establishment of menstruation. I recommended freeing the hood, but the doctor was unable to do this owing to the opposition of the family. Further events showed the second theory to be correct. In about two weeks the first menstrual period occurred, and the trouble with the legs disappeared.

* Read before the Homœopathic Society of the State of New York, October, 1912.

Next come three cases that presented painful swelling of lymphatic glands in one inguinal region, with progressive weakness and anæmia. In one of them the spleen was enlarged beyond the free border of the ribs. These were atypical cases of Hodgkins' disease. When a patient comes in with the glands on one or both sides of the neck swollen and with progressive weakness and anæmia, one thinks at once of Hodgkins, but in these inguinal cases we are apt to be puzzled for a time. Such cases must be carefully distinguished from this next group of lymphatic leukæmias which also presented swelling of the lymphatic glands in the groins, axilla and neck and great tendency to bleeding. No one can distinguish Hodgkins from lymphatic leukæmia without a microscopic examination of the blood. A drop of blood under the microscope reveals lymphatic leukæmia at once by the abundance of lymphocytes whereas, in Hodgkins' disease, the leucocytes are unaltered and the only blood change is a moderate grade of anæmia.

Here are a group of pernicious anæmias which were treated as gastritis because of the prominence of nausea and vomiting in the early stages. I treated one of them for tuberculosis for two months on account of progressive weakness and emaciation, with moderate percussion dullness of the right apex, hæmoptysis, and the fact that nausea and vomiting are common early symptoms of tubercular phthisis. After two months, I awoke to the fact that it was not a simple case of tuberculosis, and an examination of the blood showed the picture of pernicious anæmia. There are five of these cases of pernicious anæmia. They were all under the best treatment that they could find of several schools of medicine, including good homœopathic prescribers. All but two of them are dead, and I have not much confidence that these two will escape another relapse. Pernicious anæmia is peculiar in showing the most remarkable recoveries, but these are practically always followed by relapses from which there is no recovery. Of the different treatments that I have tried, the hypodermic injection of the citrate of iron and arsenic has done more than anything else to bring about improvement.

While on this subject of anæmia, here are three cases of Banti's disease characterized by enlargement of the spleen, progressive anæmia, cirrhosis of the liver and ascites. Two of these cases were old syphilitics. Banti's disease is distinguished from splenic leukæmia by the absence of leucocytosis. A well-advanced case of Banti's disease is hopeless, but there is a strong probability that an early diagnosis leading to excision of the spleen would cure. Early diagnosis of such a case would be extremely difficult. The early symptoms are enlargement of the spleen, with progressive anæmia. Now, we would hardly be justified in excising every spleen where the patient was anæmic, and yet the more experience I have the more firmly I am convinced that every case of markedly enlarged spleen with progressive anæmia where the cause is not plainly evident

requires consultation with a surgeon as to the advisability of excising such a spleen on the chance of its being an early case of Banti's disease.

The early stage of tubercular phthisis is mistaken for everything under the sun. Here is a large group of cases in which everything except tuberculosis was diagnosed. Many of these cases have digestive disorders that mislead the examiner. In the early diagnosis of tubercular phthisis, I value first a temperature range of at least two degrees variation daily with rise of temperature after physical exertion, together with progressive loss of weight; and, next, a carefully-conducted tuberculin reaction. It is in this early and doubtful stage of tuberculosis that the diagnostic use of tuberculin is so valuable. I use old tuberculin freely for diagnosis, but give only one dose of two to five milligrams. Used in a single moderate dose in early cases, tuberculin is perfectly safe. If, on the other hand, you follow the advice given in nearly all text-books and give tuberculin every two or three days, you will do great harm.

GENERAL CONSIDERATION OF OPERATIONS FOR GASTRIC ULCER AND PYLORIC ULCER.*

By DE WITT G. WILCOX, M.D., Boston, Mass.

Having had for our edification the pathology of stomach lesions, the differential significance of pain arising from diseases of the stomach and adjacent organs, the effects of diet as a curative or palliative agent, and the scope of the indicated remedy in ameliorating or overcoming the disease, we are now ready to give consideration to the *operative* treatment of peptic ulcer. The technic of operating or the selection of any particular operation are not made inclusive in my paper, but, rather, the important question of when, and when not, to operate, the class or types of cases, which are considered operable, the shortcomings of the operative policy, if any, the attitude of the profession concerning the surgical intervention in peptic ulcer, the reasonableness of exploratory incisions in masked cases, and the complications arising from adjacent lesions which may embarrass the operator and jeopardize the life of the patient.

In the majority of instances the timeliness of any act calls for more laudation than the manner of doing it. A child who smothers an incipient blaze with a stamp of the foot may deserve more credit than the hero of the department who scales the extension ladder and pours a stream of water on the roaring flames. And were we to reward each according to the net results obtained, the child would be the heavier recipient.

The physician, be he practitioner or specialist, who earliest recognizes the footprints of peptic ulcer and traces it unerring

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to its lair and slays it while it sleeps is tenfold more the benefactor and hero than he who dallies with it until, becoming emboldened with hunger, it meets a spectacular death only after a battle of stubborn resistance.

By such logic the family physician who cures a peptic ulcer by a carefully selected diet and the indicated remedy is quite as much the hero as is he who, by the delicate manipulation of the knife, makes perfect the damaged structure. In gastric ulcer it is timeliness with accuracy which deserves laudation rather than dexterity with tardiness.

In defining the type of cases which should, beyond question of doubt, go to the operating table, we should place the perforating ulcer at the head of the list. No medical man, however conservative, or however much an internist, would for a moment dispute such a classification. And any medical attendant who would, through ignorance or indifference, lose an unnecessary moment in getting a patient so menaced into a hospital or upon the operating table would be guilty of a grave misdemeanor. The picture produced by this grave catastrophe which is like a death stab is so pronounced in the large majority of cases that it can be recognized by the most indifferent observer. The sudden, severe, agonizing pain in the stomach region, a pain that transcends all other kinds of pain in its intensity and from which the patient may die from the shock, the ensuing faintness, the cold sweat, the rapid, weak pulse, the vomiting, the distressing expression, eyes which are wide and watchful, the short, catchy respirations, and later the collapse, makes a picture which does not require many repetitions to become indelible.

But were the physician at all in doubt as to the region affected, a superficial examination of the body would show a board-like wall over the upper abdomen with marked retraction. Notwithstanding this kindly protection of nature to harden the recti muscles like bands of iron, the patient wards off any attempt at an examination with jerky cries of distress and protecting arms thrown over the sensitive stomach. The diaphragm, also a muscle, is doing its best to hold rigid this agonized stomach, and in consequence the breath and words come in short jerks with the least possible respiration.

If it is a duodenal ulcer which has perforated, the seat of greatest tenderness will be just to the right of the median line and immediately beneath the ribs; if it be a gastric ulcer the seat of greatest tenderness will be the median line just below the ensiform. The fact that the pain is usually so definitely located precludes the possible mistake of its being a ruptured appendix, or fallopian tube, even though no antecedent history was obtainable.

Later, during a period of some four or six hours (if the patient survives), will appear the symptoms of general peritoni-

tis. While the rigidity of the abdominal muscles does not lessen, yet the retraction gives place to a gradual distention, and later a marked resonance. The pulse increases in frequency, the temperature rises, the distress increases, vomiting persists, delirium approaches, and a death of peritonitis closes the scene.

To one who has witnessed the moving picture of such a death the uselessness of all palliative treatment must have become so apparent as to stir him to the most active measures should he again witness the first stage of the tragedy. Men of the widest surgical and pathological experience agree that it is rare for a patient to recover after a duodenal or gastric ulcer perforation, unless surgically treated.

In many cases the perforation comes without warning or with so slight a warning that both patient and physician are totally unprepared for an occurrence fraught with so portending a fatality when the antecedent symptoms have been comparatively trivial. I well remember such a case, which I observed some twelve years ago. An apparently healthy man, of 52 years, had prided himself upon his good health and enduring strength. He occasionally complained of indigestion, but it gave such slight concern that he rarely consulted a physician. He had never vomited, had had no gastric pain. One morning soon after leaving his home, and while on his way to business, he was seized with an agonizing pain in his stomach. He became faint and held on to the fence to keep from falling. His breath came in short sobs and he groaned in agony. Friends came to his relief, a carriage was procured and he was hastened to the one hospital which the small town afforded. On arrival there he fainted and immediate death seemed imminent. His skin was cold and covered with a clammy sweat. His eyes were fixed and staring, pulse thready and rapid, respiration shallow and jerky. His own physician was as much in the dark as was the hospital staff as to the cause of his collapse. He was stimulated by rectal and hypodermic injections, artificial body heat, and hot drinks. In an hour or two he rallied, complained constantly of the agonizing pain in his stomach and was exquisitely sensitive in the upper abdomen. He was in a small town with no experienced surgeon at hand. I saw him thirty-six hours after he was stricken. He then had a well-developed general peritonitis, abdominal muscles like boards, marked distention, high temperature, and rapid, weak pulse. He was conscious and gave me a clear recital of his attack and the continued excruciating pain in the stomach a little to the right of the median line. The picture of perforation was complete in every detail. With a hope that a rapid closure of the stomach opening, the cleansing of the abdominal cavity, and the establishment of drainage might save the life which hung on so slight a thread, I operated, making the incision in the outer third of the right rectus.

Nature had rallied her forces as best she could, and I found she was attempting to stop the leak by forcing the omentum and transverse colon against the hole which was on the anterior wall of the pylorus. Unfortunately her attempts were unavailing, as the liquids given by mouth were seeping through the partially sealed opening. Flocculent pus bathed the surrounding parts and cemented loops of intestines one to another. The peritonitis was very general and extensively suppurative. The ulcer was excised, the edges closed, the abdomen cleansed, the drainage inserted, and the patient returned to his bed. The peritonitis went on unchecked, and he died two days later.

In many respects this is a typical case of perforating ulcer where surgical relief has been delayed. If a life so jeopardized can be saved at all there must be the least possible delay in securing surgical relief. If the patient survives the immediate shock, which rarely goes beyond six hours, peritonitis sets in and the hope of recovery is in inverse ratio to the elapsing minutes after the six-hour period.

Were the question when to operate as clearly answered in the non-perforating cases as in the perforating ones the problem confronting physicians and surgeons would be a simple one; but it is not, and this is the *bête noir* which obtrudes itself in every obstinate case of gastric distress. I am of the belief that the homeopathic physician takes a more liberal view of the possibilities of curing peptic ulcer by internal medication and diet than does his brother of the old school, and with reasonable justice, for certainly we have remedies whose *similimum* is matched perfectly in that disease. Moreover, we have the indisputable proof that such cures are effected. In making that statement I am well aware that men in high surgical authority claim that no remedy exists which can cure gastric ulcer and that every such case becomes a surgical subject.

Some years ago a surgeon who has perhaps operated for relief of gastric ulcer more times than any man in this country, said, "You might as well try to cure a varicose ulcer by pouring talcum powder down the patient's trouser leg as try to cure gastric ulcer by internal medicine." But were I the victim of a gastric ulcer I would try the talcum powder plus the indicated remedy and the proper diet before ornamenting the operating table.

But there is a reasonably defined border line upon which the internist and the surgeon can meet and exchange views, and it is this,—persistent gastric hemorrhage. It does not follow that vomiting blood is in itself a sign of gastric ulcer. The blood may come from any spot, beginning with the nose or teeth and extending to the stomach. Hence it is well to exclude all such possibilities before giving the verdict of ulcer.

Nor are all gastric ulcers inclined to bleed to the extent of causing hematemesis. It is estimated that about 50 per cent. of

peptic ulcers give evidence of hemorrhage. When, however, the bleeding is so persistent as to cause anaemia and failing strength and no advance has been made by careful diet and medical treatment, then the case becomes a surgical one. Again, there is the type which shows periodic attacks of bleeding, each outburst leaving the patient a little lower in the scale of resistance. Such also should be catalogued "surgical."

There is yet another class which is a source of constant anxiety to the medical attendant. This is the border-line case which, while it answers up to the requirements of gastric ulcer, does not become better or worse during a period of months or years, but keeps the patient a semi-invalid; or, again, the relapsing type which will have a long period of freedom from discomfort then a corresponding spell of distressing gastric disturbance. Were it not for the fact that cancer of the stomach follows so frequently upon the attack of gastric or pyloric ulcer, one might be content to allow this type to remain partially well rather than subject them to an operative ordeal. But with that foreboding menace even dimly in view is it not much wiser to risk the slight dangers of an operation and forestall the possibility of a cancer death?

There now remains but one class, the one of uncertain diagnosis. We have examined the stools for occult blood, we have subjected the stomach contents to a most critical analysis, we have employed the test meal, we have weighed every symptom carefully, yet we have not been able to satisfy ourselves just what ailment our patient has. These are the masked cases wherein the clinical distinction between chronic gastritis, peptic ulcer, cholecystitis, pancreatitis, and carcinoma is almost impossible to establish. It is in this type that the exploratory incision is a very present help in time of trouble. Far better is it for the welfare of the patient and the mental quietude of the physician to settle beyond doubt the exact nature of the disease and then remove it if possible rather than permit him to suffer indefinitely, floating from one medical attendant to another and in the end be told his disease is past the remedial stage.

In summarizing I should say that there is little debatable ground between the internist and the surgeon in the treatment of peptic ulcer. Both agree that many such cases get well spontaneously, many are cured by diet plus hygiene plus remedies, many that are not cured lapse into cancer. That all persistent cases of hematemesis are surgical, that obstinate, uncertain cases should be explored, and emphatically that all perforating cases should be operated at the earliest possible moment. While the surgeon willingly gives the internist credit for his full number of cures, the latter, in turn, does not question the well-established statistical record of surgical cures which is yearly becoming more gratifying. This phase of the subject, however, will be considered by the next essayist on the end results.

THE REMOTE RESULTS IN OPERATIONS UPON THE STOMACH AND DUODENUM.*

BY CLARENCE CRANE, M.D., Boston, Mass.

We cannot well discuss the results of operations on the stomach and duodenum without considering the conditions which may call for operation. For the early diagnosis of these conditions a distinct responsibility rests upon the general practitioner. Large numbers of surgeons are now performing these operations. Their reports are providing dependable statistics as to the value of operative procedure.

Let us make a classification of four types of cases which may or may not call for operation: (1) Cases of exhaustion from starvation, the vitality being very low, and also cases of collapse due to perforation. (2) Cancer cases that are too far advanced for operation. (3) Gastric ptoses and neuroses. (4) Cases of ulcer, early cancer, obstructions and adhesions.

In the first group of cases, if the starvation is from obstruction and not from cancer, Mayo advises preliminary jejunostomy and feeds the patient through the opening, gastro-jejunostomy to be performed later when the condition of the patient will permit. In cases of collapse from perforation the only hope is in prompt surgical intervention. Here astonishing results are sometimes obtained.

The second group of cases includes patients who have, for a long time, shown gastric symptoms. As a last resort they drift into the hands of the surgeon. Exploratory incision shows extensive cancerous involvement which operation cannot benefit. Probably no one doubts the tendency of gastric ulcer to degenerate into cancer. These inoperable cases were, in the beginning, simple ulcers and would likely have been amenable to surgical treatment. It is here that a great responsibility rests upon the physician who attempts to treat with medical and dietetic measures the case of stomach trouble which does not respond, after a reasonable length of time, to this course of treatment. However, a gastro-jejunostomy should not be performed upon every case of indigestion. The border line between medicine and surgery is to be found somewhere in the course of the case, and here is where the patient needs our most careful thought.

In the third group of cases, the ptoses and neuroses, it is the unwise application of surgical measures that has cast much discredit upon stomach and duodenal surgery. Here it is important that we keep away from operation.

It is in the fourth group of cases, the ulcers, the early cases of cancer, obstructions and adhesions that the properly applied operation affords a brilliant example of success.

A careful study of the end results in one hundred and sixty-five patients operated upon, in an English hospital, for gastric and duo-

*Read before the Massachusetts Homœopathic Medical Society, Oct. 9, 1912.

denal conditions is made by Dr. Short. It was possible to obtain the subsequent history in one hundred and fourteen of these cases. This list includes simple and perforated gastric and duodenal ulcers and all other gastr-duodenal conditions calling for operation. Forty of these cases were reported as cured; twenty-six as much improved; twelve as still presenting severe symptoms; thirty-six as dying immediately or remotely following operation. Of these thirty-six deaths, perforation was present in twenty-six cases. Out of seventy-eight living patients sixty-six were either cured or much improved.

Dr. Petren reports one hundred and thirty-five cases of gastric or duodenal ulcer with operation and recovery in forty per cent., or fifty-four cases. The early operation, within twelve hours after operation, gave best results, especially when the perforation was sutured.

Dr. W. J. Mayo reports one thousand cases of ulcer of the stomach and duodenum operated upon at Saint Mary's Hospital. His conclusions are:

1. The treatment of all duodenal and all obstructing ulcers of the pyloric end of the stomach by gastro-jejunosomy and excision or infolding of the ulcer is satisfactory, and gives ninety-five per cent. of cures or great improvement.

2. Eighty-five per cent. of ulcers of the body of the stomach will either be cured or greatly relieved by excision or devitalizing suture compression with gastro-jejunosomy. The remaining fifteen per cent. will be more or less benefited. The mortality under present methods of operating is less than two per cent.

From some of the gastric and duodenal operations performed by the surgeons at the Massachusetts Homœopathic Hospital the results are as follows: Four cases of cancer operated upon received great relief. One lived in comparative good health for fifteen months. Another at the present time, a year and a half after the operation, reports that he is able to eat anything and, as far as he knows, is cured. Two cases of perforating ulcer of the stomach are cured and in good health.

Case 1. Mr. D. R. Symptoms before operation, indigestion, steady, grinding pain in right hypochondrium relieved after vomiting of frothy material. Had to give up his work. Operation, March 29, 1911. The operating table diagnosis was cancer of the duodenum. Gastro-jejunosomy was performed. Result at the present time, patient is in good health.

Case 2. Mr. A. C., age 43. For twenty years patient had stomach trouble, severe vomiting, lost 58 pounds, had to give up his work. Examination revealed indurated pyloric ulcer and pyloric obstruction. Posterior gastro-enterostomy was performed October 10, 1907. Patient has not vomited since and is cured.

Case 3. Miss M. B. R., age 57. Patient had stomach trouble twelve years, pain, soreness, constipation, dark stools, vomiting of a coffee ground material. Gastro-enterostomy was performed March

1, 1907. About two weeks ago, five and a half years after the operation, the patient writes: "Words cannot express the benefit I derived. In six months I had improved so that my friends hardly knew me. I am positively cured. Nothing I eat hurts me."

Case 4. Miss R., in 1905, after showing typical symptoms of ulcer of the stomach was operated upon. A large indurated ulcer was found on the lesser curvature of the stomach. This was excised, a large portion of the stomach being removed. The patient recovered. Barring one period of gastric disturbance, she has been enjoying good health for seven years. She eats anything she wants and does her usual work.

Case 5. A similar case, Mrs. C., age 46, was operated upon in March, 1905. Patient had been suffering from stomach symptoms for twenty years and was finally dying of starvation. An ulcer of the lesser curvature of the stomach was excised and pyloroplasty was performed. The patient's health is now perfect.

Case 6. Miss P., age 30. Patient showed the usual symptoms of vomiting, gastric distress, emaciation and weakness. She had received extensive medical treatment without avail. Upon operating in February, 1911, pyloric stenosis, due to pyloric thickening, was found. Posterior gastro-jejunostomy was performed. Since recovery from the operation, the patient is eating well and performing her usual duties.

Case 7. Mr. A. L. W., age 63, entered the hospital, February 28, 1911, showing symptoms of acute peritonitis. An operation was performed at once. The abdomen was found filled with a mucus-like fluid in which was suspended small particles, probably of food. The anterior surface of the duodenum, just beyond the pylorus, was found to be perforated by an ulcer. The perforation was closed and posterior gastro-jejunostomy was performed. The abdomen was thoroughly irrigated with gallons of sterile water, followed by normal saline. A counter drainage opening was made in the right inguinal region. The large abdominal wound was then closed. The wound healed by first intention. The patient was discharged from the hospital on March 24, 1911, and is now well.

Case 8. Mr. E. F. F. entered the hospital May 3, 1912. An immediate operation was performed. The abdominal cavity was filled with a flocculent fluid. A perforating ulcer of the pyloric end of the stomach was found. The bowels were distended. The perforation was closed and a posterior gastro-jejunostomy performed. The abdomen was thoroughly washed and drainage of the abdomen provided at the lower angle of the wound. The bowels could not be replaced until the gas had been evacuated. This was done by making an opening and using a long intestinal tube. This patient also recovered, and was discharged from the hospital May 21, or in eighteen days.

Thanks are due to the surgeons of the Massachusetts Homœopathic Hospital for their kind coöperation in reporting these cases. Many additional cases, showing like results, could be reported from

the hospital records. Of similar cases of gastric or duodenal ulcer, where it was possible to secure a report of the remote result of the operation, either directly from the patient or the physician or surgeon, fourteen are entirely cured and two are much improved.

The effort to relieve the cases of ptoses and neuroses by gastro-jejunosotomy results unsatisfactorily. Operation is wholly unindicated. The patient is exposed to risk and no benefit is to be gained thereby.

In cases of extreme exhaustion and cases of collapse from perforation, the results are not promising. However, the citation of the above two cases of perforating ulcer, with general peritonitis, operated upon in the Massachusetts Homœopathic Hospital, and cured, may serve to encourage future effort in these seemingly hopeless emergencies.

A large number of advanced cases enter the hospital. Few of these cases can receive relief from operation. At best, the only thing that can be done is an exploratory laparotomy. These are the cases that should have come to the hospital long before. The time for help is past. Who is to blame? Is it the physician who has delayed too long in the use of palliative treatment? Or is it the fault of the patient who, through ignorance of the menace, has allowed time to slip by until his last chance is lost.

In some cases in spite of symptoms and conclusions resulting from the most careful study, a negative pathology will be found. In these cases a simple exploratory incision has carried a very slight risk and a brief period of convalescence, and would seem justified. Operations on the stomach and duodenum are not always successful. We must not promise too much in every case. There is a mortality risk which must not be ignored. However, when we see the great benefit received by many of these cases, we must conclude that it is our duty to operate on the definite cases and to explore those cases where a reasonable doubt exists.

References.

1. *British Medico Chirurgical Journal*. Vol. 29, page 113.
2. *Beitrage zur kluischen Chirurgie*. Vol. 27, page 319.
3. *Annals of Surgery*. 1911. Page 313.

Gastroctomy for Multiple Foreign Bodies.—Report from Pittsfield, Mass., on Oct. 29, states that Luke Parsons, a local nail-swallower, was recently operated on at the House of Mercy Hospital in that city, with the removal from his stomach of 132 nails, two keys, six jacknives, and a nondescript piece of iron. Several of these foreign bodies are said to have punctured the gastric wall, causing localized peritonitis.—*Boston Med. and Surg. Journal*.

II. MEDICAL EXAMINER EXPERIENCES.*

BY TIMOTHY LEARY, M.D., Boston, Mass.

With your permission, I will say first a few words about the functions of the medical examiner in Suffolk County. As most of you know, the medical examiner service replaces here the old foreign service which is still in existence in New York and through a large part of the country. The coronors' system requires the election of a layman who has charge of the investigations which here are largely in the hands of the medical examiner, and he, in turn, employs one or more physicians who take care of the medical side of the work. The result of that sort of thing in Massachusetts,—and it may be said that a similar result has been obtained elsewhere,—has been that the coroner's service has fallen into the hands of politicians, and the character of the medical men who were appointed to look after the medical work is apparent in New York, where the better class of medical men are not at all enthusiastic about the coroner's position.

The purpose of the medical examiner service is to stand between the public and violence—violence in any or many forms. The law says that the medical examiner shall investigate deaths from violence. The question comes up where one is going to draw the line as to what constitutes violence, and experience in this county has led to the laying down of very broad lines as to what may constitute violence. Because of experiences which are had by the men of the medical examiner service, and largely because of the inaccuracy of records furnished by the board of health, it has come to pass that there are referred to the medical examiners for examination or for investigation, merely casual cases of sudden death, particularly in public places—cases where a physician has not been in attendance. The board of health has decided that a physician shall have been in attendance on a case within two weeks preceding death in order to sign a certificate. In many cases of disease where the physician is able to say to the family that a patient is going to die, and there is no particular need of his coming regularly, death may occur and the physician may not have seen the case for a month. These cases are referred to the medical examiner, but it is my custom in such cases to call the physician and tell him to sign the certificate, which is then O. K'd. by the medical examiner, merely to get through with the formality of the law.

The medical examiner service is called upon to investigate cases of poisoning, because they come within the limits of violence, according to the law. There are various types of poisoning in which the influence of other agents on the individual count

*Read before the Boston Section of the Mass. Hom. Med. Society, October 3, 1912.

for very little. I have in mind particularly alcoholic poisoning. This is a very definite form of poisoning. We have succeeded in getting statistics in the city of Boston since this type of poisoning has been included with those cases referred to the examiner service. The stigma of alcoholism on the death certificate is one which the average physician hesitates to inflict upon the family. There is no reason why the family should suffer for the sins, perhaps, of the father. In these cases it is my custom to put on the certificate certain hieroglyphics, meaningless to the ordinary individual, but to the board of health they are quite plain. In this way our statistics are kept valuable and the stigma is very largely done away with.

Now, the rule for cases which apparently, on their face, should go to the medical examiner, is of value as indicated by, for example, a case which I was called to some time ago, in a lodging house on Shawmut Avenue. I found there a young woman dead on the sofa. There was only a single gas light, the room was dark. A man whom I had taken to be her husband, and with whom she was living, the father of her child, explained that she had been told at the City Hospital that her kidneys were seriously diseased, and that another pregnancy would in all probability result in her death. Later investigation showed this story to be true. The woman had been delivered at the City Hospital and had been warned that her kidneys were in such a condition that a repeated pregnancy would probably result in her death.

The man's story was to the effect that he had come home on the night in question, and found that the woman was pregnant again. She had flowed very slowly the day preceding her death, but there was every evidence that pregnancy was going on. He had come home that night and she was dressed to go out to get supper. She was sitting on the sofa when she gasped and died. The case was reported to me by the undertaker.

It looked like a case of sudden death. Largely because I did not quite like the looks of the man, I decided to make an examination of the body. The next morning at the morgue, inspection showed a slight discoloration along the left side of the neck, and autopsy disclosed fractured skull, with congestion of the brain, and abrasions which were deep. In that case, on the advice of the police, the man was brought to the hospital, and confronted with the body. He made a very dramatic scene, kneeling on the floor by the body, and saying he wished he knew who had been so brutal to this girl.

The police for several days were unable to find any evidence, until one day there was found at a station a peddler who roomed in the house, who was there only once or twice a week. He had come in this Saturday evening, and going by the room occupied by this couple, he had heard noises. Curiosity brought him to the bath room, which was directly off the room in which they

were quarrelling. The peddler heard the woman on the floor begging someone not to kill her. With that evidence the man in the case is now serving a sentence in state prison. The evidence indicated that he came home under the influence of liquor. She had not prepared dinner, and he kicked her in the head, as she lay on the floor. The kicks had been through the hair, so that there was no abrasion.

That type of case makes a man particularly careful as to what he does when called to investigate, and it is my tendency where the remotest doubt exists in my mind, to make a post mortem examination. I have never been sorry for having done this, and I have been sorry for not having done it.

We are given, in this county, as is necessary, absolute freedom in the making of post mortem examinations. In counties outside of Suffolk, where the number of cases is smaller, it is necessary for the medical examiner to obtain permission either of the district attorney or of the county commissioner and since autopsies in the other counties are paid for, the result is that the county commissioner or district attorney are slow in granting authority for the performance of autopsies. In this county we notify the district attorney after the autopsy has been performed, and he furnishes the authority purely in a formal way.

One of the things which is disturbing conscientious men in this city, is the possibility that cases of poisoning are allowed to get by. In 1910, according to records of the Secretary of State, there were no cases of criminal poisoning in Massachusetts. That is almost impossible to believe, and the fear exists with most of us that some of these cases are getting by and that we are permitting to go from under our hands cases of poisoning. A large part of the work of the medical examiner deals necessarily with cases of death from natural causes, and a large per cent. are from circulatory diseases, including the kidneys and circulatory apparatus, because most of the deaths from the kidneys are circulatory deaths. Amazing in this connection is the frequency with which relatively young men die of circulatory diseases, often unsuspected. It is amazing how frequently an apparent accident turns out to be, on investigation, a circulatory death, accompanied by a fall, the individual often having died before the completion of the fall. One type of circulatory disease most frequently met with is chronic interstitial myocarditis. An individual may go on with this disease without any symptoms indicating that he has it, and then when taken sick, death will come more rapidly than from any other cause. When I find a man who has dropped as if he were shot, I expect to find chronic interstitial myocarditis. As a matter of fact, that is the usual result of the autopsy. The other forms of cardiac death are distinctly slower in character.

Another group of cases which come under the observation

of the medical examiner are the very interesting diseases relating to the ductless glands. One very striking case was a young woman who had been treated by twelve physicians, all of whom thought she was a neuræsthenic. There seemed to be nothing particularly the matter. She had been unable to work consecutively at her position. She began to menstruate one night, and the next morning was found dead in bed. On examination of the body, there was a suspicious pigmentation about the knees and autopsy revealed complete absence of the adrenals.

Thymus death comes very frequently under the observation of the medical examiner. The types of this are many, always from inadequate cause. An individual who had paraded one afternoon, preparing for a formal parade later, while on his way home became unconscious. He was found on the street, and died within a few minutes.

A man started to run after a fire engine, across a field, and was found dead the next day.

An individual in a boat which tips over, dies apparently of drowning, but is taken out of the water before drowning could possibly occur. Examination of the body shows that shock and fright have resulted in death, without any evidence of drowning.

We have deaths in individuals who have been under an anæsthetic, notably in primary anæsthesia. The deaths in most of these cases result from the administration of the anæsthetic for tonsils and adenoids.

People die from infectious processes which are often overlooked, or perhaps there has been so little suspicion of it that no physician has been called. I have in mind a case of spinal meningitis whose whole course ran over a period of less than eight hours. There was an extremely active process.

I could go on indefinitely, giving you types of cases that we run into. It is amazing that tuberculosis furnishes a considerable percentage of sudden deaths, oftentimes without warning. The individual has not been well, and death suddenly comes, frequently with hemorrhage. Pneumonia is a frequent cause of sudden death. Typhoid fever occasionally causes sudden death, the individual in these cases being placed in that walk of life where the employment of a physician means an expenditure which he does not desire to make,—that is, occurring among poor individuals picked up in lodging houses; not the acute typhoid, but one in which the individual has been walking about for some time before his death.

The duties of the medical examiner include the investigation particularly of the type of case in which another individual may have played a part, no matter how innocently, in the production of the death. Where a man dies as a result of a railroad accident, or as the result of the action of machinery, it is the duty of the medical examiner to prepare for an inquest and

report to the courts. In contrast to the old courts where the coroner called in a jury and the jury heard the case in this State that function of the coroner is carried out by the municipal courts. A man who is accustomed to hear such cases judges whether another person is criminally responsible for the death. It is possible for the medical examiner and for the district attorney to carry a case to a higher court after the inquest court has decided that no one is responsible for a death, and this is occasionally done. There was one case in which a hearing was given in one of the lower courts, and the individuals who were believed responsible for the death were acquitted. In spite of that, because of a belief that they were guilty, that case is going up at present to the higher courts.

This, then, shows what in general the medical examiner does. In Suffolk County the number of deaths investigated for a year run about two hundred—more in the southern district than the northern. In many cases the examination consists in viewing the body, in more cases in autopsies, and in further investigation into the character of the case. The medical examiner works in association with the police, and very close co-operation exists here between the police and medical examiner service.

The matter of publicity in the case of suicide is one which we try to eliminate. If a death occurs by an unusual method of suicide, often within a very short time following there will be others in imitation. The newspapers reported a striking case of an old woman who had thrust her head and part of her body into the oven of a gas stove, and after piling blankets and pillows around her, she turned on the gas. Within twenty-four hours we had a similar case, where another woman committed suicide in the same way. The police department of the city of Boston is necessarily in close relation to the newspapers, and it is the custom where the police hear of a suicide, to post a notice in police headquarters, indicating that a suicide has been committed and the manner of it. In such cases, if the medical examiner were called in, the police could be kept out of the case. If the medical examiner is perfectly satisfied that death is self-inflicted, there need be no publicity. I want to suggest to you, as medical men and women, that if you are dealing with cases of suicide and would shun publicity, call the medical examiner directly and do not permit the police to be notified, because that means necessary and immediate publicity. I have no objection to publicity where it is desired, but it seems to me the publication of the details of suicide should be discouraged and avoided.

THE NATURAL DIET AND CANCER.

BY BENJ. C. WOODBURY, JR., M.D., Portsmouth, N. H.

The present writer has for some time been interested in obtaining corroboration of a theory that has only lately taken shape and been enhanced by certain contemporary writings, chief among which may be said to be the teachings of Nature Cure both of the German and American Schools.

In early childhood, we were instructed to eat only whole wheat bread, the best available type of this flour being the product of the Franklin Mills. Furthermore, our attention was called to the fact that children who were fed upon whole meal flour or even the old-time middling, or home-raised rye and wheat which was taken to the mill and returned to the owner in toto (flour, middling and bran), providing that they, at the same time, were not freely indulged in candy and other sweets, developed strong and well-shaped teeth, fine quality of hair and in general better nourished bodies.

These are in part the teachings of the German chemist, Julius Hensel, whose "Macrobiotic, or Our Diseases and Our Remedies," while crude in many respects, contains many interesting facts relative to the proper food ingredients for the healthy body. Furthermore, his little book, "Bread from Stones," dealing with pulverized stone and its use as a fertilizer, should command the respect of thinking Americans. Likewise, certain of the teachings of Schussler, popularly called Biochemistry, have always been of absorbing interest. Therefore, it was with much interest that we read a few months ago an article by Prof. Horace Packard (Boston Medical and Surgical Journal, Vol. cixv., No. 7, pp. 247-250) on "Tree Cancer," followed recently by another, doubtless the outgrowth of reasoning and experimental research along this same line, on Demineralized Food and Cancer.

This theory, while it may be new to many and particularly to the members of the regular profession, before whom Professor Packard has most adroitly placed it, is a child of rather mature growth to the followers of Nature Cure, and not unknown to a large percentage of the homœopathic profession. If the many professional brethren, whom it is to be hoped Dr. Packard may interest in this most important of all subjects, will read some of the modern works on Nature Cure published in this country or those of the German authors, not neglecting the teachings of the oft-ridiculed Father Kneip and his followers, they will find abundant corroboration of this theory. Toward the solution of this important problem, the so-called Natural Diet is without doubt a step in the right direction, and should be most carefully investigated by all who can bring themselves to cast aside professional or sectarian prejudice and test its claims. The Natural Diet consists in the use of natural fruits, nuts, a certain amount of fresh milk, a whole

meal bread of wheat or the black rye bread of the Germans, spoken of so frequently by the Nature curists, the advocates of the Water Cure, and also by Hahnemann, who, in addition to his "Homœopathic Diet," so long popular among his followers, thus wrote upon this subject in connection with hydrotherapy: "In thus making the cold bath next to the proper diet the main factor in the strengthening treatment of old ulcers I have the most exquisite success and numerous cases to support me, and I demand the most complete faith in this matter.

"That even the poorest can make use of this glorious means of relief easily and without extensive prescriptions, except those already given above, is no small proof of the excellence of the method. . . . Even one-half of the remedies given to the most luxurious will do for him all that is needful, and black rye-bread will serve him instead of strengthening soups."

Those who are interested in this most important matter, by which "expedient alone," writes Dr. Packard, "the cancer rate may be reduced from its present appallingly high rate to twenty-five or less to the ten thousand," are earnestly urged to study with renewed interest along the lines suggested by these advocates of the Natural Diet.

In Vol. 2 of the Nature Cure Magazine, an excellent journal of Nature Cure may be found an interesting article on this very problem of Cancer and the Natural Diet, in which the editor makes an able plea for the substitution, for the poisonous and acid-producing meats and flesh foods, of the simple, non-irritating positive cell elements found in this simple diet, namely, the salts of sodium, potassium, magnesium, iron, flourine, silica, sulphur and phosphorus found in fruits, fresh vegetables and nuts; for the elimination of the system's waste products by hydrotherapy, proper osteopathic treatment, and best of all by the properly selected anti-psoric remedy of homœopathy. At the sanitarium of which this writer is the superintendent, those interested may find a possible solution of Dr. Packard's problem of "the extraction of food salts from vegetable sources and their preparation in a convenient form for administration to augment, where advisable, the supply in ordinary foods," in simple combinations of just such substances, prepared from fresh vegetables.

We would add, furthermore, as a possible helpful suggestion in the beginning of such investigation, in the coöperation of which Dr. Packard invites his professional associates, that in our search for the cause of cancer we shall never find it originating from without, but from within the organism, the outward expression, the cell proliferation being but the result of internal derangement, a mal-nutrition due to lack of proper cellular elements in the case of the tree, and the inability on the part of the vital force in man to appropriate to its ends proper nutrition. In many instances this may be because of a lack of these ingredients, in others there is an over-abundance. It cannot, in our opinion, be sustained, as many have

sought to prove, that meat-eating alone is responsible for the increase of cancer, else all who eat meat or flesh foods would be thus afflicted, which, obviously, is not the case. That many who do eat meat develop serious acid conditions of which cancer may be a most frequent consequence, there can be little doubt, and this the author of the Nature Cure Magazine has well pointed out. Its origin must then be looked for in malnutrition due to some cause or causes to which we are all contributing more or less by the daily régime; in other words, cancer is an ultimate or end product of malnutrition and represents the sum of all dietetic and hygienic indiscretions, mental, moral and physical in the complex life of the individual. What is more likely than that in this complexity the question of a proper food-stuff forms ultimately no small part? Nor can we say that demineralized food is the sole cause, else we should all of us succumb to its influence, but it suffices that, as has been shown, cancer is absent among peoples who subsist upon a diet which is largely free from flesh foods and our modern bolted flour bread. According to this theory, which we trust will fast gain its adherents among the medical profession, the search for the bacteriological factor in cancer must of necessity prove futile or at all events of less and less absorbing interest, for having found the offending bacillus, spirillum or coccus, how shall we deal with it? Plainly a matter of the non-sowing of the seed, in other words, the making of the body an unsuitable habitat; then it must of necessity seek some more congenial host.

Hensel has shown that the condition known as helminthiasis is dependent upon the proper chemical soil; then worm propagation becomes, as it were, spontaneous; similarly there is first the suitable soil or the pre-cancer state or diathesis (the carcinosis of Dr. John H. Clark), then the cancer germ, which according to this same reasoning must be of endogenous rather than purely exogenous development.

The soil, hypothetically at all events, has been prepared for us to a greater or less extent by the generations who have preceded us upon this planet, through bad habits in eating, drinking, and thinking; in other words, in the developing of the inborn seeds of disease. Why explain cancer in any more difficult terminology?

Hahnemann defined this condition a century ago when he wrote his masterly work on the chronic diseases. This disease tendency, this *psora* of Hahnemann, represents the potential seeds of the disease; cancer as a material evidence of organic disease is a part of this portentous harvest.

Let us work the problem in both directions; forwards from causes to results in our process of reasoning; backwards by the elimination of these results by alteration of the evils from which they have had their beginnings, thus bringing about the removal of disease symptoms in the reverse order of their appearance.

The Natural Diet stipulates, however, that in many instances it is mineralized instead of demineralized food that in numerous

cases proves the irritating factor in cancer production, that is to say, it is not altogether that the process of cooking and food preparation has demineralized the food material, but that the food has thus been devitalized, as it were, and its natural organic cell salts have been rendered inorganic, therefore irritating to the organism. Consequently we must return to simpler natural products unadulterated and, if cooked, prepared in such a manner that these essential (positive) cellular elements are not devitalized by the driving out of the stored-up energies (sun's rays), and thus rendered fit only for less highly organized bodies. Nor it is possible to replace these cellular elements by the use of artificial salts, sodium chloride, lime, potash or other basic preparations. What the organism is calling for is that it be supplied with the pure products of Nature's garden, the fruits of the vine, the root, and the tree.

The development of the psoric state in the individual means more than a susceptibility to certain skin diseases, the pronounced type in Hahnemann's day being the itch eruption; it means that every one of us has stored within him this disease tendency in the potential. This occurs partly through evil habits of our ancestors (which have in many instances been transmitted in an unadulterated form to us), those which we ourselves are constantly developing by similar practices, and most of all by the suppression of those acute disorders, which easily banished in their simple form, eventually develop into protean disorders of which cancer, diabetes, Bright's disease, tuberculosis, etc., are all final and more often fatal terminations.

Let us right about face and check this reckless hazard of health and needless waste of human lives. Homœopathy rightly applied corrects these manifold disease tendencies (psora). If the Natural Diet will keep men well, as its enthusiastic advocates would have us believe, let us then adopt it and likewise profit by its adoption.

SENSUALITY VERSUS SEXUALITY.*

BY ELIZABETH H. MUNCIE, M.D., Brooklyn, N. Y.

Historians and sociologists tell us that America is but repeating the story of Greece and Rome; that our wealth and enervating luxury, together with their accompanying godlessness and immorality, are but a repetition of the condition that preceded that downfall of these great nations.

That such is to be our fate seems all too probable, unless, indeed, we have some saving grace which these nations did not have. This saving grace, however, we feel that we have in the form of advanced medical knowledge. To this we must turn for rescue from that moral and physical degradation which destroys home and that clean virility without which there can be no national greatness.

So long as simple laws of eugenics were taught and lived, these ancient nations were great. The men were brave; the women heroic in self sacrifice; the youth the pride of the civilized world and the

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envy of lesser nations. But when licentiousness came in, then the homes were desecrated; the lamps of Vesta dimmed; the hour of downfall struck, and we who read today of the greatness of these nations wonder how people who had once seen the Vision could have fallen to such depths.

In our own time, with licentiousness rampant, we place our hope of salvation in the knowledge which, in these late times, we have of immediate physical causation for sexual immorality and of surgical cure for the same. Moreover, since everything has its moral and mental prototype, great hope, too, lies in our increasing appreciation of physical causation.

Greece and Rome, although they rigidly enforced certain eugenic laws, had little knowledge of those things which we, with our microscopes and anesthetics, know today. In those early days there were no anesthetics making surgical exploration possible; no microscopes to reveal the existence of germ life years after the supposed cure of disease. These ancient people, to be sure, strove to produce strong, tall, straight youths for the army, but there was little effort made to establish eugenics as we understand the term today. In our knowledge lies our hope; from it we take courage, for no longer does the educated man interpret debauchery as virility; no longer do the clergyman and the doctor confound pathology with sin.

We know now that sexuality is one thing, sensuality another. Sexuality is as beautiful as sensuality is hideous. Purity of thought will clear away sensuality; but it will not emasculate us. Purity is not sex oblivion, but sex at its fullness, washed clean of lust.

From sexuality emanates the force out of which everything great is made. Sexuality is the factory, the power house, and we are beginning to catch a glimpse of what good this great and fundamental force may do for the world.

Sexuality is constructive; sensuality is destructive. And the man or woman who wallows in sensuality is a moral leper whose poison passes down from generation to generation.

Sensuality is sexuality diseased, and this brings us directly to our theme, which is the consideration of this national disease, sensuality. What is its etiology, what its symptomatology, what its treatment, what its prognosis?

Definition.—Sensuality is a contagious, infectious, degenerative mental disease, characterized by distorted moral sense, atrophy of soul, degeneration of ideals, deterioration of character, affecting through the sympathetic ganglia and branches, the reproductive system, originating in youth, but encountered in all ages, all climates, all latitudes; primarily a male disease.

Causes: Mental and physical, predisposing and exciting.

Physical symptoms: Unmanly carriage, insinuating eye, drooping shoulders, gradual decadence of spinal marrow, incapacity to stand erect, gonorrhoea, syphilis, allied constitutional diseases.

Moral and mental symptoms: Loss of fine appreciation, brutalized facial expression, fixed idea-copulation, decadence of chiv-

alry, absence of consideration, dullness of perception, presence of abnormal self-complacency.

Prognosis: Grave in youth, serious in early manhood, hopeless in middle, and after middle life when degeneration of soul centres has set in, fatal to mind, soul, and body.

Treatment: Preventive, curative.

a. Preventive: Generations of decent ancestry, a responsible conception, clean gestation, right early environment, wise and Christian parentage, early and scientific instruction at the mother's knee.

b. Curative: Change of thought, conversion to sane ideals, in extreme cases, quarantine and sterilization.

We are spending millions of dollars yearly to stamp out tuberculosis, to provide food and shelter for the undesirables and to build institutions for defectives; millions that ought to be used in beautifying our cities, in educating our young and in establishing laboratories for scientific research.

In poor old New York alone, a city of wealth and debauchery, a city beautiful to look upon but honey-combed with vice and degeneracy, in poor old New York alone, recent statistics prove that there are 20,000 *known* prostitutes and 225,000 *known* venereally diseased men. And not a physician in the city but realizes that these numbers represent but a part, could facts be sifted to the bottom.

And all this is the direct result of the disease, sensuality. And yet, so opiated are its victims, so opiated are the State and municipal authorities, so opiated are the teachers, clergy, and physicians, that this disease is allowed to stalk *ad libitum* through the streets, to invade our homes unrestricted, to stand unabashed in every walk of life, little pains being taken to protect even the children of our land.

Down through the ages we have filled our minds with such perverted ideas of sex, that a youth, unless he be fortunately blessed with wise and sensible parents, knows not whether to answer the call of the wild in himself, or to battle for what we call chastity. This very confusion and uncertainty leaves him open to any influence, for the wavering mind is a menace always to itself.

We have taught the youth that the natural overflow from the testicles is dangerous and have taught him that these danger signals must be heeded, that it is Nature's demand for full sexual expression. There may have been in the past some measure of excuse for such teaching; for until the coming of the microscope medical science had not revealed the true nature of semen and the fact that true semen does not escape in the occasional involuntary emissions. Nor have we known until recently that Nature has herself provided means for invigoration both to mind and body, through the reabsorption of the internal secretion.

Because we have taught these lies to our youth, we have driven them, by thousands upon thousands, to quacks who play upon their ignorance and terror to fleece them financially and bankrupt them morally. This matter of quack doctors, Dr. Stanley Hall, author of "Adolescence," has elaborated in magazine, book and lecture field.

Again, because we have taught the doctrine of necessity to our youth, we have left him to conclude that it remain for him to choose one of three courses: the brothel, with all its dangers, masturbation with its degrading consequences and perversions, or appropriation to himself of some good woman, ruining her life and happiness, in order that his licentious body be saved.

Again, because we have taught our youth untruths, most of them are today a menace to the health of any woman with whom they come in contact, and their low ideals make happiness in marriage almost impossible.

There remains but one course for us as physicians to pursue. We must spread the gospel of the new physiology, which is:

a. That moderate involuntary emissions are not a symptom of ill health.

b. That continence, since the glands associated with the generative organs are under control of the sympathetic, which never sleeps, does not atrophy or in any wise deplete the organs; but that, on the contrary, the youth who absorbs most of his own semen is the strongest and most splendid masculine man.

c. That the more truly virile a man is, the less persistently irritable are his sexual organs.

Again, because of these lies which we have taught to our youths, 60,000 white slaves die every year; 60,000 mothers' darlings have every year to be supplied to fill the vacant places, sacrificed to sensuality.

Can we, as physicians, to whom is entrusted the public health and the closest of confidential relationship in the homes of our land, can we longer blind ourselves to this disease?

We have allowed indifference to obtain until now we stand appalled at the conditions which exist in our high schools, in our colleges; yes, and even in our grammar schools.

The time, however, is now ripe for action, and the public is demanding that we investigate, that we find a *remedy* for the present conditions.

In order, however, to find a remedy we must search out the causes, for like all other diseases, sensuality has causes both physical and psychical.

These causes act and react upon each other, until the individual, lost to all sense of normal conditions, becomes permeated through and through with the virus of the disease. All God-given harmony is gone; the music that should be becomes discord. Even a Paderewski can get no harmony from an instrument out of tune. No more can the sensualist catch the sweet strains of normal sex life.

These physicians, however, who have learned to regard the nerves as a system of live wires, realize that when these nerves are irritated at the sex centre, which is the power house of all life, the victim is filled with suggestions so unholy that he cannot sense purity, much less attain it. Such physicians look at once, when called upon for help, for possible physical causes to account for the

patient's sensuality. In so doing we often find that he needs the surgeon and the hospital rather than the reformatory.

As practical examples of physical causes of sensuality, I would call your attention to the following cases, and hasten to our conclusion.

A little girl of nine years had become a degenerate from masturbation. Her habit was not even covered. So indifferent had she become to all punishment and persuasion, and so bold in the performance of her habit, that she was finally isolated from other members of the family. She stole, she lied, and had lost all moral responsibility.

When, however, a surgeon relieved her of a redundant and adherent prepuce, her condition was greatly improved, but not completely cured. Six months later the clitoris was extirpated in its entirety. She is now twenty years of age, a charming normal young woman, a happy wife and mother of two healthy children.

A little boy of nine months had constant erection and began masturbating. Circumcision partially corrected the distressing condition. The correction of an osteoma completed the cure.

In the first case the redundant prepuce irritated the terminal nerves of the sexual system. In the second, the trunk of the same nerve was irritated. Either was capable of producing a pervert.

A young woman of high standing in her community and her school, where she taught a class of adolescent boys, confessed to me her struggles with suggestions of a sensual nature, until she said, "I can struggle no more, I am afraid of myself in the presence of men. I must practice self-abuse. I cannot help it." And as in so many of these cases, she expressed the familiar fear of approaching insanity.

Examination revealed in this, as always in such cases, physical nerve impingement, about the lower orifices of the body.

Accordingly, a surgical operation to relieve the adherent prepuce, to remove the retained smegma, that constantly called her attention to that part, to amputate the serrated and hypertrophied labia, smooth the vagina of irritable carrunclæ and serrated hymen with dilation, curettage and packing of the anti-flexed uterus (which usually completes the clinical picture of these cases), restored the young woman to normal life, and she is today one of the most successful and powerful proprietors of a large mission in one of our great cities. She knows whereof she speaks.

In her case had the adherent prepuce received early attention, the long train of resultant pathological conditions would have been absent.

A man of high standing at middle age became insane. Three years prior to this calamity the writer having learned through invalidism of the wife, whom she was treating, the sexual habits of this man, had summoned him and urging moderation of his sexual relation for the good of the wife, had learned that his idea of virility—even though a highly-educated man—was that a most frequent functioning of his sexual powers meant greater power as

an orator and preacher. As a result of this erroneous idea, indulgence was repeated several times every night. He also confessed to a fear of his loss of self-control and consequent disgrace should his wife be taken away from him, and, being a man of desire to keep right, he suffered morbid fear of being away from her any length of time. It is hardly necessary to say that his natural oratorical power had begun to fail and his audiences to dwindle. He was advised to have immediately an operation for the removal of a tightened foreskin, and middle hemorrhoids. So fearful was he of losing his "virility" that he declined the surgical work, preferring rather a sickly wife and his supposed manliness. To remove the scales of sensuality from his vision was impossible so long as the shackles remained on the terminal nerves of his pelvic orifices, even though I thundered at him oracles of high ideals, of scientific facts, and furthermore, a prophecy of his insanity inside of two years.

Three years had rolled by, and sure enough he had been insane just one year when again he fell into our hands; this time with a subconscious conviction of his insanity, which he connected with my prophecy of three years before.

He was then circumcised, and never a boy needed it more than did this man of the clergy, and the father of grown children. His hemorrhoids were also removed. And, presto, change! he became a new man and caught the first glimpse of true manhood he had ever known.

He is now able to conserve or allow to functionate, at will, his sexual existence. He is capable of satisfaction and joys in all things of which he never dreamed before. He is also moderate in all things. His wife is happy and well. His preaching is blessed of God. He is a grateful, virile, self-controlled man.

Many similar cases could be cited, but these four represent a class of physical causes leading up to the physical cure of sensual ideas and desires, of the diseases in question. In this connection also should be mentioned a telescoped sigmoid flexure, which is responsible for such erotism of the sexual system in both man and woman.

Psychical Causes of Sensuality.

And now let us consider the psychic causes of sensuality. These may be classified as both predisposing and exciting. For these causes we must look to past generations as well as into the child's own immediate environment.

Examples of Psychic Causes Leading to Sensuality.

A child is born of a lineage of uncontrolled sexual desires. His conception takes place under conditions of selfish masculine rights, regardless of the mother's feeling in the matter. She is, therefore, constantly in a mental attitude of silent rebellion. She feels defrauded and humiliated. Her real womanly sexuality is killed. Because of her enforced slavery, her whole being rebels against an unwritten and accepted law of man's superior privileges

and woman's subjection thereto. Her youthful dreams of wifehood are buried in the ashes of her love. She is not ready for maternity under those unfair conditions, with her love nature misunderstood and defrauded of right expression, and the resulting conception is unwelcome, blessed neither by God nor man, merely a miserable disappointing accident.

In such a home there exist no ideals, and as the child of such parentage comes to an age to ask questions, the mother, hating everything pertaining to sex, is in no mood to teach the child rightly. She cannot teach him the beauty of sex life rightly lived, for she sees no beauty in it. About the whole matter, then, is thrown a miserable secrecy. The mother cannot and will not explain, and the child gets his information elsewhere,—in the school yard, in the street. Even though the child receive no definite sex information outside his home, he absorbs as only a child can absorb into his subconsciousness a feeling towards sex common to that existing in the minds of his parents.

If to this unfortunate inheritance and environment is added physical irritation from a tightened foreskin, the child when he comes to puberty is already a premature sensualist. He is ready, when his elders tell him their hellish lies in regard to the necessity of prostitution, to accept their teaching, and let us never forget that for every boy thus taught there must come to be a ruined girl.

A boy like this, untaught and unprepared, is sneered at because he has not had gonorrhoea, and even granting that he may struggle for a time with certain inherent sense of right and wrong, he has no foundation upon which to stand, and especially when his advisors are sometimes his own physician and college professors, what fate is there for him? What future other than that of a youthful libertine who in due time will pay his bitter price in disease and suffering? Such a youth is like a ship without a rudder; he is at the mercy of wind and wave.

Such a story has very recently come to our notice, and in the end the young man, sending his wife back to her father, diseased and ruined, saying that he could not support her, boasted almost in the same breath that he preferred the thirteen other women whom he controlled to his wife.

As to the treatment of these cases of sensuality. We have already spoken of physical conditions which produce the diseases and of the treatment. Let us now consider preventive measures. The prohibitive, sanitive measures by regulation and emasculation of the degenerate, though of primary importance, we cannot take time here to consider.

Carrying the matter back to its final analysis we must recognize first of all, as in the physical realm, the primary cause,—that of inherited wrong-thinking together with a wrong atmosphere in early childhood. Subconscious mentality, we must recognize, stands back of all.

There is but one course, then, to pursue, we must begin with the parents of today who have little children. They it is who must

be taught the truths of sexuality so that they may, as far as in them lies, begin at once to counteract inherited teachings by supplanting in the subconscious mind, thoughts that are right, sane, and good, both for the child and for the race.

Between the child and the parent there should be no secrecy; he should even in early childhood feel that he is a part of his parents' every interest; that they are interested in his desires; that they feel that he is interested in theirs, that perfect fellowship exists between them and that he may rely upon his parents for honest explanation of any and every problem that comes to him as he goes out into the world.

A child thus taught has no use for the filthy companion, for the filthy story. His trained tastes rebel at the low instincts of the street child; he knows how to weigh his sentiments against theirs, and having when very young learned to turn to his parents as his guides, he will continue naturally and freely.

We do not half appreciate the influence we have upon a little child, forming it and bending it to what is right and best. Many a child is wilful and hard to manage in matters of opinion and will, but in matters of subconscious absorption of whatever we place habitually before him, he is pitifully at our mercy to make or to mar.

Those parents whose children are already in their teens can, however, do very little along sex instruction unless they have done so long before. Youths are self-conscious when at adolescence, and the parents' opportunity is past. For such children, there must be help provided outside the home. These young people are full of wonder, they long to know; but the teacher, the physician must be their instructor now. At this age they will take from the teacher, pastor or physician what they will not from their parents.

Some provision then must be made for these young people who stand today upon the very threshold of life; some one must teach them their duty towards themselves and towards the community of which they are a part. Some provision must be made for teaching them the truth of their newly-awakened nature; they must know the dangers into which they walk all unconsciously, and for their own sake and for the sake of those with whom sometime they will be closely associated we must paint the dangers as black as they are, sparing nothing.

We must, however, show them at the same time homes in which right conditions prevail; where consideration and companionship bring joy and happiness. They must be taught that after all sane living brings truest home happiness; that young people whose children are welcome secure to themselves a happiness that the common sensualist does not know. They must be taught that the young man whose heart is in his home, his wife and children, gets far more out of life, is more loved, is happier in his love than the youth who lives an unclean and wandering life. They must be

taught that after all a home in which mutual trust and companionship and mutuality of simple and sane interests is the most satisfying place on earth. Many a man steeped in sensuality, finding his supposed happiness in the brothel, has been converted to sane ideals through coming in contact with one of these homes in which cleanliness and comradeship reign.

Before publishing my book, further to substantiate my position, I sent fourteen questions to fifty (senior) medical students, business men, and clergymen. These questions I asked them to answer with absolute honesty and to sign no names. Every one of these papers was promptly returned, the questions answered fully.

The first question was: "At what age did you learn about sex matters and from whom?"

Every man who answered said that he had been told of self-abuse while in the primary department or before entering school at all. Before sixteen years of age most of them had been told of lewd sexual relations. Thirteen replied, and be it to the credit of their parents, that while very young they had received right instruction from parents and had thus been prepared for what they would meet in the outside world.

Not one of the boys who had thus been taught had entered into sexual sin, and several of them said in reply to the question, "Were you ever advised to indulge in illicit sexual relations?" "No, I was never so advised; my elders knew where I stood and so knew better than to advise me so."

Y. M. C. A. experiences have taught me that most young men do look forward to home and wife and children, and if this be true, it is not a hopeless task to change the prevailing sentiment among the youth of our land. They are more ready for right teaching than we realize, and while we may see little progress in our own day, we may take courage and believe that with the mother of today being taught her duty in sex matters towards her children, and with the young man and young woman of today being taught their duty towards themselves and towards their homes to be, marked improvement will be seen before another fifty years has passed away.

Summarizing then, my appeal is that we as physicians, recognizing as we do our peculiar relationship to youth and our opportunity to raise the moral status of our land, learn not only to listen, to befriend and to serve with sympathy those who send out to us their cry for help, but that we learn to serve them efficiently.

In order to serve them efficiently we must ourselves understand, first, that back of all sensuality lie the psychic suggestions that have come down through the ages of unclean thinking creating a race mind that permeates, generates, and impels; that we must, then, bring to our youth the counteracting fact and the positive

message which latter findings in physiology give us in relation to disease and necessity.

Second, that we learn to recognize even minor physical abnormalities, irritations and pressure; acknowledging that these are conditions with which we must reckon in our attempt and desire to influence for good; that until wrong physical conditions are corrected our moralizing and exhortion are but "sounding brass and a tinkling cymbal."

Many a clergyman pleads with eloquence and fervor with his young parishioners; all of which is but wasted effort because he knows nothing of those conditions which we, as physicians, recognize or should recognize. Again, many a clergyman who has chanced to come into an understanding of the physical side of things sends his charges to a physician only to have them returned to him in worse condition than when sent there; because the physician, being ignorant of these matters, tells the youth that he is all right, thereby adding to the youth's already present burden a hopelessness born of the feeling that everything has been done that can be done or needs to be done.

If then, after a time, this youth gives up the struggle and succumbs, at whose door does the sin lie,—at the youth's or at the doctor's?

Then, when the youth's problem has been wisely and carefully considered, from the standpoint of physical, mental and moral pathology, *and not until then*, let us appeal to our boys as David Starr Jordan so grandly appealed in a recent address to the students at the Leland Stanford University when he said:

"Young men, your first duty in life is to yourself. Your first duty is to so live that your after self—the man that you ought to be—may in his time be possible and actual. Far away in the twentieth century—in the twenties, and in the thirties—he is waiting his turn. His body, his brain, his soul, are in your boyish hands. He cannot help himself. What will you leave for him? Will it be a brain unspoiled by lust and dissipation, a mind trained to think and act, and a nervous system true as a dial in its response to the truth about you?

"Will you, boy of the twentieth century, let him come as a man among you in his time? Or will you throw away his inheritance before he has come to it? Will you turn over to him a brain distorted, a mind diseased, a will untrained to action, a spinal cord grown through and through with the devil-grass of that vile harvest we call wild oats?

"Will you let him come, taking your place, gaining through your experiences, hallowed through your joys, building upon them, as his own? Or will you fling his hope away, decreeing, wanton-like, that the man *you might be, shall never be?*"

CLINICAL DEPARTMENT.

CONDUCTED BY A. H. RING, M.D.

This number marks the beginning of the fourth year of the Clinical Editor's work. Beyond an occasional reference in conversation, we have had no comment or criticism which would permit us to judge whether the present plan of conducting our department is of interest, or fills any need. We are conscious that the scope of the cases has been largely limited to the fields of nervous and mental work, and the discussions have dealt more with diagnosis than treatment. This was unavoidable, as we see more of this class of cases. We feel that the scope and interest of the department might be greatly increased in several ways, especially by reports of cases where a well-indicated drug seems to have done a definite thing. We are impressed with the fact that modern homœopathic literature teems with broad generalities, rarely drawing clear lines which may assist the next fellow in using a specific drug. Reference is usually made to the fact that the indicated remedy was or should be used, but just what this was, and by what line of reasoning or symptoms it was given are lightly skimmed over. We need more specific records of just what the indicated remedy was and why.

While wishing our readers a most prosperous and successful New Year, we urge that each of you now resolve to send us a report of at least one case in which, after careful elimination, you have good reason to believe that a single remedy prescribed according to the law of similars cured the patient. We shall also be grateful for any suggestion as to how the Clinical Department may be made of greater interest and usefulness.

Case II.—Diagnosis of Angioneurotic Oedema.

To diagnose the case presented in our December number, one need only recall the sudden appearance of circumscribed œdema of transient duration usually in either the arms, legs or face, but sparing no part of the body; the gastric symptoms, and especially the hereditary predisposition, similar swellings having appeared frequently in the paternal side of the family.

The most marked feature about this case apart from the nervous symptoms, is the œdema. In making a diagnosis the natural question arises, What conditions produce such an œdema and how do they differ from the state here described? Among the many causes of œdema, either local or irregular, probably the most common is nephritis. The absence of albumen and tube casts rules this out. We may next consider cardiac complications. Failing compensation produces œdema of lower and upper extremities, but not a transient circumscribed œdema, and when it does so, the cause is readily determined by physical examination. Various conditions of impoverished blood may cause œdema, as also a local interference

with the normal blood stream, but here again a careful clinician could hardly mistake the cause.

Some drugs are said to produce a condition closely simulating angioneurotic oedema. Among these in common use are arsenic, iodide of potassium and asperin. It is said that the latter drug may produce a fairly typical case of the disease under discussion. Of particular interest in this case is the history that for the last three years the patient has been in the habit of taking asperin in doses of ten to fifteen grains several times a day. Were it not that the swelling and gastric symptoms preceded this inexcusable drugging, one might feel that here we had a proving of asperin. The gastric and pelvic symptoms of this patient, as in most persons suffering from the neuroses, had been duly treated with the stomach tube and tamponade.

And this brings us to the most interesting question in the discussion, namely, may such a condition be a pure neurosis, an hysterical state in which the physical phenomena are but the evidence of "psychic trauma" with repression of ideas or experience incompatible with the social standards and moral code of the individual. Jelliffe, speaking of oedema in hysteria, says: "The exclusively hysterical nature of these oedemas is not yet conclusively established, but the preponderance of evidence is in favor of the possibility of their psychogenic origin."

The fact is that there were such incompatible experiences in this case as psycho-analysis has disclosed. Had they not come to one possessing an inherited neuropathic soil they would have been long since assimilated with normal consciousness and have faded, as do all normal memories. But this patient, because of the hereditary soil and the doctrinal atmosphere in which her conceptions of life had been moulded, found it impossible to reconcile these experiences with the pre-established convictions of right, and so the memory of these experiences hovered close to the surface of consciousness as an evil spirit nagging and harassing her.

A good mental house-cleaning is the cure, and this is done by lending a sympathetic ear and urging the patient to tell her story. Free association and the association test may also assist in recalling buried complexes. Hand in hand with this must go sufficient re-education and explanation of simple biologic facts to rear a saner philosophic structure for future use in preventing relapses, for we cannot change the soil.

The physical side must not be neglected. Stimulant treatments, as the drip sheet, salt rub and massage, as well as the vibration and general faradism, and much time spent in the open air and some congenial head work are important factors.

Case I-D—For Diagnosis.

The patient is a young woman, twenty-one years old; single; born in Boston, of Irish-American parents. The father has lately

had apoplexy with resulting aphasia, and one of his sisters died insane.

The patient was an apparently normal child, had measles, mumps and varicella. Menstruation began at thirteen; was very painful and irregular, going sometimes six months. At sixteen she had scarlet fever severely, and towards the end a profuse menstruation, following which she lapsed into a confused mental state which lasted a year.

She graduated from the grammar and high schools and was attending a business college at the onset of the present illness. She has always been of a studious, over-conscientious temperament; never went to parties, but occasionally to the theatre. Is very religious (Roman Catholic). She has been an average student, but the last of her schooling was very difficult, a conscious effort, and she had hard work finishing with her class.

The past summer the patient has had nervous attacks in which she would suddenly cry out and become excited, and she has become increasingly indifferent to her friends and usual interests. She says that when she went to the theatre the actors and everybody seemed to be looking at her. She denies having a sister (has several), and confuses other relations. Her manner is one of apathy and indifference. She stays where she is put, and pays little regard to her environment; sighs often and has frequent attacks of laughter without provocation, and even when alone. Her conversation lacks coherence and continuity, frequently shunting to irrelevant side tracks of association. She makes occasional facial grimaces and assumes strained and uncomfortable positions. Perhaps the most evident thing about her mentality is the numbing of the emotional field. Though her father is critically ill, she takes no interest in his condition. Physically she is emaciated and pasty, a tall, slim girl with a high forehead and blotchy skin. Her pulse is 100, and weak, but there is no evident heart trouble, and the lungs and abdomen are negative except for soreness in the appendicial region. The superficial and deep reflexes are exaggerated. Resistive exercises show the muscles to be weak, but voluntary motion is intact. The lower extremities are slightly cyanotic. The palms of the hands perspire freely, and the hand shake is of a peculiar, stiff and characteristic type. The 24-hours urine measures 88 C. C.; specific gravity, 1,024; acid, with a slight trace of albumin. Hemoglobin 80 per cent., reds normal, whites 11,200.

From what is this patient suffering. Would an early diagnosis and treatment have prevented the last attack?

Decline of Surgical Mortality in War.—In the American Civil War the mortality among the wounded was 13.2 per cent; in the Franco-Prussian War, 11 per cent; in the Russo-Japanese War only 5 per cent. These figures indicate eloquently the change which asepsis has made in the mortality of military surgery.

EDITORIAL

Books for review, exchanges and contributions—the latter to be contributed to the *GAZETTE* only and preferably to be typewritten—personal and news items should be sent to *THE NEW ENGLAND MEDICAL GAZETTE*, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business should be sent to the Business Manager, 422 Columbia Road, Dorchester, Boston, Mass.

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A COMPULSORY HOSPITAL YEAR FOR MEDICAL GRADUATES.

The Board of Regents of the State of New York bids fair to become the medical Dictator of America. Not because it has been so appointed or elected or because of its unusual fitness, but simply because it assumes to be such. While we stand ready to doff our hats to this Board for the many good things it has done to advance medical learning, yet we shall most respectfully stand with our hats on when it comes to acknowledging its wisdom as supreme upon matters medical.

Like many individuals who think they have a mission to perform they want to keep performing all the time and upon everybody they meet, and each performance must go just a little ahead of the last one. In the end they usually succeed in making themselves ridiculous or an unmitigated nuisance. It is open to serious debate whether the last few radical moves of this autocratic Board makes for advancement or retardation of medical education.

The latest emanation from this Medical Dictator is a bill which the Board of Regents purposes introducing into the New York State Legislature this winter, making it compulsory for all candidates seeking the degree of M.D. to show evidence that they have passed one year in a recognized hospital either in the capacity of interne or as clinical clerk.

This looks good on the surface, but suppose we turn it over. It would seem most ideal to require every man before he is given a marriage license to show that he has a job which pays him not less than \$2500 per year. The superficial observer would exclaim, "Good, that settles the poverty question. No man's family can come to want on an income of \$2500." But the rejected applicant might come back onto the State and say, "I have a constitutional right to marry. I am healthy, sober, single. I will gladly take the \$2500 job, but you must provide me with such a position or allow me to marry without it."

As the New York State Journal of Medicine in speaking of this measure aptly says:

"So far as the prospective physicians are concerned, it is quite obvious that it is of advantage to the public that they receive their licenses to practice medicine only after fullest proof of competency. It would be delightful if no one was allowed to practice medicine or surgery nor any of the specialties except tried and proven experts. We should all of us like to be the peers of men like Osler, Janeway, Murphy or Keen. It is quite evident, however, as these men attained their eminence after years of actual practice that their successors will have to gain their knowledge and pre-eminence in the same way.

* * * * *

"The effect of this would be evidently to still further lengthen the medical course so that for the majority of men it would easily extend well into the seventh year on account of the necessity of waiting for vacancies. It is quite true that a considerable number of men possessed of sufficient capital to make the long wait possible already take hospital positions which entail a long service, but it is one thing for a man to do voluntarily what his capital permits him to do and quite a different thing for the state to compel him to do something for which his means may be inadequate.

"Already the age of earning capacity of the young physician in this country is much greater than it is in Europe. This is partly accounted for by the peculiarity of our educational system. Can we afford to still further lengthen the period of probation so that a man will reach the age of twenty-six or twenty-seven years before he can even think of earning a living? The proposed situation is one that at least admits of discussion. Its merits are by no means entirely obvious.

"What is to be done with the man who earnestly tries to get a hospital position and fails to do so? Does the State intend to make it obligatory upon all hospitals, public or private, to open their wards to men who may be distinctly objectionable as internes? What is to be done with the interne who is dropped from a hospital for some breach of discipline? Suppose Cupid plays a not unusual prank and the young interne goes out with a nurse and both are caught by the argus-eyed supervisor or superintendent, 'Off with their heads,' says the book of rules. The nurse thereupon loses the few months which she has served in the hospital without compensation, but the interne loses the opportunity to take his state examinations in this state and must go elsewhere to practice medicine. Yet he has violated no law of the state nor has he necessarily committed any sin against the moral law."

The practical effect of this proposed law would be one of two results. Either the state would have to provide hospitals sufficient for all its applicants to begin their internships immediately after their graduation, or else the Regents would become dictator to all the existing hospitals in the state and command them to accept without question every graduate in medicine who presented himself for a year's internship.

It is a question whether the state would have a constitutional right to demand a graduate from a legalized medical college to serve one year in some special capacity without providing ample facilities for such services. Equally unjust would it be for a medical college to require that every graduate should have attended a specified number of confinement cases and then fail to make any provision or give any opportunity for his so doing.

A law whose physical provisions are such that only a portion of the people can possibly comply with it is a rather childish one. We wait with bated breath to witness the next medical handspring which this non-medical Board will turn.

MEDICAL REVOLUTION IN ENGLAND.

When a mule or a horse balks, we give the incident a passing notice because it's the "nature of the beast," but when a mild, gentlemanly cow attempts to imitate the stubbornness of the mule, a crowd gathers instantly, and the audience is "shocked" that so gentle a creature should ever refuse to comply with any demands made of it.

England's doctors have at last balked; actually refused to be imposed upon further, and the English world stands aghast that the medical profession, the kind, gentle, docile doctors, should refuse to work for little or nothing, when everybody else is being well paid.

In May, 1911, Mr. Lloyd George introduced into the British Parliament an insurance bill, the provisions of which were in substance that every wage-earner receiving an income of \$800 per year or less would be entitled to receive from the government free medical services. The fund from which these services would be paid was to be created by the wage-earners, the employers and the government contributing a certain per cent. Persons having an income of over \$800 per year would continue as heretofore to pay for their medical services from their personal funds. It is estimated that by the terms of this bill, some fifteen million persons would be entitled to receive government medical services. While the general provisions of this bill (it goes further than providing merely free medical service) are excellent, and the intent medical is good, yet the strange, almost amusing part is, that Mr. Lloyd George and his friends actually took it for granted that any sort of compensation which the government might dole out to the doctors would be accepted with thanks, and no questions asked. But it is one thing for doctors to give their services freely, or nearly so, to suffering, indigent people, while quite another thing to supply the same services to a rich government at a nominal price. Not until one month before the bill was ready to be presented to Parliament was the British medical profession consulted, and even then, the amount of compensation was not made known. Immediately after its presentation to Parliament a meeting of the British Medical Association was called, and a very thorough discussion of the matter took place. The Association was almost unanimous in its conclusion that the provisions of the bill were ridiculously unjust to the physicians, and while they endorsed the insurance feature of the bill in providing adequate medical attendance for the poorer classes, yet it practically placed the doctors with the poorer classes if they accepted the offered compensation. At the last reported meeting of this Association, held November 23, the following resolution was passed by an overwhelming majority:

"Resolved, That in the opinion of this representative meeting, the regulations issued by the insurance commissioners, and the latest proposals of the Chancellor of the Exchequer, are unworkable and derogatory to the profession, and . . . as a consequence, the medical profession declines to undertake services under the act and regulations as at present constituted!" A resolution was then offered and carried, that a conference between the Chancellor and

representatives of the Association be held with a view to adjusting the differences.

It is a matter of great interest to note the manner in which the British profession has stood united in this important question. A great number of physicians, especially those in the manufacturing districts, earn their living practically by acting as doctors to "friendly societies" (what would correspond to the "lodge doctors" in America). Nearly 90 per cent. of these have resigned their positions, and joined with the Association in its stand against the bill. No doubt the attitude assumed by the members of the British Medical Association will be severely criticised by the public, and the charge made that the medical profession has lowered itself by indulging in a strike; but a deeper view shows that it is in no sense a strike. First, the indigent sick are just as promptly and skilfully treated as ever; no doctors have refused to render medical aid to anyone, either inside or outside of hospitals; even the lodge doctors continue to attend the sick in their districts, only they are paid by the individual instead of by the "lodge." Thus no one is suffering because of the stand taken. Second, there is no demand for higher fees. It is a question of whether the physicians wish to sell their services to the government at a nominal fee or to continue as now to receive their fees from the individual patient. Even should the government meet their demands the rank and file of physicians would receive less income than at present. When the government employs lawyers or ministers it pays them well for their services. Why should it not pay its physicians accordingly? The British profession would stultify itself should it accept the terms at present offered. But aside from this question of compensation, there is the greater one of government paternalism in supplying medical services to its subjects. It shows the trend of the times, and this is but the entering wedge. Physical efficiency is the greatest asset any nation can possess, and the value of this possession has at last been recognized to the extent of a desire to pay for it. If the experiment meets with success in England it will no doubt be tried in America sooner or later. If it works well on a limited scale, it should work on a large scale. That the time is approaching in which all physicians and hospitals will be paid by the government through a wage tax system for attending wage earners and their dependents is no idle dream. It is estimated that 25 per cent. of the service rendered by the physician today is gratuitous service. If a reasonable compensation could be given him by a just system of taxes, for at least a part of this gratuitous service, it would be better for both him and the public. Any system which would ensure the physician a fair living, thereby enabling him to give more time and thought to his professional betterment (and why should he not be paid for rendering service to the government's dependents? What other class of men are called upon to give 25 per cent. of their time and abilities in gratuitous service?) would accrue to the public benefit. But it is a far cry to a workable end of such a system when one considers the difference in temperament and abilities of physicians, the provision for old age, sickness and incapacities, and the varying fitness for practice in fresh graduates.

FOREWORD ON OUR NEW DEPARTMENT OF EUGENICS.

It is with much pleasure that we announce the addition to our pages of a department of Eugenics. Such an addition has been under consideration for some time, but the difficulty in finding a person fully qualified to take charge of this somewhat new, but highly important branch, of medico-social science has delayed its inauguration.

In Dr. Mara L. Pratt Chadwick the editors feel they have the right one to carry on this department,—a woman, a physician, a writer of pronounced ability, a deep student of child welfare and social science, and a pioneer in the study of Eugenics. The physician has long since ceased to be only a dispenser of pills and the adjuster of ills. He is the high priest of all that pertains to the physical betterment of the human race. Is there anything which should interest him more deeply than the begetting, the rearing and the ultimate development of physically perfect human beings? That is Eugenics.

EUGENICS.

Edited by Mara L. Pratt-Chadwick, M.D., Boston University
School of Medicine, Class of 1889.

Dr. Chadwick will gladly receive communications, reports of cases, etc., etc., pertaining in any wise to the matter of child culture and race improvement.

INTRODUCTORY.—The era of Eugenics is upon us; the twentieth century ushered it in, and those of us who live out this half-century will see changes and improvements such as no generation has seen before. For the time is ripe; brute force has had its day; intellect has had its day; from the world of science, religion and art comes the same recognition of limitation and defeat. Not only must we lift our eyes unto the hills, but we must dig deeper into things as they are and find the tap root of existing evils.

For every great need, for every blackest hour comes inspiration and revelation; this has always proved so, and our inspiration today in our time—and our revelation—are coming through an awakening to the fundamental need of Eugenics—race improvement.

It is significant that at about the same time—preceding the beginning of this century—there were published a group of books, now world known, which forced upon the world interest in race conditions.

The influence of these books is but poorly appreciated until we begin to notice the hold they have gained on human thought.

Adolescence, by G. Stanley Hall, of Clark University, as written from the viewpoint of pedagogy, has aroused the educational world to vigorous thinking along race problems as related to pedagogy.

Social Diseases, by Dr. Prince Morrow of New York City, has correspondingly aroused the medical world. It has, together with

Adolescence, brought the teacher and the physician into closer touch and livelier appreciation of the closeness of their interests and concerns.

The Psychology of Conversion, by Professor Starbuck, of Clark University, coming out almost in conjunction with *Adolescence*, but strengthens the appeal for better recognition of the fundamental springs of life—sex, emotion, religion—and in presenting this phase of principles of being, brings the clergyman, too, in contact with pedagogue and physicians. Each has learned that his work is indissolubly associated with that of the other two.

And as if to perfect the circle, arise Sharpe and Hurly of Indiana, who cry out from their world as well demanding consideration of the simple, the criminal, the defective and the degenerate. While these leaders in their department have produced no one book there is a mass of literature from the sons of both upon the subject of race improvement.

Thus have four currents met and united, and as a result, a tide of interest, such as has never been before, is sweeping over the earth. Only some two years ago the names of these authors were known but locally; the word Eugenics was hardly coined, and today not an intelligent man or woman in the land but has become familiar with the subject and is thinking more or less earnestly out the problems that these men have propounded to the people, recognizing their import.

Boston University has taken its stand in the new work and is identified with it. In the theological department of our own Boston University we have a strong man—Dr. Norman Richardson—for whom has been created a Department of Religious Psychology, created because our theological department has arisen to the demands of the times, to the revelations of the times, and has recognized the need for pastors to understand what Dr. Hall and Professor Starbuck have presented in their books. Dr. Norman Richardson has seen, too, being a man of human insight, that in this department he must include all that Dr. Morrow, too, has taught—the story of sex morality; or more correctly speaking, the story of sex immorality.

As a result of Dr. Norman Richardson's splendid grasp upon Religious Psychology and his wide presentation, we have in our University a unique and splendidly equipped department, dealing with the fundamental principles of Eugenics. May the time come when our Medical School shall have as strong a department, either through coöperation with Dr. Richardson or through the establishment of a similar department. This we shall have; we must have; for no one realizes more fully than medical men that drugs are not all of medicine; obstetrics not all of child bearing; virility not all of life; not even perfect physical health all of man and the race. Moreover, we have in the editors of this magazine men who are alive to the significance of the movement and who are equipped for the battle to come.

May we not hope, then, that the time will soon come when

there may emanate from Boston University such a presentation of Eugenics—through Dr. Norman Richardson and our own Dr. Sutherland and Dr. De Witt Wilcox—that in the centuries to come Boston University shall be quoted as a pioneer in this new race cause, as it is already quoted as pioneer in the cause of the higher education of women?

Recommended books:

- Social Diseases—Prince Morrow, M.D., N. Y.
 Adolescence—2 Vols.—Dr. G. Stanley Hall, N. Y.
 The Psychology of Conversion—Prof. Starbuck, N. Y.
 Reports of Drs. Sharpe and Hurly, Indiana State Reformatory.
 A New Conscience and An Ancient Evil—Jane Addams, Chicago.

SOCIETIES.

BOSTON HOMŒOPATHIC MEDICAL SOCIETY.

The monthly meeting of the Boston section of the Massachusetts Homœopathic Medical Society was held at the Evans Memorial Building on December 5, President Charles T. Howard in the chair. A program of unusual interest, dealing with Eugenics and Mental Hygiene, was presented.

Dr. Chas. B. Davenport, Director Eugenics Department, Carnegie Institute, Washington, was the first speaker. He referred to the application of the laws of heredity to human affairs, and laid stress on the importance of studying one trait at a time. He said: "We must get rid of obscure thinking and fancy. Strictly speaking, children do not inherit from their parents. They are like the leaves of a bough, the trunk of the tree representing the parent type of the antecedents; that is, all the branches of a family are derived from the same stock, the same stuff. Legally, the male parent is the father of his son, but biologically he is the half brother by a different mother."

The speaker next discussed determinants in the hereditary sense, and said that the child is possessed of potentialities only at birth. The seed must not only have proper potentialities, but also proper environment. No amount of culture can produce new traits. The practical effect of determinants was illustrated by the study of the eye pigments.

Interesting reference was made to eight cases of microcephalic idiocy in which the Wassermann blood test had shown them all to be due to congenital syphilis and not to a tendency of the parent stock as had been supposed. Mongolism, the result of imperfect neural development, was referred to. The feeble-minded were discussed under the headings: (1) Those whose development had ceased; they remained children; and (2) those who are normal in all respects but one or two, and who frequently pass for normal. Feeble-mindedness, Dr. Davenport says, may be just a reversion to a more primitive type, some of the germ plasms not having acquired the determinants for brains. Hereditary imbecility follows laws of heredity, and no amount of culture will make such children anything but imbeciles.

In epilepsy the strain is due to the absence of something in the germ plasm—the law of heredity applies. If both parents have epilepsy, it has been shown that one in four of the children will have it. Functional insanity is clearly hereditary. If both parents suffer from dementia precox, then the children will all show early mental deterioration, that is, some determinants are missing from the germ plasm.

The case of manic depressive insanity is not so clear, but probably follows the same law of detriments. Some believe that it is due to something added to the germ plasm, a dominant instead of a recessive strain. Reference was made to Mendel as the first one to carefully study heredity.

and to his experiments with plant life.

Reference to organic insanity was made. Arteriosclerosis runs in families; not all alcoholics have delirium tremens, but only those with predisposed brains, and the same is true of the relation of syphilis to paresis. The speaker thought we were just in the beginning of our application of Eugenics to insanity.

Mr. Clifford W. Beers, the second speaker; is Secretary of the National Society of Mental Hygiene. He referred to the fact that the Society is the first of its kind in the world, and that it hoped to have a branch in every State, such as have already been organized in New York, New Jersey, Illinois, Maryland and Pennsylvania.

The objects of such a Society he said are: (1) To have established psychopathic hospitals in all cities of over 100,000 for curable cases and study. (2) Sanatoria for the well-to-do patients. (3) Better teaching of mental diseases in medical schools. (4) Education of the general public in mental subjects. (5) The circulation of pamphlets on such subjects. (6) Mental Hygiene exhibits. (7) Establishment of societies of mental hygiene in each State.

Such a society has been found to cost at least \$3,000 a year. It should maintain an office with one or more field workers and two stenographers.

OBITUARY.

Alvin Matthew Cushing, M.D.

Dr. Alvin M. Cushing died in Springfield, Massachusetts, on December 1st, at the age of eighty-three.

Alvin Matthew Cushing, the son of Matthew and Resia Woodruff Cushing, was born in Burke, Vermont, September 28, 1829. He was educated at the old Newbury Academy and studied medicine at Dartmouth and the Woodstock Medical School and the Hahnemann Medical College of Philadelphia, from which he was graduated. He began the practice of his profession at Bradford, Vt., and after a short residence in Lansingburg, N. Y., and Melrose, came to the height of his practice in Lynn, Mass., from 1865 to 1880. After a short residence in Boston, he moved to Springfield, where he spent the remainder of his life. On February 4, 1860, he married Elizabeth H. Pearsons of Bradford, Vt., sister of the late Judge W. B. C. Pearsons of Holyoke, and the late Dr. D. K. Pearsons of Chicago. Mrs. Cushing died in 1880 at Holyoke. His brothers, Charles Wesley Cushing and Haynes Porter Cushing, were distinguished ministers of the Methodist church. Dr. Cushing is survived by two sons, John Pearsons of New Haven, Ct., and Harry Alonzo of New York City. A third son, Alvin Matthew, Jr., died a number of years ago.

BOOK REVIEWS.

The Rebman Company, 1123 Broadway, New York, have just published a translation of the splendid work of Professor Fedar Krause, M.D., chief physician of the Augustus Hospital, Berlin, Germany. The first volume is translated by Dr. Henry A. Haubold of New York, and Volumes II and III by Dr. Max Thorex of Chicago. This comprehensive work in three volumes is the latest and best treatise which has appeared on Surgery of the Brain and Spinal Cord. Rarely have we had the pleasure of seeing illustrations which reproduce so lifelike the various lesions of structures and the *modus operandi* for their correction.

The author says in his Preface that the immense amount of material placed at his disposal, by neurologists and surgeons the world over, has made it possible for him to give in this work the most thorough and complete review of the present state of the Surgery of the Brain and Spinal Cord, including Diagnosis. Theoretical questions about which no new developments have been recorded are not discussed, but the reader is re-

ferred to the many monographs (by *v. Bergmann, Kocher, etc.*) that have appeared on the subject. He does so in order to avoid needless repetition. But he has deemed it necessary to add important Clinical Observations *in extenso*, as characteristic examples.

The work interests all Surgeons in general, but particularly the Nerve Specialists, Eye, Ear, Nose and Throat men, and the Syphilologists. This makes the field of interest very extensive.

It is not a text-book, but is intended with the aid of the incomparably beautiful illustrations, to offer a thorough survey of the present position taken by Brain and Nerve Surgery. The technic is thorough and up to date.

Volume I deals with Trephining, Cysts, Tumors, Cerebral Wounds, Cerebral Puncture, Centricular Puncture, Lumbar Puncture, Use and Application of the X-Ray; all pass before the reader in a grand review, but in simple, instructive language.

See the Ear cases on pp. 107-150, etc.; Chloroform versus Ether, p. 156; Asepsis, p. 159; Care of Hands, Towels, Antiseptics, p. 159; Use of Bare Hand, p. 160; Face-Mask, Dressing, etc., p. 160.

It deals with the more general sections of Brain Surgery and contains 24 Colored Plates with 48 Figures, one Photo Print with 5 Figures, and 63 Figures illuminating the text. \$6.00. Bound in Art Leather.

Volume II deals with Epilepsy, Neoplasmata of the Brain, the Frontal Brain, the Central Region, the Temporal Lobe and the Region of the Island of Reil. It also deals with Neoplasmata of the Parietal Lobe, the Occipital Brain, and the Posterior Fossa of the Skull. Then it takes up Symptomatology and Neoplasmata at the Base of the Brain and in the Contiguous Regions. It contains 27 Colored Figures and 4 Half Tones on 15 Plates, and 94 Figures in the Text, 14 of which are in colors. Price, \$7.00. Bound in Art Leather.

Volume III contains the concluding chapters of the Surgery of the Brain, i.e., Neoplasmata of the Base of the Brain; Prognosis in the Extirpation of Cerebral Tumors; Intracranial Suppuration; Metastatic Processes and Cerebral Injuries. The rest is devoted to the Surgery of the Spinal Cord.

It contains 47 Figures on 22 Plates and 42 Figures in the Text, three of which are colored. Price, \$7.00. Bound in Art Leather.

The publishers are justified in saying: "We point with particular pride to the many illustrations in the text and to the colored plates, which are printed on coated paper. The work is now complete and contains 122 Colored Figures on 60 Plates; 9 Half Tones on two Plates; and 199 Illustrations in the Text, 17 of which are colored."

3 vols. Art Leather, \$20.00. Sold by subscription only.

Diseases of the Mouth. By Prof. Dr. F. Zinsser. Lindenburg and Cologne. Translated from the German by John B. Stein. New York. Published by Rebman Co., New York. Cloth, \$7.00 net.

This is not a text book, nor is it a general treatise on oral affections or syphilis. It is a pictorial atlas of the syphilitic and kindred affections of the oral cavities, with differential diagnosis as the main object. The colored illustrations are extremely instructive. By using them together with the text one will find this book of great value in practice.

Materia Medica with Repertory. 5th Edition. William Boericke. Revised and Enlarged by Oscar E. Boericke. Published by Boericke and Runyon, New York.

Among the entirely new additions of special value incorporated are Lecithin, Radium, Adrenalin and X-Ray.

A Manual of Pharmacy for Physicians. By M. F. DeLorme, M.D., Ph.G., Assistant Professor of Materia Medica and Pharmacology, Long Island

College Hospital, New York. Third Edition, with 19 Illustrations. Price, \$1.25 net. P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia, 1912.

In this little book Dr. DeLorme has made an effort to provide a small, concise text book, presenting only those facts of the subject having interest for the medical practitioner. A work of this kind is largely a matter of compilation, and the author has drawn liberally from several of the larger books on this subject, especially from the Pharmacopoeia, Manual of the National Formulary, etc. It is especially valuable to the homeopath as a reference book, giving him the knowledge necessary upon the subject of Pharmacy taught in the medical curriculum.

BOEHRN MEDICAL LIBRARY
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MEDICAL JOURNAL REVIEWS.

Medical Century, December, 1912.

1. *The Evolution of the Suicide.* Greus, A. J.
2. *Treatment of Dyamenorrhoea.* Smethers, A. L.
3. *Caesarian Section.* Fitz-Patrick, G.
4. *Capsicum in Throat and Ear Troubles.* Evans, J. A.

"The throat symptoms which capsicum will aid us in are the conditions in which we have dry cough with sticking pain in region of epiglottis, severe pain on swallowing, due to dryness and burning of mucous membrane, spasmodic contraction of throat." The ear troubles indicating this drug are those which follow inflammation of the throat. The author uses the 3x dilution, 15 gtt. in one-half glass of water.

5. *Anaesthesia.* Stone, S. R.
6. *Pelvic Inflammation—Its Treatment.* Osgood, W. W.
7. *Homoeopathy in Pediatrics.* Morgan, W. L.
8. *Aortic Insufficiency.* Coburn, C. E.
9. *Hydriatics and Cyclopegics.* Armstrong, C. D.
8. *Anaesthesia in Nose and Throat Work.* Smith, G. W.
9. *Some Causes of Death in the Newly Born.* Martin, F. M.

Hahnemannian Monthly, November, 1912.

1. *Prophylaxis of Breast Infection.* Russell, A. E. C.
2. *Bleeding Following Delivery.* Kline, D. C.
3. *Thoughts on Prenatal Conditions and Influences Which May Control the Formation of Sex.* Straube, R.

The author bases his theory on results which he believes he would have obtained from experiments which he has not made. Life is too short to indulge seriously in such utterances. Why not make the experiments first, and then write?

4. *Some Fallacies of Urinalysis.* Wurtz, J. G.
5. *Cyclic or Recurring Vomiting.* Raue, C. S.

A review of the theories of the cause, omitting the recent work on this subject, by S. H. Blodgett. The author considers the symptoms and diagnosis, ending with a description of the treatment. We are especially interested in his finding iris vers. the most useful remedy, since this drug by its pathogenesis gives us the most complete picture of characteristics of the disease.

6. *The Differential Diagnosis of Laboratory Methods of Some of the More Common Diseases of Children.* Cochen, L. F.
7. *A Study of the Blood Pressure in Five Hundred Cases of Insanity.* Vessie, P. R.
8. *Presentation of a Case of Perforated Gastric Ulcer.* Eberhard, E. M.
9. *Early Diagnosis and Treatment of Laryngeal Tuberculosis.* Hallock, J. H.

The Clinique, November, 1912.

1. *The Nature of Genius.* Givens, A. J.
2. *Out of Door Schools.* Ripley, G. W.
3. *Glandular Enlargements.* Rawson, V.
4. *Symposium in Uterine Fibroids.—Pathology and Complications.* Abell, E. J.
5. *Blood Transfusion.* Hunter, E. L.
6. *Pink Eye, or Acute Contagious Conjunctivitis.* Boynton, W. E.
7. *The Early Determination of Pregnancy.* Smith, A. E.

The Pacific Coast Journal of Homoeopathy, November, 1912.

1. *Yucca Filamentosa* (Spanish Dagger). Waffle, Willella H.
A case of poisoning in a baby six weeks old.
2. *Three Serious Errors in the Use of Tuberculin.* Laidlaw, G. F.
3. *Nervous Instability.* Curtis, C. F.
4. *Electric Treatment of Poliomyelitis.*
5. *Vaccines in Surgery.* Albert, W.

The Homoeopathic World, London. December, 1912.

1. *Homoeopathic Prescribing.* Kent, J. T.
2. *A Proving of Radium Bromide.* Dieffenbach, W.
3. *Vegetable Oils, British and Foreign, Their Use and Abuse.* Horwood, A. R.
4. *A Bladder Case—? Tubercular.* Wheeler, F. T.

The British Homoeopathic Journal. London. December, 1912.

1. *A National Medical Service Scheme.* Lowe, E. C.
Regarding the National Insurance Act, a bit of legislation which has caused consternation, disgust and dissatisfaction by an outrage against the time-honored proceedings and traditions of the private practice of medicine. A remedy.
2. *Duodenal Ulcer.* Neatly, T. M.
A thorough consideration of our knowledge on this subject; to be continued in the next issue.

Berliner Homoeopathische Zeitschrift.

July.

1. *Homoeopathy and Modern Physics.* Schlegel, E.
Discussed in February issue by Dr. Walter Wesselhoeft.
2. *The Right of Physicians to Dispense Homoeopathic Remedies.* Schier.
3. *Salvarsan.* Kröner.

September.

1. *Jaeger and Homoeopathy.* Kröner, E.
2. *Lycopodium.* Schwarz, V., and Weiss, E.

An exceedingly interesting article, showing us how Dr. Schwarz is teaching materia medica in the hospital. His method is a decided step in advance of the didactic methods employed in the American homoeopathic colleges. According to Dr. Schwarz's method the student writes a thesis on a drug, and incorporates in this thesis personal clinical experience in the hospital. Dr. Schwarz then discusses the thesis. This gives the student a valuable insight into one drug. Having learned one drug in this way he can go on to the study of others with the same thoroughness. The result is that the student's knowledge enables him to prescribe the drugs he knows on scientific grounds, instead of prescribing according to the keynotes of many remedies of which he only has a smattering. Moreover, the student of Dr. Schwarz is not given gospel teach-

ings, but is left to work out his own salvation in regard to the value of symptoms, guided and assisted by his teacher. Such a system must give the student a greater respect for his convictions regarding homoeopathic therapeutics.

3. *Cocculus Indicus. v. Oiste.*

October.

1. *On the Criticism of the Law of Similars.* Dahlke, P.
2. *The Development of Thought in Pathology and Therapeutics in Recent Years.* Stiegele.
3. *An Omission of Salvarsan Treatment in Court.* Wassily.
The plaintiff was treated unsuccessfully for six months with homoeopathic medication by Dr. Wassily. At the end of this time the patient placed himself under the care of two allopaths who gave him salvarsan. The new treatment afforded relief. The allopaths then induced the patient to sue Dr. Wassily for negligence. Dr. Wassily's able defense caused the court to nol pros the case.
4. *The Inflammations of the Colliculus Seminalis and their Direct and Reflex Consequences.* Orłowski.

Boston Medical and Surgical Journal.

Indications for Operations in Epilepsy.

The cause of epilepsy seems due in some cases to molecular or chemical change in the nerve cells, in others to gross pathological lesions. Operations must therefore depend on the length of the duration of the case and the damage done to nerve structures.

I. Jacksomial or Focal Epilepsy.

The earlier the convulsion appears after the injury the better the prospect of cure from operative procedure. Repeated operations where the first fails is generally useless. Convulsions following hemorrhage if Jacksomial in type are usually benefited by removing the clot if this is accessible.

II. Intercranial Neoplasms.

Many cases show dilatation of the lateral ventricle, so operation might have been beneficial in the early stages of the disease.

III. Infantile palsies.

After the first few years of life these cases are not amenable to treatment. If, however, the case might be brought to operation when the infant shows the first signs of a developing paralysis the clot could easily be removed and the ensuing hemiplegia and idiocy averted. The danger of the operation at the time is small in comparison with the danger of allowing the almost certain development of a worse than absolutely useless life when a possibility of cure exists.

In epileptics all exciting causes should be removed, as nasal polyp¹, eye strain, uterine and ovarian displacements, etc.; for there is the remote possibility that in individuals having a defective nervous inheritance these may be the primary cause of the attacks, at least there may be a lessening in the frequency in the number of the convulsions when such conditions are removed.

Medical Digest, November, 1912.

A Review or the Treatment of Goitre.

In bronchiocile, or simple hypertrophy of the thyroid gland, iodine is given as the remedy par excellence. The tincture of phytolacca especially in alternation with iris has marked influence on glandular tissue and is useful when iodine seems contra-indicated.

In Graves' disease, however, both iodine and thyroid extract are of little value. In the early stages of the disease ascending doses of belladonna have proven curative. Quinine hydrobromate often combined with

ergotine often causes a decrease in all the symptoms, and cure has been effected in anywhere from four months to three years. This seems to be the most valuable remedial agent at the present time for exophthalmic goitre. Chromium sulphate in physiological doses, 16 grains increasing to 60 grains daily, is reported to effect cures in a few cases in about one and a half year's time.

The use of the high frequency current is often desirable and, if not curative, is a good adjuvant.

Much symptomatic treatment is often necessary. Tonics, laxatives, heart stimulants and sedatives all have their use. *Lycopus* as a heart regulator does much to overcome the tachycardia. As a laxative sodium salicylate has been of great benefit.

Surgical interference in these cases, while curative in a few, is attended by much risk and should only be attempted after the failure of all other measures.

TREATMENT OF PULMONARY TUBERCULOSIS BY ARTIFICIAL PNEUMOTHORAX.

Mary E. Lapham, M.D., *Monthly Cyclopedic and Medical Bulletin*, October, 1912.

Girado Balboni, M.D., *Boston Medical and Surgical Journal*, Nov. 29, '12.

Artificial pneumothorax is produced by the successive introduction into the pleural cavity of nitrogen gas beginning with a dosage of 50 to 500 c. c., and increasing to 1000 to 2000 c. c., guided in each instance by the amount necessary to keep the lung under a definite compression. Too great pressure causes liver and gastric disturbances, circulatory stasis with heart weakness and injury to the opposite lung, while too little helps rather than hinders the course of the disease.

The advantages of the treatment are due to the dry condition produced in the lung, the lack of oxygen and blood so hindering the development of the bacillus of tuberculosis. Compression also overcomes the spread of the disease and formation of new foci and raises the opsonic index of the patient.

The chief dangers are formation of adhesions, accidental tearing of lung tissue, reflex irritation of the vagus, causing sudden cessation of heart and respiration and, worst of all, the formation of gas emboli. However, this may be overcome by allowing only nitrogen to enter the pleural cavity when the respiratory oscillations are plainly visible on the manometer. Both the selection and results of cases treated in this manner are very instructive and interesting.

CLINICAL STUDY OF RESPIRATION.

Boston Medical and Surgical Journal, Nov. 7, 1912.

Dr. Daniel Esdall presents the results of a series of studies on respiration. "The purpose of research," he says, "is twofold, the introduction of new individual methods and the development of new conceptions."

Regarding the types of respiration, he finds that costal inspiration lowers systemic blood pressure while abdominal inspiration raises it. As to deep, superficial, and natural breathing, excluding all violent effort, each accomplishes the same result, in that there is the same definite amount of oxygen present that is essential for alveolar interchange. In diseases where the superficial type is present, the excessive accumulation of CO_2 irritates the respiratory centre, causing the conditions. Rapidity always accompanies superficial breathing and this serves to nearly wipe out all blood pressure changes during blood circulation, and just here may be a source of relief to the heart. Increase in rate is always detrimental to the amplitude of respiration. In cases where the centre is highly

irritated, the more rapid the respiration the more labor expended, the greater the Co_2 accumulation, and the less accomplished in the act. In this way the good results obtained by the use of opium, a respiratory depressant, in cases of respiratory failure may be explained by its sedative action on the overexcited respiratory center, and, at the same time, the reduction in muscular effort.

Co_2 tension has also a hormone action on the heart, a reduction decreasing the heart rate while an increase raises it. As a slight increase in Co_2 excites respiration, so lack decreases it. In anaesthesia so much Co_2 is lost that Dr. Esdall considers the cessation of respiration which so often occurs due to the lack of this automatic stimulus, and considers Co_2 inhalations in desperate cases. In case of surgical shock Co_2 does not seem to be the primary cause and inhalations in this instant would be detrimental to the patient.

The Ophthalmic Record, November, 1912.

The Treatment of Word-Blindness, Acquired and Congenital.

A paper read by Dr. James Hinshelwood (Glasgow).

Dr. Hinshelwood said the old idea was that nothing could be done for the education of persons suffering from these serious defects. Much, however, could be done if the treatment were conducted on proper lines, and he indicated what lines, in his experience, it was best to adopt. Pure cases of acquired word-blindness almost always came to the ophthalmic surgeon in the first instance, as it was supposed the defect lay in the eyes. The lesion, however, was in the brain, either in the angular gyrus, or in the interruption of the communicating fibres between it and the cortex. He related the case of a man *æt.* 58, a teacher of languages, who awoke one morning with the power of reading quite lost. He had right lateral homonymous hemianopsia, but no other symptoms were discoverable. He started to re-educate himself, learning words and letters like a child. After six months he was able to recognize the letters of the alphabet, but never learned to read words by sight. He could only read by spelling out words letter by letter, and this appealing to his auditory memory. After a year he gave it up as hopeless. Still, he had re-acquired the visual memory of the letters and a few short words. Another patient was a woman, *æt.* 34, who had been completely word and letter blind for fourteen months. She had right homonymous hemianopsia. Her brother, who was a schoolmaster, took great interest in her re-education. It was found that the effort of education was very great, and could not be continued for more than ten minutes at a time. Ultimately, she learned to read simple Bible texts by spelling out the words. Her progress from that point of attainment has been steady but slow. After an interval of ten years she could read a newspaper fairly fluently; only occasionally was she compelled to spell words. The third case was that of a girl, *æt.* 14 years, who had right-sided paralysis and loss of speech 18 months before. Previously she had been a good reader. When first seen she was completely letter-blind and had right homonymous hemianopsia. The auditory memory was unaffected. Re-education was started. After learning the alphabet she was allowed to spell out the words letter by letter. In four months she had made considerable progress, and could recognize any letter and many small words. Longer words she had to spell, so as to get the aid of her ear. Two years later she could read as well as ever, but the hemianopsia persisted. Age evidently was a very important factor in the ability with which these patients were able to regain their lost powers. The lesion in these cases was cerebral hemorrhage. In such cases the process of re-education should be delayed until all signs of acute brain symptoms had disappeared. Re-education in these cases could only be accomplished by bringing into play the corresponding centre on the other side of the brain. He argued that both in these and in congenital

cases neither the old system nor that known as the "look and say" method were suitable for all cases. A great deal would depend upon the degree of defect in the visual memory and upon the condition of the auditory memory. When the visual memory was very defective and the auditory good, then the old system would give the best results; but when the auditory was not good, the best results might be obtained by the "look and say" system. Lastly, personal education was in all cases necessary, and a number of short reading lessons during the day was better than one long one, for the brain rapidly became exhausted.

Dr. F. W. Edridge Green (London) quite agreed with the methods suggested for training the memory. He considered it was of the greatest importance to put as little strain as possible on a weak faculty. It should be remembered that the retina was represented in the cerebrum, and we might almost speak of a "cerebral retina."

D. W. W.

The Journal of Ophthalmology, Otology and Laryngology, November, 1912.
Wire Glass.

In the Grand Central disaster, there was a surface car directly opposite the scene. The force of the explosion tipped this car over and killed most of the people in it. Those who escaped immediate death were thrown through the windows, with easily imagined results. When a window pane breaks, the center falls out, leaving the jagged margins fixed in the frame. Each point is rapier like and as dangerous as a Sicilian dagger. One woman whom I attended had on face and head over seventy cuts of lesser or greater size and depth. Wherever the glass penetrated the tissues, the point broke off, leaving a piece of glass at the bottom of the wound. Both eyes were injured, one so lacerated that it had to be removed. The scalp was riddled and the face peppered with wounds.

Another victim, with a smaller number of cuts, was unfortunate enough to have both eyes destroyed, but happily he died within a few days. Others were similarly, but less seriously, injured. As I recall it, the Flower Hospital staff that day attended thirty-five patients suffering from glass cuts.

In the other accident referred to, I remember one man, a personal friend of mine, who had his nose all but severed from his face. Had it been deliberately done with a knife it could not have been a cleaner cut. This organ, hanging by shreds, was skilfully replaced by a colleague and is doing duty today. Fifteen or twenty other people suffered from glass cuts.

It is needless to multiply instances of this sort. Single cases are happening daily, almost hourly.

Every patient I have referred to would have escaped serious injury were it not for the fact that frail and easily shattered glass is in common use by the public carriers. Why is this permitted when there is a glass incapable of breaking under the circumstances mentioned? I refer, of course, to what is called "wire glass."

Holding no stock in the concern manufacturing it, possessing no acquaintance with any individual therein, and having no direct or indirect personal interest in it, I feel free to express my sentiments regarding this product. Observation convinces me that the use of wire glass is rapidly increasing. Most modern elevator shafts are enclosed with this glass, rather than with ordinary or plate glass. The reason for this particular use of wire glass is because it withstands fire much better than other kinds. The great Baltimore fire proved this.

If translucent glass were acceptable the cost would be disregarded, because the rough wire glass costs little more than ordinary window glass. The polished and transparent wire glass, however, costs from 30 to 75 per cent. more than plain polished plate, and more than twice as

much as 32-ounce window glass. It must be admitted that wire glass is more expensive in its original installation and heavier than all plain glass except polished plate. It does seem to me, however, that the added expense of carrying the excessive weight and the added cost of installation would be more than saved by the decreased breakage and the reduction of damage suits for injuries sustained from flying glass. In the end, therefore, the polished wire glass would be a real economy from the standpoint of the public carrier. This glass is nowhere employed, however, as a conservator of human life and limb, because of its nonshattering properties. It is on this account that I wish to advocate its universal employment in the public carriers.

D. W. W.

Multum in parvo might truthfully be said of Boericke's *Materia Medica*, 5th edition, for though it is small enough to slip in the pocket readily, it contains a reliable, comprehensive materia medica, a practical and excellently arranged repertory and a clinical index, making it one of the most popular, up-to-date medical works. It is printed on finest bible paper, bound in morocco leather, and will be sent postpaid, on receipt of price, \$3.50. Write for sample pages to the publishers, Boericke & Runyon, 14 West 38th Street, New York City.

PERSONAL AND GENERAL ITEMS.

Dr. Elinor Van Buskirk (B. U. S. M. 1907) spent a few days in Boston during the Christmas vacation. Dr. Van Buskirk is teaching anatomy in the Woman's Homœopathic Medical College of New York City.

Dr. Frank C. Richardson was one of the experts summoned by Governor Foss in December to examine and give his opinion as to the sanity of the "boy broker" Davie, who petitioned for pardon. His petition was not granted.

MARRIED.—On December 25, Helen Elizabeth Wilcox, daughter of Dr. DeWitt G. Wilcox, to Mr. Jacob Hepner Randolph of St. Louis, a childhood friend of the bride. They are to reside in Kansas City, Missouri. After the wedding ceremony, announcement was made of the engagement of the bride's sister, Miss Margaret Wilcox, to Mr. John May Colony of Boston.

The third lecture in the course on "Essentials of Homœopathic Practice" by Dr. Stuart Close to the students of Boston University School of Medicine will be given on Monday afternoon, January 20, at four o'clock, and the fourth and concluding one on Tuesday morning, January 21, at eleven o'clock. The profession is cordially invited to attend these lectures.

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ORIGINAL COMMUNICATIONS.

THE REAL DANGERS ATTENDING THE USE OF CHLOROFORM AS AN ANÆSTHETIC.*

BY FREDERICK P. BATCHELDER M.D., Boston.

In the production of surgical anæsthesia with chloroform we have three factors to consider :

1. The patient.
2. The anæsthetist.
3. The anæsthetic.

In the time at our disposal the principal facts will be grouped under these captions.

THE PATIENT.

Were all who come to us in a state of perfect health it could be truthfully said that there would be no dangers from this source, since every organ is performing its work in a proper manner and all organs are working in harmony. One of the greatest dangers is that some discernible functional abnormality may not be detected through a failure to become acquainted with all the body activities of the patient, notably the condition of the nervous, circulatory, respiratory and urinary systems. An intelligent understanding of any functional or organic defects at once puts us on our guard. In this section of the United States ether is employed as the usual anæsthetic and, in the writer's experience, chloroform anæsthesia has been employed, not as a routine, but in all those cases where its use would best subserve the patient's well-being, as for example, in all cases of empyæma of the thorax, with the attending large reduction of the respiratory surface and power, whether other pulmonary lesions were present or not. In such cases the use of chloroform is not attended by cyanosis, increased dyspnea, coughing, or

* Read before the Mass. Surg. and Gyn. Society Dec. 11, 1912.

copious bronchial secretion. It has also been employed satisfactorily with or without oxygen in cases where operations were imperative, but a cold or slight bronchitis was present: also in elderly patients who had previously had a cerebral hemorrhage with monoplegia or hemaplegia, or where such a catastrophe might follow ether anæsthesia.

The presence of any of the following conditions in our patient should lead us to exercise care in the choice of the anæsthetic: *Pulmonary tuberculosis.*

Double lesion of any of the four heart valves, *i. e.*, stenosis and regurgitation of any one or more valves. In the writer's experience patients are successfully and safely anæsthetized where uncomplicated regurgitation or stenosis exist with perfect compensation of the cardiac muscle.

The "status lymphaticus" is a condition but little understood which is held responsible for somewhat frequent deaths from chloroform anæsthesia. As much needs to be known further regarding this whole trouble, its merits will not be discussed at length.

The foregoing have been selected as typical examples, and to this list numerous other conditions might be added, but these will suffice.

THE ANAESTHETIST.

Prolonged observation of one's personal relation, as anæsthetist, to the patient, compels the conclusion that, in the large majority of instances, the anæsthetist is the greatest factor in this danger problem under consideration. The novice with insufficient knowledge assumes the actual responsibility of the patient's life—far more than does the surgeon with his keen instruments and deft technic. Prolonged experience in the administration of anæsthetics leads to increased care and alertness in their use. Brief mention only can be made of a few of the dangers associated with the activities of the anæsthetist. One who has used ether in a considerable number of cases somewhat successfully finds it difficult to appreciate the fact that in chloroform he finds a drug whose dosage and physiological properties are quite in contrast to those of ether. A failure to properly appreciate these and to act accordingly constitutes a serious menace. As most of us recall our medical student days we remember with a becoming sense of humility our maiden efforts in seeking to carry out intelligent and concentrated observation of any single phenomenon in our patient. This has been and is lamentably true as applied to surgical anæsthesia. Only by prolonged and persistent practice can the anæsthetist attain to that self-control whereby he becomes oblivious to all things except the patient and his proper and intelligent observation during surgical anæsthesia. Unfamiliarity with the cardinal signs which serve as reliable guides to the patient's true condition during anæsthesia leads to uncertainty,

indecision, and the injudicious dosage and administration of the anæsthetic. Those who have had an extended opportunity to compare and contrast the phenomena of ether, anæsthesia and chloroform anæsthesia find a somewhat striking resemblance, the differences being those of degree rather than of kind.

The anæsthetist must become so imbued with the fact that the *beginning* of an excessive dosage of chloroform vapor is quickly attended by such changes in the character and rhythm of respiration that if he be alert, with trained ear and watchful eye, he will have ample warning that he is trespassing on unsafe ground. That familiar proverb from the Latin Reader of our student days will very forcefully apply here,—“*erre est humane*,”—which translated reads “to err is human.” Therefore, recognizing this fact that everyone of us sooner or later will make a mistake, as the writer has frequently stated to classes of students, “since we are liable to make a mistake let us make it on the safe side and give too little rather than too much anæsthetic.” Another point needs strong emphasis. When in doubt, stop the anæsthetic until the patient exhibits some sign, both familiar and trustworthy, which shall be your guide to further action. Furthermore, with chloroform especially it is not true that the anæsthetist can safely follow the old adage “if a little is good, more is better.”

No personal criticism is intended in speaking of another most important influence. Repeatedly the novice stands in such awe of his superior, the operating surgeon, and of his emphatic commands to “give more of the anæsthetic” that this very element of fear distorts his judgment and impels an increase in the dosage of the anæsthetic so as to avoid his superior’s criticism, and he often induces more profound anæsthesia than is either justifiable or safe.

Among the members of this Society whose life work has closed was one to whom I am personally indebted for a single statement which has proven a most trustworthy rule, especially in the administration of chloroform, but equally true of ether or any other similar anæsthetic. More than once we were admonished by that eminent surgeon, Dr. Alonzo Boothby, to “watch the patient’s breathing.” Failure to do this in chloroform anæsthesia brings the anæsthetist into trouble and, it may be, disaster.

THE ANAESTHETIC.

While to some it may savor of heresy, the writer is compelled to the conclusion that the anæsthetic, chloroform, or any other similar substance is less of a menace to the average patient than is the anæsthetist. Furthermore, if you will carefully weigh the evidence you will probably agree, in part or in full, that chloroform as a drug is not more dangerous than morphine, strychnine, illuminating gas, electricity, or numerous other chemical and physical

agents. In the Pharmacopœia every drug of proven worth is accredited with a definite dosage, customary, maximum and minimum. Any physician who would indiscriminately substitute for morphia sulph., $\frac{1}{4}$ grain hypodermically, a similar quantity of strychnine or corrosive sublimate in perfect solution would speedily be adjudged both incompetent and unsafe. Is it really very much different when one accustomed to ether as an anæsthetic proceeds to administer chloroform in a somewhat similar manner and dosage? The danger therefore rests primarily not in the drug *per se* but in the improper dosage and administration thereof,—in this case by the anæsthetist. We cannot subscribe to the dosage of chloroform by inhalation laid down in the United States Dispensatory,—a fluid drachm or more poured upon a handkerchief in bird's nest form to be repeated in two minutes if the desired effect should fail to be produced. Personal experience has shown that not infrequently an hour's anæsthesia can be maintained with four fluid drachms of chloroform, an average of four minims per minute, or with a respiration rate of 16 of $\frac{1}{4}$ minim per respiration. In frequent instances careful comparison shows that only about 1-8 as much chloroform as ether is required for producing and maintaining surgical anæsthesia. Extensive studies by Prof. Augustus D. Waller of St. Mary's Hospital Medical School, London, show that upon the animals and tissues studied, an amount of chloroform vapor which exceeded 2 per cent of the air containing it, was dangerous or even lethal. When the anæsthetist adequately grasps the fact that in chloroform anæsthesia, with its small dosage, he must endeavor to give his patients something like fifty times as much air as chloroform vapor (its proper dosage, instead of as with ether at a certain stage administering air saturated at the room temperature with ether vapor) then the responsibility for harm to the patient will have been properly distributed.

To summarize:

Danger No. 1. That we shall not properly study our patient, discern his true physical condition and exercise an intelligent choice of the anæsthetic.

Danger No. 2. That the anæsthetist shall fail to discern the customary and reliable signs which will indicate safety or danger for his patient, and that he will not intelligently understand his patient, his anæsthetic, and properly correlate them.

Danger No. 3. If the chloroform be pure and properly prepared for surgical anæsthesia the chief danger lies in an overdose, with its profound and paralyzing influence upon the vital centers pertaining to respiration and the circulation.

LOCAL ANESTHESIA IN OPHTHALMIC OPERATIONS.

BY DAVID W. WELLS M.D., Boston, Mass.

Ophthalmic operations should be divided into two classes, those upon the globe of the eye and operations on the lids and adnexa. Since the eye is so sensitive to irritation, and everyone has had the experience of the great discomfort of a cinder or other foreign body rubbing on the cornea, patients and even some of our profession are quite surprised to learn how perfectly painless most of our ophthalmic operations may be made simply by the use of a local anesthetic. The quack cataract-curer utilizes this fear when he heads his advertisement "beware of the terrors of the knife." In order to understand these two apparently conflicting statements it is necessary to remember that the short ciliary nerves arise from the lenticular ganglion (which derives its sensory root from the nasal branch of the fifth), pierce the globe of the eye and run forward between the choroid and sclera, giving off branches to the ciliary body and iris, and terminate in the anterior epithelium of the cornea. This extreme sensitiveness of the front of the eye is essential to its protection from injury by the reflex of the act of winking.

Even before the days of cocain the cataract operation was not as painful as we imagine. At the session of the A. M. A. this summer Dr. Post of St. Louis related the experience of his father who was operated upon in 1864 by the late W. H. Williams for cataract of both eyes. Dr. Post said that his father often spoke of his experience and said that the discomfort of having both eyes bandaged was greater than the pain of the extraction. This was before the discovery of cocain. The method of operating was, however, simple extraction in which there is no iridectomy. From the anatomy it will be seen that the sensation of the cornea is confined almost entirely to the anterior surface. Therefore any substance which will anesthetize even superficially suffices to make quite extensive cutting of that tissue painless. Cocain paralyzes these nerve endings, producing practical anesthesia in five minutes. It is absorbed somewhat slowly, producing its most profound effect upon the iris in from 15 to 20 minutes, giving rise to slight mydriasis by the contraction of the dilator fibers and constriction of blood vessels. It has little or no effect upon the ciliary body and does not cause complete anesthesia of the iris. It gives rise to a desiccation of the corneal epithelium. This, however, can be obviated by having the lids closed after the instillation, which prevents the evaporation which is essential to desiccation.

Of the various other local anesthetics stovaine has been most lauded. After a few trials with this agent we concluded that it

produced no greater anaesthesia and was decidedly more painful than cocain. Holocain is useful because it does not produce mydriasis and is therefore indicated in that class of cases which require a mild anesthetic and in which glaucoma is suspected, like the taking of the tension with the Schiötz tonometer. Acoïn has one advantage in that the anesthetic effect is slightly longer than that of cocain. Dionin has been used for anesthesia, but its chief value is as an analgesic. It is therefore evident that the subject of local anesthesia in ophthalmic operations narrows down to the use of cocain.

For routine use in removing foreign bodies a 2 per cent solution suffices. The first effect is a slight smarting or burning sensation which, however, passes off in a minute or two. The styptic effect is quite evident and the anesthesia is evidently increased by the constriction of the blood vessels of the conjunctiva. After five minutes the anesthesia is so pronounced that the cornea may be touched without the patient's being aware of it. It probably reaches its height in about fifteen minutes, passing off in half an hour. For cataract extraction or iridectomy it is customary to use a 4 per cent solution, two or three drops instilled three times at intervals of five minutes. Some operators use solutions as strong as ten per cent, but complete anesthesia of the iris is probably never obtained with a local application. For operations on the muscles of the eyes these stronger solutions are used. It has become my practice, however, to inject one drop of a 2 per cent solution over the site of the muscle which is to be operated upon. In this way general anesthesia may be omitted in children as young as ten or twelve years, this not alone in tenotomies but also in muscle advancement in which the muscle is entirely freed from the globe, brought forward and sutured to the corneal limbus.

Fifteen years ago Dr. Payne showed me a little dropper which he had had constructed for introducing cocain into the anterior chamber after the cataract incision had been made, to secure greater effect upon the iris, but I think he has discontinued this practice. We are all of us loath to prolong the operation and fear the introduction of any foreign substance into the interior of the eye, lest through some inadvertence sepsis should occur. Should some hyperemia be evident after the preliminary cleansing, the effect of the cocain can be increased by using a drop of adrenalin. This, by the way, will cause the patient some discomfort even when the cornea is practically insensitive to light contact. So satisfactory is this local use of cocain that the cataract operation is really robbed of most of its discomfort, and from what I have observed I believe that an iridectomy is not much more painful than the prick of a hypodermic needle.

It is not uncommon abroad to see an enucleation performed

with a fairly deep injection of cocain under the conjunctiva. This I believe is never done in this country excepting in those extreme cases in which general anesthesia would be dangerous.

What has been said above has reference to the non-inflamed eye. When dealing with an inflammation cocain is very much less effective, although in a recent case of iritis I succeeded in making a sub-conjunctival injection of 1-3000 solution of cyanide of mercury with but little discomfort to the patient, by the addition of adrenalin 1-1000. Preliminary sub-conjunctival injections of one or two drops of 1 per cent cocain makes the pain of the cyanide injection quite bearable. In chronic glaucoma, either an iridectomy or the La-Grange operation, which consists of an iridectomy and a partial sclerectomy, is practicable under local cocain anesthesia. In acute glaucoma nothing short of profound general anesthesia suffices. Local applications of strong astringents like nitrate of silver to the conjunctival surface of the everted lids, if preceded by one drop of cocain, rob this treatment of most of its terrors.

In operating upon a meibomian cyst we use a lid clamp which shuts off the circulation from the surrounding tissue. Two per cent cocain injected into the base of the tumor renders the remainder of the operation (which consists of dissecting out the entire sac wall) practically painless, excepting the pressure of the clamp. More severe operations on the lids, like that for ptosis or ectropion, require general anesthesia.

Extirpation of the lacrymal sac is made bearable by injection of cocain 2 per cent .8 gram, adrenalin chloride 1-1000 .2 gram, half of this amount injected deep down to the bone immediately above the dome of the sac and the other half close to the periosteum of the nasal bone beside the duct. In this instance the cocain gets into the general circulation and may cause alarming symptoms of cardiac failure. I am indebted to Dr. Wilson F. Phillips, who assisted me in one such emergency, for the suggestion of nitroglycerine 1-100 on the tongue. The response to stimulation was immediate. The efficacy of cocain is not injured by boiling, so that in intraocular work a sterile solution is used.

STUDIES IN REGARD TO THE ACTION OF QUININE ON THE MALARIAL PLASMODIA—I.

BY CONRAD WESSELHOEFT, 2ND, M.D.

From the Pharmacological Laboratory of the Evans Memorial, Boston.

INTRODUCTION

The beneficial effects derived from quinine administration in malaria have long been recognized by the medical profession. The early authors attributed the curative action of cinchona in intermittent fever to be due to the cathartic or antipyretic properties of this drug. In 1790 it occurred to Hahnemann that these properties did not explain its specific action in malaria. Seeing in the effects of cinchona on the healthy individual a similarity to the symptoms of the disease which it cured, he evolved the idea that the beneficial action derived from this drug in intermittent fever was due to the arousing of the vital forces. Thus he was the first to advance the theory that cinchona acted indirectly rather than directly against the disease. In 1867 Binz¹ inferred from his discovery of the antiseptic property of quinine that its curative action in malaria depended on this property to destroy certain lower forms of life. Later when Laveran discovered the plasmodia to be the cause of the disease, Binz advanced the theory that quinine acted on the plasmodia in the same way that it acted on the leucocytes.* This was backed up by observations of Laveran and others who noticed the death of the organisms when immersed in a strong quinine solution outside the body. Consequently the followers of Binz's theory continue to ascribe the cure of malaria by quinine to a direct paraciticide action, while the followers of Hahnemann's theory continue in the belief that this curative action is due to increased activity through the pathogenetic similarity of the drug to the disease. It is fitting, therefore, that the homœopathic school of medicine should take up investigations regarding this subject instead of leaving this problem, which bears so strongly on the fundamental principle of homœopathy, to that school of medicine which denies the value of homœopathic therapeutics. The question which presents itself is whether quinine acts directly or indirectly on the parasites. If it acts directly we must expect to find this drug exerting the same destructive influences on plasmodia outside the body as is observed on these organisms when quinine is administered to the patient. That quinine in doses of .05 G or $\frac{3}{4}$ gr. every two hours can prevent further paroxysms, and can cause the destruction of the plasmodia and their disappearance from the peripheral blood in cases of acute malaria has been demonstrated by our clinical researches which will be published at a later date.

* Binz was the first to show that quinine caused a decrease in the movements of the leucocytes.

Our task, therefore, has been to observe the effect of quinine solutions on plasmodia taken from such malarial patients prior to the administration of the drug.

PREVIOUS WORK

In 1881 Laveran² found that the addition of a 1-1000 solution of quinine to malarial blood under the microscope caused the immediate cessation of motility in the plasmodia, which was followed by their death. Grassi and Faletti,² on the other hand, found that the plasmodia succumbed as quickly in controls of normal saline as they did in the quinine solution. Binz¹ explained this by stating that sodium chloride was also a poison to the plasmodia.

La Monaco and Panichi^{2,4} studied the action of quinine on the plasmodia in hanging drop preparations of malarial blood. They found that weak solutions caused swelling of the parasites and a stimulation of the amœboid motion, medium solutions greatly increased amœboid activity and migration from the red cells, while strong solutions caused contraction of the protoplasm of the plasmodia and their death. Capograssi⁴ showed that this migration can take place in a similar hypotonic solution of sodium chloride containing no quinine, and that if the solution is isotonic this migration is not apparent, but that the presence of quinine caused the parasites to lose their motility and to take on an opaque appearance.

Rosin,⁵ after a careful morphological study of the malarial parasites, made observations on malarial blood to which a quinine solution of 1 : 5000 had been added. He states that at the end of ten hours he was unable to observe any effect on the motility which could be attributed to the quinine. Rosenbach⁵ confirmed these experiments, concluding with Rosin that the specific action of this drug in malaria must be due to some other cause than a direct paraciticidal influence as inferred by Binz, Laveran and their followers.

REPORT OF THE AUTHOR'S EXPERIMENTS TO THE PHARMACOLOGICAL DEPARTMENT

Work was begun in this laboratory on May 15, 1912. The problem undertaken was to determine the effect of quinine in different solutions on the malarial plasmodia. Daily experiments were made in connection with this subject with varying results. Owing to the fact that we were quite inexperienced in dealing with a problem involving a knowledge of hæmolysis, the chemistry of isotonic solutions, and the morphology of plasmodia, a considerable amount of time had to be spent in reading up the literature, in observing normal blood in isotonic solutions and in solutions not ren-

dered isotonic, and in studying the morphology of the plasmodia. In these we received the most generous aid from Dr. Rowe, Dr. Watters and Dr. Nowell.

EXPERIMENTS BY MEANS OF THE HANGING DROP METHOD

Observations on the plasmodia in various strengths of quinine sulphate in watery solution were made from the first, along with the other work. Later we made up solutions of different strengths of quinine bisulphate, quinine hydrochloride, quinine citrate and arsenic trioxide and observed their relative effects on the malarial organisms. The department is indebted to Merck & Co for these salts, which they have supplied gratis for both our laboratory and our clinical researches.

For these experiments a drop of the solution was taken by a sterile platinum loop, and placed on a coverslide. To this drop was added a drop of malarial blood taken from the ear of the patient by means of the same platinum loop. The drop of solution was always very much smaller than the drop of blood owing to the density and consistency of the latter. The blood was mixed with the solution by means of the loop, and the coverslide then inverted onto a hanging drop slide; the edges of the concavity being sealed by cedar oil. This was promptly placed under the microscope, a malarial organism located and arranged in the centre of the field, and observed in regard to the motility of the granules. By means of eight microscopes a series of eight such preparations, including controls, could be observed simultaneously. Owing to the mosaic floor of the laboratory and a very heavy and firm table for the microscopes we had very little difficulty in maintaining the original organisms observed in the microscopic fields. Observations were constantly made and noted at intervals varying from fifteen minutes to one hour. Definite periods for observation could not be carried out as the motility of the organisms varied considerably, and when the motility became doubtful an observation of from ten to thirty minutes on one organism was frequently necessary to determine whether the granules were actually in motion or not. Moreover, this was often such a strain on the vision that it was necessary to delay for some time before trusting to further observation. Motility of the granules could usually be plainly ascertained by a magnification of 475 times; in doubtful instances, however, it was necessary to magnify from 950 to 1530 times. In one of the series using four microscopes 132 observations were made varying from fifteen minutes to one hour and fifty minute intervals over a period of twenty-six hours and twenty minutes. For these experiments the plasmodium vivax of benign tertian malaria was used. The results varied so widely and were so unsatisfactory that we merely

give the maximum duration of motility observed in some of the solutions used:

Solution added to malarial blood.	% alkaloid in salt used.	Temp. of room C.	Duration of motility.
1. Quinine citrate 1 : 1000 ..	67	23°—25°	28 hours, 10 min.
2. Quinine sulphate 1 : 1000	74	23°—25°	27 " 15 "
3. Quinine bisulphate 1 : 100	59	23°	0 " 35 "
4. Quinine hydrochloride 1 : 100	81	23°	0 " 30 "
5. Arsenic trioxide 1 : 100 .		25°	0 " 35 "
6. Arsenic trioxide 1 : 1000		25°	3 " 50 "
7. Sterile water		23°—25°	27 " 30 "

This table deals only with organisms which were kept in the microscopic field from the first observations, consequently there could be no mistaking their identity. At other times when an organism became motionless and then underwent contraction or disintegration, the field was changed. In this way we frequently found active and dead organisms in the same preparation which can only be explained by the greater resistance of some parasites, or by an incomplete mixture of the solution with the blood. This latter is an unsatisfactory explanation when we consider that when two organisms are in the same field one always dies before the other. Another perplexing condition is the persistency of the motility of granules in one part of an adult organism, while the remaining granules become motionless and remain so. Vaporization takes place in these hanging drop preparations as shown by the condensation of moisture on the convex surface of the slides. In a hypotonic solution this would tend toward isotonicity, thus favoring the organisms until this point was passed. The migration of plasmodia from the red cells was observed in a few instances, but it was by no means constant in hypotonic solutions. The primary increase in activity in the quinine solutions was apparently confined to the amœboid motions, the granules being no more active than in the plain blood preparations. After the amœboid motion became decreased the granules did not change their positions to any extent in the organisms, although they continued to "dance about" in their positions in a way which could never be confused with Brownian movement. That is to say that the granules in one part "danced about" each other and changed places, but a granule was never seen at this stage to migrate to the other side of the organism as is frequently observed in the fresh preparations.

Sixteen of these series were run through with such varying

results that we must conclude that experiments along this line are of little value. Our conclusion is based on the following objections:—1. The ultimate strength of the solution of quinine in the mixture cannot be accurately determined as the platinum loop takes up different sized drops, and the solution is not always thoroughly diffused as shown by variation in hæmolysis in different fields of the microscope. 2. Vaporization takes place as shown by the condensation of moisture on the convex surface of the hanging drop slide, thus introducing the factor of partial drying as contributing to the destruction of the parasites. 3. There can be no accurate control with such a technique, as pointed out by Binz, since sterile water, sodium citrate or normal saline added in this way form an unfavorable, if not a directly toxic medium for the plasmodium. Consequently when, in one series, plasmodia showed activity of the granules for twenty-eight hours and ten minutes in such a quinine citrate solution of 1 : 1000 and in such a sterile water solution for twenty-seven hours and thirty minutes, —long after hæmolysis had taken place—we can place but little confidence in these results. 4. The age of the organism at the time of the first observation can be only roughly determined by the time of the chill, and only very roughly by the appearance of the organism. Segmentation often begins one hour before the paroxysm and continues as long as two hours after the height of the paroxysm has been reached. This is borne out by our studies of smears taken at intervals previous to and following the chill. One smear from a simple benign tertian infection taken two hours after the height of the paroxysm showed three fully developed schizonts. This factor is important since it is claimed by many observers that the younger forms are more markedly influenced by the presence of the drug in the blood than are the older forms. 5. Although the process of segmentation was observed by us in several instances the merozoites liberated always became motionless within an hour in all solutions, and only had depleted red cells to enter, since hæmolysis was so far advanced by the time the segmentation took place.

It might be argued that these experiments were valueless, since the quinine did not come in direct contact with the plasmodia as the organisms under observation were protected by the cell membranes of the red corpuscles in which they lived. Such an argument is met by the results of the researches of Golgi,¹ Romanowsky,² Mannaberg² and especially those of Marchiafava and Bignami² who demonstrated the effect of the administration of quinine by mouth to organisms at different stages of development in the blood. Their results show that organisms in all stages of development already harbored by red cells undergo alteration, especially “in that phase of their life history in which they are

nourished and develop." Moreover, according to Hedin,⁶ the alkaloids are capable of penetrating the erythrocytes on account of their property of being dissolved in lipoids, and also on account of a specific vulnerability the cause of which cannot be explained. This assumption of Hedin is not based on such accurate experiments by which he, Hoeber⁷ and others have demonstrated the permeability of the red cells to other substances.

In order to avoid the first two objections raised to the first experiments we collected the malarial blood directly into test tubes containing the different solutions, withdrawing the corpuscles by means of a pipette at given intervals of time. Here hæmolysis began so promptly that this method was soon abandoned.

EXPERIMENTS WITH LEECHES

Following along the lines of research advanced by Sacharoff² and Rosenbach⁸ we allowed two leeches to gorge themselves on the arm of a patient with a simple benign tertian infection three hours before the onset of the paroxysm and previous to any administration of quinine. Immediately after removal of the leeches smears were taken from the blood coming from the leech bites. These smears showed comparatively few organisms, but these were mature. The leeches were promptly put in a flask containing ice and left in the ice chest. After twenty-four hours one leech was removed and placed in a similar flask containing quinine sulph., 1:1000 which was also left in the ice chest. Forty-eight hours after the leeches had been applied they were opened. The leech in the quinine solution was shriveled, curled upon itself, and motionless. The blood taken from the gut of both leeches was dark, thick and of a stringy consistency. Fresh smears showed the presence of organisms in both cases in apparently larger numbers than were found in the smears taken from the arm at the time the leeches were applied. In both cases the granules in all the organisms were absolutely motionless. The stained specimens showed the same condition in the blood from both leeches; namely, an apparent increase in the number of organisms. All these were apparently at least twenty-four hours old, but by no means mature, and showed comparatively few granules. From this experiment we can only conclude that the organisms had undergone segmentation within the gut of the leech, and that the merozoites had gained entrance into the red corpuscles, but that development had ceased in about twenty-four hours, and that activity had ceased at the end of forty-eight hours. It is doubtful whether any quinine gained entrance to the gut. An interesting feature in this experiment was the fact that both the blood elements and the organisms took the Wright stain as well as fresh blood smears, although it had remained in the leech's gut for

forty-eight hours. As the condition of both leeches was not the same at the time of autopsy, the degree of digestions in the two guts would differ, more especially if the autopsies had been postponed.

The experiment is worth recording since the results differed from those of Sacharoff,² Hamburger,² Mitchell,² Blumer² and Rosenbach,⁸ these observers having kept the organisms alive in this way for forty-eight hours providing the leeches were kept on ice. The last named experimenter found that after the patient had been given fifteen grains of quinine in divided doses on the day previous to applying the leeches, that the blood from the guts of these leeches showed at the end of twenty-four hours rare plasmodia which were shrunken, held very little pigment and showed no movement. This, however, only demonstrates that the administration of quinine by mouth brings about a diminished vitality in the plasmodia, a fact already definitely established to be the case in the very large majority of malarial infections by clinical experience and laboratory findings. Our problem is to determine how the quinine acts: namely, whether it acts as a direct protoplasmic poison or in an indirect manner by promoting the body cells to react against the life of the plasmodia.

It might be worth mentioning that we attempted to feed leeches on malarial blood to which quinine sulphate 1:800 had been added in the relation of one part of quinine to four parts of blood. The blood was collected from leech bites and consequently was not coagulated. The leeches so tempted, however, positively refused to ingest this diet, even though left in it for an hour.

EXPERIMENTS WITH UMBILICAL CORDS.

Our next step was to obtain fresh umbilical cords from the obstetrical department of the hospital through the kindness of Dr. Jacoby and others. The cords were ligated while distended immediately after the birth of the child. An area over the umbilical vein was cleansed by sterile water and alcohol, and three to six drops of blood freshly drawn from patients infected with the plasmodium vivax and not under the influence of quinine, were injected by means of a sterile hypodermic syringe. More than this amount could not be injected owing to the prompt coagulation in the syringe. This blood was then thoroughly mixed in the blood of the umbilical vein by running the cord back and forth through the fingers. The cord was then tied in the centre with an equal amount of blood at each end. To one end a quinine solution of a given strength was injected under aseptic precautions. Twelve cords were treated in this way with different strengths of the sulphate, bisulphate, hydrochloride and citrate of quinine. The cords were kept in the ice chest, since it had been previously determined by us that cords kept in the in-

cubator or at room temperature caused rapid hæmolysis and putrefaction, or if not kept soaked in normal saline, underwent drying. At the end of twenty-four hours the cords were removed, run through the fingers to disseminate any local growths of the organisms, and a small portion at each end of the cord ligated firmly. From these ligated portions the blood was taken and fresh and stained preparations made. Another portion was ligated on the following and six successive days and smears taken in the same manner. The blood grew darker and thicker from day to day. The results were absolutely negative since it was never possible to isolate an organism from this foetal blood on any day from either ends of the cords either by fresh or stained preparations.

EXPERIMENTS WITH ISOTONIC SOLUTIONS.

The following isotonic solutions to blood were made up:—

1. Potassium oxalate.
2. Potassium oxalate saturated with anhydrous quinine.
3. Sodium chloride.
4. Sodium chloride saturated with anhydrous quinine (anhydrous quinine is soluble in 1750 parts of water).

Also the following solutions:—

5. Sodium chloride 1 per cent. Sodium citrate 4 per cent.
6. Sodium chloride 1 per cent. Sodium citrate 4 per cent saturated with quinine sulphate (Quinine sulphate is soluble in 750 parts of water).

To small test tubes containing 10 c.c. of these different solutions we added six to ten drops of malarial blood collected directly from the patient's ear under aseptic precautions. For these experiments we used blood from a double benign tertian infection (*plasmodium vivax*); and the blood from a very severe infection of mixed quotidian and tertian aestivo-autumnal (*plasmodium falciparum* quotidianum and *plasmodium falciparum*). In some instances the blood corpuscles were washed in the isotonic solution, while in others washing was not resorted to. In two experiments 10 drops of foetal blood from fresh umbilical cords were added to the solutions containing malarial blood with the idea of supplying more available corpuscles to the parasites should segmentation take place in the test tubes. The corpuscles were drawn at intervals from the bottom of the tubes by means of sterile pipettes. In all these experiments hæmolysis was prominent after twenty-four hours in spite of attempted isotonicity of the solutions.

We report the results of some of these experiments as follows:—1. *Plasmodium vivax* removed from patient six hours before the onset of the paroxysm found active after fifty hours and fifteen minutes in potassium oxalate; four hours in sodium chloride, and

three hours and forty-five minutes in sodium chloride, sodium citrate and quinine sulphate. 2. Plasmodium falciparum removed from patient one hour before the onset of the paroxysm found active after forty-eight hours in potassium oxalate, and after forty-eight hours in potassium oxalate and quinine sulphate. We do not consider these experiments of sufficient value to enter into details, since haemolysis was evidently an important factor in the destruction of the parasites in spite of our efforts to avoid it.

DISCUSSION.

An important consideration to be borne in mind is that pointed by Nocht,⁹ namely, that the trypanomes are killed by quinine outside the body, while this drug has no influence on them when they are circulating in the blood of a case of sleeping sickness. This disease, therefore, does not yield to quinine, but it does to arsenic.* In our experiments the plasmodia always died as soon in arsenic 1:2000 as they did in quinine 1:2000, and usually sooner. This is simply another factor which throws a shadow of doubt on the Binz theory, but it need not deter us from further researches with the organisms outside the body, providing we can actually cultivate them. If we can cultivate malarial plasmodia in the presence of a quinine solution, the strength of which shall be equal to that obtained in a patient's blood during a prompt quinine cure, we shall have a valuable argument against the direct paraciticide theory. In these attempts which have been begun we are using dextrose media with which Bass and Johns¹⁰ have apparently had so much success.

It will have been observed from the conclusions of each of our experiments here recorded that we place very little importance on the results obtained. The only deductions which can be drawn are:—(1). That if quinine acts as a direct paraciticide it does not seem to destroy the parasites outside the body as quickly as we should expect from the definite effects produced on these organisms after small doses administered to the patient. (2). That such experiments outside the body are unsatisfactory since the plasmodia are subjected to unfavorable conditions other than quinine. (3) That only by cultivating the malarial organisms in the presence of quinine can we hope to definitely refute the paraciticide theory by laboratory experimentation.

* The form of arsenic most commonly used in this condition is atoxyl (arsenic-acid anilide). The curative effect of this drug in sleeping sickness cannot be compared with the specificity of quinine in malaria. Ullrich (Archiv. f. Schiffs- u. Tropenhygiene 1911, 2.) in a series of nearly 800 cases of sleeping sickness treated with injections of atoxyl obtained a complete cure in 25 per cent of the cases. How atoxyl acts on the trypanosomes is a question which seems to be more widely disputed than the question of how quinine acts on the malarial plasmodia. Some see a direct action on the trypanosomes from the arsenic which is split off, from complex reduction products, or from combinations of atoxyl with the body albumins, while others see an indirect action from the stimulation of antibody production by this drug. The results of most of the researches to date would appear to favor the theories implying a direct paraciticide action.

BIBLIOGRAPHY.

1. Binz. (a) Experimentelle Untersuchungen über das Wesen der Chininwirkung. Berlin, 1868.
(b) Über Chinin und die Malaria-amoebe. Berlin klin. Wochenschrift, 1891, p. 1045.
(c) Unser jetziger Kenntniss von der Malara-fieber heilung durch Chinin. Centralbl. f. d. Med. Wissensch., 1894, Jan. 13. p. 480.
(d) Über den Vorgang der Heilung des Malaria-fieber durch Chinin. Deutsch Med. Wochensch. Feb. 8, 1894. No. 6, p. 122.
2. Craig, C. F. Malarial Fevers. New York, 1909.
3. Golgi. Über die Wirkung des Chinin auf die Malaria-parasiten Deutsch. Med. Wochensch., 1892. Nos. 29 and 31.
4. Ziemann, H. Handbuch der Tropen Krankheiten. Edited by Carl Mense. Leipzig, 1906. p. 474.
5. Rosin, H. Einfluss von Chinin und Methylenblau auf lebende Malaria-parasiten. Deutsch. Med. Wochenschr., 1893. No. 44, p. 1068.
6. Hedin, S. G. Archiv. für d. gesammte Physiologie. Pfluger., 1898. 70. p. 542.
7. Höber, R. Physikalische Chemie der Zelle und der Gewebe. 3rd. edit. Leipzig, 1911. p. 201.
8. Rosenbach, O. (a) Die Conservirung lebender Malariaparasiten. Berlin Klinisch. Wochenschrift. 1891, August 24, p. 839.
(b) Arzt contra Bakteriologe. Berlin and Vienna, 1903. p. 35-91.
9. Nocht. Die Therapie der Malaria. Deutsch. Med. Wochensch. 1909 March 25, p. 513.
10. Bass, C. C. and Johns, F. M. The Cultivation of Malarial Plasmodia in vitro. Journal of Experimental Med. Oct. 1, 1912. p. 567.

**INDICATIONS FOR THE HOMŒOPATHIC REMEDIES
COMMONLY INDICATED IN DISEASES OF THE
DIGESTIVE TRACT.***

BY F. M. PADEFORD, M.D., Fall River, Mass.

From the earliest ages of the medical art, physicians have sought to find specific medicines. Little success has rewarded their endeavors when the end in view has been to discover remedies that would cure nosological forms. It remained for Hahnemann to view disease from a new angle and to show that the sum total of all the discoverable signs that indicate a departure from health constitutes a disease-picture for which medicines may be prescribed with the expectation of effecting a cure.

This marked the beginning of a new epoch in medicine. But it also necessitated the creation of a new science of pharmacology and a practically new classification of disease.

From the homœopathic standpoint it is not enough to know that a patient is suffering from sub-acute gastritis, gastric ulcer, or other specific complaint. Such knowledge, important enough in itself, and even indispensable to the surgeon and to those who must decide as to what the general treatment of a given case should be, does not, in the present state of our knowledge, constitute an adequate basis for the selection of the one remedy that the patient, at any particular time, may require. It may, however, and probably does point to the group of medicines in which the needed remedy will be found, but even here there is considerable ground for error. In a great many cases it is practically impossible to determine what the exact pathological condition really is, and if a prescription is to be made it must be upon some basis other than that of pathology.

* Read before the Mass. Homœopathic Medical Society, October 9, 1912.

It is doubtful, indeed, if gastric ulcer, or even cancer of any organ or tissue of the human body, has ever developed in a person in whom there was no previously existing disease or constitutional taint, either inherited or acquired. Whether we can demonstrate it to be so or not, we may safely assume that both ulcers and new growths are but symptoms, are but expressions of a diseased state that must have existed prior to the time when they appeared. It is to this underlying disease that our homœopathic treatment must be directed if we expect to prevent or cure these so-called maladies with the medicines that we know about today. And in the only stage in which we can hope to cure many of the chronic disorders that we are called upon to treat, subjective symptoms constitute the chief evidence of existing or developing disorder and furnish the principal indications for remedial treatment.

In any stage of some diseases we may fail to cure. This failure may be due to one or more of many causes. It may be that the disease is absolutely incurable. It may be that the disease is curable but that our tools are inadequate—that the needed remedies have not yet been found. It may be that we possess all the remedies that are necessary, but lack the knowledge to properly apply them. Or it may be that the reason for our non-success is that we have failed to remove the still present and active cause of the disease which we strive to cure.

Indigestion resulting from indulgence in foods that are too rich or in iced foods or drinks, will probably find a remedy in Pulsatilla, Ipecac, Antimonium crudum, or Arsenicum. Pulsatilla is indicated while the stomach still contains the food that has disagreed, Ipecac where *nausea* persists after the stomach has been ridded of its contents. Under Pulsatilla we find: Dry mouth, absence of thirst, foul taste, tongue coated white or yellow, nausea and vomiting. Under Ipecac the tongue is clear, or comparatively so.

When there is present retching and vomiting, with a tongue that is thickly coated white, "like whitewash evenly laid," Antimonium crudum should be prescribed.

Arsenicum complements the action of Ipecac. Farrington states that it should follow or even supplant it when an actual catarrh of the stomach has been produced by indigestible food or one of the most useful in the materia medica. Whether we have to do with acute, sub-acute, or chronic disorders, either catarrhal or ulcerative, or even where new growths are present, no medicine that we possess is likely to be of greater service, if, of course, symptoms calling for it are present. It acts upon almost every organ, tissue, and fluid in the human body, and the cachexia that it produces parallels that which occurs in some of the most serious diseases that afflict mankind. Briefly enumerated, the general symptoms indicating it are: Nausea and vomiting, burning pains in the stomach, thirst for small quantities of water often, anxiety and

fear, prostration and restlessness. Amelioration from heat. Aggravation soon after midnight. The tongue may be coated white, yellowish white, brown, or lead color. It may be dry and red with raised papillæ at the tip, or pale and doughy, showing on its edges imprints of the teeth; or it may be "mapped." It is one of the few remedies under which "mapped tongue" is found.

Where vomiting is present with other symptoms that are suggestive of Arsenic, care should be taken to differentiate this remedy from Phosphorus. Under Arsenicum, vomiting takes place as soon as whatever is eaten or drunk enters the stomach; under Phosphorus cold things for a short time seem to relieve, they are vomited when they have become warmed in the stomach. Bismuth also must be differentiated from Arsenicum. Under this remedy there is "burning in the stomach with a violent ejection of food." The vomiting takes place immediately, as under Arsenic. On these symptoms alone it would be practically impossible to decide between the two remedies, so other conditions must be taken into account. For "pure gastralgia" Bismuth sub-nitrate is likely to be most helpful. "Burning, griping, lancinating pains, associated with dull pains in the back," are indications for it.

Nux vomica is indicated in disturbances that commonly develop in persons of an active, intellectual type, who are in the habit of eating at irregular hours and eating hastily, and in the disorders that are caused by the "abuse" of stimulants and highly seasoned food. The Nux patient, physically, is thin and active; in temperament he is irritable and impatient, and over-sensitive to noise, odors, light and music.

The mental, or "dispositional" symptoms of the drug are not unlike those of Chamomilla. Clarke, differentiating the two, says that the Chamomilla patient has "a bad temper," while "Nux is malicious."

Chamomilla has been highly valued in the treatment of such "bilious attacks" as have seemingly been caused by giving way to a fit of anger. Hahnemann stated that "the (sometimes dangerous) disorder, resembling an acute bilious fever, which is often brought on by violent angry vexation, with heat of the face, insatiable thirst, bilious taste, tendency to vomit, anxietas, restlessness, etc., has so much homœopathic similarity to the symptoms of Chamomilla that it can hardly fail to remove the whole sickness speedily and specifically." (Hughes.)

The Nux patient, it seems, is ugly because he is sick; the Chamomilla patient is sick because he is, or has been, ugly.

Symptoms indicating Nux vomica, are: Dull, heavy frontal headache, worse in the early morning; tongue clear on its anterior half and coated toward its base; sour, bitter, or metallic taste; sensitiveness in the region of the stomach; retching and vomiting; colic-like pains in the abdomen, and ineffectual urging to stool. The bowel movements are usually small and unsatisfactory. Many Bryonia symptoms resemble those of Nux vomica, but the general

state of Bryonia is one of "dryness"; the lips, mouth and tongue are dry; there is thirst for large quantities of cold water; the bowels are constipated, and the stools are large, dry and hard.

The gastric pains of Nux are "gripping and clawing." They start in the region of the epigastrium and radiate in all directions, and are worse in the morning and from solid food. Dr. Nash compares Nux vomica with Anacardium. He states that under the latter remedy there is "pain in the stomach, which comes on only when the stomach is empty, and is relieved by eating, while Nux vomica is relieved after the process of digestion is over."

For gastrodynia we must also consider Nitrate of Silver. Its characteristic pains are described as "gnawing" or "ulcerative"; a sensation as if there were a "lump in the stomach" may be complained of. This sensation is, I believe, supposed to be a "key-note" of *Abies nigra*. The pains of Silver Nitrate radiate from the epigastrium in every direction. The paroxysms end with vomiting of glairy, stringy mucus, or with eructations of large amounts of gas, which for a time cannot be gotten rid of, but which is at last expelled with a good deal of force. The vomiting is suggestive of that which occurs under *Kali bichromicum* and *Hydrastis*.

The pains of *Argentum nit.* "increase and decrease gradually," are made worse by taking food, and relieved by firm pressure and bending forward. The remedy is of value in the treatment of gastric ulcer.

In the provings of Uranium nitrate there were caused: Pains which radiated from the left side of the ensiform cartilage, coming and going, and worse when fasting. Return of indigestion fifteen minutes before dinner, with gnawing and sinking at the cardiac end of the stomach, but without hunger or faintness. (*Cycl. of D. P.*) In Hering's *Guiding Symptoms* we find: "Boring pain in pyloric region. Dyspepsia, intermittent attacks of pain, with sinking at epigastrium and acid eructations, flatulency and copious urination. Gastric and duodenal ulcers."

On the lower animals the drug has caused ulceration of the pyloric end of the stomach.

Belladonna is indicated where there are "cramping, burning pains, which extend to the spine." Dr. Goodno states that "*Belladonna*, or its alkaloid, *Atropia*, is useful in cases of gastralgia of a purely nervous type, and characterized by the suddenness with which the paroxysms appear and disappear."

"Constant pain, aggravated at regular intervals by paroxysms of intense suffering," calls for *Dioscorea*.

On the duodenum and the hepatic system the action of *Nux vomica* is pronounced. It has cured cases of thickening about the pylorus with consequent dilatation of the stomach with its usually accompanying symptoms. A sense of fullness and pressure with stitching pains in the right hypochondrium, when other *Nux*

symptoms are present, will indicate this remedy when the liver is involved.

For patients who complain of a feeling of faintness or gone-ness, or of weakness at the pit of the stomach, Hydrastis should be thought of. The Hydrastis patient suffers from catarrh, the secretions being yellowish and ropy and tenacious; there is dropping of mucus in the throat; the tongue is pale and flabby and marked on its edges by the teeth. On the tongue, especially its anterior part, there is a peppery sensation, or a feeling as if the mucous membrane had been burnt or scalded. The gastric symptoms are those of "atonic dyspepsia"; the bowels are constipated, stools light in color and hard. The "dropping in the throat" is suggestive of *Mercurius Iodatus Flavus*. The sense of "goneness or faintness" in the pit of the stomach is found also under *Sepia* and *Ignatia*.

But under *Sepia* there is mental depression; aggravation from milk; desire for acids; irritability of bladder; offensive urine, which contains a red or pinkish sediment that adheres to the vessel in which it is contained; sense of weakness or pain in the lower part of the back, and in women a bearing-down sensation in the pelvis. Morning and evening aggravation of complaints is characteristic.

The *Ignatia* patient is easily moved to tears; complains of a sensation as of a lump in the throat and of the "sinking in the stomach." The "burnt or scalded" sensation of the tongue is found under several remedies, particularly under *Magnesium muriate*, *Sepia* and *Sanguinaria*.

English homœopaths have spoken highly of Hydrastis as a remedy for cancer. It is one of the very small number of medicines that have been credited with having cured some cases of this dire complaint. It is without doubt a valuable remedy for "gastric catarrh," and even ulceration.

For a person who is pale and sallow and emaciated, who complains that while his appetite may appear at times to be fairly good, he can eat but little without feeling full and uncomfortable, and who has sour eructations; a sense of fullness and pressure in the stomach after eating; flatulence in the intestines, and constipation, *Lycopodium* should prove helpful. The observation of "brick-dust" sediment in the urine would strengthen the indications for the remedy.

The flatulence of *Carbo vegetabilis* is chiefly gastric; that of *Lycopodium*, intestinal. Under *Carbo veg.* the tendency is to diarrhœa; under *Lycopodium*, constipation is the rule.

China, which the late Dr. Thayer used—in the 6th cent. dilution, I believe—as a stock remedy for gall-stones, has flatulence in both stomach and intestines. The bowels may be but little affected, but the tendency is to diarrhœa.

Under *Lycopodium* there may be ineffectual urging to stool, but this condition seems to be due more to a spasmodic contraction

of the sphincter which prevents the passage of the feces than to the irregular peristalsis that is characteristic of *Nux vomica*.

China is recommended for the dyspepsia that may be caused by the intemperate use of tea. When the diet for a long time has contained a too high proportion of farinaceous material, the condition which calls for *Lycopodium* is likely to develop.

The China condition is erythistic. A state of physical depression and weakness is characteristic of *Carbo veg*. The *Lycopodium* patient is intellectually keen, but muscularly, not well developed; his digestive processes are slow.

When we have to do with a cicatricial contraction which occludes a natural channel whose patency is essential to the continuation of life, manifestly it is not medicine that the patient requires, and this also may be the case where there exists a biliary calculus or a gastric ulcer. But in doubtful cases a trial of medicine should be made.

We infer that the remedy that has been carefully chosen, if it relieves the flatulence, and the vomiting, and the pain, will cure also organic complaints. If this be not so, our faith and the faith of our fathers has been in vain.

PRACTICAL EUGENICS

An editorial quotes an opinion that every person before marrying should be compelled by law to undergo a private and confidential medical examination, just as one must pass an examination before obtaining a policy for life insurance.

While such an examination might cause more serious thought upon the subject of physical fitness at the time of marriage, it is recognized that when two people are determined to marry, the doctor's views as to their physical condition will not have much weight with them.

The department of vital statistics would be benefited by such a plan and the classification of married people from the physical standpoint would be a matter of important record.

In the course of years this would result in the accumulation of valuable data affecting many obscure problems of heredity.

It is admitted that no one is competent at present to say who is fit to marry and who is not; it would be an extremely difficult matter to draw the line beyond which marriage should not receive public sanction.

A public requirement of this character is worth striving for as it would be an incentive to acquire good health especially if the certificate of the highest grade were refused to those who were not physically well developed. It would enable the state medical service to watch over the children of degenerate parents and give them the best possible chance. A symposium on this subject is also reported in this number of the *Medical Times*, a series of very interesting and valuable contributions being made by clergymen and doctors. The opinions expressed were all but unanimous that a law requiring a certificate of health prior to marriage would be a valuable law, but that it might not be easy to enforce it, at least not until public sentiment caught up with it.—*Therapeutic Gazette*, September 15.

CLINICAL DEPARTMENT.

Conducted by A. H. RING, M.D.

Case 1-D. Diagnosis: Dementia Praecox.

There are certain salient symptoms in this patient which leave little doubt as to the diagnosis. The confusional illness at sixteen was undoubtedly the initial attack. How much the preceding scarlet fever had to do with this might be questioned, but it is not uncommon to have a severe illness which undermines the general health in a predisposed young person, usher in one of the psychoses and especially dementia praecox. While one may hypothecate a secondary low-grade cortical cerebritis in such cases, time and refinement of neuro-pathological technic have yet to prove it. The fact is, however, that this patient never regained her usual acumen and that mental pursuits became increasingly difficult until during the summer of her twenty-first year, four years after the acute attack, she began to show signs of dementia, namely, lack of interest and attention, disregard of her normal family ties and affections, occasional noisy outbreaks of irrelevant laughter and irritability. So characteristic is this picture that it can hardly be mistaken. It is the picture of early mental deterioration. And this is all that is meant by the name, dementia praecox.

In seeking for a better classification of mental disease, Kraepelin, some twenty-five years ago, reversed the prevailing custom of labelling pathognomonic symptoms, and began to sort out cases according to end-results, collecting from them such common symptoms as bore a special prognostic significance. Thus he found a set of cases whose leading feature was that they went to pieces psychically at an early age. These he called dementia praecox. Studying the leading symptoms, he found that they all possessed certain common features, especially loss of the emotional reactions and instinctive desires; also certain special symptoms which led to the following subdivisions; (1) Hebephrenia, a form which commonly develops between puberty and twenty-five years of age, and is characterized by irrelevant laughter, gradual change in the personality, indifference, irritability, aversion to some members of the family, a psychasthenic state with obsessions and a variety of hallucinations; (2) Katatonia, which adds to the foregoing disturbances of voluntary motion. The patient grimaces and strikes attitudes, is depressed, and speaks in monosyllables or not at all (mutism), is negative, doing the reverse of the command, or is stuporous; (3) Dementia paranoïda, a type which develops somewhat later, before forty, in which hallucinations and delusions are more marked. It differs from pure paranoia, in that the delusions are less systematized and more transient, and dementia comes on early. Suspicion, distrust, auditory hallucinations and visions are common,

and these patients frequently believe themselves to be great personages.

There has been much discussion as to whether dementia precox is a functional or an organic psychosis. No cortical change has yet been described which may be said to be characteristic, though many autopsied cases have exhibited a variety of lesions. Stoddard says "The convolitional pattern of the cortex is often abnormal." Turner has described immature nerve cells. These both indicate an inherent structural deficiency of the nervous system, a condition which one would expect from the symptoms.

Perhaps the most interesting question in these cases is, could they be prevented or delayed, and much has been written about pre-dementia precox.

One of the recent and best papers on this subject is by William R. Dunton, Jr., M.D., printed in the *Journal of the American Medical Association* for December 21, 1912. In it he quotes Dr. Jelliffe as stating that "when a child shows an inability to bring himself in touch with the physical world, with a constitutional aversion to dates and a glorification of vague abstractions, it is justifiable to regard the child or youth as a patient, to advance his level, and to train him to be interested in his small demands, so that he may be saved the necessity of meeting greater demands than his capacity will bear." He says these patients are interested in inward rather than outward fields (the shut-in mind), lack manual dexterity, lack adaptability to uncongenial environment, and fits of abstraction are common. Dr. Dunton tends toward the functional conception and believes that the careful mental examination of school children and a lessening of the demands upon those who manifest the type described as pre-dements, would go far to lessen or prevent the later unfortunate stage.

Case 2-D for Diagnosis:

The patient is a woman twenty-six years of age, though looking much younger.

Family History:—Father and mother living. Mother had eleven children, of whom the patient is the second oldest. Paternal uncle and maternal grandparent were insane. The family has been a successful one, the brothers occupying positions in banks and as commercial travelers. Eldest sister is nervous, and the mother has of recent years been subject to epileptiform seizures.

Past History: The patient was an unusually healthy girl. She graduated from the high school at seventeen; attended seminary two years, graduated with high honors, and prepared for a life as a school teacher. Her father employed her as a saleswoman and buyer, and she did this work up to the beginning of her sickness. She did much business on her own responsibility and was considered

a careful and shrewd business woman. She is deeply religious, coming of a strict Baptist family. When nineteen, she met a young man whom she greatly admired, and this friendship gradually ripened into an engagement which had the approval of her family. Just after her formal engagement, when twenty-four, she went to help care for the house of a relative who was to be confined. Though not actually present during the labor, she heard the commotion, was much disturbed by it, and resolved that she could never care enough for any man to go through it herself. Now she became more religious and was conscious that she did not care so much for the young man. She decided that she was not worthy of him. This conflict continued over two years until last summer (1912). All she was conscious of herself was that she was not worthy and was striving to make herself so through religion. At fifteen she had joined the church during a hallelujah revival. She was "just frightened into it." She got religion only "into her head and not into her heart," hence, as she now reasons, becoming a "hypocrite." This made her dissatisfied with herself. Last April, when the pastor was preaching on the 46th Psalm, and reached the conclusion that some of the weak-kneed Christians would go over to the devil, she took it to herself. This startled her: she reasoned that she was a weak-kneed Christian. She immediately became agitated and could hardly contain herself. On account of being, as she reasoned, a hypocrite, she was "unprepared for her Master," consequently she had a great fear of death. At this point she formally broke off her engagement, deeming it unfair "to keep him dangling any longer." Her sister was to be confined and she went to assist in the affairs of the house. The night the baby came she sat up in bed reading the Bible, when it suddenly flashed upon her that she did not believe a word of it. This so frightened her that she did not sleep at all, and this insomnia has continued since as the most distressing symptom of her illness. At this time she says she became void of emotions; did not show any particular regard or love for her family, could not cry as formerly. She became very depressed and lapsed into a state of sheer apathy and indifference to Bible, religion, friends, etc. She explains this on the ground of the selfish life she has lived. From April, the onset of her ideas of religious hypocrisy, until the latter part of September, she still worked and kept about her daily business, continually thinking of her hypocrisy. Her insomnia increased and she soon had to give up her work. In the last twelve weeks she has "had only two good nights' sleep." (?)

Mentally, the patient appears entirely normal and well poised. While declaring that she lacks interest, she pays close attention and shows clear comprehension, appreciates humor, and is a comely, attractive young woman. She weighs 110 lbs. and is five feet two

inches tall. With the exception of a soft, full, somewhat rapid pulse, physical examination is negative.

From what is this young woman suffering, and how treat it?

IS YOUR NAME IN THE INTERNATIONAL HOMŒOPATHIC DIRECTORY?

DEAR COLLEAGUE:—The time has come when we must carefully collect and record the changes and additions to the DIRECTORY of 1911-12.

The labour and expense of collecting the DATA is being borne by the writer, who has not the time, nor can he afford to make a second appeal for your help in this INTERNATIONAL DIRECTORY WORK.

The Journal of the AMERICAN INSTITUTE OF HOMŒOPATHY for August contains the report of Dr. George Peck, Chairman of the International Bureau of Homœopathy, and his remarks on the need and value of this DIRECTORY fill his three page report. He says in this connection "No greater surprise has overtaken our profession during the past year than the marvellous change, both in size and contents, that has occurred to the International Homœopathic Directory. . . And yet there is nothing irrelevant between its covers. . . The information the volume imparts should be in the possession of every single member of this Institute, for is not this a nation of globe trotters, our patrons its most educated people, and ourselves responsible for their well-being abroad as well as at home? . . . It is the most complete exhibition of the homœopathic school in detail that has ever been presented. . . ITS PRICE IS REASONABLE, being only four shillings. . . It has been intimated that unless the Directory receives greater pecuniary encouragement than it has hitherto, its publication will cease. . . The number of Americans who subscribed for this work in advance, thereby securing the admission of their card and a copy of the book for one dollar, was just seventy-three! Ridiculously few! . . . This circumstance reflects on our general intelligence, questions the depth of our interest in Homœopathy and disproves the sincerity of any professed regard for our clients. Shall this condition abide? The discontinuance of the Directory would result in irreparable damage to the cause and in the death of many of our best citizens."

So spake Dr. Peck in behalf of this standard work.

As intimated, there has been a serious financial loss on the production, and which even much better sales on the next issue will not recoup, but we labor and are inclined to think that it has a place on every good homœopath's desk, so this is now being brought up to date from a pure consideration of duty to our school.

The writer has letters in his possession asking sharply, why these writers were not personally informed of the previous issue, when they would have had their cards inserted; some, at least, of these are not to be found in the list of members of the A. I. H., so how were we to find them? Let these consider for a moment what this personal canvass and detection would entail.

The editors of the various journals very generously gave good announcements and in plenty of time; it is now requested that these Editors will again extend their courtesies to this Directory by a few words of notification.

Matter sent us will be inserted in proper order, and by this means the writer hopes to be able to bring every country up to date.

We wish to receive any information about Hospitals, Societies, or any Statistics of which you will vouch the reliability.

Any who prepay four shillings, are entitled to a brief card, naming their Speciality and Professional Appointments. Details and remittance should be sent to the writer or the publishers, the Homœopathic Publishing Co, 12 Warwick Lane, Paternoster Row.

DR. E. PETRIE HOYLE, 84 Holland Park, W., London E. G.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only and preferably to be typewritten—personal and news items should be sent to THE NEW ENGLAND MEDICAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business should be sent to the Business Manager, 422 Columbia Road, Dorchester, Boston, Mass.

The GAZETTE does not hold itself responsible for the opinions expressed by its contributors. Reprints furnished at cost.

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SHOULD VENEREAL DISEASES BE REPORTED?

The great awakening concerning the prevalence and ravages of venereal diseases is pushing to the front some intensely interesting and weighty questions. One need but look over the last report of the Secretary of War to gain a fairly accurate knowledge of the prevalence of this plague-spot in the army.

Secretary Henry Stimson says,

“The high percentage of venereal disease continues to be the reproach of the American army, and *the daily average number of those sick from that cause during the past calendar year was larger than the daily average number of those sick from all other of the more important diseases combined.*”

I believe that the ultimate causes which make the record of our army in this respect shameful beyond that of the army of any other civilized nation are inherent in our *own* shortcomings as a *nation* in dealing with this matter. So long as in our *civil* communities, and particularly our larger cities, we continue to close our eyes to the magnitude and extent of the evil and refrain from attacking it with all of the weapons which modern scientific knowledge places in our hands, it cannot but be expected that the younger men in our army, leading the abnormal life of the soldier, will show the effect of the evil to a marked degree.”

While statistics in the army are much more easily obtained and more dependable than in civil life, yet the statement given by the Secretary of War forms a fairly accurate basis upon which to estimate the prevalence of venereal disease in civil life.

In the large manufacturing centres where boys and girls are thrown closely together, both in the factory and the home, the prevalence of this disease is almost as great as in the army. In the large cities amongst the transient and floating population, the same could be truthfully said. Jumping over the “industrious and sober-minded middle class” and taking the idle “upper crust,” we find the same condition prevailing. It can therefore be said without exaggeration

geration that for corresponding ages venereal diseases are nearly as prevalent in civil life as in the army.

If the statement of Secretary Stimson be true, that venereal disease in the army causes more physical disability than all other causes combined, and if it be shown that those diseases are as common in civil life as in the army, is it then unreasonable to conclude that venereal diseases are the causative factors in producing more physical disability in male adults under forty years of age than all other causes combined?

The Director General of the Army Medical Department in England reported this year that 31.8 per cent of the total disability amongst members of the British Army for the year 1910 was due to venereal diseases: He further reported that from 1900 to 1909 the army recruiting station rejected 1,516 applicants because of syphilis, while there were only 725 rejected because of tuberculosis.

If it were true that only the guilty suffered by the prevalence of these loathsome diseases, we might perhaps be content to sit back with folded hands and say "Let nature be the jailor and the executioner."

But note these significant figures, which smite our apathy like whiplashes: In England during 1910 the number of deaths due to syphilis amongst infants under one year of age was 1.23 per hundred thousand; the same due to diphtheria was .30 per hundred thousand; the same due to gastro-intestinal catarrh was .58 per hundred thousand. Nearly two and a half times as many infants under one year of age died in England in one year from inherited syphilis as died from gastro-intestinal catarrh; and what is true in England is approximately true throughout the civilized world.

We are carrying on a nation-wide campaign for pure milk and baby hygiene; we are enacting laws, educating the people, and insisting that the bottle-fed infants shall be protected and given a chance to live. All of it is excellent and highly necessary, but consider that where one infant dies as a result of impure milk nearly three die of a preventable disease against which we are scarcely raising a finger.

Our campaign against pulmonary tuberculosis has been so successful that in the registration area of the United States the number of deaths has been reduced from 201 per hundred thousand in 1900 to 160 per hundred thousand in 1909. General tuberculosis (not including pulmonary) has been reduced from 2.6 per hundred thousand in 1901 to 2.3 in 1909. Pelagra, against which we are directing so much preventive ammunition, amounted to but one-tenth of one per cent to the hundred thousand in 1909 and had increased to only .2 in 1910. Now note the increase in deaths from syphilis! In 1900 it was 3.4 per hundred thousand; in 1909 it was 5.6, almost doubled in nine years! !

There are today more than twice as many deaths in the registration area of the United States from syphilis as there are from general tuberculosis. In 1909 there were but two deaths in the said area from bubonic plague, while there were 2,858 deaths from syphilis. Worse than that is the fact that we do not know just what part syphilis plays in the causation of all chronic diseases, but it plays a part.

Why should we direct all of our splendid ammunition of preventive medicine against impure milk, pulmonary tuberculosis, pellagra and bubonic plague, when syphilis, which is claiming more victims than all of these combined, save pulmonary tuberculosis, is left practically unnoticed?

In war the innocent suffer quite as much as the guilty—perhaps more—but war does settle some huge questions. Syphilis and gonorrhoea can only be combated by a war of extermination; in that war the innocent must suffer as well as the guilty, but it is far better so than that more innocents should become victims to this curse.

Experience has proven that publicity is the great weapon against all communicable diseases. Until we reported, segregated and publicly treated pulmonary tuberculosis, we made no progress against the disease. We need to treat venereal disease in exactly the same way if we expect to make any progress. The secrecy plan has utterly failed of results.

The stock argument that it would be unfair to an innocent victim of syphilis to report his case falls flat when we consider that such victim may in turn ignorantly infect other innocent persons, and so the chain grows. But reporting does not necessarily mean publicity. A system can be devised whereby only the physician and the properly constituted registrar will know the name of the victim. Then the patient should be placed under the heaviest legal obligations to coöperate with his physician, in such manner that it would be impossible to communicate that disease during the period of treatment. He should, as it were, be under suspended sentence until pronounced absolutely free from all traces of the disease. After he was cured the name should be expunged from the register. If the disease were so virulent that hospital care was demanded there should be provided state detention hospitals, where such patients could be quarantined and treated until cured.

Segregation of prostitutes has utterly failed, both in preventing venereal diseases and in checking prostitution. Indeed, the sanction by law and the medical certificate plan has caused an increase in the crime and the disease. The only preventive and curative measures lie in quarantining every prostitute (for it is to be assumed that all are diseased) in a detention hospital until absolutely cured, then turning the cases over to some one of our many excellent social service institutions for future safe-guarding.

If a law exists, or could be devised, which would provide for the arrest and detention in a hospital with treatments, of every woman found guilty of prostitution, it would result in a quicker and more effective remedy for this evil than any yet devised.

If after the passage and enforcement of a registration law, it were made obligatory upon every marriage certificate clerk in the United States to refer to the list of registered venereal patients before issuing a marriage license, and issue a license to none except those not registered, or who, having been registered, could show a certificate of having been cured, it would go a long way toward preventing the further spread of this modern-day black plague.

THE DENVER MEETING OF THE AMERICAN INSTITUTE.

"Meet you in Denver" is now the proper salutation. If you are not met there during the week of July 6-13 you will have added another chapter of sad regrets to that one which started when you failed to attend the Los Angeles meeting.

There are many Institute members who look really sad when asked if they attended the California meeting. "There is a reason." They missed it and thereby missed one of the most delightful journeys any set of doctors ever took. The essence of the delight was the lavish hospitality accorded every man, woman and child who crossed the California border upon that memorable occasion.

And now we are told it is to be repeated in Denver. That sort of thing is inherent in the West. They cannot help it, but they cannot exercise it unless they have people to exercise it upon. *You* are the one of whom they want to get hold just to see you open your eyes.

Yes, Doctor, the American Institute of Homœopathy meets in Denver July 6, and the meeting continues through the week. The headquarters will be at the New Albany Hotel, Denver, with rates as follows: 70 rooms at \$2.00 per day; 90 rooms for \$2.50 per day, 100 rooms for \$3.00 per day, and 10 rooms at \$4.00 per day. The Keiserhof and The Standish have a number of rooms at \$1.00 per day without bath to \$2.50 per day with bath. With any of the above there will be reductions made where more than one person occupies the same room. Meals may also be had at the Albany at regular standard prices. The above prices are guaranteed by a signed contract so no one need be overcharged in the slightest. In addition to the above there are nine or ten first class hotels within a radius of five blocks.

The Transportation Committee has this to say regarding the route:

“The chairman of the Transportation Committee takes pleasure in announcing to the members of the American Institute of Homœopathy that it has selected as the Official Route from Chicago to Denver for the session of 1913 the Chicago & North-Western and Union Pacific lines.

Facts, conditions and premises inviting this selection are as follows:

Double-track system from Chicago to Julesburg. Roadbed splendidly ballasted with Sherman Hill gravel. Automatic block signal system, insuring perfect safety. Splendid dining car service with ample facilities. The pledge of as fine a train or trains as ever left Chicago. Equipment of the very best and latest models of sleepers. Two or more diners for each train. Latest style observation cars for each train. Personal attendance Chicago to Denver.”

There will be a “Gazette Special” made up to carry the New England delegation from Boston direct to Chicago, where it will become part of the official train from thence to Denver.

The “Gazette Special” will be as fine a car as the Pullman Company can produce, providing every possible requisite for luxurious travel. It will be a special car exclusively for the physicians and their friends attending the Institute meeting and will take the most direct route from Boston to Chicago. Other specials will join us en route, and thus we shall pick up our friends in Albany, Utica, Syracuse, Rochester, Buffalo, Cleveland, Toledo and Detroit. It will be a five-o’clock tea all the way to Chicago.

The American Institute is your medical father and you owe it to the old gentleman to go back once a year and have a good visit with him and the family. You will find that he has kept well abreast of the times, and while you will have to arise early to tell him anything new, nevertheless he will welcome whatever you can tell him, particularly if it is for the betterment of his great and growing family. Begin now to get your things on for Denver. The “Gazette Special” will start on time.

MASSACHUSETTS SCHOOL FOR THE FEEBLE-MINDED.

The recently published sixty-fourth annual report of the trustees of the Massachusetts School for the Feeble-Minded, at Waltham, records the work for this institution for the year ending Nov. 30, 1911. During this period 217 new cases were admitted, 120 were discharged, and 32 died, leaving a total of 1495 inmates, of whom 1255 were at Waverley and 240 at Templeton. It is estimated that there are at present over 6700 feeble-minded persons in this state, most of them hereditary defectives and instinctive potential or actual criminals, whose complete segregation and prevention from procreation would be of immense economic and social advantage.

DEPARTMENT OF EUGENICS.

CONDUCTED BY MARA L. PRATT CHADWICK, M.D.

Dr. Chadwick will gladly receive communications, reports of cases etc., etc., pertaining in any wise to the matter of child culture and race improvement.

WHO SHALL TEACH OUR CHILDREN?

Like all reform movements, this of Eugenics is passing through stages of condemnation and tolerance: In time approval will come. Among intelligent men and women, parents and teachers, the questions to-day are: How shall it be taught? By whom? When?

The Moral Prophylaxis Society of New York made this the subject of its quarterly conference, and several well informed men took part in the conference, among them, Prof. Ballcet, so long Superintendent of Schools in Springfield, Mass.; Prof. Eddy, New York High School of Commerce; Prof. Sharpe, New York High School Principal; Dr. Thomas Wood of Columbia College; Dr. Henry Newman, President of the Brooklyn Ethical Culture Society; Prof. Gruenberg, Brooklyn High School; and Mr. Cosmo Hamilton, author of the sex play "Blindness of Virtue" recently exploited in New York City.

So rich in plan and output was this Conference that one hardly knows where to begin in reporting it. In the first place, as a preparatory step, thirteen propositions were sent out to one hundred educators, asking their opinions. Here are the propositions and the percentages of affirmative and negative replies.

PROPOSITION I.

The well-known facts concerning the widespread ignorance, misunderstanding, and misuse of the human sexual function point clearly to the need of special instruction of young people in the scientific principles of sex.

Affirmative, 91; Negative, 0; Doubtful, 5.

PROPOSITION II.

As it is well established that few parents are both qualified and willing to give their children this vital instruction, it is necessary that such instruction be given in the public schools, both elementary and high, in colleges, and in other organized educational agencies.

Affirmative, 73; Negative, 7; Doubtful, 11.

PROPOSITION III.

The scientific basis of sex instruction should be laid in the biological nature study of elementary schools and the biological courses of higher schools and colleges. Beginning with the nature-study lessons of the primary grades, life histories of living things should be emphasized. In the advanced nature study of the grammar grades and the biology courses of the high school, there should be a gradual presentation of the leading biological facts of animal and plant reproduction. It should also be incorporated into courses in hygiene and in ethics.

Affirmative, 80; Negative, 3; Doubtful, 3.

PROPOSITION IV.

Specific instruction applying the biological facts to human life is needed, preferably at the end of the biology course in the early years of the High School.

Affirmative, 75; Negative, 1; Doubtful, 2.

PROPOSITION V.

Since numerous pupils never reach the high school, there is need of some definitely organized instruction relating to human life for pupils of grammar school ages. This is the most difficult problem now apparent.

Affirmative, 73; Negative, 6; Doubtful, 9.

PROPOSITION VI.

Provision should be made for sex instruction in evening schools in forms adapted to the needs of the various types of students.

Affirmative, 72; Negative, 1; Doubtful, 2.

PROPOSITION VII.

All special instruction which touches human life directly should be under specially selected and trained teachers. The average teacher should not undertake this direct teaching.

Affirmative, 87; Negative, 0; Doubtful, 6.

PROPOSITION VIII.

In order to appreciate the problems and co-operate with special teachers, all teachers should know the fundamental biological, hygienic, and ethical facts relating to sex-processes. To this end, teachers' training schools should offer courses of biology and selected reading which will give the needed knowledge.

Affirmative, 82; Negative, 0; Doubtful, 8.

PROPOSITION IX.

While the nature-study and biology classes may be co-educational, as abundant experience has proved, the special application of biological facts to human life should be in separate classes.

Affirmative, 82; Negative, 0; Doubtful, 5.

PROPOSITION X.

Special lectures under the auspices of clubs, churches and other associations interested in general education, should be established in order that the sex-education movement may reach parents and young people who are not connected with schools.

Affirmative, 86; Negative, 0; Doubtful, 0.

PROPOSITION XI.

The above propositions refer to instruction in normal sex-processes. Such instruction should obviously be made basal. But at the proper time, instruction should be given also as to: (1) the danger of unnatural and unhygienic sex-habits; (2) licentious or irregular sexual indulgence; (3) and later, the impressive facts relating to the dangers of social diseases, and the consequences to themselves and others. Instruction in regard to the last two should be given only to the upper classes of the high school and to students in college, by carefully selected instructors, preferably by those with special training in medicine or physiology, and at the same time possessing tact and skill; but all teachers should be prepared to help individual students who may need advice.

Affirmative, 85; Negative, 3; Doubtful, 2.

PROPOSITION XII.

While instruction concerning abnormal conditions is largely a problem relating to adolescents, some direction of individuals is sadly needed by many children in the two or three pre-adolescent years; and it is to be hoped that every school will finally have one or more competent persons (principal, nurse, doctor, or teacher) able to deal effectively with the individuals needing help.

Affirmative, 81; Negative, 0; Doubtful, 5.

PROPOSITION XIII.

The introduction of sex-instruction into the public educational system should be made carefully and with due regard to local conditions, such as the

attitude of school officials, public opinion, and the availability of specially trained teachers. Nothing could be more undesirable than precipitate introduction of sex-instruction by propagandic legislators or by over zealous school officials. For better results are to be expected if the teachers and parents interested in each school are first awakened to the need of special instruction; and then the work should be developed gradually, quietly, conservatively, and on a sure foundation.

Affirmative, 90; Negative, 0; Doubtful, 4.

Lack of space prohibits our giving even samples of concrete replies which these one hundred educators gave; but one realizes at once that both pro and con were safe and sane and conservative.

In brief survey the substance of the platform discussion was as follows:

Prof. Eddy, a teacher of biology, made a strong plea for making biology the foundation for sex instruction. He gave an illustration of how he taught the story of the fertilization of fish eggs, and he clung consistently to this one point of view.

Prof. Eddy was followed by Prof. Earl Barnes, a speaker who offered no solution and made no issue other than that all such teaching is theoretical; that the pleasure of sex is the one thing that the boy is thinking of. Had this statement, true as it may be, come from a hard headed business man it might have passed as such a man's limitation; from an educator it was at least regrettable that there was no suggestion how or by what method to meet this undesirable but very self-evident fact. One other point was that we should elect more married men and women as teachers and these should be men and women of *wide experience*. Fortunately for our pupils, however, there are not many teachers of *wide experience* in sex life.

Prof. Sharpe, following, dealt with the matter of race health; that young people should be taught race responsibility. He made a strong plea for showing the biology pupil the *application* of biology to his own sex functioning.

From his own experience in teaching sex facts to his boys, Prof. Sharpe said:

"Most of us are familiar with the biological line of attack. I have tried this method, and modified methods, with second-term boys in the DeWitt Clinton High School. The interest and respectful attention exhibited by the boys convinces me that the secondary schools and the colleges can do an infinite amount of good toward the cause. If presented with the foundation of physiological facts used in teaching the applications in personal and civic hygiene, it is demonstrated over and over again that our boys will take up the subject of sex hygiene as seriously and with as little shock as they might the study of city sanitation, or of reproduction in a flowering plant. We can well warn our boys of the trickery and despicable methods of quacks, as well as teach the great facts of sex and sex hygiene—that sex functions belong not to themselves, but to the race; that the thing to be considered is the welfare of the race, the vigor and happiness of their children, and thus give them a *positive motive* for conduct, instead of falling into the errors of our prohibition friends, by the attempt to frighten. It is well known that neither children nor adults can be frightened into being good. More people are frightened into hell than into heaven. No matter how much we may preach concerning the two great diseases of sex, there are always those who are willing to take a chance, and run the risk. Let us appeal to higher motives."

Following Prof. Sharpe, Prof. Hunter of the same school continued the appeal for biological presentation and favored trying to place the facts of human sex side by side in the boy's mind with those of insects, fish and animals in general. So thus may a boy's mind be cleaned up. He said:

"It is the language of the street that they come to us with; and it is a most inspiring thought for us to realize that after these children have had a certain amount of sex instruction their attitude toward the terms of the street is completely changed. Boys come into a class-room; the teacher begins to talk about matters of sex and a snicker comes over the faces of many of them. The teacher tells them that this is entirely a wrong attitude

on their part; that wrong knowledge of the sex processes may mean degradation; a right knowledge, the upbuilding and conserving of the race; and they leave the room with a feeling quite different from that shown before the true meaning of sex was impressed upon them. We want to have our pupils leave us with a feeling that they have a right to instruction in sex hygiene, just as they have a right to know how to properly use and care for their eyes, their teeth, and their muscles. In other words, we want to produce a right attitude of mind."

Prof. Hunter then gave an outline of topical teaching as given in the DeWitt Clinton High School.

Prof. Thomas Wood of Columbia University, made a plea for more careful painstaking; he warned against anticipating too aggressively the temptations of the young, and declared that the school should but supplement the home. An excellent point well taken by Dr. Wood was that boys should be taught more of the nature of the girl, her physical limitations and her emotional nature; and that girls should understand the nature of the boy. Anyone who observes must realize that much misery comes to both from ignorance each of the other. One original point was made in recognition of the fact that the abnormal stimulation under which all live in this country must be reckoned with in dealing with this matter of sex instruction. Prof. Wood closed with a tribute to our own Dr. Richard Cabot and his recent article on "The Consecration of the Affections" in which Dr. Cabot brings out so strongly that biological facts and animal instincts do not form a basis for human interpretation in the normal field.

This was the first suggestion at all emphatic of the moral side of this question; and it opened the way for Dr. Henry Newman, President of the Brooklyn Ethical Society, who came out strong for the moral significance of sex, and which brought hearty applause from the audience, composed mostly of practical, earnest women teachers who often see more clearly than the theoretical pedagogue.

It is a pity that Dr. Newman's speech cannot be printed in full; for, argue and speculate as we will, the every day, physical, passion-goaded youth finds no real protection from himself except through his own tastes and ideals. Dr. Newman said:

"I should like to mention one or two illustrations of the way in which teachers of biology and teachers of literature can aid such strong convictions. If Dr. Eddy will allow me to use his illustrative fish, I should say that he has not quite exhausted all the ethical possibilities of that fish when he teaches the boy its reproductive history. One of the most important things that a teacher can do is not simply to help the pupils get certain facts, but to aid them to interpret these facts significantly. The teacher of biology has a unique opportunity to clear away certain false views of nature—the false notion, for example, which says 'Such and such things are instinctive and I am helpless before them, for I cannot choose but obey the call of my sex desires.' Now, the teacher of biology, when he is conducting the lesson on the fish and its instincts, can press the ethical point home by dealing with instinct in the human animal, and showing the great difference between the fish and man in this respect. The fish is helpless against his instincts—it must eat, must swim, must obey its reproductive instincts. The glory of the man is that he is not helpless. A very instructive lesson can be given by comparing the man and animal in respect to the instincts they have in common, and showing that the difference is in the possibilities of their attitude toward them. A dog, for example, jumps at a bone when he is hungry, but human conventions have taught man that he has certain decencies to observe in the matter of eating, and that he cannot do as the animals do. So in the matter of voiding the wastes. So, too, of the reproductive instincts. It often comes with a certain shock to boys to learn that they are like animals; but then it also comes home to them with a certain inspiration that they can be much better and higher, that human personality can control instincts, as animals cannot. Why not here push this interpretation home? Last April, the men on a sinking ship might have said: 'Self-preservation is the strongest instinct in any nature; I will seek my own good and save myself.' But the

glory of the *Titanic* disaster was that the actors in it were men, not animals, and they chose the higher and human privilege, instead of following the call of what was lower.

The teacher of literature enjoys special opportunities also, to help his pupils interpret the facts of life wisely. For illustration: A high school class was reading Milton's 'Comus.' The half-man and half-animal, after whom the poem is named, is the son of Bacchus and Circe, and has the power of entrapping all who come under his influence by causing them to drink his magic potion, when, like his mother, he thereupon turns them into beasts. The point is, of course, that when some people get the chance, they make beasts of themselves. Milton goes on to say that once the victims of Comus have been turned into animals they look upon themselves as more beautiful than ever before. The pupils in this class were made to see how this truth bore upon their own lives. They were asked whether they had ever met fellows who thought themselves more manly and attractive than before, just as they had begun to be beasts. Further discussion brought out the truth of Aristotle's dictum that vice blinds our judgment. By surrendering their manhood, the men in 'Comus' lost the power of knowing that they had become bestial.

The teacher of literature can so use his literary material as to make it strengthen deep-lying motives, such as the motive of chivalry, at bottom a special kind of fair play. We often hear it said that it is his business to teach literature; but how can he do this if he does not linger over the ideas of life which literature in its beautiful way embodies? Boys want the pleasures of which Professor Barnes spoke. Now the teacher of literature, like the teacher of biology, can show them what these desires really embrace. 'You think that you are choosing simply your pleasure. Let me show you in literature what your choice really includes. Here in George Eliot's 'Adam Bede' is Arthur Donnithorne wanting pleasure, and not forecasting what his pleasure is going to lead to—the ruin of Hetty Sorrel, and her death for strangling her babe and his. He can make the boys feel the genuine grief in Arthur's words when he says to Adam: 'My God, if I had only known!' There is a kind of wrong that can't be made up. The teacher of literature has a similar opportunity in 'David Copperfield,' where handsome young Steelforth is guilty of the same conduct toward little Emily. There is something in every manly boy that revolts against that sort of thing. Every normal boy regards that as the worst thing he can do. He will hear it said on the street by some fellow who considers himself as fairly decent: 'I would not ruin an innocent girl!' Show him that it is just as unmanly to keep down a girl who has already been ruined; and that while the man may not be responsible for the initial degradation, he is responsible for continuing the shame. The teacher of literature can do this so well! I do not advocate making a special selection of books that bear just on this point. This defeats the object by over-attention. But there are so many opportunities that arise naturally in the literature work. What a chance there is in 'Pendennis'—in the scene where the mother is praying for her boy when he goes off to college, or the scene that pictures the agony in Mrs. Pendennis' soul when she hears that her boy, Arthur, in London, has gone the way of other young fellows! The teacher who knows his task can make his material count.

The point is simply to appeal to those strong fundamental motives that are deep down in every man's heart. Boys can be kept chivalrous before bad habit dulls their sensibilities. Most of them like the 'Lady of the Lake' (when it is well taught), and the character of Ellen Douglas. There is a striking scene toward the end of the poem, where Ellen, who puts fear behind her in order to visit her father in the dungeon of Stirling Castle, must cross a courtyard that is filled with soldiers of the worst kind. As the young, unprotected girl advances, she sees a certain leer on the faces of the men, and she shrinks. The boys know that leer. They have seen it themselves, and they know what is behind it. But they appreciate no less the chivalry of rough John de Brent who leaps forward to protect the girl at this point and to shame the others into a realization of their unmanliness. Boys want to be like John de Brent. The teacher's opportunity lies in making them see that they have the chance.

Ethical instruction is often misunderstood to be barren preaching. It is nothing of the sort. It consists in clarifying views of life. It begins with the fact that there are certain tendencies in our nature which may work ill or good. Then it tries to show to what these lead. It uses what is best in a lad to make over what is worst. That is why problems of sex-hygiene should be regarded as at bottom problems of sex-morality. The teacher's cue is to enforce this fact, with the utmost care, to be sure. Realizing that boys want to be men, he can make them see what a man actually is. Remembering also that one of the strongest desires in adolescence is the desire for liberty, he can make them see that a man's way to liberty, to use the well-known phrase, is to chain the beast in him."

Mr. Cosmo Hamilton then made a strong plea for conservatism; he feared that the schools were taking too much of the responsibility that should be, instead, impressed upon the home and mother. For the first time in the entire session Mr. Hamilton brought the name of God into the discussion and a genuinely fervent appeal was made for strong religious instruction—not only ethical and moral, but religious. Mr. Hamilton, perhaps being English, did not realize that God and religion are no longer "strictly pedagogical" and that both, therefore, have long since been ruled out of our American pedagogical institutions.

The audience showed its approval of the old fashioned notions of God and duty by its hearty applause as he closed with these words:

"In the discussion to-night, no mention has been made of the religious aspect of parenthood. You can continue to turn out a generation of book-stuffed, mechanical, unimaginative and uninspired boys and girls, but if you do not instill into their young and receptive minds the great ideal of the Creator, the Father of all men and women, I think that the teaching of sex hygiene loses not only much of its beauty and force, but a great deal of its usefulness. I believe in human nature. I believe that if we appeal to all that is best and idyllic in the youthful mind, if we stir the imagination that is so lively in the mental and moral output of every young thing, give them faith in God and themselves, and prove to them that to-morrow and the day after are theirs to make or break, there is no need for the barnyard methods of advanced eugenism."

Eugenics is being approached from and taught from several points of view. Physicians are proclaiming the horrors of venereal disease; sociologists are protesting against the taxation for penal institutions; advanced women are crying out against the world-old injustice to their sex, nevertheless sexual vice is on the increase; never has there been a time when our high schools were such hot-beds of immorality; never a time when immorality has so evidenced itself among men of high intellectual type and in positions of trust; never a time when venereal disease has been more widespread. It may be—is, no doubt—true that youths think only of "pleasures of sex"; it may be that adolescence is a period of "storm and stress and strain; moral upheaval; and emotional awakening" as all sex specialists from Dr. Stanley Hall on say. But the question is, do these conditions have to be? Is there no such thing as anticipating these states of mind by proper training and preparation?

One would suppose not, judging from the educator; but however psychological and pedagogical these statements may be, physicians know that sex functioning like digestion has long since passed over into the control of the sympathetic; and everything in the realm of the sympathetic is largely influenced by the mind and peculiarly susceptible to training. Why, then, since promiscuous and persistent sex functioning is bad for the youth, bad for the race and ruinous always to some woman, should the youth's mind not be previously trained so that he shall be spared this uncomfortable storm and stress and strain? Why should not the period be anticipated by proper education?

And this can be done. There are many strong youths who can testify that they passed into adolescence with no great storm and stress simply because their minds had been prepared by right teaching. Prurient curiosity being absent, they had not the influence of that upon their sexual pleasures to overcome; being reverent of women and righteous of intention again

they were sustained by *habit of thought*, for after all is not habit of thought in all things pertaining to the sympathetic-emotional life half the battle, half the solution?

What then is the conclusion of the whole matter? Is it not that, after all, the mother, the plain, every day mother, must rise in her might to combat in her own peculiar office the problem of the youth's clean living? For in spite of all our science and all our sociology and all our pedagogy the only young men and women who are truly and deeply right minded in sex matters are those who have learned in *early childhood* the lessons of control of mind and body; unflinching respect for right; reverence for womanhood in the generic; and who have had it instilled into their sub-conscious minds and implanted in their automatic spinal centres that there is a God and a principle of sowing and reaping. Many a simple, almost ignorant mother has brought up sons with these ideals where many a pedagogue has failed with his fine scientific theories.

The close psychological relation between mother and child need not be elaborated here; but we all know that nothing can compare with its influence. A generation of mothers could revolutionize the world.

Who then is to arouse these mothers? Not the pedagogue. This Conference, *if representative Pedagogical thought*, proves the inadequate insight. It is significant that the only men in this conference who struck the strong personal and fundamental note were those in no wise connected with the public schools. Not the biologist; not the sociologist. The mass of mothers never hear such. The two influential persons who do come into the mother's personal life, however, are her minister and her physician; these she respects and more or less reverences. And it often seems, in spite of her disregard all too often of his directions, that she does, after all, regard her physician first of all. From no one else as from her or him will she accept so well instruction on sex matters and child welfare. Therefore, the physician has it in his power to do more to bring about clean and eugenic conditions than anyone else. The physician stands next the mother; the mother next the child. A father who sneers at every other authority on this earth will listen to a man physician who talks to him, "hits straight out from the shoulder" in regard to his child. And every woman doctor knows how a mother will hang upon every word that she utters when along these lines of sex. What greater and more enduring glory could come to our Alma Mater than for it to take some initiative in this matter; establish a university extension professorship; or send out a salaried worker among mothers; or force a Boston University Bill upon the legislature which shall in some way affect the mother and child?

From no educational centre in Boston could so tremendous an influence go forth as from Boston University School of Medicine—if we would. No, we need not except even Harvard University, for Harvard has no women to work the woman's side of this question; and of all questions in the world this of sex will never be settled by either men or women alone.

DIABETES-MELLITUS.

I am undertaking an exhaustive research into the pathology, etiology and dieto-therapy of Diabetes-Mellitus. I am very anxious to hear from every physician in the United States who has a case under treatment or who has had any experience in the treatment of this malady. Van Noorden says, "the best treatment for the diabetic is the *food* containing the *greatest* amount of *starch* which the patient can bear without harm." If any physician who reads this has similar or contrary experience, and would take the trouble to write me, I would esteem it a special privilege to hear from him, if only a postal card.

Kindly address,
William E. Fitch, M.D.
355 W. 145th St.,
New York City.

SOCIETIES.**Massachusetts Surgical and Gynæcological Society.**

The Massachusetts Surgical and Gynæcological Society held its Seventy-Ninth Session and Thirty-Seventh Annual Meeting at the Robert Dawson Evans Memorial Building, East Concord St., Boston, on Wednesday, December 11th, 1912.

The programme consisted of the following papers and discussion:

1. The Real Dangers of Chloroform Anesthesia.

FREDERICK P. BATCHELDER, M.D.

2. The Drop Method of Etherization.

HERBERT D. BOYD, M.D.

3. Nitrous Oxide Gas and Oxygen Anesthesia.

MARY A. LEAVITT, M.D.

Discussion opened by HORACE PACKARD, M. D.

4. Local Anesthesia in Ophthalmic Operations.

DAVID W. WELLS, M.D.

5. The Use of Quinine and Urea Hydro-chloride as a Local Anesthetic.

FRED S. PIPER, M.D.

6. Methods of Anesthesia from the Economic Point of View.

WILLIAM O. MANN, M.D.

This was followed by the annual banquet at Bellevue Hotel, Boston, at which the Society was entertained by Newton Newkirk, in Monologue.

Under the head of "Rare or Unusual Cases," Dr. Briggs reported the following:

"Last May I had a very interesting case which was referred to me by Dr. Batchelder,—a woman 57 years of age who had been having a great deal of difficulty for six months previous to this time in passing urine, there being a good deal of pus in the urine. Upon investigation it was found that she had a large stone in the bladder, 2 1-2 inches long by 1 1-2 inches in breadth. I etherized the patient and proceeded to break up this stone with a Bigelow crusher, and finally resorted to dilating the urethra and removing the stone in pieces with forceps. After proceeding in this way for a few moments, I became aware of the fact that there was some foreign body in the bladder, and finally, I got hold of a hairpin which I was able to pull out through the urethra. This represents the stone in the bladder and the hairpin also.

The interesting feature of this case is that a year previous to this time, this patient had been confined in an insane asylum, and she had a very curious delusion,—that if she could introduce some very sharp foreign body into the vagina it would penetrate and work upward into some vital organ and afford her a sure and not painful death. In view of this delusion, she requested her nurse to supply her with hairpins and the nurse gave her three hairpins. Soon after these were given to her, one disappeared. The nurse was never able to account for it, nor was the patient. The patient has no remembrance of having introduced this hairpin, but simply remembers very distinctly this delusion and that she wished to commit suicide. This is the explanation of the hairpin, which was the nucleus of this large stone in the bladder."

In discussing Dr. Leavitt's paper Dr. Packard said:

"This subject of anæsthesia has been very close to my heart in all the years that I have been a surgeon, because it has seemed to me that it is vital. I am sure that I have seen good results of splendid operations spoiled by the injurious and fatal results of anæsthesia. Long ago, I began spending a great deal of time and thought on ways and means to diminish the dangers attending upon it.

In the past years, we have seen patients anæsthetized with ether and

chloroform and have seen them recover immediately from the operation; but we know little of what the sequellæ are in two, three or four days following the operation, when the patient may die in a mysterious way from some toxic effect of the anæsthetic, which has crippled some vital organ and has resulted in a fatality.

I was fully satisfied long ago that the less of these poisonous materials, ether and chloroform, could be given, the greater the chance of recovery of the case and the less we had of these embarrassing sequellæ, pneumonia, bronchitis, acetonuria, nausea, vomiting, and tympanitis. They diminish just in proportion as we can carry the anæsthesia through on a small amount of anæsthetic.

Therefore my efforts for years have been to keep the quantity of the anæsthetic down to the smallest possible limit, and our results, in that respect, I am sure, have been very, very gratifying in this Hospital, and, as your statistics have shown, there was a very marked drop in the quantity of ether used. I believe that the mortality was lessened also from the same source.

It has been my purpose to keep fairly well abreast with progress in anæsthetics. Long ago, I became impressed that a very important factor, one of equal importance with the diminishing of the amount of the anæsthetic, was an expert anæsthetist; and I want to say that as soon as I adopted the rule of having all my cases anæsthetized by an expert, never any such thing has happened as a death on the table from the anæsthetic. So that, I believe that one of the greatest dangers of anæsthesia is the anæsthetist. I will admit that for the ordinary anæsthesia, conducted by inexperienced assistants and nurses ether is the safest, by the drop method, as stated by Dr. Boyd.

Within the past two years we have come to hear considerable about N₂O-O anæsthesia and I felt greatly interested in it and immediately we tried to see what could be done, and with Dr. Leavitt's co-operation, we have done something in that for two years. All of my private surgical work has been conducted under N₂O-O anæsthesia, when it was found suitable for the patient.

I do not believe that any one fixed method can ever be settled upon as the best for all patients, because there are idiosyncracies which cannot be determined beforehand, and the anæsthetist never can know beforehand just how the anæsthesia is going to proceed. They may begin with N₂O-O and find that some other method must be resorted to.

Our work has been in somewhat original lines, in that we have not depended upon any apparatus on the market. One reason is that they are so exorbitantly expensive that we felt it was an unwarranted outlay in beginning this sort of work. So I have endeavored to introduce this method in a simple and inexpensive way, and with the inhaler which bears my name, which has been used in the Hospital for many years, by introducing little changes, an exhaling valve and tubes which provide for the oxygen tank and another one from the gas tank and another one for the ether vapor should it be needed, and a re-breathing bag of a third greater capacity than the original rebreathing bag, and a little scheme of suspending, so that it may hang over the patient, and a little device which I call the crow's nest, with a rack for an ether bottle and one for a chloroform bottle, and another one for a wash bottle to show the oxygen bubbling through; another one to drop in above, if you wish more ether, as is sometimes desirable. Thus, the anæsthetist has everything in hand and can simply put in a few bulbs of ether vapor, and the patient gets sufficient effect to meet all the conditions that are necessary. That can be continued while the gas and oxygen are being breathed, simply mixed with them. Or the N₂O can be cut off and ether and oxygen used, which we used a great many times before the N₂O-O was introduced. In fact, we had drifted into this method of anæsthesia which almost antedates the N₂O-O anæsthesia. We had been using gas and ether and oxygen so long; so that the patient was breathing gas and ether vapor for some little time and then cutting off the gas and going on with the ether; and also, if there were evidences of cyanosis we put in some oxygen, and it was the most manageable sort of arrangement, before we began the N₂O-O anæsthesia. Now it is the routine here in all my private surgical

work. Dr. Mann does not like to have the Hospital cases anæsthetized in this way because the method is too expensive, but in private cases it is used under routine, with the results that Dr. Leavitt has laid before you.

We perhaps have settled down to it this fall more than ever before, but we were using it nearly all last winter and perhaps in an experimental stage in the year preceding that.

This is the N₂O tank. 100-gallon tanks would do just as well as 1000 with the reduction valves. These are a necessity in order to reduce the pressure and make the gas run smoothly, and the patient requires it at atmospheric pressure.

There are missing in this apparatus a great many of the complications which you will see in the machines which are on the market. There is no effort made to raise the temperature of the gases. Our lungs are tolerant of a great range in the temperature of the air which we inhale, without detriment. We go from a warm room like this one out to a zero temperature, and the temperature of these gases should be presumably about 70° or 80°, as they are standing 24 or 48 hours or a week in the temperature of our operating rooms. So I see no reason to add complications for the purpose of heating these gases, which is contained in some of the expensive machines. I question the necessity of it and I do not approve of adding anything to make a complication.

I do not know that there are any other points for me to speak of regarding this; but since I have adopted this method on cases that can use it, it is very exceptional for us to change to anything else, beyond adding now and then a little ether vapor. The advantages are so vast that I have no desire to change back to the old methods, even though the expense is considerably more, and when the patients know about it they are more than willing to pay the additional cost for the immunity that it gives them from distressing sequellæ, which everybody knows who has ever taken ether and everybody hears of and dreads.

In the first place, rare nausea and vomiting. It does occur once in a while, but as a rule it is nothing more than perhaps a slight gulping up some fluid in the first hour or two; probably some water that has been taken. If water is given in the first hour or two, it will be usually gulped up. I do not call this nausea and vomiting. Occasionally, there is a patient who will retch once or twice, and occasionally one who will vomit, but it is a very small feature and never the continuous vomiting that we used to get.

Furthermore, a big cloud has been lifted from me in the wiping out of the danger of bronchitis and pneumonia. That has always been a horror to me in all my surgery; the frequency in the old ether anæsthesia of bronchitis, and now and then pneumonia. It is a very unpleasant complication to have this when the patient is doing well otherwise. This is another big thing to wipe out by this method.

Also, another large thing is the kidney complications. Careful examinations have been conducted here to show that invariably the kidneys show an irritation following ether, sometimes a great deal. Now, if the kidney is crippled before the ether is administered, that may be just enough to cause acetoneuria, and violent vomiting, and the patient may die from it. Very often after ether we used to have that utterly miserable feeling, coated tongue and disturbance of the stomach for two or three days, and we have nothing of that now. The patients want water and food pretty quickly after they get back to their rooms, and it is because they do not feel sick and they have not been made ill. Before, on slight operations, we used to have patients horribly ill for two, three or four days, so that, to me, the advantages are very great indeed and I feel very thankful that we have such a pleasant and easy method of anæsthesia given to us.

When I look upon anæsthesia to-day and compare it with that at the beginning of my professional career, I feel that there is no department of medicine where such progress has been made as in anæsthesia."

Dr. Miller, Anæsthetist for the Rhode Island Hospital, spoke as follows: "I should be glad to tell you a few things from personal experience with N₂O-O anæsthesia. We have used N₂O-O a great deal and we have not decided just where it should be placed in the consideration of safety. In

addition to the eleven deaths which were reported in June there have been since then reported seven more deaths, making a total of eighteen deaths which have been reported from N_2O-O in this country. This list has been very carefully gone over and it does not include any deaths except N_2O-O deaths. Of these eighteen deaths, it seems that seven were due to the anæsthetic, and to the other eleven, the anæsthetic contributed. Page 11.

Dr. Tetler of Cleveland, has reported two of these deaths which were reported to him and he found that in these two cases the death was due to impure gas;—he found a peculiar trend of symptoms that were due to impurities of the N_2O-O gas. One other death was reported from this cause, so that this is not an absolutely safe anæsthetic, and for that reason as well as for the lack of ready muscular relaxation it is certainly not an ideal anæsthetic. While we are using a great deal of N_2O-O , and we have found that it has a distinct field in surgery, we still feel that ether will be the anæsthetic of the future. I should like to tell you about two cases, to illustrate the method in selecting cases.

We had a boy very sick with scarlet fever, and in the course of the scarlet fever he developed pneumonia and in the course of the pneumonia he developed a severe mastoid, which had to be operated upon. This boy could not have taken ether or chloroform. He did take N_2O-O for a long and difficult mastoid operation and recovered perfectly, and in this case it saved his life. I do not know what other means could have been adopted to anæsthetize this patient.

Another patient was a woman, rather old and asthmatic, operated upon for hysterectomy, and following the operation she vomited violently, under ether by the drop method; she also had a distressing cough. In the course of this trouble, she developed a hernia in the wound, which became strangulated and it became necessary to do a second operation. There again was a case where I do not know what other anæsthetic could have been employed. She vomited only a very few times after she recovered from the anæsthetic. She had previously been vomiting continuously. Her cough was not increased and she recovered. So we believe that it has a distinct field and has a tremendous value, and yet I believe that ether is the anæsthetic on which we should concentrate our knowledge and that it should be the anæsthetic of the future, and yet we do not believe that the drop method is ideal. When Morton first used ether in 1846, he used an old ether inhaler which was very good. The more I think about it, the more I think we do not appreciate it at the present time.

A great many methods of administering ether have been introduced since that time. In a recent issue of a medical journal, we have a report of ether being administered through an old derby hat, putting a wad of gauze in the crown of the hat and holding this over the patient's face. So we have about one hundred different methods of administering ether and we have not yet the ideal method. We do not think the drop method is ideal. Perhaps the work of the vapor apparatus for the use of ether and chloroform comes nearest the ideal."

Dr. Gardner presented a case:

"A very severe case of scar following a burn in a young woman sixteen years of age. Ten years ago, her brother was playing with a cat-o-nine-tails, soaked in kerosene and lighted; he was swinging it around and it broke and struck her chest, burning off the tissue on the front of the chest and down one arm. It was fourteen months before this burn healed. She got along very well until she commenced to develop. When her breasts began to develop, the skin became more and more tense, and now the scars are so tense that in using her arm they tear away. The whole skin on the front of the chest was completely destroyed, so that there is no vestige of nipple, but the breast tissue is developing. The problems are as follows: If this breast tissue goes on developing to anything like natural size, the tension will be exceedingly great in the scars. If she marries, what is going to happen. The nipples are all destroyed, but there is a great deal of breast tissue there. I should like you to see the case and have her retire before you make any comment."

Case presented.

Dr. A. H. Powers.—“Relief of the arm is the first thing to be done; I do not think that the breast should be removed at the present time. suggest that skin grafting be tried.”

Dr. Wilcox.—“It is possible that by the Tiersch method larger skin grafts could be used, especially on the left side.”

Dr. Gardner.—“Then, it seems best to have this scar tissue in the axilla freed and the newer method of skin grafting practiced? Should we have the skin grafting and the removal of the breast also?”

Dr. Powers.—“There might be discomfort if pregnancy occurred, but I question if there would be anything more than discomfort if the breast remained.”

Dr. Packard.—“I should say those are the only things that could be done. I think the breast should be removed, contracting band severed and skin grafts put on. There will be inevitable trouble if she marries.”

Dr. Gardner.—“She is a well and strong and exceedingly sweet and attractive girl, and I want her to have all the advantages that she can.”

Dr. Howard Moore.—“I am very much interested in scar tissue. I am sure that all of us have seen scar tissue added to scar tissue by sections of the old original scar. In other words, operation on a scar puts more scar tissue on than we had before. I have in my mind a case that has been under treatment for a long time. A man was stirring up some chemicals in a powder factory with gloves on, and the chemicals took fire and burned off the gloves from the anterior surface of his hands and wrists, with the result that the superficial tissue down to the tendons in the wrists was entirely destroyed and there were two or three places where you could see the tendons themselves and in other locations the tissues were destroyed down to the sheaths, with apparently no injury to the sheaths.

In the contractions that resulted, all the fingers were drawn in so that the ends were pointing directly into the palms of the hands and the wrists were flexed at a right angle. The fifth finger on one hand was burned off entirely and on the fourth finger the skin over the anterior surface, and over the palm was gone, so that the result is union of the finger to the palm. On the left hand, the same condition applies to the fourth and fifth fingers. We have been working on that case daily, massaging, stretching the scar tissue under olive oil. Where there was absolutely no sign of any tendon play in the thumb and first and second fingers on either hand in the beginning, there is now absolutely free flexion in the first three fingers on the right hand and the thumb and first finger on the left, and he is able to hyper-extend the right wrist practically to normal and the left wrist a little beyond a straight line. I feel that if we had manipulated these scars forcibly at the time we first saw him or at any time, we would have simply added scar tissue to what we already had, and that we would have lost any possibility of any flexion of the tendons in these fingers. Now, the problem is simply a plastic operation on the outer fingers, and he will have perfect use of the right hand and one finger missing on the left hand. He is now able to shave himself and write and do practically all the work that he did before, so that it seems to me that it would be possible in this case to stretch out the scar tissue, that is, under careful massage and stretching with sweet oil as a lubricant.”

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A CRITICISM OF Dr. E. SCHLEGEL'S "HOMŒOPATHY AND MODERN PHYSICS."

BY WALTER WESSELHOEFT, M.D.

In a very interesting and suggestive article in the *Berliner Homœop. Zeitschrift*, July 1912, well deserving of an extended notice, since it again brings forward the apple of discord fallen into the homœopathic camp, Dr. E. Schlegel studies the relationship between our attenuations and the higher physics of today. In the best spirit and with full mastery of the subject he bases his argument mainly on the recent work of Gustave Le Bon on *The Evolution of Matter*, now attracting much attention in scientific circles.

Dr. Schlegel's interest centres mainly on the divisibility of matter and the transference of energy, subjects which he treats practically from the same point of view from which they were discussed by our own Dr. Copeland on a memorable occasion at Niagara several years ago. His thesis maintains that the atomic theory has completely broken down under the weight of evidence brought forward by Becquerel, the Curies, Rutherford, Thomson, Soddy and others, following upon the labors of Crookes, Roentgen, Webers and the scientists of the last century.

Supported by many laborious and striking expêriments, however, Le Bon carries the annihilation of the atom representing the "crude and tottering materialistic theory of the universe" a good step further by showing that the substances isolated from uranium, such as radium, thorium, etc., are not alone in possessing the attribute of infinite divisibility as shown in their unceasing process of self destruction, but that demonstrably *all* substances are forever in a state of disintegration observable as radio-activity. And, furthermore, he brings strong evidence that *all* electrones set free by this disintegration of atoms are absolutely identical; in other words, that all substances of whatever character or appearance are composed of the same ultimate elements and differ solely in the nature of their form structure and their chemical composition.

It is of interest to note here that Dr. Schlegel, in accepting Le Bon's view of the divisibility of matter and in discussing the ion, points out that it is still possible to find in one ccm. of the 20th decimal attenuation one electrone of the substance attenuated, but inasmuch as this now is dissociated from its original relationship, and hence utterly changed in its nature we cannot claim for it the slightest therapeutic value. Although an ardent Hahnemannian, indeed for this very reason as will appear later, he has no hesitation in declaring that no medicinal effect is to be looked for from any drug divided beyond the 9th, or, possibly, the 12th decimal attenuation, thus wholly agreeing up to this point with the results of the late Dr. Conrad Wesselhoeft's researches. But in following Le Bon he draws other inferences from the changed nature of matter in extreme or infinitesimal subdivision. Here he finds himself, with so many of his colleagues, still in conflict with the atomic theory, a position so difficult to understand since the necessary and universal acceptance of the atom as the unit of structure and of the proportional distribution of chemical elements, leaves this theory for all practical purposes precisely where it was before we knew of the electrone and radio-activity. Moreover, in pharmacodynamics, as in other biological sciences, we still deal with the chemical entities called atoms constituting the molecule and the cell with its structure and functions, normal and abnormal. No speculations into the nature of the forces governing these can warrant the abandoning of these essential conceptions of science.

It may appear unjust not to do so, but it would lead us too far to enter into the details of Le Bon's experiments and Dr. Schlegel's reasoning from them. They lead us to look upon even the most inert and apparently solid substances as loose agglomerations of particles, held together by forces unceasingly active, but capable of being liberated with the effect of disrupting the substances in which they have exerted their energies and of entering readily into new relationships. This we know may be the effect of seemingly most insignificant causes, such as mere contact or the slightest impact against highly explosive materials and also of chemical or catalytic action, etc.

It is not enough, however, for Dr. Schlegel to resolve the atom into ions, to look upon these again as divisible ad infinitum and liable constantly to alter their relationship, but we are brought face to face with the monistic theory of Ostwald, Herz and others, somewhat modified by Le Bon, which finally reduces all matter to energy or declares it the product of energy, as Bergson declares the stuff out of which reality is made to be time itself: In this dematerialization of matter, which to the speculative physicist opens up vistas of the most daring hypotheses, Dr. Schlegel finds a new confirmation of Hahnemann's theory of dynamization. We are told not only that what we see as matter is in a constant state of flux, and by virtue of its interatomic forces capable of most marked changes in the arrangement of its ultimate structural elements, but that these changes and new associations are governed by the *director-forces* or *dominants*; the same forces now accepted as determining the nature or temporary integrity of matter, and which Hahnemann recognized as the inherent regulating forces of the organism.

So far it is a pleasure to follow Dr. Schlegel, and though we do not go the length of all his inferences, we cannot but admire the boldness and plausibility of his reasoning. But when we are told that these director forces are not only separable from the matter of which they determine the character, but capable of being readily transferred to inert substances, we refuse to accept even the authority of Le Bon. If these forces constitute matter of one kind they cannot fail, on being liberated and transferred to what we call inert substances, to determine the character of these. For example, the arsenic or aconite forces transferred to water, alcohol or sugar of milk must not only adhere, as it were, loosely to these, but at once alter their molecular structure and thus constitute them new substances. And when he argues further that since many observing and trustworthy physicians have again and again witnessed the striking effects of these forces thus liberated and transferred, as in attenuations carried to the 30th, the 200th and far above, we are forcibly reminded of our position between the old medicine and the new.

The old medicine sought its rules of practice in the past experience of the profession and in popular medicine, and partly in the prevailing theories of the period, while it drew its main support from metaphysical speculation. These were the sources of Hahnemann's knowledge and skill and he used them as none but a genius and seer could do. But his sources of knowledge are not and cannot be our sources, much as we remain dependent on the experience of the profession. This wider experience together with the evolution of the scientific method demands ever more insistently that no law should be recognized and no fact admitted not derived from minute and unbiased observation, accurate record and exact experimentation. Since the new medicine postulates new rules for the search of therapeutic truth it can no longer accept without criticism mere unsupported assertions regarding the effects of medicines; and it confesses frankly that, despite all modern progress, we do not possess, save in a limited field and that within the range of materialism, the means of distinguishing between a cure and a recovery. Furthermore, it does not and cannot seek the confirmation of its practice in metaphysical speculations or the hypotheses of advanced physical science, for the reason that these are forever changing and rest on subjective beliefs leading invariably to mysticism. It demands in support of its principles and practices, not arguments founded on analogies taken from the sciences dealing with inorganic nature, uncertain as is now the line of demarcation between organic and inorganic, but demonstrable facts derived from the biological sciences, more particularly those dealing directly with the human organism in health and disease.

It is true that this new medicine is barely dawning upon the profession. Conflict of opinion, uncertainty and the blind acceptance of authority more or less questionable, still cause endless confusion and constant relapses into traditional habits of thought and obsolete practices. But a steady current of higher criticism and of searching inquiry is setting in, sure to bring the profession to a higher plane in time. For the present every physician is still the arbiter of his own methods, a privilege generously allowed us by

the law, and one the most eminent share with mediocrity and submediocrity as well as with the osteopath and Christian-scientist. Dr. Schlegel is, therefore, quite as fully warranted in his extreme views as are those who still lavish their polypharmacy, their calomel, aspirin and what-not on their confiding patients, or those who declare that no good can come from anything above the third decimal. In the presence of all these contending views we are bound to respect the convictions and the arguments of any man, known as is Dr. Schlegel, to be a highly accomplished physician, equal to any emergency in general practice and faithful to the highest professional ideals. To disregard or reject the fact that more and more the recognition today of a vitalistic principle is crowding back the coarse materialism of the last century; that, in fact, agencies as subtle as thought and emotion may and do produce pronounced pathological and therapeutic effects; that imponderables such as the emanations of radio-active substances possess powers but recently inconceivable; that infinitesimally minute quantities of sera produce constitutional changes, as in anaphylaxis, both destructive and immunifying; that the biological reaction is by far the most delicate chemical test, and many like phenomena,—to disregard the force of these established facts is to betray a blind scepticism not only unworthy of a scientific mind but of one claiming to possess common sense. To utilize these forces, to study them in their indubitable relation to the principles we all profess is the imperative duty of every homœopath, and every effort in this direction should be heartily welcomed, even by those of us who still maintain that it is a far cry from these controllable and demonstrable phenomena to forces dissociated from matter and observable only among the countless and obscure changes witnessed at the bedside.

To subject all these matters to a critical and experimental investigation, in this lies the only hope of a future for Homœopathy. By the force of its organizations and institutions, in fact by the mere force of inertia and the certain advantage it yet possesses over the crude and unscientific dosings of the dominant school, it is still sure of a long existence. But neither societies, schools, hospitals nor laboratories can ensure its growth and triumph unless it applies to its principles and the greater accuracy of its practice the methods of modern science. The means are now at its hand. Can it be said that the latest meetings of the American Institute show that these means are used to advantage? Mere declamations and retrospective essays can lead no farther than do transcendental speculations.

A FURTHER REPORT ON THE RELATION OF THYROIDISM TO THE TOXEMIA OF PREGNANCY

Dr. George Gray Ward, New York City, summarized the present status of the toxemias of pregnancy of this type as follows: 1. That these cases may be classified into two groups: (a) Cases having no Graves' Disease, but without sufficient thyroid secretion to promote the increased metabolism in the liver made necessary by the pregnancy and probably due to the failure of the thyroid to hypertrophy. (b) Cases associated with Graves' Disease which condition usually caused serious disturbance in the metabolism. 2 Toxemias of the first group were frequently benefited by the administration of thyroid substance in the form of either dry extract or a serum. 3. In toxemias of the second group, it was essential to determine whether the Graves' Disease was in a condition of hyperthyroidism or hypothyroidism. If the former, rest, applications of ice, milk diet, and sedatives, should be employed, and if these measures failed, an anti-serum, such as the cytotoxic serum of Beebe and Rogers should be administered. If the latter, thyroid substance should be given in the form of the dry extract, or, what was more efficient, if possible to obtain, a saline extract prepared from normal human glands, for hypodermic administration. 4. Reliance should be placed upon nitrogen partition of the urine as a guide to the severity of the toxemia rather than on the blood pressure. 5. Induction of labor was very slow and uncertain in these cases, and where the history of formal labors was that of dystocia, elective Cesarian section was probably the safest method of delivery for both mother and child.—*Boston Medical and Surgical Journal.*

CURRENT TOPICS.

AN EXAMPLE OF GOOD TEAM WORK.

The once popular pastime of certain old-school physicians trying to discredit a man because he was a homœopathic physician was so silly that we thought it had been abandoned. It seems, however, still to exist.

Last September there was a slight outbreak of typhoid fever in Portland, Maine. Dr. F. A. Ferguson, of Portland, a B. U. S. M. man, asked Dr. Charles A. Eaton of that city to examine a specimen of the city's drinking water, and give him a bacteriological report. Dr. Eaton did so, stating there were colon bacilli in the specimen, and while not abundant, yet enough to make the water suspicious.

This report Dr. Ferguson handed to the city Board of Health from which it found its way into the newspapers, where it was magnified by scare head lines. A few days later Dr. Eaton was asked to meet the Chairman of the Board of Health at the City Hall for a little conference. In complying, he found himself facing the entire Board of Health, the Water Commission and their attorney. He was promptly put through the "third degree" ordeal with an attempt to show his incompetency as a bacteriologist, and to emphasize the fact that he was a homœopath. The city physician who posed as a bacteriologist said there were no colon bacilli in the water and that it was safe for drinking purposes.

Now, although Dr. Eaton had demonstrated to the assembled inquisitors his ability to pass on so important a question as the presence of colon bacilli in drinking water, by virtue of his long and thorough training in the pathological laboratories of Boston University School of Medicine; although he showed his equipment by the possession of a complete private laboratory, and the fact that he was specializing in that line, and although the city bacteriologist actually confessed that he himself had no laboratory, that he was neither competent nor possessed the facilities for making a bacteriological test of water, yet the joint Board gave out, or allowed to go out, a newspaper report which discredited in toto Dr. Eaton's report of finding colon bacilli in the water, and placed him and his homœopathic associates in a very humiliating light.

But the Board of Health, composed of old-school physicians, laughed too soon; it did not know the kind of timber which went to make up Dr. Charles A. Eaton, Dr. Luther A. Brown, and Dr. Franklin A. Ferguson, the three homœopathic physicians of Portland; neither did it appreciate that these three men work together with the solidarity of one man.

Immediately upon the appearance of that newspaper report, these men secured the services of Prof. E. B. Phelps of the Sanitary Research Laboratories of the Department of Public Health of the Massachusetts Institute of Technology, and turned him loose without any restrictions to investigate the water supply of the city of Portland. And he did it from the bottom up to the top, back again and on all sides.

His report, which covers six long newspaper columns, shows that he did not slight his job. The essence of it was that he found colon bacilli in sufficient abundance to make the water more than suspicious,—to render it dangerous.

Prof. Phelps then asked the joint Board the privilege of meeting with it and submitting his report. This caused said Board quite a fit of coughing, but it acceded to his request, particularly when it learned that if it did not the report would be given direct to the newspapers without comments. By receiving the report the Board was given an opportunity to square itself with the public in appearing to take the position of instituting the investigation itself.

At best, however, it was a bitter pill for the Board to swallow, for after publicly seeking to belittle Dr. Eaton and his associates in every way possible, it was obliged to endorse and publish the report of Prof. Phelps which sustained Dr. Eaton's findings in every particular, resulting in the establishment of a system of purification of Portland's water supply.

Moral: Had these three men not stood together and fought as one man

they would have been downed individually. The day has gone by when physicians can afford to do otherwise than pull together.

A BLOW AT PATENT MEDICINES.

The great mail order house of Sears, Roebuck & Co. of Chicago has decided to discontinue handling patent medicines. That in itself might not carry much weight, but read the sermon which they publish in their new catalogue just issued. Surely "the world do move" for the discontinuance of this sale means a decided financial loss to this house. The move is altruistic and nothing else.

"Many of our customers will be surprised and possibly some of them disappointed to find that this catalogue no longer lists the various patent medicines we have carried in the past. Our decision to discontinue the sale of patent medicines was made after careful study of the question from all sides and is based on our policy of handling only dependable merchandise—merchandise that we believe will give the service our customers have a right to expect. We have come to believe that patent medicines do not conform to this standard; in fact, we are confident that those of our customers who have investigated the matter thoroughly will agree with us that, considered in all its phases, the patent medicine business is a public evil.

"We are not prepared to take the extreme position that no medicines of any kind, regardless of how simple or in what manner advertised, should be offered direct to the public. However, even such a state of things might easily be better than the present situation, in which we find valueless and even dangerous medicines offered to the public through the medium of advertising that is extravagant, misleading and deceptive—advertising calculated to deceive the well into the belief that they are sick and to induce the sick to pin their faith to ineffectual means for recovery.

"Practically every patent medicine is put out under a trade-marked name and secret formula. The fact that the name is private property makes advertising profitable where otherwise it would not be. Secrecy permits advertisement of the most extravagant sort to go more or less unchallenged. It is not unusual to find a patent medicine advertisement that tends to leave the impression that there is a 'mysterious something' about the medicine that is sufficient to account for the otherwise unbelievable virtues attributed to it. In selling patent medicines the tendency is to tell as little about their composition and to claim as much for them as the law will allow.

"That patent medicines are more than likely to be disappointing as well as dangerous is apparent when we consider the fact that the all-important as well as the most difficult thing in the treatment of disease is that of finding the real underlying cause of the trouble, and the further fact that the person least able to form a safe judgment in this matter is the patient himself.

"The person who falls a victim of the advertisement that attaches a grave meaning to every little ache or pain, when in reality nothing ails him that forgetting would not cure, is at least defrauded.

"The person who depends on an advertised nostrum to cure a serious ailment, which to be successfully treated must have only the most prompt and skilful attention, is throwing away valuable time. The most dangerous medicine, especially in the case of the lingering disease that drugs alone cannot cure, is that which, by containing a stimulant or an opiate, causes its victim to feel better for awhile. Being thus encouraged in a vain hope, though all this time the lurking disease is steadily progressing, he often turns too late, if he turns at all, to rational means for recovery.

"The person, whether sick or well, who takes a secret-formula medicine runs a chance of being injured directly by dangerous drugs that may be present. The law requires that only thirteen of these, and their derivatives, be declared on the label, but the medicine may contain certain poisonous drugs, even including strychnin, arsenic and prussic acid, without such declaration being required; and what the law does not require along this line is seldom done.

"Therefore we have decided to restrict our line of drugs and medicines

to those officially approved by the leading drug and medical associations of the country as given in three well-known publications, namely, the United States Pharmacopeia, published by authority of the United States Pharmacopeial Convention; the National Formulary, issued by the American Pharmaceutical Association; and the New and Non-official Remedies, accepted by the Council on Pharmacy and Chemistry of the American Medical Association. The pure food law has made the first two of these publications the standard for all drugs and medicines in this country. Thus the highest quality, as well as absolute uniformity, are assured for these official preparations. This places them in a class by themselves, for the composition of a patent medicine may be changed at the whim of the maker, and this without even a change in the name of the medicine or in the claims made for it. The last-named publication, as its title would signify, is intended to supplement and bring up to date a knowledge of the merits of certain newer remedies that are not open to the criticisms outlined above and are not yet to be found among the official preparations.

"We believe that the publications named above contain practically all that is of value in the field of medicine. From among the preparations that experience shows are of most value, we have selected a few simple remedies that we believe may be of use in the household. In presenting this list we wish to be understood as not urging the purchase of any medicine that is not needed. Again, if any of our customers have need of more than a few simple home remedies, such as those listed below, we are frankly of the opinion that they should consult their family physicians rather than waste either time or money experimenting with drugs, whether patent medicines or any other.

"In conclusion we wish to say that in our opinion the evils chargeable to patent medicines are likely to continue so long as these products have free access to the channels of publicity and trade. Just why patent medicines are needed at all as articles of commerce, considering that non-secret medicines are better in every way, is not apparent. Since non-secret medicines are better, we believe that our customers will find the remedies we now offer to be more satisfactory than the patent medicines we have carried in the past."

THE MARY PUTNAM JACOBI FELLOWSHIP.

The Woman's Medical Association of New York City offers The Mary Putnam Jacobi Fellowship of \$800 available for post-graduate study. It is open to any woman graduate of medicine. The amount of the endowment to date will permit of a biennial award. Upon the completion of the fund this will be made annually.

The fellowship will not be awarded by competitive examination, but upon proof of ability and promise of success in the chosen line of work.

Applications for the year 1913-1914 must be in the hands of the committee on award by April 1, 1913, and must be accompanied by:

1. Testimonials as to thoroughly good health.
2. Letters as to ability and character.
3. A detailed account of educational qualifications.
4. A statement of the work in which the applicant proposes to engage while holding the fellowship.
5. Examples, if any, of her work, in the form of articles, or accounts of investigations which she has carried out.

The committee will decide upon the award by June 1, 1913. The fellowship will be granted from Oct. 1, 1913, to Oct. 1, 1914.

When possible it is considered desirable that the applicant should present herself in person to the committee.

Two reports will be expected from the holder of the fellowship, one to be presented about the middle of the work and a detailed report upon its completion.

As a rule, the fellowship will be awarded but once to an applicant; in case of unusual ability a re-award will be considered.

All applications for this fellowship shall be forwarded to the committee on award.

EMILY LEWI, M. D., Chairman,
35 Mt. Morris Park West, New York
MARTHA WOLLSTEIN, M.D.
MATHILDA K. WALLIN
HELEN BALDWIN, M.D.
EMILY D. BARRINGER, M.D.

MASSACHUSETTS THE DUMPING GROUND FOR IMPURE MILK

Do you know that the State Board of Health of Massachusetts does not even have the authority to prohibit the sale of milk from a filthy dairy within its own State boundaries, let alone not being able to prohibit the importation of impure milk from other States. Such powers have long since been given to a majority of the Boards in other States of the Union. It is not pleasant to realize how much behind the other States we are in this respect. It is fully time we roused ourselves from this criminal indifference and placed ourselves and our children on the defensive against this inexcusable defect in our State laws. The Massachusetts Milk Consumers Association is carrying on a splendid campaign of education along this line, and it is the duty of every physician to hold up the hands of this association in securing prompt and efficient laws to prohibit both the importation of impure milk into our State, and the sale of the same within the State. In a circular letter sent out the Association says:

"If you and every other doctor will make it his duty to interview his representatives and senator, requesting them to work for the passage of the Ellis Clean Milk Bill, we can put this much needed legislation upon the statute books this winter.

You will be more likely to get their attention if you telephone or speak to them before January 1st, when their legislative duties begin.

Under our bill most of the actual inspection of the State Board of Health will be confined to the out-of-state dairies from which two-thirds of our milk comes. But it will be its duty to inspect the dairies in the state wherever the local boards fail to do so and it will act as a clearing house and central exchange for the local boards, thus enabling them to co-ordinate their work in such a way as to avoid overlapping and omissions in their inspection. At present the few local boards that are doing good work are simply dumping their excluded milk on the surrounding communities.

Our campaign of education has not been without its very substantial results. We have constantly kept the matter before the public so that local boards have been stimulated to greater activity and producers have been impressed with the necessity of taking greater care in the handling of their milk. We are therefore able to report a substantial reduction in the infant mortality. The deaths under one year of age have been reduced from 11,499 in 1910 to 10,543 in 1911, and the deaths from cholera infantum from 3744 in 1910 to 3279 in 1911. You will observe that the figures are still very high. No permanent results can be obtained until we have given the necessary legal powers to the State Board of Health."

BOOK REVIEWS.

Text Book of General and Special Pathology for Students and Practitioners. By Henry T. Brooks, M.D. Formerly Professor of Pathology at the New York Post-Graduate Medical School and Hospital; Consulting Pathologist to Beth-Israel, New York City, and New Rochelle, N. Y., Hospitals; Bacteriologist to St. Mark's Hospital, N. Y., Academy of Medicine, the New York State, and West Chester County Medical Societies, etc.

This book is neither too elementary for the practitioner nor too advanced for the student, but is a most valuable treatise of the whole subject of pathology. Up to the present time there has been a conspicuous scarcity of books on this subject which not only serves the undergraduate as an introduction to the difficult and intricate study of pathologic anatomy, both gross and microscopic, but also enables the practitioner to apply the knowledge obtained from the various pathologic states to interpret clinical symptoms.

Special mention might be made of the arrangement of contents, with the excellent illustrations. In every sense it seems to meet existing requirements.

Skin Grafting, for surgeons and general practitioners. By Leonard Freeman, B.S., M.A., M.D., Prof. of Surgery in the Medical Department of the University of Colorado, etc. With 24 illustrations. Price, \$1.50. C. V. Mosby Co., St. Louis. 1912.

As an evidence of the manner in which every successful surgical procedure extends its sphere of usefulness, we have now quite a pretentious little book devoted entirely to the subject of skin grafting, a subject which, in many of our text books, receives but a scant page or two. That there is a much wider field for this plastic work than has generally been recognized there can be no doubt. Dr. Freeman, after describing in detail the various methods of skin grafting, gives some of the more recent applications of the operation, such as for lupus, X-ray burns, in the eye and ear, transplanting mucous membrane and periosteum grafts.

A Doctor's Table Talk. By James Gregory Mumford, M.D., lecturer on Surgery in Harvard University, etc. Price, \$1.25. Houghton, Mifflin Co., Boston and New York. 1912.

From this very delightful little volume one gets many an interesting side-light on the physician. How really incomplete, after all, is a direct, full-front view of any subject or thing! To get the softer effects of light and shadow, one must stand aside and catch a view from an angle. Dr. Mumford has succeeded in working into this little volume some of the unnoticed and apparently little-thought-of traits of the medical man which make his life and character more interesting. There is much of homely philosophy also, and one lays down the book with a comfortable feeling that one has had a good visit with a delightful friend.

The Mortality of Alcohol, a statistical approximation of the deaths in the United States in which alcohol may figure as a causative or contributory factor. By Edward Bunnell Phelps, M.A., F.S.S. Thrift Publishing Company, New York. 1911.

Any one looking for a "temperance lecture" in cold facts will certainly find it in this carefully written work; yet it was apparently written with no attempt to "prove anything either for or against temperance; simply to give facts in as unprejudiced and unfeeling" a manner as possible, allowing the conclusions to stand for themselves. Coming from a Life Insurance actuary, one naturally feels that the evidence gathered has been carefully scrutinized and digested; that broad conclusions or generalized percentages have been eliminated. The methods employed by the author in reaching his statistical conclusions are so common sense and seemingly reliable that it is hard to differ from his findings. Looking at the matter of alcohol mortality in the United States in the most indifferent manner possible, one cannot escape the conviction that as an economic factor alone, it is the one thing above all

others which demands the imperative attention of physicians, statesmen, social workers and lawmakers. Typhoid fever and tuberculosis are feeling the throttling grip of preventive medicine; their day has passed. But alcoholism, claiming more victims each year than either of those diseases, goes unchecked.

Gould and Pyle's Cyclopedia of Practical Medicine and Surgery, with particular reference to diagnosis and treatment. Second edition, revised and enlarged. By R. J. E. Scott, M.A., B.C.L., M.D., New York, With 653 illustrations. Price, \$14.00. P. Blakiston's Son & Co. 1912.

The aim of this work is to provide, in a compact shape, all the main facts of medicine. Instead of long discursive papers on special subjects, there are short, pithy articles alphabetically arranged. Thirty-three new names have been added to the list of contributors, and the book increased in size by 400 pages. The work is in every sense a cyclopedia of medicine and surgery. It is more than a dictionary, and less than a treatise; it contains the latest and most authoritative descriptions, in the fewest possible words, of every subject pertaining to medicine and surgery. For instance, eight columns are devoted to the subject of blood pressure. Incorporated in it is the history of the study of the subject, the clinical estimation of its value, study of the variations, manner of taking pressure, various apparatus employed, general deductions,—all in fact which the generally informed physician could wish, and yet obtained in a few minutes' reading.

Massage and Swedish Movement. By Kerrie W. Ostrom. The seventh edition. Published by P. Blakiston's Son & Co., Philadelphia.

A concise, practical hand-book on this very valuable adjunct to medical therapeutics; massage and Swedish movement. Prof. Ostrom has become an authority upon this subject, and anything emanating from his pen carries with it a weight of truth. Physical therapeutics of all kinds are rapidly on the increase. It is true that many functional disturbances are but an unbalance of metabolism which needs for its readjustment the stimulation which comes from exercise; yet to exercise the entire body may not be practical or safe. It is here that an intelligent appreciation of the principles governing massage will greatly benefit the patient. The student or practitioner seeking a condensed, practical knowledge of that subject will find the book of great value.

The Pituitary Body and Its Disorders; Clinical States Produced by Disorders of the Hypophysis Cerebri. By Harvey Cushing, M.D., Associate Professor of Surgery the Johns Hopkins University; Prof. of Surgery (elect) Harvard University. An amplification of the Harvey lecture for December, 1910. Price, \$7.00. 319 illustrations. J. B. Lippincott Co., Philadelphia and London.

The profession of medicine is indebted to Dr. Cushing for many discoveries and advances made in the field of neurological surgery. The latest obligation comes from the presentation of a valuable work on the function and treatment of the pituitary body. The study of the ductless glands has cleared up a number of obscure pathological questions, and gives us a better insight into the etiology of some diseases; but the close relationship in function of other ductless glands to the pituitary body has been, until quite recently, only guessed at. While Dr. Cushing's investigations are really only the beginnings of what is to be expected from further research into the function of this obscure gland, yet the knowledge he has given us is invaluable. The fact that the pituitary body is quite as frequently diseased as is the thyroid gland, and produces quite as marked pathological states may seem like a rather surprising statement; yet from the study of cases recorded, it is no exaggerated estimate. The success so far achieved by the operation upon this gland is indeed gratifying. The book is illuminating and of deep interest both to the surgeon and the internist.

BOSTON MEDICAL AND SURGICAL JOURNAL.
DECEMBER, 1912.

The High Frequency Current in the Treatment of High Blood Pressure.

BY HOWARD VAN RENSSELAER, PH.B., M.D.

The action of the High Frequency current is physiological, says Dr. Van Rensselaer, and its power rests in the fact that it penetrates every organ and tissue in the body, regulates cell vibration and stimulates nutritive function in assisting both assimilation and elimination.

Its direct action on hypertension depends on these factors and can be summarized as follows: The greater the tension the greater the fall after treatment.

After the initial fall the blood pressure rises during the next twenty-four hours but fails to reach the point recorded before the treatment. After each treatment the blood pressure remains down a longer period of time and rises at a much slower rate of speed.

High frequency also retards the morbid process producing the increased arterial tension, usually an autointoxication of intestinal origin: and can prevent the ensuing arteriosclerosis with its renal, liver, and cardiac disturbances.

THE POST GRADUATE. DECEMBER, 1912.

The Source of Sugar in Diabetes.

BY PROF. DR. CARL VAN NOORDEN, Professor of First Medical Clinic, Vienna.

In this article Dr. van Noorden gives a systematic study of the formation of sugar by the body processes from the different food materials.

I. CARBOHYDRATES.

Carbohydrates have for their end product glycogen, and this is not only formed by but is stored up in the liver cell. In the diabetic this cell is at fault not in the formation of the product, but in keeping the glycogen in reserve and preventing its decomposition, with the result that the blood is constantly overcharged with sugar.

II. PROTEINS.

A carbohydrate is also split off from the protein molecule during stomach digestion. This goes through the same cycle as does any other carbohydrate except that the absorption of this is so very slow and in such small quantities that it does not affect sugar formation.

The amino acids which form 40 per cent of the protein molecule also act indirectly as an excitant to sugar output. Each type of proteins has its own effect. Meats, because rich in extractives, cause the greatest increase in the glycosuria. Of these, fish is least harmful. Proteins also increase sugar output through their dynamic influence on body tissues. In diabetics there is an increased caloric production of endogenous origin. This becomes greatly augmented by a large protein intake as this class of food stuffs causes a greater increase in oxidation than does any other, therefore it acts not only as a stimulant but as a liver stimulant with the resulting increased glycogen formation.

III. FATS.

From his own laboratory experience Dr. van Noorden claims that the liver is exclusive in the oxidation of the fat molecule. When there is a scarcity of glycogen in the liver cells, fat is stored in its place, and when in need only, does the liver form carbohydrate from this source. It can readily be seen that this would happen in the liver of a diabetic patient.

Journal of Ophthalmology, Otology and Laryngology, December, 1912.

H. S. Weaver, M.D., Philadelphia, Pa.

Hypertrophied tonsils during acute inflammations are markedly enlarged over the usual normal size and will decrease to that size again as soon as the acute inflammation subsides. These reductions in size are often spoken of as cures and attributed to the action of the internal remedy administered, when in fact it is simply a normal physiological resolution taking place and the same result would have been accomplished without treatment.

Understand I am not advising against the treatment of these conditions by internal medication, but ask for a rational limitation of its use. Nothing that I know will relieve the subjective symptoms arising from these pathological conditions quicker than the well selected internal remedy, but this does not constitute a cure.

Postnasal adenoids cause a train of symptoms with which you are all familiar, and experience has taught us that normal atrophy of these growths begins to take place at puberty and later in life barely a trace of their former existence can be found. When this atrophy takes place normally are we justified in attributing the results to our remedies.

I have prescribed the internal remedies, to the best of my ability, according to the totality of the symptoms both in hospital and private practice, and relieved the acute symptoms, but this I do not claim as a cure of the condition. The adenoids still remained and these patients are subject to repeated acute exacerbations.

Many remedies are useful in the treatment of hypertrophied tonsils and enlarged postnasal adenoids, but the one which has been most curative in my hands is Ferrum metallicum, not given for its dynamic effect, but well-tempered, keen-edged and thoroughly sterilized.

D. W. W.

ANNALS OF SURGERY. DECEMBER, 1912.**Operative Treatment of Fractures.** By John B. Walker, M.D.

A concise and well illustrated article dealing with the use of Lane plates in fractures of the femur. The author lays great stress upon proper technic and armamentarium as necessary factors in securing success. Advocates plating all femur fractures, if a thorough attempt at reduction, or if maintenance of reduction fails. Operative interference should not be postponed longer than 7 days.

The least possible handling and trauma should be allowed during the operation. Suitable (Dr. Lemon's) extension apparatus should be used for reduction. Repeated violent attempts have caused more traumatism to the tissues than the operation itself.

Conclusion. 1. In fractures, the rapidity of union is proportional to the accuracy of reduction and the retention of fragments; delayed union is very largely due to faulty adjustment.

2. Plating the fragments does not increase the nutrition, but it brings the fragments into early intimate contract.

3. "As our experience grows we will be able to select after a study of the X-Ray plates, those cases in which operation is indicated." This will save the patient loss of time in trying extension, and will also render the operation easier, safer, and surer.

A. G. H.

Contribution to the Etiology of Congenital Dislocation of the Hip. By

Emmet Rixford, M.D.

This article describes in detail two new bone cases of double congenital dislocation of the hip, and discusses the various theories of the etiology of the condition.

Nothing new is presented in this paper.

A. G. H.

Bone Plating in Irreducible Fracture of the Clavicle. By J. L.

Bendell, M.D.

The author describes an interesting case of a lad of 15 years. A light vanadium plate and screws were used and the arm and shoulder encased in plaster paris dressing. Bendell prefers this to wire or kangaroo tendon.

A. G. H.

Mediotarsal Subluxation as Shown by the X-Ray. By Eugene R. Corson, M.D.

The author describes the anatomy of, and normal motions at, the mediotarsal joints, and calls these joints anatomically weak. He cites a case in illustration and condemns the use of plaster paris splints, because they do not correct the deformity, apparently failing to recognize the fact that the subluxation could and should be reduced before applying the splint.

Water dressings, massage, adhesive strappings and early use of the foot are recommended. A. G. H.

Traumatic Separation of the Lower Epiphyses of the Femur. By James I. Russell, M.D.

The author cites interesting cases and their treatment. He believes that many cases of epiphyses separation are overlooked or diagnosed as fractures.

Nothing new.

A. G. H.

AMERICAN INSTITUTE OF HOMŒOPATHY.

The American Institute of Homœopathy will hold its next annual meeting in the New Albany Hotel, Denver, Colo., July 6-12, 1913. The Chicago & Northwestern-Union Pacific Route has been chosen as the official route. Address communications concerning transportation to Dr. C. E. Fisher, Sterling, Colorado.

Dr. W. A. Dewey, having declined to serve as Chairman of the Press Committee, Dr. Burton Haseltine has been appointed in his stead.

Dr. Grant S. Peck, 226 Majestic Bldg., Denver, has been appointed by President Hinsdale, Chairman of the Local Committee on Arrangements.

The subject of social hygiene has been added as a part of the work of the Bureau of Sanitary Science and Public Health.

Genito-Urinary Diseases is a part of the work of the Bureau of Dermatology, whose correct title is "Bureau of Dermatology and Genito-Urinary Diseases."

PERSONAL AND GENERAL.

Greatly to the regret of the Faculty of the Medical School, Dr. Charles Leeds, of Chelsea (B. U. S. M. 1878), has resigned his position on the Board of Trustees of Boston University. Dr. Leeds has ably represented the Medical Department during his service, and his resignation is felt to be a distinct loss.

Dr. Emerson F. Hird, class of 1910, B. U. S. M., has removed from Concord, New Hampshire, to Camden, New Jersey, — corner of West and Stevens Sts.

Dr. Cora Smith King, class of '92 B. U. S. M., has removed to 63 The Olympia, Washington, D. C., from Seattle, Washington. Dr. King does special work in Electro-therapeutics and X-ray.

Dr. Antonio Orozco, class of 1911 B. U. S. M., has located at 3a. Rio de la Loza No. 106, Mexico, D.F., where he is specializing in Obstetrics, Gynecology and Pediatrics.

Dr. Bernice A. Bartlett, class of 1911 B. U. S. M., has removed from Bradford, Mass., to 94 Emerson St., Haverhill, Mass.

Dr. Bertha Cameron-Guild, B. U. S. M., class of 1911, was tendered a reception in Manchester, New Hampshire, in January by Dr. Mary S. Danforth, as a formal introduction to the medical profession of that city, where Dr. Guild has been in practice since the early summer of 1912.

LESSONS IN THE ITALIAN LANGUAGE.

Signor Ettore Ciampolini of Siena, Italy, (class of 1916 B. U. S. M.) would be glad to take a few pupils in the study of Italian or for Italian conversation. Signor Ciampolini is lecturer for "Circolo Italiano di Boston" and is endorsed and recommended by Prof. Geddes of Boston University and Prof. Grandgent of Harvard College. Address Ettore Ciampolini, Care of Boston University School of Medicine, 80 East Concord St., Boston, Mass.

RECENT DEATHS.

Dr. Charles Sturtevant, for many years in practice in Hyde Park, Massachusetts, died of heart disease and chronic nephritis, on January 19, 1913, at the age of seventy-four years.

Dr. James Francis Bothfeld, class of 1888 B. U. S. M., of Newton, Massachusetts, died on January 12, 1913, in his 48th year.

Dr. Mortimer H. Clarke, class of 1888 B. U. S. M., died at his home in Auburndale, Massachusetts, on January 13, 1913, in his 53rd year.

*Dr. Hugo R. Arndt, for the past three years Field Secretary of the American Institute of Homœopathy, and formerly editor of the Pacific Coast Journal of Homœopathy, died in Cleveland, Ohio, on January 2, at the age of sixty-four years. Dr. Arndt was a graduate of Cleveland Homœopathic Medical College, class of 1869, and a distinguished teacher of and writer on homœopathic materia medica.

DEATH OF DR. WILLIAM E. GREEN.

From the Little Rock (Ark.) *Gazette* of January 5 we quote the following which will come as a great shock to the many friends of Dr. Green who knew him well and esteemed him highly:

"Dr. William Elza Green, one of the best known physicians and surgeons in Arkansas, killed himself yesterday afternoon at his residence, 1114 West Capitol Avenue, by shooting himself.

Dr. Green's death came during a period of melancholia brought on by a long illness from pneumonia, which had revived and complicated an old malady of the kidneys. He was stricken on November 13, and after several days of critical illness began to convalesce, but during his period of convalescence he was subject to fits of despondency. He had gained sufficient strength to be ready for a trip to San Antonio, Texas.

Few professional men have as many warm friends as had Dr. Green. His practice was very large and lucrative, but he always found time for worthy charity and has given freely of his rare skill in the treatment of the poor and unfortunate.

Dr. Green has been signally honored by the homœopathic school of medicine, having been President of the American Institute of Homœopathy, President of the Southern Association of Homœopathy and a member of the Homœopathic State Medical Board. He was a frequent and valued contributor to the medical press and contributed largely to the Homœopathic Text-Book of Surgery.

Dr. Green was born at Charlestown, Ind., March 18, 1845, the son of Richard E. and Frances Davis Green. He was educated in the public schools and at Barnett Academy in Charlestown. He was graduated from the Eclectic Medical Institute in 1872 and from the Pulte Medical College of Cincinnati in 1873. He moved to Little Rock in 1874 and soon became recognized as one of the State's leading surgeons. On December 3, 1889, he was married to Mrs. Adelaide Ward Fatherly. He is survived by his widow and four children, William E. Green of St. Louis, Mrs. A. D. McBryde of San Francisco, and Mrs. Worthen Fatherly Garnett and Ward Fatherly of Little Rock."

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No. 3

ORIGINAL COMMUNICATIONS.

THE VALUE OF DIFFERENTIAL LEUCOCYTE COUNTS, AND A NEW CHART FOR RECORDING THE SAME.

BY HELMUTH ULRICH, M.D., BOSTON, MASS.

In diseases causing leucocytosis, and particularly in those due to the pyogenic bacteria, there seems to be a fairly definite relationship between the total number of leucocytes and the percentage of neutrophiles, depending upon the resistance of the body on the one hand and the virulence of the invading organism on the other. It is a well recognized fact that a greater power of resistance is expressed by a larger number of leucocytes, while high virulence of the infecting agent causes a high neutrophile percentage.

Thus, if a young adult, full of vigor and vitality, were to come down with an attack of appendicitis due to not too virulent a strain of bacteria, blood examination would probably show a fairly high leucocytosis, say twenty thousand, and a percentage of neutrophiles not very much over eighty. The relatively excessive leucocytosis would at once indicate that the patient is well able to cope with the infection, the comparatively low virulence of which is shown by the moderate rise of neutrophile percentage. On the other hand, should the process have gone on to abscess formation, gangrene, or even perforation with more or less generalized peritonitis, the typical blood picture would be quite different. The total number of leucocytes may be as high as, or even higher than, in the other case, or it may be less, depending upon the resistance and vitality of the diseased organism; but the neutrophile percentage, indicating the severity of the existing pathological process, would probably rise out of all proportion to the total leucocyte count.

This was well illustrated by a case recently operated upon at the

Massachusetts Homœopathic Hospital by Dr. Charles T. Howard. A diagnosis of appendicitis had been made, but the symptoms were so mild that operation would not have been considered had not, as Dr. Howard expressed it, experience taught him to operate in all cases so diagnosed. I made a white blood count and found the leucocytes increased to only 12000 per cmm., of which the neutrophiles formed 90 per cent. This marked excess of neutrophiles (shown graphically in Fig. 2) indicated the condition found at operation: a badly inflamed, greatly swollen appendix containing fæcal concretion and showing signs of imminent perforation.

In a well-balanced infection, if I may use this term, that is, in one where the combating forces of resistance and infection are equal, the neutrophile percentage should, therefore, increase or decrease in proportion with an increasing or decreasing total leucocyte count. Just what this proportion should be, that is, how many points of percentage of neutrophiles should be considered equivalent to, say each 10000 leucocytes, has been a matter of some study. Gibson of New York formulated the following rule: For every increase of 1000 leucocytes there should be an increase of 1 per cent neutrophiles. (Fig. 1). Practical application of this rule shows, however, that it is applicable to moderate leucocytoses only, for according to its formula, and taking 10000 leucocytes = 75 per cent neutrophiles as a basis, the limit would be reached at 35000 leucocytes = 100 per cent neutrophiles. Of course, there are many cases having more than 35000 leucocytes per cmm. It was, therefore, found necessary, in ascending the scale, to progressively increase the number of leucocyte thousands per neutrophile per cent, adhering to Gibson's 1000 = 1 per cent scheme between the 75 per cent and 80 per cent points only (Fig. 2).

Figs. 1 and 2 are representations of Gibson's chart and a modification thereof respectively and show but one blood count each. The figures representing the leucocytes are at the left of the charts, while those for the neutrophiles are at the right. If, as in Fig. 1, there are 19000 leucocytes per cmm., of which 91 per cent are neutrophiles, then the two points representing these levels are connected by a straight line. If this line ascends, from left to right, it is evident that the neutrophile percentage is relatively higher than the total leucocyte count; this, applied to the disease, would mean that the disease is stronger than the patient. If the line descends, the opposite is the case; that is, the patient is considered stronger than the disease. Gibson endeavored to show the progress of the disease by drawing lines for several consecutive blood counts on the same chart, greatly at the expense of legibility.

In order to depict the progress of the disease, as determined by

repeated blood counts, clearly and comprehensively, I devised a chart, copies of which are shown in Figs. 3-4-5. The modification of Gibson's rule shown in Fig. 2, is incorporated in this chart which resembles an ordinary temperature chart. The red curve represents the percentage of neutrophiles (virulence of the invader) and the black curve, the total number of leucocytes (resistance of the invaded). Thus, at a glance one may see whether the disease (red) or the patient (black) is the stronger, by the relative positions of the red and black lines.

Of course, this does not mean that in every case where the red overtops the black the issue is fatal; it does mean, however, that in a case showing a decided relative increase of neutrophiles, the prognosis should at least be guarded. Taken in conjunction with other symptoms and manifestations of the disease, the relation between the total leucocyte count and the neutrophile percentage should prove an additional and valuable diagnostic and prognostic sign.

Charts I and II (Figs. 3 and 4) illustrate the two types of curves: No. I, puerperal sepsis with fatal termination, showing persistently high neutrophile percentage; No. II, Infected wound following coeliotomy, with recovery. The first half of this curve shows the effect of ether, of which more will be said later. The rise depicted by the second half of the curve was due to infection of the abdominal wound. The resistance was high, while the infection was relatively mild, as shown by the high leucocyte count and the relatively low neutrophile percentage. The organism had very little trouble in overcoming the invader and was soon restored to health.

It is interesting to note the effect of poisons (ether; salvarsan) introduced suddenly into the system, as shown by the curves on chart III (Fig. 5). In all, there is a decided rise of the red over the black lines, although none were fatal cases. Arithmetical computation determines that in the first (ether anesthesia) and third (intravenous infusion of salvarsan) there is an actual diminution of lymphocytes to one half in the former and one fifth in the latter. In the second case (ether anesthesia) the number of lymphocytes is only slightly reduced. Chart II (Fig. 4) shows a case in which the effect of ether anesthesia is much less marked, and there are others, not shown here, where the red line does not overtop the black line at all. Out of five cases of intravenous infusion of salvarsan or neosalvarsan, the one represented on chart III (Fig. 5) is the only one showing such a high relative increase of neutrophiles.

The fourth case on chart III (Fig. 5) is that of a robust young man who, twenty-four hours previous to the first blood

count, had felt perfectly well. He came down very suddenly with a shortlived acute inflammatory condition of unknown origin, lasting about three days. Although no preliminary count had been made to determine his normal, it is evident that there was a decided actual diminution of lymphocytes.

As may be seen from Figs. 3 and 4, the temperature, represented by a broken line, may also be shown without greatly complicating the chart, while there are two columns at the bottom, one for the percentage of eosinophiles, the other for Arneht's blood picture. The latter, because of lack of space, is not shown in the usual way, but is represented by the average number of nuclear lobes in the neutrophiles. The short black and red lines on either side of the vertical red lines are subdivisions put in for convenience, the black to be used for the leucocyte and temperature curves, and the red for the curve of neutrophile percentage. Wherever a black and a red horizontal line fall at the same level, a black line is used, as at the 10000=75 per cent point. Normal, represented by a heavy black line, falls at 98.6-7000-72 per cent. Below the normal level, the divisions on the neutrophile side gradually decrease, while those on the leucocyte side gradually increase in size. This is done merely to carry the gradations to the zero point on both sides, without any attempt at relational accuracy, for here we enter the field of leucopaenia, with which this chart does not, primarily, concern itself.

AN EARLY SYMPTOM OF EXTRA UTERINE PREGNANCY.

Soloway says the symptoms of an early unruptured tubal pregnancy are mostly so insignificant that they may elude the attention of even skilled gynecologists. In the very beginning of such a case it may be possible to feel a very small undefined resistance at the side of the uterus which may simulate an inflammatory adnexal tumor. The menstrual period may have been absent or not, and often there is an intermittent or continuous sanguinous discharge from the uterus. If in this decidual fragments are found there is no doubt in the diagnosis, especially when associated with periodic contracting pains in the tubes. But these symptoms are often absent, and the diagnosis is only recognized on the occurrence of internal hemorrhage from tubal abortion or rupture. The author then calls attention to an early symptom, namely an indefinite doughy resistance in the posterior cul-de-sac. He recites two cases. In one this doughy feeling was caused by a collection of blood and the attachment of the pregnant tube to the rectum. In the other case the symptom was produced by an attachment of the omentum to the pregnant tube and the posterior uterine wall, where also a small collection of blood had formed. Of course this sign, to possess full value, must be found present, after the cul-de-sac had been found empty a few days before.—*Zentralbl. f. Gyn.* 1912, p. 134.

THEODORE J. GRAMM, M.D.

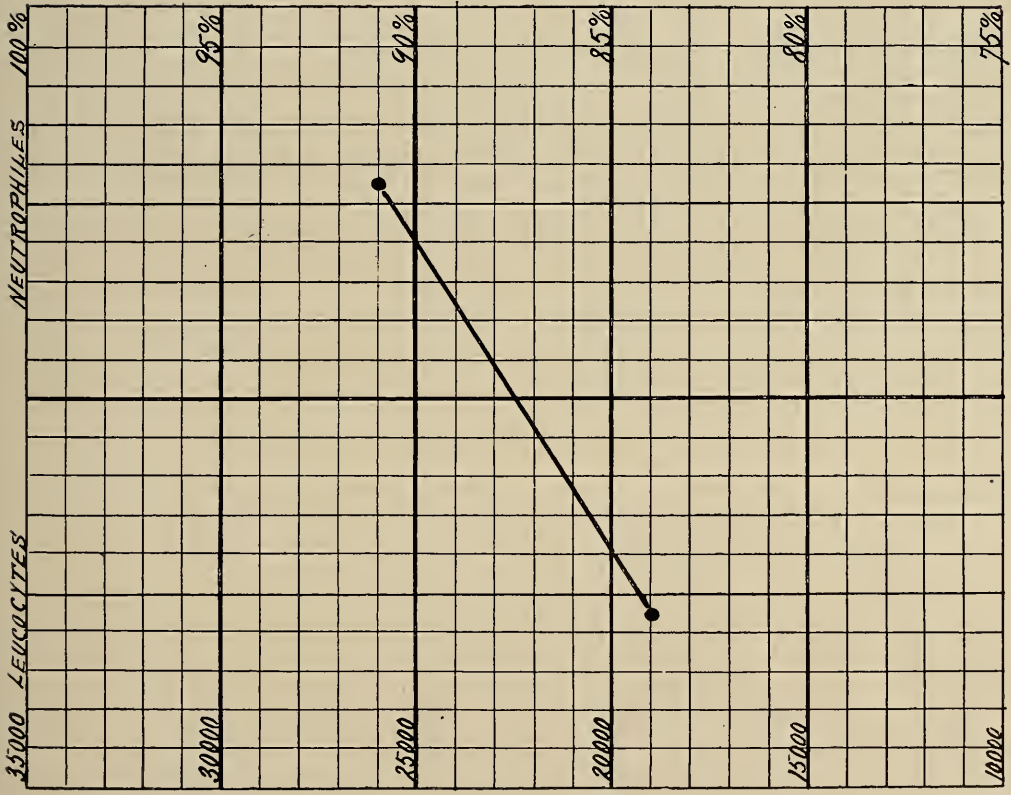


FIG. 1 GIBSON'S CHART FOR RECORDING DIFFERENTIAL BLOODCOUNTS

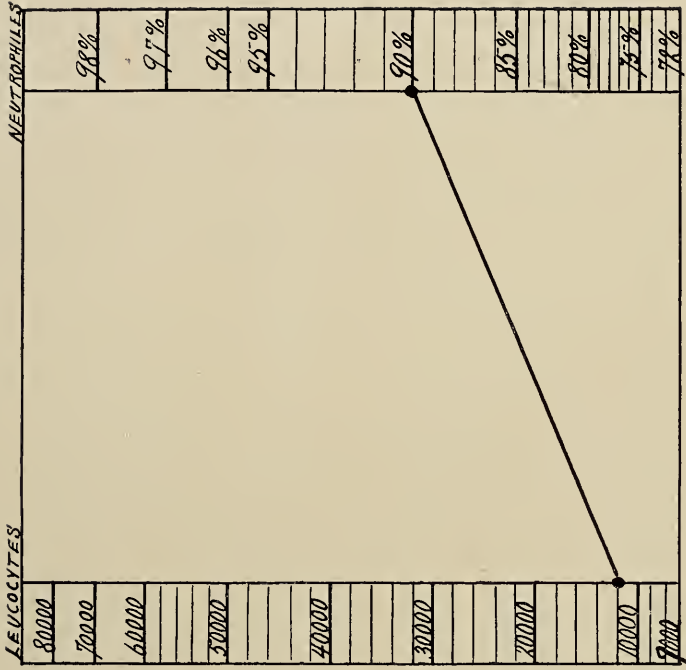
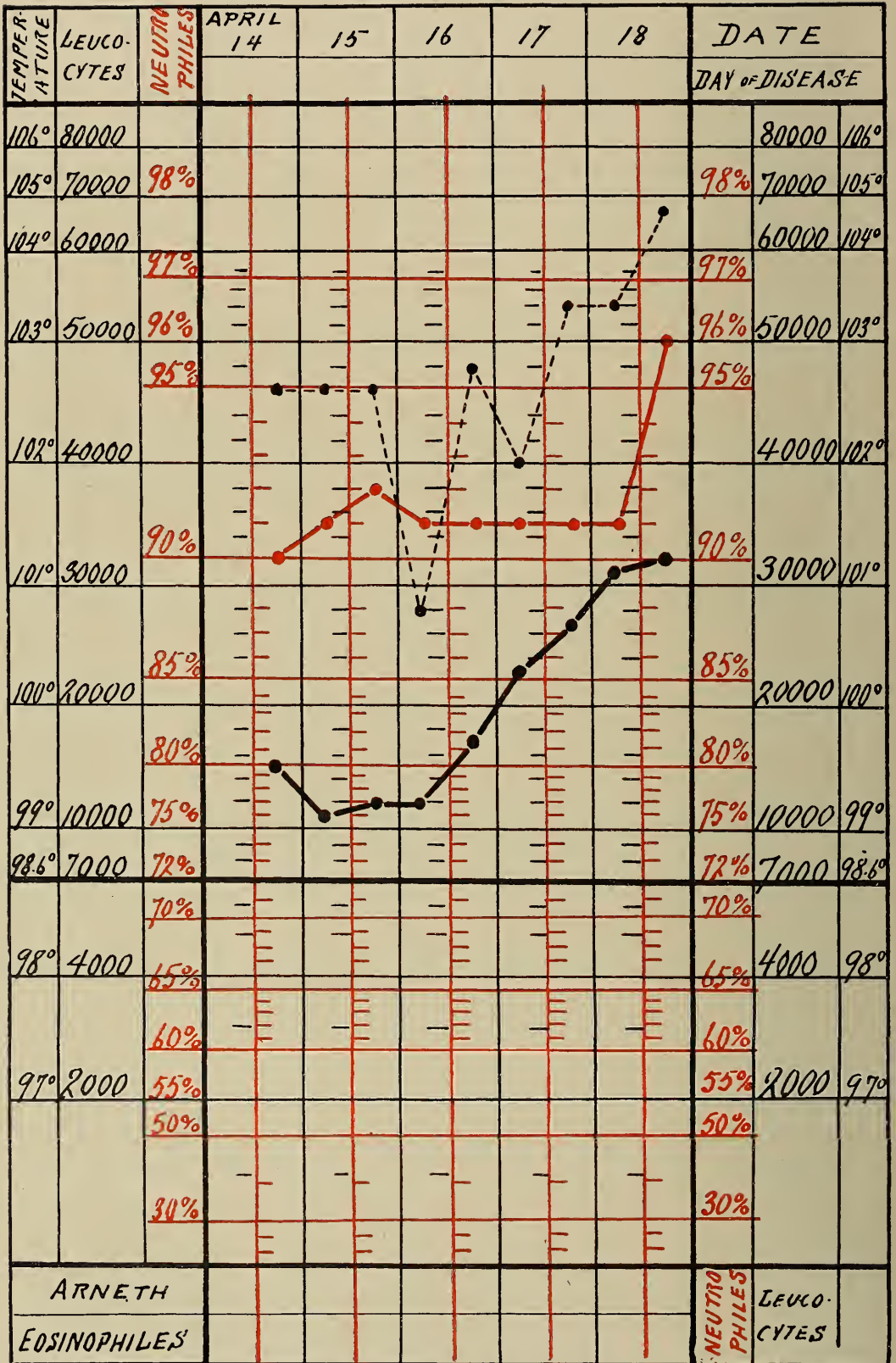


FIG. 2 MODIFICATION OF GIBSON'S CHART. (APPENDICITIS)

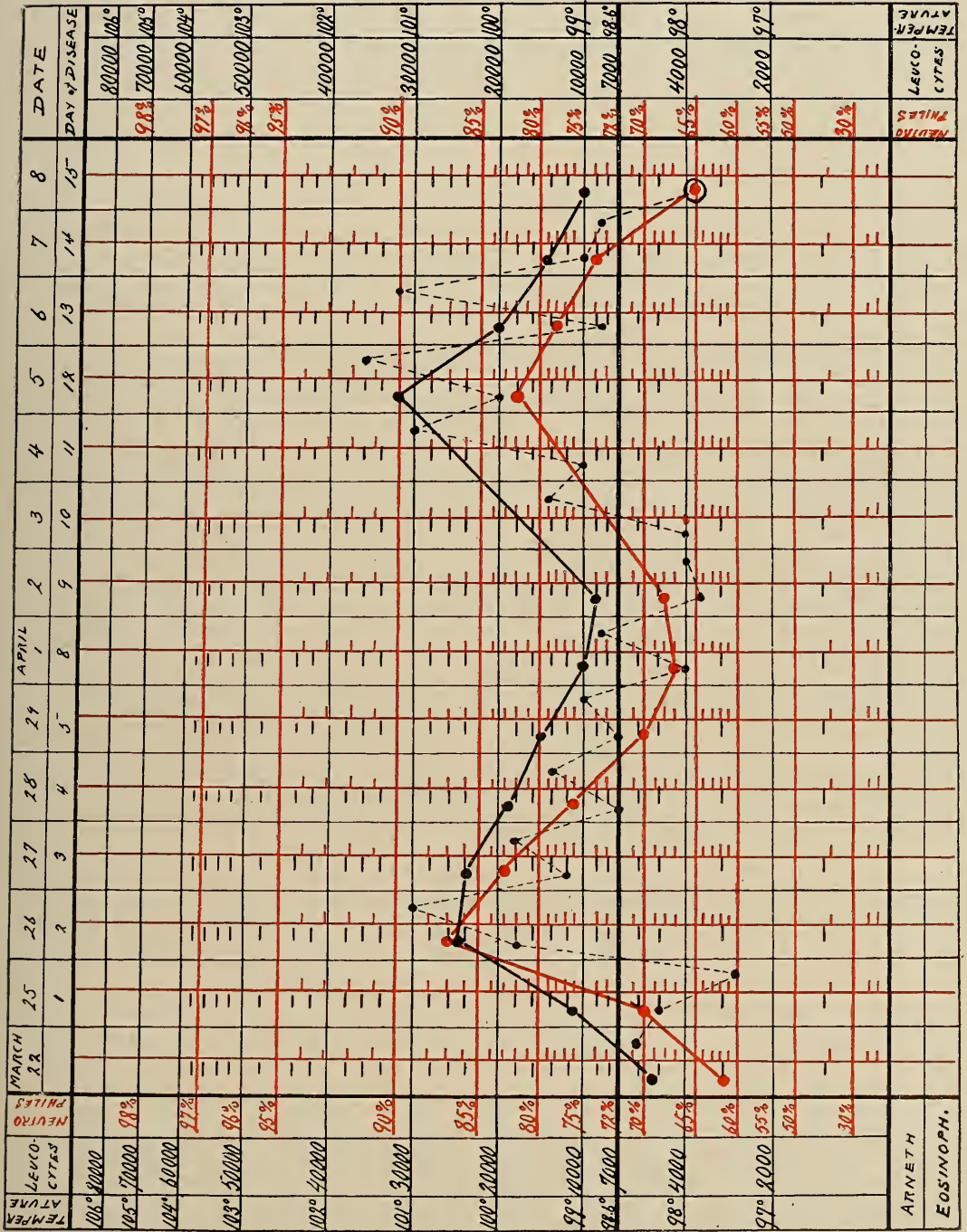
(FIG. 3) CHART I.

PUERPERAL SEPSIS WITH FATAL TERMINATION.



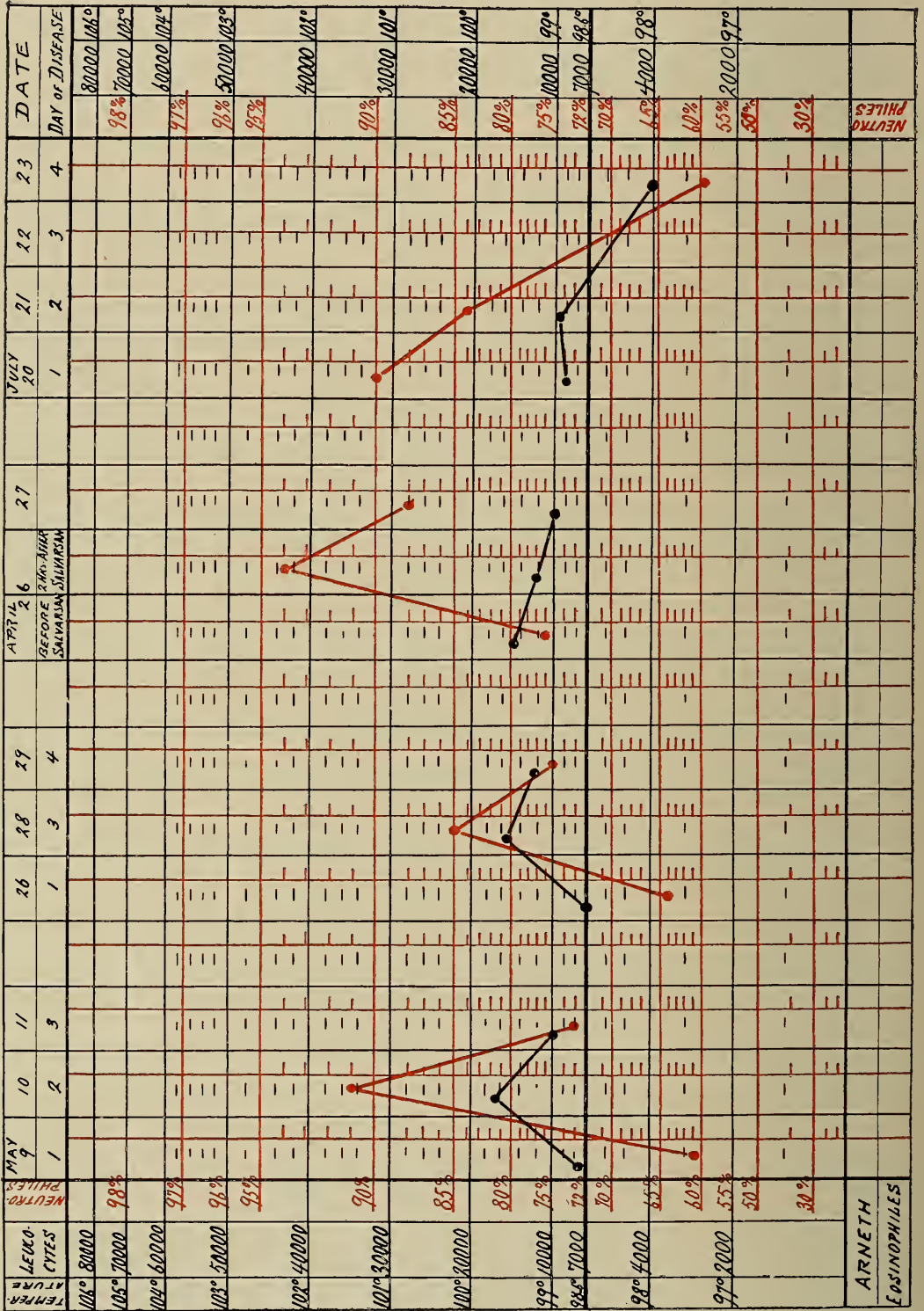
(FIG. 4) CHART II.

ETHER ANAESTHESIA (FIRST HALF OF CURVE) INFECTION OF WOUND FOLLOWING COELIOTOMY (SECOND HALF OF CURVE) RECOVERY.



(FIG. 5) CHART III.

CURVES 1 AND 2 ETHER ANAESTHESIA—CURVE 3 INTRAVENOUS INFUSION OF SALVARSAN—CURVE 4 ACUTE INFLAMMATORY CONDITION.



A STUDY OF THE BLOOD PRESSURE IN FIVE HUNDRED CASES OF INSANITY. *

BY P. R. VESSIE, M. D., Gowanda, N. Y.

The area of cardiac dulness, stethoscopic inspection of the heart sounds, pulse rate per minute, character of the radial pulse, systolic blood pressure in millimeters of mercury and urinalyses were recorded in each of five hundred male inmates of the Gowanda State Hospital for the Insane. Sphygmographic radial tracings were taken in three hundred and eighty-five cases. Faught's and Janeway's modifications of the Riva Rocci sphygmomanometer with the wide arm cuff were employed. The millimeter of mercury at which the full radial pulse returned after obliteration of the brachial artery comprised the method of technic, care being exercised to have the apparatus, arm and heart on an approximate level. The systolic blood-pressure (intra-arterial pressure during ventricular systole of the heart) was taken in the sitting posture excepting in the helpless bed patients. The diastolic pressure (the ebb of repose to which the intra-arterial pressure falls during diastole of the heart) was disregarded because the therapeutic effect upon the lowering of the blood-pressure and prognostic inquiry are not the objects under consideration. Most of the readings were observed from 2 p. m. to 4 p. m., extending over a period of one year.

In cases presenting heart affections or an elevation of blood-pressure urinalyses were repeatedly made so as to determine the clinical evidence of nephritis with a certain degree of accuracy.

The average normal arterial blood-pressure before middle life is held to be 120 millimeters, and 130 millimeters after that period. As a result of the wear and tear, sclerotic changes and impairments of the cardio-vascular renal system it is no doubt true that an increased blood-pressure is effected so as to maintain an equalization of blood supply. Here a slight elevation of blood-pressure (about 130 m.m. to 150 m.m.) may be of no great importance from a prognostic standpoint, but the fact remains that some pathologic process exists which is responsible for this physiologic compensation, and it is this phase of the subject that is held significant in these observations. Janeway, the foremost authority on blood-pressure, asserts that he seldom sees a systolic pressure of 140 m.m. or more in a normal individual. His recent analysis of five hundred cases, presenting 170 m.m. or more, showed a mortality of one hundred and fifty of the total number in the course of eight years. The importance of recognizing this condition and also a hint as to its

* Read before the New York State Homœopathic Society, Buffalo, N. Y., October 8, 1912.

prognostic value are taught in this data. In an analysis of 1,247 members of a progressive insurance company, it was found that those who presented a measurement of 150 m.m., or more, contributed a mortality two and a half times greater than the general average death-rate of this company.

A pressure of less than 105 m.m. is considered to be below the normal range limit. It is on the intelligence of the above figures, offered by skilled men, that the convictions of this report are based.

GENERAL CONSIDERATIONS.

It is the experience of clinicians that arterial blood-pressure rises gradually in advancing years. Table A corroborates this evidence, although it is obvious that the averages of two hundred and seventy-four patients given here are comparatively low, in fact, unduly so. Explanation of this low index can be based on the fact that the mode of life and habits of these patients examined are under institutional control, while the tabulations of others are founded on readings of subjects independent of institutions, especially applicants for life insurance. The dement who has led an institutional existence since youth, escaping the numerous deleterious influences conducive to heart, arterial and renal diseases, is a subject of proof as to the advantage of hygiene, environment, diet and regulation of habits afforded by our hospitals for the insane. This type, comprising the dementia praecox group in the main, features particularly in this determination. Vaso-motor tone is no doubt lowered in the complete dement who leads a vegetative existence. In this consideration of blood pressure readings confined to the minimum normal limits it must be mentioned that the chronic bed patients (thirty-seven) are responsible to a small degree for this low range of readings.

TABLE A.

RELATIVE INCREASE OF BLOOD-PRESSURE IN ADVANCING AGE.*
(274 cases)

No.	Decade	Average blood-pressure.
34	20 - 30 yrs.	110 m.m. Hg.
78	30 - 40 yrs.	112 m.m. Hg.
75	40 - 50 yrs.	117 m.m. Hg.
58	50 - 60 yrs.	120 m.m. Hg.
20	60 - 70 yrs.	128 m.m. Hg.
9	70 -100 yrs.	129 m.m. Hg.

*Cases presenting arrhythmia, nephritis, and cardiac disease with or without nephritis, are eliminated.

In table B it will be seen that the highest average blood-pressure readings are observed in the class of patients regularly employed at manual labor. Aside from the conceded fact that their mental deterioration is kept in abeyance by occupation, the physical health, especially the heart action, general circulation and character of the pulse, is appreciably better than that of the idle dement and bed patient. The idle patient displays a lower average pressure than the employed. Prolonged rest in bed in cases of varied psychoses results in low tension.

TABLE B.

INFLUENCE OF THE MODE OF LIFE UPON BLOOD-PRESSURE.*
(256 cases)

No.	Class of patients	Average Reading.
42	Employed.....	119 m.m. Hg.
177	Idle	116 m.m. Hg.
37	Bed	110 m.m. Hg.

IMPAIRMENTS OF THE VASCULAR SYSTEM.

Pathological affections of the heart, arterial system and kidneys, encountered so frequently in insanity, are to be recognized in part as the result of the debilitating influences, infectious fevers and excesses that form the etiology of many psychoses.

An attempt to diagnosticate early stages of arterio-sclerosis is on such a weak foundation and so precarious from an objective standpoint that a selection of only those patients with definite radial atheroma and tortuous temporals was considered. The arterial tree, particularly the arterioles, becomes less pervious and elastic in advancing years, so that an increased blood-supply is asserted to be necessary to furnish nutrition. The virtue of a rise of blood-pressure in this condition is appreciated by the argument that there must be some method of nature to maintain physiologic nourishment so as to protect and conserve life. There may or may not be an elevation of blood-pressure in simple arterio-sclerosis. (Table C.) This variation is probably dependent upon the location and extent of sclerosis in the arterial tree.

*Cases presenting arrhythmia, nephritis, and cardiac disease with or without nephritis, are eliminated.

TABLE C.
SIMPLE ARTERIO-SCLEROSIS.
(22 cases)

No.	Tension	Range of pressure.
12	Hypertension.....	140 - 170 m.m. Hg.
10	Normal.....	100 - 135 m.m. Hg.

Contradictory to this view-point many clinicians hold that hypertension is not uniformly essential to atheromatous changes in the arteries but are inclined to suspicion a diseased kidney as a complication of arterio-sclerosis. The following Table (D) giving the total number of cases of nephritis, determined clinically, with or without arterio-sclerosis, seems to suggest the plausibility of hypertension as a very frequent symptom of nephritis.

TABLE D.
BLOOD-PRESSURE IN NEPHRITIS.
(166 cases)

No.	Tension	Range of pressure.
124	Hypertension.....	140 - 220 m.m. Hg.
33	Normal Tension...	110 - 138 m.m. Hg.
9	Hypotension.....	95 - 105 m.m. Hg.

The most common condition is the affiliation of a chronic interstitial nephritis with a general arterio-sclerosis. Their association is so close that it is quite impossible to describe them separately. Whether the renal disease is primary with resultant vascular changes or shares with general sclerosis of the vascular system, cardiac hypertrophy will occur secondarily, because of the effort to overcome arterial resistance. A hypertonic contraction of the arteries induced by some irritative stimulation, viz., toxic products of syphilis, over-indulgence in alcoholic beverages, etc., increases blood-pressure and, if continued, these circulating irritants produce a hyperplasia of the muscle fibres of the media, the connective tissue of the intima, and occasionally affect the adventitia. Pathological changes in the kidneys may therefore be the result of nutritional disturbance through interfered circulatory supply. It is assumed that this obstruction to the renal function causes an elevation of the blood-pressure reading. The latter conclusion is illustrated in one hundred and thirty-six cases of hypertension (140 m.m. Hg. or more) where signs of chronic nephritis in 124 were observed. No diagnostic symptoms of nephritis connected with urinalysis were noted in the remaining twelve cases. In these twelve cases of elevated tension not attended by the clinical findings of nephritis one was a hemiplegic and the remaining eleven arterio-sclerosis. (Table E.)

TABLE E.
THE FREQUENCY OF HYPERTENSION.
(136 cases)

No.	Associative Condition	Range of pressure
124	With nephritis.....	140 - 220 m.m. Hg.
12	Without nephritis...	140 - 170 m.m. Hg.

The symptom syndrome of a chronically contracted kidney consists of urinary findings of nephritis, arterial sclerosis, secondary cardiac hypertrophy of the left ventricle without valvular lesions, accentuated second aortic sounds and elevation of the blood-pressure. The thirty-eight cases indexed in Table F are examples of this cardio-vascular renal complex. The seven cases showing a normal tension gave definite auscultatory evidence of weakened hearts apparently due to over-work entailed by the long continued high blood-pressure.

TABLE F.
CARDIO-VASCULAR RENAL COMPLEX.
(38 cases)

No.	Tension	Range of pressure.
31	Hypertension.....	140 - 220 m.m. Hg.
7	Normal tension...	110 - 135 m.m. Hg.

In cardio-renal disease the heart is primarily diseased. Mitral valve lesions result in a chronic passive congestion of the kidneys. An interstitial nephritis may, of course, be associated with valvular incompetency and occasion a hypertension. In uncomplicated valvular lesions of the heart where no signs of nephritis were found in the examination of the urine, all blood-pressures (eighteen) were confined to the normal range, while valvular lesions complicated by symptoms of nephritis (twenty-five) exhibited an elevation of blood-pressure, ranging from 140 m.m. to 210 m.m. (Table G). Failing energy of the heart muscle is shown by a gradual fall of blood-pressure, this latter condition presenting a decline to normal after a long continued high pressure, thereby misleading interpretation of existing impairments.

TABLE G.
VALVULAR LESIONS OF THE HEART.
(43 cases)

No.	Associative Condition	Range of pressure	Average
18	With nephritis	140 - 210 m.m. Hg.	168
18	Without nephritis	100 - 130 m.m. Hg.	113

INFLUENCE OF MENTAL DISEASE ON BLOOD-PRESSURE

In the consideration of the influence of mental diseases upon the tonicity of the vasomotor system it is quite necessary to take frequent observations throughout the course of the psychosis so as to obtain dependable data. Minor fluctuations of the blood-pressure which occur physiologically during the day may contribute misleading results, likewise, disease of the internal organs, especially a nephritis. All cases presenting blood raising or lowering factors must, therefore, be eliminated before attempting to establish weighty conclusions.

In mania with a well pronounced psycho-motor activity the arterial pressure is rather consistently lowered, the same rising to normal upon recovery. Fatigue is no doubt the cause of this fall, while recuperation is accompanied by the return to normal.

Only in depressive states where there is a decided agitation do I find an appreciable elevation of blood-pressure, returning to normal upon the cessation of the agitation. The impression on the blood current is no doubt established by the reflex psychic influence that stimulates peripheral vasomotor contraction.

Dementia praecox has no bearing on blood-pressure except in episodes of excitement where the pressure mounts 10 to 20 m.m. Excitability manifested in other types of insanity may also exhibit this elevation.

In the dilapidated general paretic a hypotension is the rule, while variable pressure exists in the incipient and moderately advanced stages.

A pressure within the normal range was noted in two cases of cerebral syphilis, the autopsy examination of which showed large gummata of the brain.

In post-apoplectic insanity the blood-pressure is, as a rule, profoundly high. The invariable association of a nephritis and arterio-sclerosis embarrasses the investigation of intracranial pressure as a possible elevating factor. The signal sign of a fatal prognosis is a decided fall of blood-pressure immediately after a haemorrhagic insult, this drop being also significant of a failing heart.

OBSERVATIONS OF THE ACTION OF REMEDIES IN INTERESTING CLINICAL CASES. *

BY RUDOLPH F. RABE, M. D., New York City

A recent case of grippe, accompanied by a rather severe bronchitis, serves to emphasize nicely certain characteristics of our

*Read before the N. Y. State Homœopathic Medical Society, Albany, February 12, 1913.

well-known remedies. The patient was a middle-aged, keen-minded, intellectual woman of a decidedly neurotic type, in whom several periods of nervous breakdown had at various times in her history occurred. When first seen, she had been ill for somewhat longer than thirty hours and presented at the time of my examination the following clearly defined symptoms:

Painful dry and rasping cough; soreness of the flesh all over the body; marked restlessness, with brief relief from any change of position; decided thirst for much ice-cold water; face somewhat flushed; tongue moist and slightly coated brownish; accelerated pulse and temperature of 101.4. *Rhus tox.* 1000th was given every hour for three doses, thereafter every three hours.

In twenty-four hours the temperature was 99.2 with general amelioration of the whole condition. Some domestic excitement, the exact nature of which was not disclosed to me, caused a sleepless night and much anxiety the following day. Although the temperature was now normal and the thirst abated, the patient was exceedingly restless and declared herself to be worse. It was plain to see that the frequent tossing about the bed had its origin in an inquietude of nervous origin. Accordingly, a single dose of *Coffea c. m.* was now given and placebo, already previously administered, continued. The following day showed a smiling face and restful demeanor, after a much better night. The symptom complex now showed: cough still persisting and much worse if room gets at all cold. Soreness in upper chest, with a "velvety" sensation which seemed to impede the inspiratory effort to some extent.

Goneness at the stomach relieved by taking food, for which until the present time there had been no appetite.

A few doses of *Phosphorus* 1000th were now given, at intervals of three hours, and then a return to placebo.

Improvement was rapid, symptoms yielding promptly, but in their place the old nervous breakdown becoming manifest. The patient had no desire to do anything, no ambition, maintained herself to be absolutely without strength, yet except for the alleged weakness, declared herself to be free from actual suffering of any kind. Brief inquiry elicited the following:

Feels badly and confused after a nap.

Frequent waking at night.

Hot summer weather has always exhausted her.

Inclination to constipation, with large and difficult stools.

Weakness.

Selenium 45m, one dose, was given. Progress has since been steady and gradual, yet more rapid than in previous attacks.

The interesting points of this case for the homœopathic pre-

scriber are, the immediate response to a well indicated acute remedy for the symptoms last to appear, namely those of *Rhus tox.*, defining the acute disturbance or illness. Further, the emergency use of *Coffea*, to meet an acute nerve storm and one not caused by joy, to the effects of which this remedy is commonly held to be homœopathic. Then, the heaviness or tightness of *Phosphorus*, described by the patient as "velvety" and indicating to the physician the necessity of interpretation of the variable word descriptions by patients. Lastly and entirely in keeping with homœopathic philosophy, the return of the old chronic, underlying tendency, in the form of nervous depression or neurasthenia, as soon as the acute illness had been overcome. *Selenium*, as here used, is a much neglected remedy, although one of great power and to be compared with *Phosphorus* and especially *Sulphur*. It is of great value in the weakness following upon typhoid or other fevers.

Some time last Fall, there came to Flower Hospital a young woman whom examination showed to be ill from diphtheria. Immediate transference of the case to Willard Parker Hospital was made, where diphtheria antitoxin was employed with an uneventful recovery. Shortly after, during her convalescence, this patient noticed a weakness of the knees, as though they might give way, while standing or walking. There now followed much difficulty of swallowing, with regurgitation of solid food and of fluids through the nose. The patient returned to Flower Hospital and came to my ward. Examination showed a post-diphtheritic neuritis, with paralysis of the muscles of deglutition and absent patellar reflexes. Eating or drinking were practically impossible, and a loose tracheal cough added to the trouble. In these cases we naturally think of *Cocculus*, *Gelsemium* and of *Causticum*, but no characteristic indications for any of them appeared to be present. Accordingly, three doses of the nosode, *Diphtherinum* in the c. m. potency, were given at intervals of twelve hours. Immediate improvement began, and within three days the patient was able to eat a hearty meal of solid food. Home-sickness now claimed her, and in spite of the persuasive, gentle eloquence of my interne, Dr. Markham, the patient insisted upon going home. Within three weeks or less she was back, applying for admission to the Women's Medical Ward. This time her legs would not carry her, being altogether paralyzed, so that she had to be carried in and put to bed. But her throat was and had remained entirely well. *Diphtherinum* c. m., a single dose, was again given. In five or six days time, the patient was able to walk unsupported in the ward. At the present writing she continues to improve and has been given another dose of the remedy. There is every promise of a complete restoration to health within a short time.

The interesting features of this case are, of course, first the prompt response to a so-called nosode, the highly potentized toxin of diphtheria itself, after its antitoxin had been employed in the cure of the original disease. We believe it to be pretty broadly recognized today that diphtheria antitoxin, when it cures, does so by virtue of its immunizing power in supplying the necessary antibodies to oppose the toxin, elaborated by the diphtheria bacillus, and not by virtue of the law of similars. The use of diphtheria antitoxin, in other words, is not an homœopathic procedure, although Von Behring himself has freely given credit to homœopathy and its principles for his discovery. But the use of the nosode Diphtherinum is unquestionably homœopathic, since the symptoms upon which we prescribe it are identical with those typically produced by the disease. Nor is this a matter of isopathy, more especially since the highly potentized remedy can hardly contain any of the material disease substance, as is the case when an antogenous vaccine, for example, is employed. Had this particular case presented characteristic symptoms of, let us say, *Gelsemium*, this remedy would have been curative and not Diphtherinum. Of course, this nosode, like numerous others, needs extended provings in various potencies, upon healthy human subjects, so that its finer shadings may be brought out and its individuality more clearly expressed. At present, we know it almost altogether from its clinical side only.

The second point of interest in this case lies in its illustration of the workings of a true homœopathic cure and not a mere recovery. All real cures are made from above downward, from within outward, and in such a cure symptoms disappear in the inverse order of their coming. Thus in the patient under consideration, we see that the paralytic weakness of the knees was the first symptom noticed by the patient. It is, as has been shown, the last to get well. On the other hand, the paralysis of the pharyngeal muscles was the very last symptom to appear and the very first to improve.

This case is presented, therefore, as a slight contribution to our homœopathic literature of clinical demonstrations at a time when our able pathological workers are slowly but surely relating the modern vaccine and similar therapies to the parent of all of them, Homœopathy. Old School investigators are yearly coming nearer to the truth of Homœopathy. Let us be up and doing lest we be caught napping and virtually discovered, in spite of ourselves! The credit is ours, but let us claim it by deserving it.

The subject of blood-pressure is rightly regarded as one of importance, not only as it concerns the questions of diagnosis, but also in its relation to prognosis. The common practice of physicians in their treatment of cases showing increased blood-pressure, is to

give something which will bring this pressure down, to what are regarded as safe limits. This "something" usually consists in the regulation of the patient's hygiene, habits and diet, plus the administration of some drug, known to have a reducing effect upon the pressure of the blood itself. At best such therapy is uncertain and doubtful, since blood-pressure is known to fluctuate widely in the same patient, under various conditions. Homœopathic literature has thus far presented a few cases, in which without other adjuvants, the well selected remedy has more or less permanently reduced the blood-pressure, while at the same time ameliorating the condition of the patient under treatment, most decidedly. The following case, to be reported very briefly, may be added to the number.

The patient, a woman, age 59, was brought to me showing a marked aphasia. It was almost impossible to understand her except by making signs and audible suggestions, to bring out her confirmatory grunts of assent or dissent. The history, obtained from her attendant, revealed the fact that sudden shock produced by a telephonic communication to the patient, to the effect that her husband, previously robust, had suddenly died after an apoplectic stroke, was undoubtedly the exciting cause of the trouble. My case record shows that the climacteric had been passed some eight years before, without special disturbance. Since the shock of the news of her husband's death, speech had gradually become confused. Inquiry brought out the fact that the patient is fully aware of what she wishes to say, but that she cannot express herself. Appetite fair, sleep is good. Flatulence, especially from any nervous excitement. Aversion to meeting people on account of the embarrassment of speech. Has grieved deeply and silently over the death of her husband. Mild and gentle, yielding disposition. Examination of heart was negative; no signs of any paralysis were present. A specimen of the twenty-four hours urine showed a specific gravity of 1030; but no albumin or sugar. The blood-pressure was 218.

She was given a single dose of Phosphoric acid 1000th, and reported in seventeen days. At this time there was an improvement in the speech, and the blood-pressure, taken with the same instrument,—the "Tycos,"—was 170.

Sixteen days later the improvement in speech was decided, the blood-pressure, 174; Phos. acid 1000th was repeated.

Eighteen days thereafter, the blood-pressure had risen to 190, but the improvement in speech was still more decided.

Since this time the patient has not been seen, but is known to be improving. Although an unfinished case, the action of Phosphoric acid is of sufficient interest to warrant a report of the result thus far. To be sure, it may be that in this case arterio-sclerosis is playing

its part, although as yet the cardiac and urinary findings are negative. Should this prove to be so, permanent reduction of the blood-pressure can scarcely be expected, although the aphasia, of undoubted hysterical origin, will be cured. Attention is called to the fact that Ignatia is by no means the only remedy to be given for the ill effects of grief. Phosphoric acid was chosen in preference to the former remedy, on account of the dull, apathetic, hopeless expression of the patient. In this connection it may be remarked that the grief of Phosphoric acid is more crushing in its effects, the patient sinking into a state of dull and hopeless despair, whereas that of Ignatia is more of the weeping, hysterical type and more acute in its manifestations. Ignatia is frequently followed by Natrum muriaticum, which is its chronic remedy.

A REPORT OF SOME INTERESTING SURGICAL CASES.

By G. J. JACKOWITZ, M. D., New Haven, Conn. Surgeon to Grace Hospital,

The following cases are reported because of their unusual interest and comparative rarity in medical literature:—

Case 1.—J. B. aged 15 years, is one of six children, and has always been well. His parents have never noticed anything unusual about him. While gaming with dice, the sport being interrupted by the police, he climbed and jumped from a high fence. As he landed he felt something descend, but continued to run until he was forced to halt because of the severe pain in the right inguinal region. Every motion seemed to cause excruciating pain, so much so that his friends were obliged to carry him home. When seen four hours later he was suffering from pain in the before mentioned region, was nauseated, and had vomited at intervals since the accident. Physical examination revealed the absence of the right testicle from scrotum; and a moderate sized sensitive irreducible mass in the inguinal region. The parents were informed of the suspected condition, and upon considerable persuasion granted permission for immediate operation.

Upon making the usual incision and cutting into the hernial sac, after releasing the constriction, the writer found a mass of strangulated gut to which was adherent an undescended testicle. After reviving the gut with normal saline as is customary, the gut was replaced in the abdominal cavity. The testicle, somewhat undeveloped, was brought down as far as possible, and after scarifying the tissues of the scrotum and a portion of the surface of the tes-

ticle, the two surfaces were approximated and, in order to prevent it from slipping upward, a Pagenstecher suture was passed through the body of the testicle and tied external to the scrotum.

The sac was not tied off as is customary, but the internal surface was scarified and brought together through the entire length by a suture, thus making a covering for and incorporating it as a part of the spermatic cord. The remainder of the operation was finished according to Bassini. The patient made an uneventful recovery barring a slight orchitis caused by the irritation of the retaining suture.

Case 2.—F. D. aged 36, presented himself at Grace Hospital, with a large growth of one year's duration, extending over the entire head of the penis, originating at the margin of the urethral orifice, passing backward. The entire growth resembled a mushroom with the body of the penis as the stem. Urination was extremely difficult and painful because of the almost complete obliteration of the urethral orifice. A microscopical diagnosis of a section revealed growth to be an epithelioma. The writer amputated the penis midway and the patient made an uneventful recovery. Up to the present writing there is no tendency toward recurrence. On the other hand the patient reports that he is able to perform all the sexual functions. The reason for reporting this case is to impress upon the reader the necessity for early surgical procedure in similar cases not only for the personal welfare of the patient but also for social reasons.

Case 3.—M. F. aged 38, colored. Family history negative. Personal history: Patient has always been well up to two years ago, when she had a double salpingitis necessitating the removal of both tubes and ovaries and the appendix. Since then she has been well to the time of the present illness. She was taken with the typical symptoms of a general peritonitis, nausea with vomiting, tenderness over the entire abdomen, muscular rigidity, etc. When sent to the hospital the following day, the muscular rigidity seemed to have entirely disappeared. There was no rise of temperature, her principal complaint being paroxysmal pain in the abdomen somewhat localized on the right side. She was kept under observation one day and there being no change in her condition, an exploratory incision was decided upon.

Through a median incision the writer found a much retracted omentum, the abdomen full of peritonitic fluid, sanious but not foul, the remains of the pelvic organs in good condition. Above, a long area of gut was found to be gangrenous, measuring forty-two inches in length after resection. Further exploration revealed the cause to be a thrombosis in the lower portion of the superior mesenteric artery. The patient rallied beautifully from the operation and did

well for three days, having no discomfort whatever, expelling flatus readily and having a pulse of good volume. On the third day after the operation the patient had another severe paroxysm of pain about the umbilicus, a drop in temperature, from 99.6 to 96 degrees, followed by a rise and a remission, terminating by death on the fifth day after operation.

Post mortem findings showed a union of the previously resected gut. About one foot above this, there was sixteen inches of gangrenous gut with a perforation caused by a hemorrhagic infarction in the mesentery, which at the time of the operation was in good condition.

Case 4.—Mrs. I. A. aged 36 years. Husband is a teamster, residence adjoining stables, surroundings of which are most unhygienic. Family history negative. Personal history: Menses established at fourteen years of age, was always regular and had no special discomfort. Patient had four children, and three miscarriages; oldest child is twelve years of age, the youngest two. She was well up to the first six months of the present pregnancy. After that she had vague pains all over the body, but at no time did she feel that she could give up her housework or afford to go to see a physician. She carried the children in utero to full term and was normally delivered of twins with a slight post partum hemorrhage. The following morning after delivery the patient was fairly comfortable, the uterus was contracted down to what one ordinarily expects. The same afternoon there was a rise in temperature to 106 degrees. The uterus was considerably enlarged, the lochia was inoffensive and normal in quantity. The second morning after delivery the temperature was 105 degrees, the uterus much larger than the day before, the lochia the same in character. The same evening the patient died suddenly.

The writer saw this patient a few hours before death and made a culture of lochia for diagnostic purposes. A bacteriological examination revealed an infection by the staphylococcus and the bacillus aerogenes capsulatus. The sudden death was probably due to an air embolus entering the circulation through a uterine sinus. It is the writer's opinion that this infection existed for some time previous to delivery.

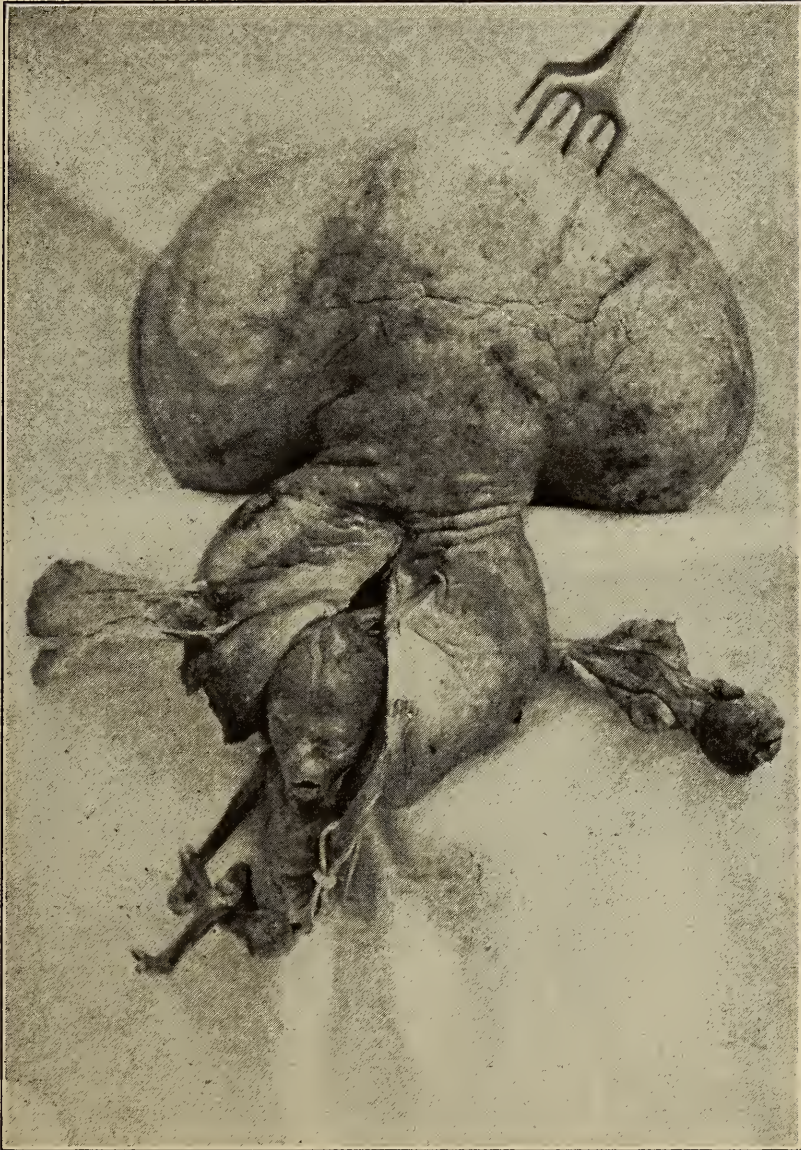
Case 5:—Mrs. R. L. P. aged 29 years. Family history negative. Personal history: Patient has had the usual children's diseases. Menses established at fourteen years of age, regular, with no discomfort. Married at 25 years of age, had one child at the age of 26 years, which is living, had another sixteen months later which died at the age of one month. Had one abortion of foetus of ten weeks, three months after the death of last child. Since then her menses

had been regular up to the present illness, when she was one week overdue. Fearing that she had become pregnant, she took thirty grains of quinine, a hot mustard foot bath and a glass of gin, after which she flowed very profusely for two days, on the second of which, while washing dishes, she had a very severe cramp-like pain in the right ovarian region. When seen shortly after, she showed all symptoms of an internal hemorrhage. Vaginal examination revealed a haematocolpos, substantiating the writer's diagnosis of a ruptured ectopic pregnancy. Operation the same evening revealed a ruptured right tube with a two months foetus imbedded in the lumen and substance of the tube. A salpingo-oophorectomy was done and the patient made an uneventful recovery. Whether the emmenagogue action of the combined measures used, especially the ecboic effect of the quinine, hastened the rupture of the tube or whether these were coincidental remains a question.

Case 6:—Mrs. E. C. aged 39 years. Family history negative. Personal history: Menses established at 16 years of age, regular, Married at 22 years of age, had three children; all are living, youngest is six years old. She has had three miscarriages. Patient has always been well up to the time of present illness. Five and four months ago respectively, she skipped her menstrual periods. Three months ago she had a severe pain in the uterine region, after which she flowed very profusely for five days and was obliged to remain in bed for ten days. All this discomfort she attributed to the menopause. Every month since then she has flowed more or less regularly. The patient has been gradually becoming weaker, suffering from headache, fever, general malaise, etc., up to the time she entered Grace Hospital.

Examination revealed a large, boggy, indefinable mass in the pelvis. With her previous history a possible ectopic pregnancy was suspected. Operation was advised. Upon opening the abdomen the omentum was found adherent to one large solid clot which filled the entire pelvis, obliterating all the pelvic organs. This was gradually removed piecemeal, and upon approaching the uterus it was found that the clot had become partially organized and was contiguous as a portion of the uterus, resembling somewhat a degenerated fibroid. A panhysterectomy was decided upon and done. The abdomen was drained with a cigarette drain and closed. Upon examination of the specimen a well developed foetus about three months old was found in the supposedly organized mass, which was adherent to the posterior wall of the uterus. The patient rallied beautifully from the operation and did well for eight days after the surgical procedure, when she suddenly died. Post mortem examination revealed death due to an embolism of the coronary artery.

Case 7: —Mrs. L. G. aged 29 years. Family history negative. Personal history: Patient had the usual children's diseases, menses established at 16 years of age; married at 19, had no children and no miscarriages. About three years ago she noticed a little discomfort in the abdomen. At that time the patient consulted a physician who



examined her and informed her of the presence of a small tumor, not of sufficient size to warrant any surgical interference. Six months ago, ten years after marriage, she became pregnant. A month later she again consulted her family physician, who again examined her and found the pelvic tumor larger but advised no surgical procedure. The patient was seen by the writer when she was

about six months pregnant. Physical examination showed a very much enlarged abdomen, an indefinable mass extending from the pubis to the xiphoid cartilage, filling laterally the entire abdominal cavity. The upper portion was very hard, whereas the lower segment, the uterus, was more resilient. For the last month she had had considerable difficulty in getting about the house with any degree of comfort. She found herself suffering from much dyspnoea, was unable to lie in bed or to assume the recumbent posture for even five minutes, so she was forced to rest sitting in a chair. She was unable to retain any nourishment, and as a result was becoming gradually weaker. She was constipated. There was no rise in temperature, the pulse was rapid and feeble. After very careful consideration as to what procedure to pursue, she was advised to go to the hospital. A Porro's operation was done by the writer and the accompanying illustration shows the specimen and the relative position of a massive fibroid to the pregnant uterus. The patient made an uneventful recovery.

Now as to the points of interest in reference to this case. Had she been operated at the time the presence of the fibroid tumor was discovered, the probabilities are that to-day she would have a living child with prospects of future successful pregnancies. Again were her condition thoroughly considered at the time when she was first noticed to be pregnant, a legitimate abortion with a subsequent fibromectomy may have possibly saved the uterus and adnexa and thus made it possible for a future pregnancy. On the other hand, under existing circumstances it was entirely out of the question to induce labor and deliver a premature child, because of the extreme weakness of the patient. Again, the fibroma had grown to such an enormous size and had become so wedged in under the ribs that it would have prevented the uterus from contracting down after the delivery of the placenta, thus endangering the life of the patient from hemorrhage. Still further, but for the poor general condition of the patient we might have waited for her to carry the child through the seventh month and then have done a Caesarian section and fibromectomy, and probably have delivered a viable child. Procrastination was impossible, therefore the writer feels justified in having pursued the course which he did.

AN UNUSUALLY PROTRACTED CASE OF TYPHOID FEVER.

By C. W. SCOTT, M. D., Andover, Mass.

The following case of typhoid fever seemed to the writer to be of sufficient interest to warrant reporting, in the hope of its being of assistance to some brother practitioner and of material benefit to his patient.

Mr. C. W. C., aged 41, married, two children, shoemaker by trade. He had been feeling tired and irritable from the first of May, and for a week prior to the 17th, on which day he took his bed, had a severe diarrhœa which was attributed to clams he had eaten. On the 16th had chills and fever.

He rapidly developed the usual and complete typhoid conditions, the baked tongue, sordes, profuse diarrhœa, 25 dejections in a day; rose spots covering the whole body, and copious hemorrhages; stomach fairly good. Temperature ran from 100 to 103.6 degrees.

He received the usual treatment, and on June 10th his temperature reached normal and continued so for eleven days, when it again developed and ran for three weeks, reaching 104 degrees; no diarrhœa, stomach fairly good. Convalescence from this attack rather slow, patient complaining somewhat of pain and weakness in back and hips. He gradually got out and around, gaining slowly.

From about July 8th to the 23rd, when I left on my vacation, I saw him occasionally. He complained of his back and hips. During August he did a little work, picked berries, etc., but gradually grew worse and took his bed again September 9th, with a temperature of 103 degrees. For a month his temperature ran from 99 to 103 degrees.

By this time the pain had become very severe and he could not move without bringing on an attack of most excruciating pain, besides the one or two he was bound to have anyhow, lasting an hour or more, so severe that his cries could be heard in the street.

Nothing I could give afforded relief, and I was forced to resort to hypodermics of morphia, sometimes 1-2 grain.

During this attack his bowels were very constipated. For eight days he took only grape juice and elderberry wine. October 7th called Dr. J. P. Sutherland in consultation, who after a very careful examination was inclined to give an unfavorable prognosis but strongly advised among other things the use of typhoid vaccine. Blood for examination was sent to Dr. Watters, who reported a positive Widal reaction and kindly sent the vaccine. October 8th, 6 P. M., temperature 103 degrees, gave first dose of vaccine. Quite a decided reaction.

Oct. 9th	temp.	A. M.	98	P. M.	100.6	
Oct. 10th	"	"	99.6	"	100	..
Oct. 11th	"	"	100	"	102	2nd dose of vaccine
Oct. 12th	"	"	101	"	101	
Oct. 13th	"	"	99.4	"	100	
Oct. 14th	"	"	101	"	100	3rd dose of vaccine
Oct. 15th	"	"	98.5	"	98.5	
Oct. 16th	"	"	99	"	101	
Oct. 17th	"	"	101	"	102	
Oct. 18th	"	"	101	"	101.4	
Oct. 19th	"	"	102	"	102.4	4th dose of vaccine
Oct. 20th	"	"	98.6	"	98.6	

No more fever and no pain after 24 hours from the first dose of vaccine unless caused by moving, and even that disappeared after a few days. Recovery has been slow and tedious but steady and, considering what he has passed through, satisfactory.

While this is only one case, it shows very positive results of the vaccine treatment, especially the relief from pain and the general change for the better in his whole condition, and I believe saved his life. He was undoubtedly a "carrier," and carried the bacilli from one attack to another.

MEDICO-LEGAL ASPECTS OF ARTERIO-SCLEROSIS.*

BY FREDERICK W. SEWARD, M. D., Goshen, N. Y.

In the consideration of the medico-legal aspect of arterio-sclerosis or the atheromatous condition of the arteries it is unnecessary to go into the etiology or pathology of the affection further than to refer to the reduced calibre of the artery found in the arterio-capillary fibrosis form and the mechanical effect of such obstruction upon the circulation of the blood. For it is precisely this effect upon the circulation of the blood; lessening blood supply, hence nutrition to different parts of the body, that we get the secondary effects of this form of atheroma. And, when it refers to brain tissue, these effects, resulting in altered mental processes, bring the subject clearly within the realm of medico-legal discussion.

All mental processes result from the functioning of the brain. So long as such functional action is normal, the mental process will be rational. Whatever cause operates to interfere with such normal functioning tends to produce an irrational mental process. The

degree of this irrationality is infinite and determined by the area and extent of area of brain tissue involved.

6 point footnote.

Arterio-sclerosis is a disease which is peculiar to advanced age in almost all cases, although a syphilitic complication may bring on arterial degeneration earlier in life, but this form usually terminates in paresis. The progress of the non-syphilitic form is usually exceedingly slow and its beginning insidious and oftentimes long undetermined.

Let us take now these three characteristics, advanced age, extreme slowness of progress in loss of nutrition to the brain, and the consequent and very gradual interference with normal functional action of the brain, and we get a situation which underlies a vast number of exceedingly complicated and long drawn out legal complications which are dealt with in our Criminal, and more particularly our Probate Courts.

There are doubtless many instances in criminal practice where the question of responsibility on the part of the accused may be determined by the fact that the party is a subject of this condition of the arteries, and yet it is rarely recognized. The question of "testamentary capacity" is, however, of very frequent inquiry in probate practice and in very many instances will be rightly solved by a careful and intelligent inquiry as to the existence of this pathological change in the maker of the will and the extent thereof. To the legal mind, insanity or mental incompetency is regarded as a fact. If it exists, testamentary capacity is lacking. The rule is a hard and fast one, possessed of no flexibility. The truth is, however, a subject may be in a degree insane and incompetent and yet undoubtedly possessed of testamentary capacity.

The recital of a case which came within our experience will illustrate my meaning. B. was a farmer; widower, 56 years of age, had been industrious and had accumulated several thousand dollars, which were invested by him in various ways. Two daughters and one son besides himself composed the immediate family. The daughters had married well and were living in villages remote from the farm. The son had also married and, at the solicitation of the farmer had taken up his residence in the farm home, making a home for the father, and the father and son had worked the farm together under a business arrangement mutually satisfactory. The father made a will, leaving to each daughter a legacy of two thousand dollars, as I recall, and the residue of his estate, both real and personal, amounting, as per inventory, to something like fourteen thousand, to the son. Subsequent to the making of this will the father became ill. His physician and a consultant diagnosed the

condition as one of acute alcoholism and, because of his mental excitability, he was committed to a State Hospital for the Insane. His history while in this institution showed him to have been excitable, profane and abusive for a few hours, but in a short time he was given his parole to go and come as he pleased. In all respects he was considered rational. If there was a condition of arterio-sclerosis it was not discovered. At all events it was not written in the record. This patient, on his own request, was promptly discharged as cured. It was also developed that gradually and for months before this commitment, the farmer was using alcohol with increasing liberality until the crisis came. After his admission he had *no* alcohol.

For seven years subsequent to his discharge from the State Hospital, this man lived in his home, circulating among his neighbors and friends as always, bought and sold stock, grains and implements for his farm, loaned his money on notes and mortgages, collected his interest money, conducted his affairs with banks and stores without question.

Remembering that he had executed his will only a short time prior to his illness and commitment to the State Hospital and thinking possibly the will might be attacked on the ground of incompetency, and because of such commitment, he had a new will drawn by a different attorney and witnessed by two individuals other than those who witnessed the first will. In substance the second was precisely a duplicate of the first will.

After living these seven years in a manner so rational that his condition was absolutely unquestioned, the use of alcoholic stimulants was again resumed, and again he became ill and this time very distinctly maniacal. Again he was committed to the Hospital, but lived only a few days. Autopsy disclosed now a pronounced condition of arterio-sclerosis and this was assigned as cause of death.

So far as my knowledge of the case extends the question as to the effects of alcohol upon his condition was not considered, but it seems to me all circumstances indicate its prominence as a factor. My experience also demonstrates to me that alcohol when used by subjects of brain disturbance is always a cause of aggravation of mental symptoms. This is particularly illustrated in cases of paranoia. There is no question in my mind but this case had in a slight degree a condition of arterio-sclerosis even prior to his first incarceration, but not to an extent which affected his mentality, but the use of alcohol induced the acute mania, which was alcoholic, and his ability to make a will was good, both before and after the seizure. Whereas, some years after, the progress of the arterial obstruction had become so extreme that the renewed use of stimulants precipitated a fatal termination.

Instances wherein men who have displayed good judgment all through their careers as business men gradually, mysteriously and unaccountably, as they advance in age, begin to sustain money losses, to manifest a warped and defective judgment, to manifest marked and unfortunate traits of character, are numerous indeed and the same is almost uniformly the effect of a sclerotic condition of the arteries which by reason of its partial occlusion of the blood vessels cuts off in a measure the blood supply to the brain, and also by the organic change in the walls of the blood vessels interferes with the process of osmosis. These considerations, then, show the importance of this pathological state in connection with legal processes in which the mental capacity or responsibility of a subject is in question.

Aside from any legal question this condition of arterio-sclerosis, marking as it does in very many instances the beginning of mental decadence which results in loss of property, domestic complications, social entanglements, a grave responsibility rests upon the family physician requiring an early recognition of the malady on his part and an intelligent management of the case in the direction of safeguarding the interests of patient, family and friends.

Without doubt you can all recall instances within your personal experiences where the vagaries of the early stages of senile dementia, due to this sclerotic affection, have resulted in just such complications as we read of daily in the public press, a notable example of which has very recently distressed us all. A man justly honored for services rendered to his country in her time of need, a man honored for the display of the attributes of true manliness through a long career, is, in the declining period of his life, portrayed in our press as a deliberate violator of his domestic obligations and an embezzler of public funds committed to his care, and he, his family and friends subjected to the gross indignity of his arrest at the instance of the legal representative of this great State, when, as I venture to affirm, the man is a victim of a pathological change which has affected his brain action to a degree which renders him clearly irresponsible in a legal, and also moral sense. While expert testimony may have fallen into a degree of ill repute, is it not desirable that due and scientific inquiry should be made in doubtful cases before criminal action be instituted or even criticism offered?

**A CONTRIBUTION TO THE STUDY OF TUBAL, OVARIAN
AND TUBO-OVARIAN HERNIAS.**

BY AIME PAUL HEINECK, M. D., Surgeon to
the Cook County Hospital, Chicago.

In the female, the frequency of hernias and especially of hernias of the internal genitalia has been and is still underestimated. Owing to the lack of study heretofore given to this clinical entity, hernias of the uterine adnexae are often overlooked, not uncommonly misdiagnosed, and therefore subjected to injudicious treatment, harmful alike to the individual and to the hernial contents, prejudicial alike to the patient's general well-being and to her reproductive powers. Impressed by the clinical importance of the condition and surprised at the insufficient consideration given to the subject in even the most modern gynecological and surgical text books, I have collected the following data which may prove of service to some of my professional colleagues as well as to future investigators of the subject. Knowledge of the occurrence and familiarity with the symptomatology of a clinical condition lead to its more frequent and more timely recognition.

Soon after beginning the consideration of the subject, we became convinced that deductions and conclusions, to be valuable, should be based solely upon the study of cases whose accuracy of diagnosis is self-evident. Therefore in the preparation of this paper we have only considered cases in which the hernial contents were demonstrated at the dissecting, autopsy or operating table.

We have conformed to the nomenclature in actual use; but, to better insure precision of classification and a more intelligent discussion of the subject, we define, at times, the terms employed. The word hernia signifies the permanent or temporary protrusion of one or more viscera from their normal situation through a normal or abnormal opening in the walls of the cavity within which they are contained. It implies the existence of a hernial ring, of a hernial sac, of hernial sac contents and of sac coverings. In the hernias discussed in this article, the protruding organ was always either an ovary, an oviduct, or Fallopian tube and an ovary. In some cases, as associated hernial contents we find omentum, a segment of the alimentary canal, a part of the urinary bladder, a rudimentary uterine horn, or the entire uterus, be the latter organ rudimentary, infantile, or of normal development. The tube or ovary or both in part or in their entirety may be herniated. All the hernias herein considered are external hernias; that is, their outermost overlying saccular covering is skin, and each, after reaching a certain stage of development, gives rise to a more or less visible, more or less

palpable external swelling in the inguinal, femoral, ventral, obturator or ischiatic regions, depending upon the anatomical location of the hernia. Internal hernias, that is, hernias in which one or more loops of intestine find their way into pouches or recesses in the posterior peritoneal wall, and diaphragmatic hernias, be the latter true or false, congenital or acquired, constitute other chapters of surgery.

The escape of the uterine appendages from their normal situation may take place through any of the weak spots or openings of the lower abdominal or abdomino-pelvic cavities. A hernia originating either in the internal or in the external inguinal fossae and escaping above Poupart's ligament is an inguinal hernia; if escaping beneath the same ligament, it emerges through the crural canal and the saphenous opening, it is a femoral hernia; if through the obturator canal, an obturator hernia; if along the course of the gluteal or sciatic nerves and vessels, emerging almost always above, very infrequently below the pyriformis muscle, very rarely through the lesser sacro-sciatic foramen, a gluteal hernia; if through an operative scar in the abdominal wall, a post-operative hernia.

Though sanctioned by long usage, the classifying of hernias into congenital and acquired is, at times, misleading. It is misleading because it is practically impossible to determine the congenital or acquired nature of many hernias. Furthermore, the term congenital hernia as now used does not imply in the female that the hernia was present at birth, as it is also applied to hernias whose post-natal development is due to predisposing conditions of congenital origin: developmental defects, persistence of transitory embryonal or fetal states which, owing to their non-disappearance with growth, permit the occurrence of outward visceral displacements. Some hernias are congenital in the truest sense of the word; they are complete at birth, hernial contents being then present. In most of the so-called congenital hernias, the sac only is existent at birth; in an acquired hernia, the sac is always of post-natal development, and in all but hernias *par glissement* is entirely derived from the parietal peritoneum. Congenital hernial sacs result from the want of closure of peritoneal processes, such as the processes vaginalis peritonei in the male, the canal of Nuck in the female, etc., normally present in the fetus. Congenital hernias may appear at any period of life.

Orifices for the transmission of vessels and ducts are normally present in the muscular and aponeurotic layers of the abdominal walls. An acquired hernia is formed by the gradual or sudden escape through these orifices, pathologically widened, of viscera normally contained within the abdominal cavity; the viscera in their

passage through and beyond the abdominal wall create paths of escape for themselves by bulging and pushing forward the parietal peritoneum.

In many cases, the congenital or acquired nature of the hernia is either too vaguely stated or is left unmentioned. Femoral hernia seldom occurs before adult life.

Tubal, ovarian and tubo-ovarian hernias occur in the colored and in the white race. Commonly, the condition is unilateral; infrequently, it is bilateral. When bilateral, the hernias may or may not be developed to the same degree on both sides. The bilaterality may date from birth, may be acquired. In the latter case, the hernias may from the first have been bilateral or an interval of time of shorter or greater length may have intervened between the appearance of the two hernias. In Broca's case, when the patient was eight months old, the right inguinal hernia appeared, but the left inguinal hernia did not become manifest before the patient was four years of age. All the bilateral, tubal, ovarian, or tubo-ovarian hernias recorded in the medical literature of the last twenty years are of the inguinal variety. This is in accord with a well-known fact that, in both sexes, double femoral hernias are less frequent than double inguinal hernias.

A tubal, an ovarian or a tubo-ovarian hernia may coexist with one or more hernias of other organs. Multiple hernias are not infrequent, the hernias present being either of the same or of different types, as two inguinal hernias or one inguinal and one femoral hernia on the same or on opposite sides of the body.

The hernias which we have under consideration may or may not be associated with non-development, malformation or absence of the other internal or of some external genitalia. In Martin's (Kossmann) case, a hernia of the left tube and ovary, the uterus was displaced upwards, forwards and to the left by a cyst of the right ovary having the volume of a man's head. In almost all the cases the operation performed was a herniotomy, and as herniotomy affords little opportunity for direct examination of the pelvic organs, the condition of the non-herniated genitalia was determined in only a few cases.

Hernia is a widespread disease. The relative incidence of hernias of the internal genitalia as to age corresponds to that of hernia in general. In our series, the youngest patient was four weeks old at time of operation. Nicoll operated successfully for ovarian hernia in two infants each one and a half months old. The oldest patient operated on was seventy-eight years old. She had a left tubal obturator hernia. Lickley reports a right tubo-ovarian obturator hernia observed in a dissecting-room subject who had died of general debility and hemiplegia at the age of eighty-seven

years. In many cases, the age is not stated. The age given by most authors corresponds to the age of the patient at the time of operation and not to the age at which the hernia first appeared.

The study of the reported cases demonstrates:

- (a). The frequency of hernias during the first year of life.
- (b). The rarity of the condition from the first to the fifteenth year of life.
- (c). The noticeable progressive increase in the number of hernias observed from the fifteenth year on, the maximal frequency being seen during the fourth decade of life.
- (d). After the fortieth year, there is a decline of the number of hernias; they become relatively rare as the extremes of life are approached.

During the child-bearing period, hernias of either or of both uterine appendages have been observed in nulliparae, in primiparae and in multiparae.

ETIOLOGY.

The predisposing and exciting causes of tubal, ovarian and tubo-ovarian hernias are shown by an analysis of the collected cases, to be the same as those of other hernias in the female. The persistence of the canal of Nuck is an etiological factor of the greatest significance in the causation of inguinal hernias. The canal of Nuck, the homologue of the processus vaginalis peritonei in the male, is a peritoneal diverticulum accompanying and adhering intimately to the round ligament, descending in some cases as far as the insertion of that ligament in the labium majus. This peritoneal process whose dates of origin and disappearance are not accurately known, is usually found completely obliterated at birth; it may close after birth; it may even persist throughout life. When the canal of Nuck is only partially or completely unobliterated, it forms a potential hernial sac and is conceded to be the most important congenital predisposing cause to inguinal hernia formation. It is a matter of common knowledge that preformed sacs are not of infrequent occurrence in the inguinal region. They have been found in other hernial regions. A sudden or forcible increase in intra-abdominal pressure, such as can be determined by muscular effort, by a misstep in an attempt to save one's self from falling, can lead to hernia formation by causing the irruption, in a preformed sac, of a tube, an ovary or a tube and ovary. As, during infancy, the internal genitalia can neither be displaced by their physiological activity which is nil, nor by the development of pelvic tumors (rare during early childhood), nor by muscular effort, it follows that hernias of the uterine appendages, at that period of life, are due to such congenital anatomical defects as facilitate tubal, ovarian or tubo-ovarian displacement.

Though, as an etiological factor in the production of hernias, the existence of hereditary predisposition is denied by some authors, to us the influence of heredity appears positive. Hernia being a malformation often due to developmental arrest, such as non- or incomplete obliteration of the precessus vaginalis peritonei, non-obliteration of umbilical ring, etc., it is subject to hereditary transmission. It is reasonable to assume that like structural characteristics beget a like predisposition and a like resistance to hernia development. Among other etiological factors should be mentioned:

1. All conditions associated with increased mobility of the uterine appendages:

(a). Lengthening of the broad ligaments consecutive to repeated pregnancies.

(b). Pathological relaxation of the ligaments due to puerperal sub-involution.

(c). Abnormal length of the broad, ovarian and infundibulo-pelvic ligaments.

(d). Relaxation of the other tubal, ovarian and uterine ligaments.

2. All conditions that tend to increase the intra-abdominal pressure:

(a). By overcoming the resistance offered by one or another of the weak points of the abdominal wall.

(b). Occupations necessitating repeated muscular efforts associated with increased intra-abdominal tension, as the lifting or pushing of heavy weights, etc.

(c). Physiological or pathological states which distend the abdominal cavity, which stretch the abdominal parietes and widen the orifices normally present in the muscular and aponeurotic layers of the abdominal wall:—Enteroptosis, obesity, abdominal tumors, ascites, pregnancy, etc.

3. All conditions which weaken the abdominal wall.

(a). Acute or chronic diseases debilitating the organism.

(b). Obesity.

(c). Traumatism.

(d). Enteroceles, epiploceles and entero-epiploceles.

(e). Feeble development or atrophy of the aponeurosis of the transversalis muscle and of the conjoined tendon.

(f). A shortening of the round ligament of the hernial side.

HERNIAL SACS.

Congenital hernias have sacs of pre-natal formation. That the canal of Nuck remains patent in many cases long after birth,

even into adult life, has been proven by a number of investigators. Acquired hernial sacs are formed of parietal peritoneum forced by intra-abdominal pressure through some congenital or acquired defect in the abdominal walls.

In the female the following anatomical characteristics are strongly suggestive of the congenital sacs:—great vascularity, absence of sub-serous fat, folds, valvular or diaphragmatic constrictions, cyst-formations, scar-like induration of the wall, etc. In congenital inguinal hernias, it is also noted that the round ligament is intimately adherent to the sac.

As we see, the sac results from the bulging outward of the parietal peritoneum without solution of continuity. It consists of a neck, body and fundus. Of these three, the neck is the most important. It is through it that the general peritoneal cavity communicates with the hernial sac cavity. It may be the site of constriction. The fibrous envelope of the sac is due to the condensation of the fibrous layers which the hernia in developing pushes forward.

The internal surface of the sac, whether the latter be congenital or acquired, has all the peculiarities of serous membranes.

In the female, encysted inguinal hernias result from partial closure of the canal of Nuck, the peripheral portion of which is transformed into a cyst in which a developing hernia prolapses or from the sinking of a hernia in pre-existing hernial hydrocele.

There is really no sacless hernia; but the herniated viscus may be an organ only partially covered with peritoneum.

In sliding hernias, the anterior and lateral portions of the sac are, as in ordinary hernias, derived from the parietal peritoneum, while the remaining portion is formed by the anterior surface of the herniated cecum, sigmoid, bladder or Fallopian tube.

Hernial sacs may be dome-shaped, cylindrical, digitiform, sacculated or irregular, and may show constrictions with intervening dilated portions. Most femoral sacs are small and not infrequently are embedded in a mass of fat. The sac in recent hernias may be very thin. In children and in infants, the sac is extremely thin.

HERNIAL FLUID.

The reporters not infrequently state that fluid of some nature or other was present in the hernial sac. The fluid may be serous, sanious, muco-purulent, purulent or fetid in character.

(Continued in April number)

CLINICAL DEPARTMENT.

CONDUCTED BY A. H. RING M. D.

Case II-D. Diagnosis: Hysteria.

It is granted at the outset that this diagnosis is not without question, for there were symptoms,—loss of weight, of emotional reaction and of normal affection, with many self depreciatory and fanciful ideas,—which strongly suggested dementia precox. For this reason, this case was placed after the one of frank dementia precox (February number) in order to contrast the two.

But this patient, when given association tests, answered promptly and showed good power of the elaboration of thought. She did sums rapidly and correctly; free association (the writing of original lists of words in a given time) was slightly slow but within normal limits. Her recall of her associations (recent memory) was good, as was her ability to repeat a story told to her, showing that she possessed normal attention. If she had a really profound disturbance of the emotional field, distraction (secondary passive attention) would have been present, or, what is more common in dementia precox, neutrality or indifference. Normal attention presupposes normal interests, for attention is but the intellectual resultant of interest which represents the sum of emotional desire present. For this reason attention and interest are the best and simplest measure of mental normality and can usually be sufficiently observed in an ordinary conversation. The presence of good attention in our patient, therefore, makes improbable any marked deterioration in interest and hence in the emotional field, and tends to take the case out of the group of early dements.

There were some decided psychasthenic symptoms. For example,—the patient felt sure that she could never get well; that her emotional life was dead; that she loved no one, not even her family; that she would never sleep again. These obsessions were most obstinate and again emphasized what Freud has said, that the psycho-neuroses are seldom met in pure form.

From the old time standards the symptoms did not conform to hysteria, for there was no limitation of the field of vision and no color inversion, no anaesthetic zones, no hyper-emotionalism. But from the standard of Babinski, Janet and Freud, the predominance of her symptoms justify such a diagnosis. The former says that "no symptoms can be hysterical which cannot be produced by suggestion and removed by persuasion." Janet says that hysteria is "a form of mental depression characterized by the retraction of the field of personal consciousness and by a tendency to the disassociation and the emancipation of symptoms of ideas and of functions which by their synthesis constitute the personality." The most important

theory of hysteria to-day is that of Freud, who regards it as due to the operations of buried sexual complexes. The symptoms that result are due to the conversion of the affect of the complex into physical symptoms.

Now recall for a moment the patient's story as dug out over weeks through the association and other tests, through patient listening and persuasion and through several long letters which she wrote me at my urgent request. Could all this material be reproduced it would fill a most interesting small book and present many points for discussion. But the pith of it was this: She was an affectionate, neurotic girl of religious nature, hence had established for herself very strict ethical lines. She became engaged, which means the acceptance among other things, of the establishment of sexual life. Very shortly thereafter she was present at a confinement and realized vividly for the first time all that it entailed. That night she wrote to a friend that she could never go through a labor herself and could therefore never marry. Immediately she became more religious, that is, she substituted religion (an idealistic affection) for her natural love. Over the next two years she saw her fiance less and less and read the Bible more until she "knew it by heart." She felt ashamed of her cowardice and strove through religion to get strength to marry. Here then was the fundamental "incompatible idea" on a sex basis which forms the nucleus of the Freudian hypothesis. I know that Freud believes that the primary psychosexual trauma occurs in the prepubescent period of life, but this applies to the pure hysteria. It seems to me that the reason this patient exhibited a psychasthenic phase was because the psychic trauma occurred after the establishment of intellectual life.

Then in this run-down state she was again present at her sister's labor. This was the last straw. She found religion had not given her the strength she had sought, hence the sudden feeling that "she did not believe a word of it." From this it was an easy step to a belief in her own hypocrisy and selfishness (which applied to her fiance). She forthwith broke off her engagement and began that sleepless vigil (insomnia) so common to states of depression and agitation. This picture brings up another possible diagnosis which we will discuss next time.

Finally she was brought for treatment, and the sickness was gradually explained to her. She began to improve. Sleep came slowly and in proportion to her grasp of the facts. At last she freely acknowledged the truth of the theory and made an excellent recovery in eight weeks. In the treatment, the psychoanalysis played only the leading role; physiologic therapeutics and drugs were not neglected.

Case III-D. For Diagnosis.

The patient is a man about fifty years of age. He was one of three children, the others dying under one year of age. Father was a sea captain and died of dropsy, probably of renal origin. His mother died in childbirth. No family history of nervous or mental disease can be elicited.

The personal history of the patient up to the present illness seems to be of little interest. He has been a man of exemplary habits and wide interests, business and social, and holds several positions of great trust and responsibility. He is normally religious and has lived a very sedentary life. Venereal disease can be eliminated. He has always been of neurotic and moody temperament.

Last spring he says he felt unusually well, notwithstanding he had lately had deep bereavement through a death. This state of exhilaration continued into the Fall, when he began to suffer increasingly from flatulent dyspepsia and bad taste in the mouth and loss of weight. Through December and January he became increasingly conscious that he could not think clearly,—mind seemed muddled. He began to accuse himself of having neglected many opportunities for doing good, of having been criminally selfish, and read depreciatory ideas into the innocent statements of his friends. Yet he was able to be about and attend to his business until the last of January, when his friends insisted that he should take a rest. He went for a short water trip, slept little, was very restless and returned worse than when he went away. In spite of his mental depression and suspicion, he has been able through it all to appear normal under effort and even to smile and take an apparent interest in conversation. Now, however, he paces the floor or sits silent most of the time, making only occasional comments in reply to questions. He says that a short time ago his head suddenly cleared up and he was then able to see what a complete failure he has made of life; condemns himself for not having realized it before. Intellectually, he is simply fogged, but under effort can attend and remember perfectly; can write a logical letter. He knows his ideas do not coincide with those of his friends but is positive that they are wrong, not he, and thinks he should be allowed to go back to business. Emotionally, he is depressed, as stated above. On the motor side, he resists almost everything that is done for him, not because he is obstinate or disagreeable or because he doubts the efficacy of the treatment, but because he cannot bring his will to the point of volitional co-operation.

Physical examination shows a man of medium stature, weighing 157 pounds (normal weight, 170 pounds). Hair iron gray, complexion sallow, face drawn and worried, flesh flabby. Lungs

negative; heart negative, except that it is slow (60) and labored. Blood-pressure, systolic, 130; diastolic, 80. The abdomen is negative. The deep and superficial reflexes are normal. The urine is of good quantity and, except for the presence of indican, is normal. He eats and sleeps fairly well.

What is the matter with this man; how does he differ from our two preceding cases; what would you do for him?

Immunity.

J. C. Shaw states that every physician is asked why he so seldom acquires the infectious and contagious diseases to which he is exposed.

An answer is not always easy to give. In general he is obliged to say that he is not very susceptible to them or that he has greater or less immunity which enables him to resist them. Natural immunity to bacterial infection is often a natural quality of a race or individual, its opposite being natural susceptibility.

Natural susceptibility may be transformed into acquired immunity by an attack of disease or by inoculation with vaccines or sera. We can account for these facts by heredity and a gradually acquired immunity through long continued ancestral exposure to infections. The blood serum is the great factor in the human organism which enables it to resist infection so successfully.

The antitoxic substances in the healthy body are identical with those which are found in actively immunized animals.

Our protective immunity comes from the bactericidal substances in the blood which are called alexins by Buchner and defensive proteids by Hawkins. Metchnikoff claims that immunity comes from phagocytosis, that is, the leucocytes have the power of taking up, rendering inert and digesting micro-organisms encountered in the tissues. In other words, susceptibility or immunity is the struggle between invading bacteria and resisting leucocytes. Immunization increases the opsonins or the substances which act upon bacteria preparing them for the phagocytes or leucocytes.

From this arises the theory of the opsonic index. The ductless glands exert controlling influence over many of the metabolic activities of the tissues which is shown by the results following their removal or pathological involvement.

Such glands have an internal secretion which is essential to growth and function.

Furthermore, glands which have ducts also secrete substances which are taken up by the blood or tissues for the benefit of the entire organism.

It is thought that the important discoveries along these lines should be received with an open and impartial mind in the hope that they may soon be arranged in their proper order and proportion. At the present moment there is no little bewilderment at the obscure and sometimes conflicting statements which are made from time to time by investigators in this most important field.

Bewilderment indeed! and many of us, the majority of us are compelled from the pressure of that which occupies our daily lives to confess ourselves agnostics who are waiting until the waters have settled and crystalization has taken place.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the *GAZETTE* only and preferably to be typewritten—personal and news items should be sent to THE NEW ENGLAND MEDICAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business should be sent to the Business Manager, 422 Columbia Road, Dorchester, Boston, Mass.

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NEW YORK STATE'S HEALTH COMMISSIONER.

A good object lesson (or rather a bad one) in the spoils system of politics is the spectacle of the newly elected Democratic Governor of New York displacing the best Commissioner of Public Health which New York State has ever had, and putting in a Democrat. Dr. Eugene H. Porter has served his State well in the capacity of Health Commissioner for the past eight years. He is essentially an organizer, an administrator and an executor. First: he has so organized the Department of Health of New York that it has now become a mighty force for the conservation of health in that State. Second: his careful study into and his thorough establishment of a system of vital statistics has been and will continue to be of inestimable value in the study of disease. We have only just begun to realize how dependent we are upon vital statistics in obtaining a working knowledge of the spread, control and prevention of disease, also in estimating the economic cost of morbidity. Third: he has not only secured the passage of good laws looking toward the betterment of the public health, but he has vigorously enforced the existing laws to that same end. By a special law authorizing the Health Commissioners to investigate the watersheds of the State, a wholesale cleaning up of the water supply of the cities and towns was effected. In 1906 he organized the traveling exhibit, giving an object lesson in the sanitary methods of living as a means of preventing and combating tuberculosis. In 1907 he ordered all boards of health throughout the state to report cases of tuberculosis. The year 1912 showed the lowest death rate from typhoid fever which the State has had for twenty-eight years, it being 44 per cent lower than the average death rate per year from this disease during that time, and 52 per cent lower than the average prior to 1905. His thorough and systematic work in investigating the sanitary conditions of summer hotels has resulted in an immense reduction of mortality and morbidity. The death rate during Commissioner

Porter's administration has decreased steadily as follows: 1907-17.05; 1908-16.02; 1909-16.02; 1910-16.02; 1911-15.5; 1912-14.8. Just what this means in cold hard figures is that five thousand people are alive in New York State today who "ought to have died" during 1912, if the death rate had not been lowered as it was. A saving of five thousand lives per year for seven years means a good sized city saved to New York State through the wise administration of her health matters. Will the people of New York State allow its Governor, or any set of politicians, to turn such a man out of office merely for the sake of the "spoils" which are supposed to go with the office? We trust not.

DENVER PREPARING FOR THE INSTITUTE.

All the Homœopathic physicians in the United States and Canada should be interested in the coming meeting in Denver of the American Institute of Homœopathy. The committee is now busy on the details of entertainment and is making large preparation to give all the visiting doctors and their families a royally good time.

Denver is a beautiful city with many attractive environs, and in addition has the best summer climate in America. With the snow capped mountains, affording a constant delight to the eye and the imagination, and rushing, roaring streams, teeming with the gamiest fresh water fish, and the hundreds of varieties of beautiful flowers, and scenic grandeur not equalled anywhere else,—Denver surely should be the objective point for the summer's vacation.

The committee is making all arrangements to give the visitors the best time ever experienced. They are planning mountain trips by auto and train and are working out every detail that will add to the pleasure and profit of the visitors. It is perhaps a bit incongruous to be planning where to go to be cool while we are so vigorously shoveling coal as at this time, but even this early we can begin to think of those scorching hot July days and the insufferable nights. So the cool breezes of Colorado, with the nights so cool that blankets must be used on the beds, is a big oasis in the long, enervating summer.

You should plan to attend this session of the A. I. H. even if you are not a member. It will do you good to rub elbows with the other fellow and get the moss off your back and the cobwebs off your brain. If you are a member you surely must be on hand, for this will be the biggest and best meeting ever enjoyed by the Institute.

Pessimistic comments are being made upon the fact that when San Diego cleaned out its brothels, only one prostitute took up the municipal and charitable offer to find respectable work for inmates of these houses. To some this is proof that prostitutes wish to remain prostitutes regardless of opportunity to escape.

It seems, however, a pity that the San Diego municipality and charities did not get at *why* these girls refused to remain in the city. Possibly the outcasts knew "respectable" human nature, alas, too bitterly well; perhaps they knew the citizens too well; perhaps they knew better than their would-be friends their own diseased and consequently unsafe condition. And it is more than probable that these girls were morally debauched and their brain masses alcoholized beyond cure. Medical science recognizes this of the drunkard; why not of the prostitute?

DEPARTMENT OF EUGENICS.

CONDUCTED BY MARA L. PRATT CHADWICK, M.D.

Dr. Chadwick will gladly receive communications, reports of cases etc., etc., pertaining in any wise to the matter of child culture and race improvement.

To the Editor Eugenics Dept.,
N. E. Medical Gazette, B. U. Sch. of Medicine.

Dear Madam:

I glory in your demand for a deeper and more religious element in teaching sex matters than most educators seem to appreciate. I can't quite make out, however, whether you approve or disapprove biological methods. Just what do you think should be the method—not biological at all?

Awaiting your reply and trusting I am not asking for too much trouble on your part,

I am, very truly,

C.—A.—M.

Answer—Biology by all means—but High School biology, as a means of protection of the youth, comes too late. Children of to-day are precocious; our school system, over stimulating the child, as all doctors know well that it does, intensifies this precocity which seems to be a part of the spirit of the age. In sex matters, as in all others, children are precocious; and all seem to recognize this except the mothers of the children. Again school and street conditions are such that even a dull child learns early a garbled mass of filth, which he supposes to be sex truths. A mother would need be omnipresent to protect her child from the conditions that prevail. That unfortunate conditions do prevail, no one can deny; and the large size of our school buildings, making personal supervision impossible, is in large part responsible. Some one, then, mother or teacher—some one—must forestall the teachings of the street and school-yard,—alas, and the school basement.

Now, as most educators agree, biology presents a perfect scheme by which to teach fundamental facts of reproduction which are after all the avenue by which to present sex truths, in that biology forms a basis from which the child and its instructor may draw analogies when a little later the concrete and personal problem presents itself.

The parent should, then, begin very early to teach the child the story of plant processes—as early as the child can be made to evince interest. Many a child in his fourth summer shows interest in blossoms; and this is the time to begin, *little by little, now and then*, for the mother to teach biology.

Sex need not and should not be mentioned to these little children. A mother should understand that she is now *preparing and only* preparing for sex teaching. We do not talk to the child about classic literature when we teach him his first primer lessons; we are only preparing the way. And so with first simple facts of biology; we are only preparing the way.

Five words of the botanical vocabulary, only, need either mother or child know:

- a—pistil
- b—stigma
- c—stamen
- d—anthers
- e—pollen

The *pistil* is the mother; the *stamens* the father. When the *pollen* on the *anthers* is ripe, the father stamens send it to the pistil. By agency of wind or bee or bird or moth the pollen reaches the *stigma* and rests there until the pistil mother can carry it to the seed cradle at her feet where the seed babies lie.

This, briefly, is the story of first steps in biology as preparation for later sex instruction. Any mother can impart these simple facts; and any normal child will absorb them.

The rest is a matter of ingenuity, imagination and general capacity for idealism on the part of the mother. Any mother who knows enough to tell a fairy tale to her child is able to tell the life story to little children by means of the blossoms. The point is that she, not the High School, must do this biological teaching to have it of practical value. In the High School it may be of profound interest to the youth to study out the evolution of sex processes and to examine the histology of the sexual tissues; but it is the mother who, and at an early period in the child's life, should implant those facts of reproduction which make for idealism and clean living in maturer years.

"Remember thy Creator in the days of thy youth *before* the evil days draw near" may not refer, after all, to old age as we have been commonly taught. The early Roman Catholic church, which knew psychology quite as well as theology, laid stress upon *early child training*. It did not hesitate to take a child away from an inefficient mother; and we sometimes think it wouldn't be altogether bad to return to the old Roman Catholic state paternalism.

Physicians everywhere meet inefficient mothers, and they need his help. Again, the physician is often appealed to by mothers who wish for guidance in the sex training of their children. For this reason we have answered thus fully the inquiry of "C. A. M."

What books shall we get? is a concrete question that confronts the physician often; and since the average physician is too busy to investigate the children's library, we suggest the following excellent books—

Clarence Weed, teacher of Nature Study in the Lowell High School has a little book—"Ten New England Blossoms"—which gives most explicitly the story of the traps and schemes and odd devices by which ten every day New England plants secure fertilization for their stigmas.

Another book by the same author—"Wild Flowers"—carries the story farther. "Seed Travellers," a third book, tells the story of the devices by which the seed babies travel from the parent stock to find new homes in the autumn.

Margaret Morley's two books—"Seed Babies" and "Little Wanderers"—tell the same story even more simply for little children. McClurg, Pub., Chicago.

These books are excellent aids for parents. To put into the hands of little children or to read to little children in immediate relation to the blossom under investigation, "Blossom Babies," published by Eaton and Mains, N. Y. City, is more practical. This book has a text book preface for mothers, following which are many fairy-tale presentations of the biological facts of common plants.

Haverhill, Mass. Feb, 1913.

To the Editor Eugenics Dept.,
New England Medical Gazette.

Dear Doctor:

May I trouble you to tell me through the columns of the N. E. Medical Gazette the names of magazines and a few best books devoted to the subject of Eugenics?

E. H.

ANSWER—The most classical American magazine is *Eugenics Record*, Cold Spring Harbor, N. Y. This is a government station for investigation into breeding of finer fruits, grains, cattle—and,—recently!—of humans. Also with this may be classed an English magazine on Eugenics, *Eugenics Review*.

The Moral Prophylaxis Society, Tilden Building, New York City, publishes a quarterly; and to the subscriber is supplied a series of admirable educational pamphlets. These are particularly useful to physicians who wish to aid their patients into right knowledge.

"*Vigilance*," published by the Amer. Vigilance Society, 156 Fifth Ave., New York City, is a most reliable bulletin. One can hardly keep in touch with progress along these lines without "*Vigilance*." Dr. David Starr Jordan is President of this Society, and Dr. Charles Eliot, one of the Vice Presidents. Jane Addams is consulting editor.

Indiana State Board, Indianapolis, issues strong bulletins, free for the asking. These are just the thing for distribution among parents who need to know and youth's who need even more, perhaps, to know.

Last but not least is a little home magazine called *Light*. This is the organ of the World's Purity Federation and is a magazine suited particularly to the average woman in her home. It is not classically scientific; but it is not unscientific. It is very human, sympathetic, awake and strongly moral. This magazine is published from La Crosse, Wisconsin.

A group of books of particularly fine literary, artistic quality and especially strong in appeal to the idealism of adolescence are:

"The Strength of Ten" by Dr. Winfield Scott Hall, Northwestern University Medical School; and the following by Dr. David Starr Jordan, President of Leland Stanford Junior University: "The Call of the Twentieth Century;" "The College and the Man;" "The Higher Sacrifice;" "The Human Harvest;" "Life's Enthusiasms;" "The Strength of Being Clean."

Abraham Goodman, formerly of New York, was convicted of white slavery and condemned to one year's imprisonment. The Cuban authorities proved that he had hired young women at 154 Ludlow St., New York, for tailoring work in Havana shops at large wages, but they were placed in Havana's Tenderloin. The women, as many as six in number, were each brought in under the name of Miss Goodman.

For ruining the social lives of *six women*; subjecting them to the most demoralizing conditions to which any human being can be subjected; and forcing them into an environment of disease certain to produce physical agony and death, Havana sentences Abraham Goodman to *one year's imprisonment!* Comments are inadequate. Six women! One year!

The authority of the United States is powerless before the claim that a Chinese slave driver may present that any one of the slaves suspicioned by the officers of law is his wife. One little Chinese girl who had been brought to San Francisco as a "slave" and whom a Shelter was trying to rescue, stabbed herself in the heart when told by the Matron that she must go back to her owner who called himself her husband. If this Christian land can do nothing to rescue the little Chinese woman from certain disease and suffering and death, is it not a little ironical to send missionaries to the native home of these little Chinese child-women?

The recent secret service investigation of the vice centres of Boston reports that to the proportion of population, square mile for square mile, Boston is worse than New York.

It is noticeable in the report of this Investigation that one of the methods of securing girls for White Slave Traffic is that of first securing their confidence and then taking them to the theatre, after which a theatre lunch, wine, drugs. Could any statement throw the responsibility more completely back on the home? What kind of a mother could a girl have who would know so little of her daughter's companions as to make such a friendship with a stranger, either man or woman, possible without the knowledge of the mother? "But," some mothers will say, "how can any parent watch every movement of a girl in her early teens?" We grant that no mother can watch every movement of her daughter; but there

should be no need to do this. Any girl properly taught the common courtesies of society, to say nothing of sex facts, would never make an acquaintance from the street.

Whatever phase of the matter presents itself, it seems always to drive the responsibility back upon the parents, whose business it is to make friends with their own children early in their childhood. And a girl whose mother is her confident and friend has no drawing towards strange men and women on the street.

Since, however, mothers do not and will not guard their daughters, why may not the municipality take the matter in charge and in some way warn and inform by placards the young women of our High Schools and industrial centres? Our country is plastered with tuberculosis placards; why not a few White Slave placards?

SOCIETIES.

Massachusetts Homœopathic Medical Society.

BOSTON SECTION

The regular monthly meeting was held on Thursday, February 6, at the Evans Memorial Building, at eight o'clock.

The meeting was called to order by the president, Stephen H. Blodgett, M. D.

The records of the last meeting were read and approved.

The following proposals for membership were made:

Helmuth Ulrich, M.D., Boston University, Class of 1911.

Alberta S. Boomhower-Guibord, M.D., Class of 1899, 409 Huntington Avenue, Boston.

PROGRAM

1. Enteroptosis, Etiology, Diagnosis and Treatment.
L. M. SPEAR, M.D.
2. Postural and Mechanical Treatment of Enteroptosis.
LLOYD T. BROWN, M.D.

Upon motion of Dr. Rockwell, a rising vote of thanks was extended to Dr. Brown and Dr. Spear for their interesting papers.

Meeting adjourned at 10.30. 33 members were present.

The Massachusetts State Homœopathic Medical Society holds its annual meeting the second Wednesday in April. It is planned to devote the preceding evening to the report of the work done in the Research Department of the Evans Memorial Building. Clinics and papers of general interest will be given the following day. At the banquet on Wednesday evening papers of an unusual character and interest to the Society will be presented. Particular attention is called to the meeting of Tuesday evening, as the report from the Evans Memorial will make this an epoch-making meeting in its history. An exhibition of new apparatus and of medical and surgical supplies will be given, together with an opportunity to make purchases at or near the wholesale rate. The object is to enable members of the Society to save enough on their purchases to at least pay the cost of membership. A large number of physicians apparently do not realize the importance of the Society in protecting the interests of the profession and do not know of the efforts made by it to present papers and clinical cases of general interest, and which it is hoped will prove helpful to those who do not. Will you not make it your special duty to urge every physician practicing Homœopathy to become a member of this organization at this coming meeting?

George R. Southwick, M.D.

**Report of the Committee on Special Education, Burton Haseltine, M.D.,
Chairman.**

New York city is of course pre-eminent among the cities of this country in opportunities for training our specialties. The clinical opportunities are very great, and the arrangement is such that the student has little difficulty in obtaining clinical instruction probably unsurpassed. Even in New York, however, the facilities for graded didactic instruction are by no means adequate.

The New York Ophthalmic is the only institution having an organized course covering the field of ophthalmology, otology, rhinology and laryngology as they should be covered. The plan of this college comes nearer, we believe, to meeting the demands for modern instruction in these specialties than perhaps any other in the world.

The committee consider that the relation of this school to our profession is a matter worthy of special consideration. It is well known that the demand for practitioners of ophthalmology-otology of the homœopathic school in nearly every State is greater than the supply.

The New York Ophthalmic offers without doubt the most complete graded course of special instruction to be found in America. Its standards of scholarship are high and its diploma is a guarantee of thorough work. It has clinical material in abundance handled by a staff of the highest efficiency, and its material equipment, while not all that could be desired, is sufficient for excellent work. With relatively few changes this institution could accommodate twenty-five students and give them a training superior to that obtainable elsewhere in this country.

One or two improvements seem obviously needed. There should be better provision for teaching the most recent additions to special knowledge as illustrated in modern radiography, labyrinth, physiology, etc.

The committee believes that there should be short courses offered for established specialists who may wish to devote a few weeks to work in particular branches. Most progressive practitioners spend a few weeks of each year in studying the new development in our art, and a school like this should be the place to do so; it should be a place where new additions are being made to special knowledge, or at least where an authoritative opinion may be had as to the value of those made elsewhere. More important than material equipment is mental stimulus; the spirit of research is a great magnet to attract students.

Dr. David W. Wells reported for Boston:—"The Boston University School of Medicine has given some postgraduate courses in the specialties. but it was decided that we are not in a position to give regular courses. We have no intention to turn out specialists but merely to accommodate men in general practice who want to freshen up on the subject of diseases of the eye, ear, nose and throat. In ophthalmology we offer a course of six weeks, devoted mostly to clinical work. Students are taught refraction, and their reading is directed; in addition they are given an opportunity to see and do clinical work. The charge is twenty-five dollars for the six weeks. Quite a number of them have their interest excited in the subject and want to continue their studies; such ones are given subordinate positions in the department. Prof. Payne offers a course in operative ophthalmology next winter.

In Harvard there is no course offered for the training of specialists. The fourth year the student may select what he wants to follow, and whatever he does counts toward his whole work. The courses are extensive but are not well correlated; it is simply an extensive *menu* from which any man may take his choice. The separate courses are good in themselves and include both theory and practice, but there is no such thing as a graded course. There is no course in refraction offered. In otology the instruction is mainly clinical in response to the usual desire of graduates, but the opportunity is also offered for the direction of reading on the part of the student and for quizzes during the course which he takes. These arrangements are

made with the individual instructors upon the basis of the courses offered by them and published in the pamphlet issued by the Graduate Department. The customary advice given to a student who wishes to devote himself especially to otology covers a certain amount of assigned reading, a study of anatomy of the temporal bone by means of the bone boxes provided for that purpose, and an allotted amount of clinical work, according to the time at his disposal; this clinical work includes special training, by the instructor to whom the graduate is assigned, in methods of examination, of case taking, of reporting and, progressively, of manipulation in treating patients in the Out-patient Department of the Massachusetts Charitable Eye and Ear Infirmary.

Boston is ambitious to become a great medical center, and there is now in course of erection adjoining the new Harvard Medical School buildings a hospital whose relations will be in accordance with a very comprehensive plan, so that there will be in the near future in Boston something that will meet this growing need.

I concur in what the other members of the committee have said in regard to the advantages which we have in such an established institution as the New York Ophthalmic. It is only necessary to correct its defects to make it a highly valuable school for the study of our specialties."

D. W. W.

ABSTRACT FROM JOURNAL OF OPHTHALMOLOGY, OTOTOLOGY AND LARYNGOLOGY.
JANUARY 1913

AMERICAN INSTITUTE OF HOMŒOPATHY.

Propagandistic Department.

By the time that the present issue of the *Gazette* reaches its subscribers every graduate of a homœopathic medical school who is located within the Commonwealth of Massachusetts will be in receipt of a letter calling attention to the fact that the American Institute seeks his aid in its effort to extend the name and fame of Homœopathy throughout the Nation.

Anyone who may doubt the advisability of such a campaign has only to read the leading article in the *Journal of the American Medical Association* for February 1, 1913, the story of our homœopathic colleagues in Portland, Maine, as recorded in the February number of the *Gazette*, as well as other articles and editorials too numerous to mention, to be convinced of its necessity. At least, that is the way it seems to the writer.

As a matter of fact a little persecution and misrepresentation has always aided the progress of Homœopathy and will do so now. At the same time we as individuals have no quarrel with the so-called "scientific physician." We work with him in the friendliest manner possible in hospital and charitable institutions wherever we are permitted to do so.

Our chief work is to convince him that we are just as scientific as he is, nay, oftentimes more so, and to convince him that our separation is likely to continue as long as he classes us with the christian scientist and other cultists, and refuses to investigate and prove for himself the merits or demerits of homœopathic principles and practice.

For these reasons and others which lack of space forbids enumerating you are asked to pledge and pay into the treasury of the Institute two dollars or more annually for a period of five years for this work of homœopathic propagandism. The response thus far has been exceedingly disappointing, and you are urged, if Homœopathy means anything to you, not only to do this but in every way possible by practice and precept to advance the facts of Homœopathy.

DANA FLETCHER DOWNING, M.D.,
Director for Massachusetts.

BOOK REVIEWS.

Boericke & Runyon, Publishers, 14 West 38th Street, New York City, announce a new book, "Elementary Dermatology" by Ralph Bernstein, M.D., now in press, which will be ready about April 1st. This book is written primarily for the student in dermatology and as a quick reference book for the busy homœopathic general practitioner, and conforms in a general way with the method of instruction as given by the author at the Hahnemann Medical College and Hospital, Philadelphia. Its mere intention is to give an outline of the fundamentals of elementary dermatology, and to act as a guide to follow in coming to successful conclusions as to the diagnosis and treatment of the more common skin diseases. Dr. Bernstein's well known ability as a writer upon dermatologic subjects should make this, his latest work, more than appeal to the student and practitioner because of the original method in which the author graphically describes in his own characteristic style the subject of dermatology. The book will be fully illustrated with at least seventy-five illustrations of the more common skin diseases.

Health and Longevity Through Rational Diet. Practical hints in regard to food and the usefulness or harmful effects of the various articles of diet. By Dr. Arnold Lorand, Carlsbad. Published by F. A. Davis Company, Philadelphia. \$2.75

Dr. Lorand has had a large practical experience in the dietetic treatment of many disorders at the greatest and oldest of the world's health resorts, Carlsbad. His book shows not only a broad scientific grasp of this most difficult subject, but a delightful literary style and a real gift for making most interesting reading out of this usually dry subject. In it he presents no fad or hobby, but bases his many practical suggestions upon sound physiology.

The book is composed of ten chapters covering 416 pages, with a good index and glossary, and is one which will well repay reading.

MEDICAL JOURNAL REVIEWS.

Medical Century. February.

1. *Homœopathy vs. Antitoxin in the Treatment of Diphtheria.* Clarke, F. A.

The author takes the side of Homœopathy and defends it with a large number of statistics taken from various sources. He does not openly profess to be opposed to antitoxin, but he backs up his skepticism as to its efficiency by the experience of a host of able observers, and shows that specific serum therapy cannot be specific when the individuality of the patient is disregarded. The paper is written in a truly scientific spirit; no high-flown language or sectarian fervor is used in drawing conclusions. The reader is aroused to the possibilities of homœopathic therapeutics in the treatment of diphtheria, and gently introduced to certain fallacies in serum therapy as generally practiced to-day.

2. *Erigeron.* Fahnestock, J. C.

3. *The Medical Treatment of Pterygium.* Brockmyre, F. A.

"Adrenalin 1-2000 in normal salt solution, instilled, one drop every three hours, will constrict the blood supply, and if continued for three to six weeks causes complete disappearance of the growth."

4. *Eye Diseases Caused by General Diseases.* Rumsey, C. L.

5. *What is Homœopathy?* Copeland, R. S.

The Clinique.

1. *Treatment of Uterine Fibroids.* Chislett, H. R.

2. *Acute Local Infections.* Colwell, C. E.

3. *Throat Infections and their Treatment.* Whitlock, M. H.

4. *Analysis of Urine in an unusual case.* Mitchell, C.

Pernicious vomiting with acetonuria, showing a ratio of urea to ammonia of 10 to 1, and a ratio of urea to phosphoric acid of 33 to 1.

5. *Chronic Suppuration of the Middle Ear.* Wynn, J. J.
6. *Elevation of the Temperature in the Puerperant.* Lockie, D.
7. *Senega.* Blackwood, A. L.
8. *A few Remedies for Gastric Disturbances.* Smith, R. L.

The Hahnemannian Monthly. January.

1. *A Theory of Similia Similibus Curantur submitted to thinking and scientific Homœopaths.* Guernsey, J. C.

Hahnemann teaches that by exhibiting the similimum to a set of symptoms (i.e., a natural disease) existing in the human system a stronger, more intense, artificial disease is created which, by its dominance, conquers and annihilates the weaker (natural) disease, thus producing a cure. Guernsey suggests that perhaps both diseases (natural and artificial) are equal forces which acting against each other in contrary direction mutually destroy each other's effects. McClelland recalls that Hahnemann always used *curentur*, and not *curantur*. He says that Guernsey's is a very reasonable explanation. Cranch agrees with Guernsey, assuming that while the rule of selection is similar the *modus operandi* of the cure itself is *contraria*. Copeland, after showing that laws of nature cannot be explained absolutely as shown by the disagreement among scientists as to the explanation of the law of gravity, takes an opposite view to that of Guernsey. He says that given a disease acting in a certain direction, to cure it we give a remedy capable of producing a disease acting in the same direction. It does not act in a contrary direction, but in the same direction by stimulating those forces which are engaged in throwing off the disease.—The reviewer takes a decided stand against Guernsey's hypothesis. The "artificial disease" created by the remedy in a healthy body by proving is not appreciable by symptoms after a few "homœopathic doses" which are enough to cure the natural disease, hence when the "forces" are working in the same direction they are not equal. Moreover, it would seem that Guernsey has lost sight of the dynamic action of the drug in arousing the specific resisting forces against the disease at hand. It is true that small doses of a drug have the opposite effects of large doses. But one dose of a potentized drug does not arouse in health the vital forces to the extent that one dose of the crude drug does. I am aware that this is not in agreement with Hahnemann's later writings. In the presence of a natural disease the action of a potentized drug is probably tremendously increased provided it is a true *similia*. A striking analogy exists in the results of recent experiments with anaphylaxis. In a properly sensitized animal an almost infinitesimal dose kills the animal instantly by an over stimulation of the "vital" or resisting forces. But these resisting forces are already on the "qui vive," so to speak. According to Guernsey's *contraria* theory an entirely new set of resisting forces would be aroused, and not the specific ones already awakened to activity by the disease. Ipecac does not stop vomiting by a direct action against the cause, but by an indirect action whereby the cause of the vomiting is overwhelmed by a further stimulation of the resisting forces; in accomplishing this the potentized ipecac works along the same line or "in the same direction" as the disease.

2. *Nephritis, Analytical Diagnosis.* Seibert, W. W.
3. *The Prophylaxis and Treatment of Post-operative Intestinal Stasis.* Bascom, F. T.

Avoid pre-operative catharsis. If necessary, use castor oil at least 36-48 hours before the operation. Avoid shock by pre-operative hypodermics of morphia, and careful anæsthesia,—preferably nitrous oxide-oxygen. Gentle manipulation of the intestines with moist sponges. Straighten out intestines before closing wound. Hypodermis of eserine gr. 1-60 to 1-40 before patient leaves the table. In the treatment of stasis the author recommends lavage where vomiting is present, rectal irrigation through a Kemp tube rather than so-called gas enemas, using water, saline or asofoetida, dram one of the tincture to the quart of water. Gentle massage is useful at times.

4. *Electrical Treatment of Some of the More Common Skin Eruptions.* Baker, W. F.

The author uses the cataphoretic action of the galvanic current to carry drugs under the skin.

5. *Septal Deviations.* MacKenzie, G. W.

6. *Is a Physical Examination Essential for the Selection of the Homœopathic Remedy?* Fisher, J. A.

1. A physical examination is essential to accurate prescribing in order to obtain the actual totality of symptoms. 2.—to determine the cause of the diseased condition and to enable the prescriber to remove that cause if possible, in accordance with the teachings of Hahnemann. 3.—to determine whether the case comes within the scope of a dynamically acting remedy, or whether some physical or mechanical therapy is indicated.

7. *Abdominal Pain in Diagnosis.* Stubbs, G. P.

8. *Reasons for Failure in the Treatment of Diseases in the Respiratory Tract.* Hubbard, C. H.

The British Homœopathic Journal. January.

1. *Notes of Practical Interest from the Out-Patients' Department for Diseases of Children.* Purdom, W. P.

The author takes up cases of epidemic gastro-enteritis, worms, enuresis, enlarged glands, laryngismus stridulosa and vaccination, giving the treatment and apparent results. Unfortunately this report lacks details and sufficient statistics to give it the value it might have as clinical evidence in favor of Homœopathy. This is much to be regretted.

2. *Duodenal Ulcer.* Neatby, T. M.

A report of twenty-three cases with an outline of the treatment employed.

The Medical Advance. January.

1. *Classification of Patients as an Aid to Prescribing.* Rabe, R. F.

The greater importance of peculiar over natural symptoms in a given condition, and the importance of taking into consideration the characteristics peculiar to the patient in general. By classifying patients one becomes more and more independent of the repertory. The danger to be guarded against in the use of the repertory is a blind reliance upon its mandatory summing up, lest in obedience to this mandate the prescriber miss the spirit of the remedy.

2. *The Permanence of Homœopathy.* Turner, M. W.

A brief review of Hahnemann's career, and the elements of homœopathic philosophy and homœopathic prescribing. The difference between isopathy as practiced with serums and vaccines and Homœopathy. The best Homœopathy of to-day is identical with the Homœopathy of Hahnemann and his immediate followers. The homœopathic law is permanent and unchangeable; hence the science of Homœopathy is the same yesterday, to-day and forever. —(Reviewer's note.—The law of Homœopathy may remain the same, but like the law of gravity its interpretation is and will be forever subject to investigation. An explanation of this law and other laws of nature satisfactory to all has never been advanced. By seeking an explanation of the clinical verifications of this law, i.e., by analyzing it with what is known and becomes known in science, we shall gain a better understanding of this law which will enable us to better apply it. As we come to apply it with more precision the science of Homœopathy will become more and more at our command. Though the law of similas "Let likes be treated by likes" remains the same, its interpretation, and consequently its application, is subject to change with the advance of science. Homœopathy, like other branches of medical science, is not standing still, but advancing.)

CURRENT TOPICS.**What One Letter Did.**

A few weeks ago one of our physicians wrote a courteous letter to the *Boston Journal* expressing surprise that a "daily" which stood for the better things in social and political life should stoop so low as to carry questionable patent medicine advertisements. He then called the editor's attention to a "lost manhood" ad, a fake home-made prescription "catarrh cure" and a guaranteed "Rheumatism cure-or-your-money-refunded" ad, and a few others of that family which were daily appearing in the *Journal*. He went further, and gave the editor such information as would enable him (the editor) to ascertain the facts concerning the worthlessness of the advertised "cures."

A month later, he received this answer:

"The Boston Journal, Boston, Mass., Jan. 14, 1913.

Dr. DeWitt G. Wilcox,
419 Bolyston St., Boston, Mass.

Dear Sir:

You will be pleased to know that in line with the suggestion in your letter we have cut out objectionable advertising. You were so interested in writing that I am taking pleasure in telling you about this.

Very truly yours,

MEDICAL EVENTS.**Patent Remedies Condemned.**

The Committee on the Prevention of Tuberculosis, of the Charity Organization Society of the city of New York, has passed the following resolution:

WHEREAS, It has come to the knowledge of the Committee on the Prevention of Tuberculosis, of the Charity Organization Society, that many so-called specific medicines and special methods of cure for pulmonary tuberculosis have been and are exploited and widely advertised, and,

WHEREAS, In our opinion there is no specific medicine for this disease known and the so-called cures and specifics and special methods of treatment (by electricity, X-rays, electric light treatment, "diet" cures, plasters, serums, etc.) widely advertised in the daily papers are, in the opinion of the committee, without value and do not at all justify the extravagant claims made for them, and serve chiefly to enrich their promoters at the expense of the poor and frequently ignorant or credulous consumptives; therefore,

RESOLVED, That a public announcement be made that it is the unanimous opinion of the members of this committee that there exists no specific medicine for the treatment of pulmonary tuberculosis, and that no cure can be expected from any kind of advertised medicine or method, but only from a sufficient supply of pure air, nourishing food, needed rest, attention to the hygiene of the skin, and such medication as appears from time to time required, in the judgment of a physician.

The above is signed by eighteen laymen prominent in hygiene and sanitary reform, including Henry Phipps, founder of the famous Phipps Institute of Philadelphia and the Agnes Memorial Home for Tuberculosis of Denver, Colorado, and twenty-two of the leading physicians of America, including Drs. E. L. Trudeau, Bertram M. Waters, James Alex Miller, Woods Hutchinson, Egbert LeLevre, Joseph D. Bryant, Herman M. Briggs, J. S. Billings, Jr., Livingston Farrand, A Jacobi and many others.

Morbidity Reports.

In order to make available to the health authorities of the States, Territories, and insular possessions of the United States, for their use and guidance in the protection of their respective communities, information regarding the prevalence and geographic distribution of certain diseases, and the occurrence of outbreaks and epidemics, be it resolved:

1. That the health authorities of the States, Territories, and insular possessions of the United States, including the District of Columbia, shall notify the Surgeon General of the Public Health and Marine-Hospital Service immediately by telegraph (collect) and letter upon the occurrence of a case or cases of cholera, yellow fever, typhus fever, plague, or Rocky Mountain spotted or tick fever, giving the number and location of cases, and that said authorities shall render monthly reports of the number of cases notified of smallpox, leprosy, scarlet fever, measles, diphtheria, typhoid fever, poliomyelitis, cerebrospinal meningitis, dysentery, Rocky Mountain spotted or tick fever, and other diseases notifiable in their respective jurisdictions; said monthly reports to be made on or before the 20th day of each month for the preceding calendar month, and to give the distribution of cases of smallpox, leprosy, poliomyelitis, cerebrospinal meningitis, Rocky Mountain spotted or tick fever, and typhoid fever, by counties, or by counties and cities, or by towns (townships), or by towns (townships) and cities; and that when in a State one or more cities are excepted by statute, charter, or otherwise from reporting the occurrence of the notifiable diseases to the State department of health, and the State report therefore is exclusive of cases occurring in such cities, the cities thus excluded shall be enumerated.

2. That upon the occurrence of an unusual outbreak, or in the event of a sudden increase in the number of cases of smallpox, scarlet fever, diphtheria, typhoid fever, poliomyelitis, cerebrospinal meningitis, or Rocky Mountain spotted or tick fever in any locality, the Surgeon General of the Public Health and Marine-Hospital Service shall be immediately notified by telegraph (collect) and letter of such unusual outbreak or sudden increase.

3. That in the primary notification of smallpox to local health authorities the date when the patient was last vaccinated and whether the disease is of the benign or virulent type shall be stated; that in all outbreaks of smallpox in which one or more deaths occur a report of such data as can be obtained regarding the origin of the first case or cases and the history of the outbreak shall be made to the Surgeon General after the subsidence of said outbreak; that all reports of cases of smallpox made by the State or other health authorities to the Surgeon General shall be divided into four classes:

(a) Those vaccinated within a period of seven years preceding the attack.

(b) Those whose last vaccination occurred more than seven years antedating the attack.

(c) Those who have never been successfully vaccinated.

(d) Those in which no definite history is to be obtained.

4. That in reporting the occurrence of cases of leprosy such data as it is possible to obtain regarding the patient's history shall be given.

5. That the Surgeon General shall, under the direction of the Secretary of the Treasury, pursuant to section 4 of an act approved February 15, 1893, entitled "An act granting additional quarantine powers and imposing additional duties upon the Marine-Hospital Service," compile and publish the reports forwarded in compliance with the foregoing in the Public Health Reports for the information of the health authorities of the several States, Territories, and insular possessions, including the District of Columbia.

Phenol Coefficient of Disinfectants.

Resolved, That the United States Public Health and Marine-Hospital Service Hygienic Laboratory Standard Method for the determination of the phenol coefficient of disinfectants be recommended to the several State

boards of health as the standard method; that all regulations regarding disinfectants be based upon this standard; and that the phenol coefficient be required to be stated on the label of each package containing such disinfectant.

A Woman Physician is Needed for the Mary S. Ackerman Hoyt Hospital and Dispensary for Women and Children, Jhansi, India.

This is a Christian Hospital, opened in 1900, two years after a dispensary had been started. In one year more than 10,000 treatments have been given, 530 in-patients cared for, in addition to many visited in the city and district.

Jhansi, a city whose population is 55,724, is situated in nearly the geographical center of India. It is a large military cantonment and civil station, and the headquarters of the Indian Midland Railway Administration. Throughout a vast region for hundreds of miles villages are thickly scattered, in very few of which the Gospel has ever been preached. The city and region are full of Mohammedans in addition to the Hindus. There are not more than fifteen foreign Christian missionary workers in the community.

This post requires a woman of thorough medical training, unimpaired physical constitution, good sense, sound judgment, capacity for leadership, a cheerful, hopeful spirit, ability to work pleasantly with others,—all controlled by a single-hearted, self-sacrificing devotion to Christ and His Cause. She should be prepared to make her professional knowledge and skill directly subservient to the furtherance of the Gospel.

Support is provided by the Woman's Union Missionary Society and includes traveling expenses, living quarters, and outfit allowance, in addition to the regular missionary salary, which is based upon what experience has shown to be necessary to maintain the worker comfortably.

For further particulars write to Mr. Wilbert B. Smith, Candidate Secretary, Student Volunteer Movement, 125 East 27th Street, New York City.

Woman Physician for Korea.

A Christian woman with medical training is needed in the Canadian Presbyterian Mission, working in the northeastern part of the Korean Peninsula, with headquarters at Jen San about 135 miles north of Seoul, the capital.

A wonderful Christian opportunity is presented in this section. Men, women and children from all parts of Korea are flocking into it. This is the psychological moment in the Christian history of the district and workers are urgently needed. Of the 12,000,000 people in Korea, this church is responsible for the evangelization of 1,000,000 in the extreme north. The population in this one field is greater than that of New Brunswick, Prince Edward Island and Nova Scotia combined. All Canada has over 6,700 physicians,—one to every 1,030 people. In this section of Korea there are less than a score of physicians.

Appointment to this work will be made by the Board of Foreign Missions of the Presbyterian Church in Canada, which provides traveling expenses, living quarters and outfit allowance, in addition to the regular missionary salary which is based upon what experience shows to be necessary to provide comfortable support.

Inquiries may be addressed to Mr. Wilbert B. Smith, 125 East 27th Street, New York City.

Trained Nurses for Ceylon, Turkey and India.

Five trained nurses are needed at once in Christian hospitals in Turkey, India, and Ceylon, respectively.

The work is essentially religious and Christian and requires women

who are in full sympathy with its missionary purpose. While denominational questions are not raised, membership in some Protestant church is expected.

Women who have administrative capacity and a gift for training other women in nursing will find a large opportunity for work that is greatly needed.

The Hospital for Women and Children, at Madura, South India, needs a nurse. Last year 519 patients were treated in the hospital; 14,771 in the dispensary. 1,067 of these were Mohammedans, 9,296 Hindus, 4,851 native Christians and 76 Europeans. 62 operations were performed, 139 maternity cases cared for, 438 outside visits made, 40,390 prescriptions written. This work was carried on under the supervision of two physicians.

The McLeod Hospital, Inuvil, Ceylon, needs one nurse to have entire charge of a training school for nurses and the organization of the nurses' staff of the hospital. This is one of the best hospitals in India and is in charge of Dr. Isabel N. Curr. The work is practically self-supporting. Last year 1,142 patients were treated.

Anatolia Hospital, at Marsovan, Asiatic Turkey, affiliated with Anatolia College. A new building is under construction which, when completed, will be one of the finest in Turkey. The hospital staff consists of 3 doctors, 2 foreign nurses, 1 dispenser, a nurses' training class and a force of 25 servants and helpers. In 1911 there were 852 in-patients (610 surgical, 242 medical); 3,690 new patients in clinic (804 operations). Of these, 367 were Armenians, 279 Turks, 176 Greeks. Marsovan is one of the stations in the Western Turkey Mission, of the American Board. To meet the needs of not less than 11,000,000 people, there are only 7 hospitals and dispensaries.

The Hospital at Talas Cesarea (Asia Minor), needs a nurse, to be associated with Miss Phelps. Last year 10,000 cases were treated. Talas is also in the Western Turkey Mission.

Azariah Smith Hospital, at Aintab, in the Central Turkey Mission, needs a nurse to be associated with Miss Bewer. This is one of the greatest missionary hospital plants in the world.

All appointments are to be made by the American Board of Commissioners for Foreign Missions, which provides traveling expenses, and living quarters in addition to the regular missionary salary.

Inquiries may be addressed to Mr. Wilbert B. Smith, 125 East 27th Street, New York City.

Homœopathic School-Physicians for Colleges and Private Schools.

By EDWIN LIGHTNER NESBIT, M.D. Bryn Mawr, Pa.

There is a condition of affairs which is very detrimental to the interests of homœopathic practitioners to which we wish to call attention at this time. It is a simple fact that in few of the colleges and private schools is our method of practice officially acknowledged in the appointment of college or school doctors. We do not know of any institution where the *only* school doctor is homœopathic—even though members of the faculty and others in authority employ homœopathic physicians exclusively for their own families. We know of any number of instances, however, where the *only* recognized school-doctor is allopathic, and where certain clever and not readily apparent devices are employed in the form of "rules" or "regulations" which work directly for the special opportunity of allopathy, and the lasting detriment of homœopathic physicians at home, as well as to those located in school communities. To cite two specific examples of these "regulations": An old school nurse is in charge of the infirmary; a girl or boy becomes ill; no questions are asked, but *the* school-doctor (allopathic) is called in attendance. If the student but mildly expresses his preference for a homœopathic doctor—after *the* doctor has taken charge—he or she is regarded as peculiar "in this day, when there is so little difference between schools."

Another particularly effective "rule" is for a boy or girl to be removed immediately upon suspicion of illness to the infirmary, to be under observa-

tion and care of *the* college-doctor (allopathic) for three days *without any expense to the student*, after which time a bill is contracted for services rendered. This device is so clever as to need mentioning only to become clearly transparent.

After a varying period of from four to eight years of this "just as good as" brand of medical practice, these boys and girls become men and women, and sooner or later the responsible heads of families. The old family doctor, a homœopathic physician, becomes a "dear old man," but the practice which he employed to bring them through the trials of infancy and childhood (the time, by the way, when infancy and childhood was even more precarious than to-day) is recalled as a pleasant memory or a system of practice "good for children" or "for colds in the head," but not to be taken too seriously in this day and generation. It follows that some homœopathic practitioners are constantly losing valuable clientage *through the defection of the second generation* while others are compelled to do pioneer service in communities long settled. It must be apparent that the only way to permanently secure homœopathic school-doctors *on a basis of exact equality and equal opportunity* with others is to bring pressure to bear from the homes through the parents whose earnest demands upon school authorities are usually taken seriously.

It is in the interest of the individual practitioner quite as much as of the homœopathic school as a whole that there should be *an official homœopathic school-doctor* in every college and school in the land. The way to have them there is for parents to demand them from the authorities of these schools, and this demand can come most forcefully *through the parents*.

Jour. of the Amer. Institute of Homœopathy.

Massachusetts Homœopathic Hospital.

DEPARTMENT OF PREVENTIVE MEDICINE

Public Health Talks.

Feb.	25	Appendicitis, Facts and Fallacies, Dr. Winfield Smith.
March	4	Human Efficiency, Dr. Frank B. Allard.
March	11	Diseases and Crime, Dr. DeWitt G. Wilcox.
March	18	Fresh Air, Dr. Edward E. Allen.
March	25	Fliés and Mosquitoes, Dr. Wm. H. Watters.
April	1	Sleep and Its Disorders, Dr. Fred'k B. Percy.
April	8	Care and Feeding of Babies, Dr. J. Herbert Moore.
April	15	Clean Milk and Dirty Milk, Dr. Wesley T. Lee.
April	22	What is Homœopathy? Dr. J. P. Sutherland.
April	29	What is Homœopathy? Dr. J. P. Sutherland.
May	6	What is Homœopathy? Dr. J. P. Sutherland.
May	13	Tuberculosis, Dr. Geo. S. Lapham.

OBITUARY.

Dr. Martha A. Sheldon.

On October 10, 1912, in upper Bhot, in Northern India, well up among the Himalaya mountains, there passed from an active life here into the unknown beyond, a woman of rare ability and of unique experience.

Dr. Martha A. Sheldon was born in Excelsior, Minn., May 22, 1860, her father being pastor of the Congregational Church in that town for thirty years. She was an active, athletic young girl, fond of all out-door sports but quite as fond of study. She graduated from the University of Minnesota, ranking head of her class. She entered Boston University School of Medicine in 1885 and few who were in the school during the next three years will fail to recall her with keen interest. Her personality was so strong, her ability in the class room so marked, and her attendance at all clinics was so constant that she became well known.

Her standing was such that she was class orator at her graduation in 1888.

Any opportunity seemed open to her, but her purpose, formed as a young woman in Minnesota, to go as medical missionary to India had never wavered, and she offered herself as a candidate for the mission field.

She was sent to India by the Methodist Board of Foreign Missions, and for a few years was at Moradabad and Pithoragarh, but in 1895 at her own request she was transferred to Bhot. Here, four days march from any other white person, with two native Christians as helpers, she began the work which, with the exception of one year's absence in America, she never left until her death. As the work grew she was joined by a refined and educated woman, born in India but of English parents, and these two, one as teacher, the other as physician as well as teacher, continued together for many years, though at the end Dr. Sheldon was alone with her native Christians.

Dr. Sheldon's aim in desiring to be sent to Bhot was, not only to bring Christianity to the strong and sturdy Bhotians, but to extend its influence into Tibet. Her mission compound was on the direct highway into Tibet and the nearest trading post beyond them was Gartok in Tibet.

With this aim in view she made yearly attempts to go farther and farther into the forbidden country. In 1895 she went over the Lipen Pass, 17,000 feet above sea level, and had one day in Tibet before she was turned back by the authorities. The next year she entered by the Tinkar Pass, 19,000 feet high, and was there over a Sunday. In 1902 she was permitted to go as far as Takalahot, a populous region, but was not allowed to remain long.

In 1905 her associate and another teacher visited Mansorowar, the most sacred lake in all the world. They were the first white women to gaze upon its sacred waters. Dr. Sven Hedin, who saw it for the first time two years later, wrote, "Oh, what a wonderful lake it was! I have no words to describe it—till my dying day I shall never forget it, and even now it is in my mind as a legend, a poem and a song." He claims that he was the first European to visit the lake.

In 1910 Dr. Sheldon wrote, "During the extensive rainfall in Chandas the lure of the high grassy plateaus of Biyas, the almost rainless, golden-red mountains of Tibet, is strong with me." In that year she received an urgent request from some influential Tibetans that she come over and operate on them for cataract. This trip was quite in contrast to the first, fourteen years before. Written permission was given by the raja, who later received her in his lofty residence, crowning a fort-like mountain. She had previously sent him a cheap clock which he had brought out that she might teach him to wind it, and expressed regret that he knew nothing of what was going on in the outer world. During this trip she performed ten cataract operations assisted by her cook boy. Most of these operations proved successful.

Nothing easy came Dr. Sheldon's way. Medical and surgical cases

seldom came till the native doctors had done their worst. Often it was a question where money was to come from to provide food for the large household that had assembled about her, children in the school, native helpers, etc., numbering over fifty at times. To help provide for these she had become a thrifty farmer and had transplanted into India many fruits and vegetables never known there before.

Her apple trees began bearing some years ago.

She translated many portions of the Bible into the languages of the country, Hindi, Bhotian and Tibetan. She could make herself understood in ten languages, and in several was proficient.

When Mr. Henry Savage Landor made his trip to Tibet in 1897 his way lay past Dr. Sheldon's home, and he gives in his book a pleasing description of his visit to her. Among other things he says, "Perhaps her most valuable quality is her perfect tact. Her patience, her kindly manner towards the Bhotians, her good heart, the wonderful cures she wrought among the sick, were items of which these honest mountaineers had everlasting praises to sing."

On her second visit to this country during the twenty-four years, she spent about three months in Massachusetts in the fall of 1905, and many of her friends saw her then.

PERSONAL AND GENERAL ITEMS

Dr. N. R. Sylvester, Jr., having completed his service as house physician in the Emerson Hospital, has opened an office at 1121 Broadway, West Somerville, Mass.

Dr. J. Herbert Moore of Brookline, Professor of Diseases of Children in Boston University School of Medicine, sailed on February 18 for Panama, to be gone three weeks.

FOR RENT.—Office of a Back Bay physician to be let for a part of the day. Furnished, excellent service, stenographer, telephone. Apply to Secretary, Medical School office, 80 East Concord St.

Dr. Mary J. Hall-Williams, B. U. S. M. 1880, is located at Penzance, Cornwall, England, where she removed from London on account of her husband's health.

Dr. Frank C. Richardson went on February 21 to Palatka, Florida, for a two weeks vacation.

Dr. Frederick H. Lovell (Hahnemann Med., Chicago) has located at 74 Mapes Ave., Newark, New Jersey.

The Greenfield (Mass.) Doctors' Club at its February meeting made special observance of the sixty years of medical practice by Dr. W. S. Severance of that city, just completed, and comparison was made between the medicine and surgery of sixty years ago with present day conditions. Dr. Severance, at eighty-three, is in robust health.

WANTED, by a physician and his wife (the latter a graduate of Boston University School of Medicine) a child for adoption, about a year old, or younger, healthy and of American parentage.

Replies to this notice can be sent in care of the *New England Medical Gazette*, 80 East Concord St., Boston, Mass. The interest and co-operation of B. U. S. M. graduates is solicited.

Dr. C. H. Dobson of Conway, Mass., reports that there is a fine opening for an homœopathic physician in Bernardston, Massachusetts. No physician there at present. Dr. Dobson will be glad to give any desired information regarding the location and practise.

Dr. Alberta Boomhower Guibord, class of '99 B.U.S.M., has removed to 409 Huntington Avenue, Boston.

Dr. Hattie Williams Baker (B.U.S.M. 1903) is at present located in Pittsfield, Massachusetts.

Dr. Winifred Woolls Devine, class of 1908 B.U.S.M., has resumed practice at her home, 27 Parkview Avenue, Lowell, Mass. The Doctor is the proud and happy mother of a fine baby boy, born in October, last.

LESSONS IN THE ITALIAN LANGUAGE

Signor Ettore Ciampolini of Siena, Italy, (class of 1916 B. U. S. M.) is desirous of obtaining a few pupils in the study of Italian or for Italian conversation. Signor Ciampolini is lecturer for "Circolo Italiano di Boston" and is endorsed and recommended by Prof. Geddes of Boston University and by Prof. Grandgent of Harvard College. Address Ettore Ciampolini, care of Boston University School of Medicine, 80 East Concord St., Boston, Mass.

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ORIGINAL COMMUNICATIONS.

A SUGGESTED PHYSIOLOGICAL BASIS FOR HAHNEMANN'S PSORA THEORY.

BY AUGUST KORNDORFER M. D., Philadelphia, Pa.

Hahnemann's psora theory has aroused more discussion, probably, than has any other of the views that he advanced. Even his most ardent disciples felt that his exposition of the remote origin of chronic diseases failed to satisfactorily explain his theory and consequently lacked the power of conviction that his demonstration of the law of similars; his new method for ascertaining the curative power of drugs; the use of the single remedy; and the utility of the minimum dose, possessed in such eminent degree.

Among his early followers we find this expressed quite forcefully, though coupled indeed with words of most profound admiration and with evidences of most devoted discipleship. Thus Hering, in his Introduction to Stratton's translation of the *Organon*, Allentown, 1836, says: "Whether the theories of Hahnemann are destined to endure a longer or shorter space, whether they be best or not, time alone can determine; be it as it may, however, it is a matter of minor importance. For myself, I am generally considered as a disciple and adherent of Hahnemann and I do indeed declare that I am one among the most enthusiastic in doing homage to his greatness; nevertheless I declare also that since my first acquaintance with homœopathy (in the year 1821) down to the present day I have not yet accepted a single theory in the *Organon* as it is there promulgated." "All theories and hypotheses have no positive weight whatever except so far as they lead to new experiments and afford a better survey of the results already made."

In this spirit of real fealty to Homœopathy and its founder, the following thoughts upon the psora theory are presented. Not in any spirit of criticism but in an effort to reach a better understanding of the wonderful truths with which he enriched the domain of medicine.

We must ever remember that as an astute observer of facts, Hahnemann stood without a peer. As a theorist, reasoning upon the relationship of observed phenomena, he apprehended some of the greatest truths in medicine. Some of these he clothed in language now indeed antiquated and possibly obsolete; nevertheless the thoughts registered therein will ever remain worthy masterpieces of observation, reasoning and scientific acumen.

His vision of truth seemed indeed the gift of inspiration, rather than the result of study and research, and though his exposition of the principles involved may at times have failed in convincing argument, opposing criticism has failed to weaken his position.

Psora, he defined as "the oldest, widest spread and most injurious, as well as most misunderstood chronic miasmatic disease which for thousands of years has afflicted mankind." Tracing the course of this miasm through the centuries, from the time of Moses to the early years of the nineteenth century, and noting the increasingly varied and progressively serious character of its manifestations, Hahnemann sought by collating and studying the symptoms observed in patients suffering from various chronic ailments, to gain a knowledge of their origin, the better to discover means for their cure. The symptoms which he recorded in Vol. I of the *Chronic Diseases*, as evidence of the psoric miasm, embodied the results of many hundred observations, on patients who had suffered from scabies prior to the development of their chronic ailments. All the symptoms noted, occurred after the employment of local suppressive measures against the external manifestations of this disease.

For nearly a century past, the followers of Hahnemann have accepted the fact of such chronic miasmatic disease, and have recognized the importance of Hahnemann's antipsorics in its treatment; nevertheless the theoretic explanation offered by Hahnemann has failed to satisfy the earnest seeker after exact knowledge. Arguments, pro and con, filling many hundreds of pages, have been written in the past, all of which, however, had the same fault, namely, a basis of purely speculative hypotheses. Had my thoughts, this evening, no more substantial basis, they should have been permitted to perish, unuttered, in the birth.

Hahnemann himself recognized the need for an intelligent explanation of nature's method for the accomplishment of cure.

In fact, we have his express sanction, in our search for a true interpretation of the curative process, in the Preface to Vol. IV., Chronic Diseases, wherein, referring to a former unsatisfactory explanation which he had offered, and to a new conjecture which he then presented, he says: "The human mind feels an irresistible, harmless and laudable desire to give an account to itself as to the manner in which man accomplishes good."

With such irresistible desire, and in view of the advance in every line of biologic research, through which definite knowledge of functions that were either unknown or grossly misunderstood in Hahnemann's day, has been revealed, we trust that we may be able to present facts of sufficient importance to warrant a physiologic interpretation of Hahnemann's discoveries without in any essential invalidating his conclusions.

We must bear in mind that Hahnemann insisted upon the constitutional character of the diseased process which he named "psora." He recognized its intimate relation to the forces engaged in the functions of metabolism, evidenced not only by many of the symptoms recorded, but by his instructions as to diet and hygiene.

Again, we must understand that his term "miasm" embraced practically what we to-day include under the term "germ." Proof of this may be found in his definition of the cholera miasm, which he described as "an invisible, probably animated and perpetually reproductive contagious matter;" and in another paragraph when referring to the influence of the confined spaces in the holds of infected ships, he expressed himself as follows: "the cholera miasm finds a favorable element for its multiplication and grows into an enormously increased brood of those exceedingly minute, invisible, living creatures so inimical to human life." This was written in 1831, and from it we can see that his use of the term *miasm* was with a specific meaning analogous to, if not identical with, our use of the term *germ*.

Further, we must remember that Hahnemann recognized the importance of extraneous factors, psychic as well as physical, in the development of disease. He taught the necessity for strict individualization and laid stress upon the importance of the *totality of the symptoms and signs of disease* in the individual, as constituting the only true and comprehensible picture of disease, on which to base curative treatment.

Yet with all this we learn that his results in chronic disease had failed to satisfy his critical judgment, and it was only after an exhaustive study, extending over eleven years, that Hahnemann reached the conclusion that chronic forms of disease were dependent upon a perversion of the physiologic forces, consequent

upon the suppression of the external manifestations of certain forms of disease. He defines three chronic miasms, *i.e.*, psora, syphilis and sycosis. These years of critical research proved to him that in proportion as the external manifestations were suppressed, more serious internal chronic diseased conditions supervened, so that the last state of such patients was invariably far worse than the first.

Though Hahnemann's facts were rightly observed and his conclusions as to the related sequence warranted, the casual intermediary was not really recognized. This was inevitable, for the science of biology had not yet advanced sufficiently to afford the required clue. Much, however, has been accomplished during the past few decades toward clearing up this obscure problem. Physiology has advanced along lines that makes possible a reasonable explanation of the underlying factors in the diseased processes grouped under the general term "psora," and clinical observations have strengthened our conclusions.

Improvement in laboratory technic has enabled investigators to reach a knowledge of the functions of organs whose importance has until recently been overlooked or ignored. It has also made possible the discovery of functions, the knowledge of which affords a verifiable explanation of the phenomena manifested in patients suffering from this chronic psoric miasm.

Sajous, in his epoch-making work, "The Internal Secretions and Principles of Medicine," has given us an entirely new perspective, one which will enable us to better understand what Hahnemann discovered a hundred years ago. A careful study of this work forcibly impressed me with the marked similarity of the effects produced by the impaired action of the thyroid and adrenals with those designated by Hahnemann as indicative of psora.

Sajous has demonstrated not only the intimate relation between the pituitary body and the adrenals, but has shown the important relation, existing between the pituitary, adrenals, thyroid and parathyroids. The center in the posterior pituitary through which the anterior pituitary governs the adrenals, controls also the functional activity of the thyroid gland, and constitutes the adreno-thyroid center. Thus we have a physiologic union between the pituitary bodies, the adrenals, and the thyroid gland (including the parathyroids). The sensory or test organ which is embedded in the partition between the anterior and posterior pituitary bodies has for its purpose to protect against noxious material that may be present in the blood.

Reacting under the influence of any excitant poison brought to it by the blood or its leucocytes (phagocytes) it increases,

through the adreno-thyroid center which it governs, the activity of the adrenals and of the thyroid and parathyroids.

By increasing the function of the adrenals the bacteriolytic and antitoxic powers of the blood and its phagocytes are enhanced. Stimulation of the adrenals causes the secretion of an excess of adrenalin which, converted into adrenoxidase, enters the general circulation and, in course, excites the spleno-pancreatic secretion, whereby, in turn, the secretion of trypsin is increased; this reaching the circulating fluids and the tissues, performs a most important function, acting as a proteolytic ferment capable of reducing bacterial toxins, toxalbumins, vegetable poisons and venoms.

The adrena-thyroid center further stimulates the functional activity of the thyroid and parathyroids, increasing their specific secretions and through them increasing the sensitiveness of all cells, including bacteria, thereby increasing their vulnerability to phagocytes.

The autoprotective power of the body depends upon the normal development of these functional activities.

When properly interpreted the process harmonizes not only the known facts of physiologic autoprotection but it clears the obscure explanation of psora offered by Hahnemann, and throws a new light upon the philosophy of the principle of similars and the utility of the minimum dose.

In the final analysis of the facts, as given by Sajous, we find that: the secretion of the adrenals, adrenoxidase, represents Ehrlich's amboceptor; that of the pancreas, trypsin, Ehrlich's complement; that of the spleen and leucocytes, the nucleo-proteid; and that of the thyroid and parathyroids, thyroidase, Wright's opsonins. The result of an excess of these secretions, is an increase in the bacteriolytic and antitoxic properties of the blood and phagocytes.

Proof of these facts may be found not only in the laboratory, but is fully revealed on analysis of the symptoms dependent upon a paucity of these secretions. This is especially noticeable in conditions characterized by hypothyroidia. In fact, we find a most remarkable parallelism between the symptoms of hypothyroidia and those detailed by Hahnemann as symptomatic indications of psora. This is true also, to a greater or less extent, with impairment in any element of the autoprotective mechanism.

A critical comparison of these two symptom pictures, and a careful study of the underlying lack of resistance to morbid impressions, leads one to the conclusion that they represent, practically, one and the same condition. In other words, the depraved constitutional condition known as psora, is but a chronic state of faulty functioning of the autoprotective organism, and in its

symptomatology corresponds to the conditions which we know are dependent upon hypothyroidia and its physiologic sequences, hypoadrenia, etc.

In the early centuries of medical history we find but few recorded indications of such lack of vital resistance to morbid influences, but as the centuries rolled by and man, in his ignorance, failed to apply a rational treatment for certain well defined diseased conditions such as leprosy and the various skin lesions, and later employed even the most irrational and pernicious measures, we find a gradual but sure decline in the natural protective forces inherent to the healthy human body.

When through the maladministration of drugs and other depletive measures, the autoprotective system could no longer respond to normal stimuli, the various "miasms," as Hahnemann designated the causative factors in disease, triumphed over the weakened and non-resistant body. This condition of chronic non-resistance is practically the equivalent of Hahnemann's psora.

Another and important feature to which I wish to call your attention, is the remarkable similarity of the symptoms in the provings of our antipsorics, with those of hypothyroidia and consequent impairment of the autoprotective system, and further, the fact that cures effected through the use of these remedies, in accordance with the law of similars and in the potentized dose, are both prompt and enduring. Normal resistance to disease-producing causes being re-established, the former susceptibility to morbid influences is overcome.

In order to vividly portray the parallelism referred to, permit me to present in comparison some of the symptoms of psora, as recorded by Hahnemann in his *Chronic Diseases*, and the symptoms of hypothyroidia as given by Sajous in his work on "*The Internal Secretions and the Principles of Medicine.*"

Hypothyroidia

1. Mind obtuse: inability to grasp the finer points of an argument, or of a question treated in the abstract.
2. Slow mental development.
3. Uncontrollable sadness.
4. Melancholia.
5. Maniacal excitement.
6. Delirium.
7. Pain in the occiput.

Psora

Inability to think or perform mental labor properly. Cannot control her thoughts.

Sadness; awakens from sleep at night, with palpitation and anxiety. Tearful mood, weeps for hours without any known cause.

Melancholia.

Mania. Suicidal mania.

Pain ascending from the nape of the neck to the occiput, sometimes over the whole head.

Headaché worse in the morning on

Hypothyroidia

8. Migraine.
9. Old look. Hair prematurely gray hair falling out in patches from the forehead and median line, later from the occiput. Hair may be coarse and brittle. Eyebrows grow thin at the outer end (eyebrows shorten).
10. Skin of the face hard to the touch as in myxoedema, color waxy. May have a reddish patch below each cheek bone.
11. Teeth, especially the molars, loosen and decay early.
12. Prone to formation of tartar on the teeth.
13. Gums bleed easily and recede from the teeth.
14. Hallucinations of sight, as of small animals, etc.
15. Hallucinations of hearing, as of running water; rumbling noises; tinnitus.
Due to loss of vascular tone and imperfect circulation in the sensory organs.
16. Nasal voice, or husky through infiltration of the laryngeal mucosa.
17. Nasopharyngeal mucous membrane swollen.
18. Tonsils liable to acute inflammation.
Deficiency of germicidal activity, phagocytic and humoral, manifests itself where protection is usually active, namely, along the mucous surfaces—
19. Dyspnoea, especially on going up stairs, or on continued speaking.
20. Palpitation (sometimes with pain).
21. Heart dilated, weak systole, occasional murmurs.
22. Blood pressure low.
23. Pulse weak and rapid.

Psora

awaking, or in the afternoon during a rapid walk or from loud talking. Semilateral headache. Tic douloureux.

Old look.

Falling out of the hair, mostly in front, on the crown and vertex.

Dryness of the hair.

Scalp very scaly.

Face yellowish or grayish.

Skin may be dry, rough, withered, harsh to the feel.

Teeth become loose and decay.

Owing to deficient calcium and phosphorus metabolism which deficient thyro-parathyroid secretion entails—

Gums recede from the teeth and bleed easily. Teeth become loose.

Hallucinations of sight, as of flies etc.

Hallucinations of hearing, as of rushing wind; rumbling; singing; buzzing; chirping, etc.

Hoarseness after the least talking. Hoarseness, also aphonia after a slight cold.

Nasal catarrh after the least exposure to air.

Frequent inflammation of the throat with swelling of the pharyngeal walls.

Swelling of the parotid glands.

Swelling of the submaxillary glands.

Swelling of the cervical glands.

Dyspnoea from motion, with or without cough. Dyspnoea from ascending even a slight incline.

Suffocative attacks after midnight.

Palpitation with anxiety.

Heart diseases.

The symptoms of heart and circulation are all traceable to impairment of oxidation and nutrition, the cardiac and vascular muscles suffering therefrom—

The blood-forming organs being also inadequately nourished anemia results—

- Hypothyroidia
24. Liver passively congested and enlarged.
Due to low vascular tension, which also explains the occurrence of varicose veins varicocele etc.—
 25. Biliary calculi.
 26. Constipation, due to deficient peristalsis. Impaction.
 27. Urine high colored and scanty, occasionally containing albumin, casts, sugar or blood.
Biliary calculi.
 28. Impotence.
 29. Loss of sexual desire.
 30. Spermatorrhoea.
 31. Prostatic hypertrophy.
 32. Retroflexion.
 33. Amenorrhoea is common but owing to low vascular tone particularly of the arterioles, metrorrhagia may occur.
 34. Severe lumbo-sacral pains, with menstruation.
The pains are due to deficient catabolic activity; the blood becomes laden with toxic waste products—
 35. Deep seated pain between the scapulae.
 36. Coccygodynia.
 37. Neuralgias.
 38. Pains worse from rest in bed.
Rest slows the oxidation process, thus increasing the catabolic torpor and consequently aggravating the pains—Activity within limits increases oxidation and consequently ameliorates pain—
 39. Hands flabby and damp.
 40. Weakness of the knees.
- Psora
- Inflammation of the liver.
Tension and pressure in the right hypochondrium, impeding respiration and causing anxiety.
Pain in the liver from touching the right side of the abdomen.
- Constipation; stool retarded many days.
Stools hard, as if burnt.
Urine dark, of strong penetrating odor and quickly depositing a sediment.
Urine bloody.
Red sandy sediment in urine, at times.
Pale sweet smelling and tasting urine in large quantities, accompanied by loss of strength and flesh; also great thirst. (Diabetes)
Loss of sexual power.
Loss of sexual desire. (in both sexes)
Nightly emissions.
Induration and hypertrophy of the prostate.
- Menstruation delayed until the fifteenth or later years; or after appearing one or more times ceases again for months or even years.
Metrorrhagia accompanied with much pain in the chest and abdomen and numberless nervous symptoms.
Severe pains in the lumbar, dorsal and cervical regions.
- Pressive pain between the scapulae.
- Neuralgic pains in various parts.
Many symptoms worse at night:—pains, cough, toothache, etc.
- Cold hands, or perspiration on the palms.
Coldness of single parts.
While walking in the open air sudden attacks of weakness, especially of the legs.
Sudden bending of the knees.

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| <p>Hypothyroidia</p> <p>41. Fibrillary motion of muscles, and trembling.</p> <p>42. Flat-foot. May be due to relaxed interosseous muscular and ligamentous support—</p> <p>43. Languid, fatigued, somnolent on rising, better as the day wears on.</p> <p>44. Temperature low, complains of feeling cold; especially the extremities.</p> <p>45. Rigidity.</p> <p>46. Convulsions.</p> <p>47. Imperfect bony development; pigeon breast; narrow chest.</p> <p>48. Disposition to caries.</p> | <p>Psora</p> <p>Sudden twitching of single muscles or limbs.</p> <p>Attacks of trembling of the limbs.</p> <p>Increased tendency to strain or over-lift oneself.</p> <p>The joints are easily sprained.</p> <p>In the morning on awaking feels stupid; languid; more unrefreshed and tired than on retiring at night.</p> <p>Every evening chilliness with blueness of the nails.</p> <p>Tonic contraction of the flexors.</p> <p>Convulsions. Epilepsy. Chorea.</p> <p>Softening of the bones.</p> <p>Curvature of the spine.</p> <p>Curvature of the long bones.</p> <p>Rhachitis.</p> <p>Fragilitas ossium.</p> <p>Caries.</p> |
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A critical review of the remaining symptoms enumerated by Hahnemann as indicative of the psoric miasm, will lend added emphasis to the physiologic interpretation which is here presented.

When we contemplate the marvellous prescience with which Hahnemann was endowed, we may well say with Professor Eschenmayer of Tübingen, "So much has been achieved that we can only gaze with admiration at this gigantic intellect who conceived the idea of reforming medicine, and showed by example how it was to be done."

A BEDSIDE TEST

Dr. G. Gilman reports a bedside method of Widal testing which consumes little time and gives results within a few hours. The test solution is a formalized culture of the typhoid bacillus, which can be procured from any pathological laboratory and will keep any length of time. In a small vial are placed 48 drops of the test solution, and to this are added two drops of the patient's blood. The tube is corked, well shaken, and set aside for three to five hours. A clear supernatant liquid indicates positive, a turbid liquid a negative reaction. The same technique may be used for other agglutination tests.—*Medical and Surgical Reporter.*

MATERNAL DIET—AN AID TO EUSTOCIA.*

BY PHILIP COOK THOMAS, M.D., New York City.

In the treatment of any pregnant woman we must, of course, prescribe a diet suited to her needs and with reference to any abnormality or disease tendency which she may have. Anemia, obesity, malnutrition, constipation, toxemias, etc., should invite a careful study of dietetic methods for relief, so that the expectant mother will be in the best possible condition for confinement. Thus, in a general way, any treatment or any diet which is beneficial to the health of the mother is an aid to eustocia, but in writing this paper it is my purpose to limit myself to a discussion of maternal diet as an aid to eustocia by its influence upon fetal development.

There are several influences which determine fetal size:

- I. Heredity.
- II. Vigor of embryonic cells.
- III. Age of parents.
- IV. Length of pregnancy.
- V. The nutrition and mode of life of the mother.

It is the last factor which we will take under discussion, for at the present it is the only one which comes within our control. Some day, perhaps, when the science of eugenics is applied to human beings and mating is done with procreation as its chief desideratum, women with minimum pelves will not be allowed to marry men with maximum heads, and so there will be less trouble for us doctors.

The questions we ask in regard to maternal dieting are,—How much can fetal growth be limited, and can this be done without danger to mother or fetus? But little scientific data can be found concerning this matter. No hospital experiments have been conducted, so one's personal experience and one's ability to theorize are at present the bases of individual opinion.

In the first place, the fetus is a parasite and it will maintain growth and vitality even at the expense of maternal tissue. We have all seen apparently healthy babies born of tubercular, anemic or poorly nourished mothers. With any diet devised we can not always be sure of a small baby with a compressible head, but we can reasonably expect a smaller baby with a more compressible head than we otherwise would have had.

It is generally conceded that excessive maternal diet often does cause over-development of a fetus and a correspondingly

* Read before the New York State Homœopathic Medical Society, February 1913.

difficult labor. The women I have delivered of large babies have invariably been hearty eaters during their puerperium. Among the well-to-do and leisure classes, the more difficult labors are due to larger feti, the result of a more liberal and nutritious diet. In the hospitals, our ward patients have easier births than the room patients, representing somewhat different grades of prosperity.

In Williams' "Obstetrics" it states that Pinard and Bachimont, from a study of 4,445 cases, found that the babies born of mothers who had remained in the hospital for three months prior to confinement weighed one pound two ounces more than those born of patients entering the hospital just before or during labor. Logically, if a plentiful diet of nutritious food develops a larger fetus and some degree of dystocia, the reverse of this should be true and a limited diet of selected food should make a smaller fetus and an easier labor.

By a limited number of experiments in feeding guinea pigs, Paton seemed to prove that each gram of mother produces less fetal weight in under-nourished than in well-nourished guinea pigs. Our experience also teaches us that poverty, overwork and illness diminish fetal growth through insufficient maternal nutrition and assimilation. In spite of these conditions, we find a large baby, but this is the exception; and in spite of every surrounding of ease and luxury, we may find a small baby, but this is also exceptional and due to causes outside of our control, such as heredity.

The chief consideration in the prognosis of any labor is the relative size of the fetal head and the degree of ossification of the fetal cranium. Allowing, for the moment, that it is possible to lessen fetal growth and to secure a mobility of the cranial bones by maternal diet, such diet would be indicated in slightly flattened or contracted pelves or in any pelvis in which the fetus showed signs of disproportionate growth. When there is serious doubt as to the roominess of a pelvis to render safe passage to the developing fetus, it would be a great comfort to have some reliable and safe method of limiting its growth.

The special object of a prescribed diet would be to prevent the normal amount of cranial ossification. It is only in the last six or eight weeks of pregnancy that the lime salts are deposited to such an extent as to make the cranium firm and non-compressible. It would be most ideal, therefore, to hold back cranial ossification so that at term it would have made but little progress from the condition of the eighth or ninth lunar month. To me, this would be preferable to the induction of premature labor, for at full term we have a more viable fetus, likewise the softened cervix and the benefit of the normal reflexes of natural labor.

To understand this problem, we must investigate the physiology of the placenta. In the first half of pregnancy, the maternal blood is separated from the fetal blood by the syncytium, Langhan's layer of epithelia, the stroma of the villi, and the capillary walls. At the seventh month, Langhan's layer has atrophied, and the syncytium forms a membrane through which the substances required by the fetus pass by osmosis. It is proved, also, that the syncytium, by its proteolytic, lipo-lytic and glycolytic ferments, can change proteids, fats and starches to forms required by the fetus. The syncytium has also a selective action and can pick out those elements especially demanded by the fetus. Note the excess of iron stored in the fetal liver for future synthetic blood-making; also the selection of lime salts as required for bone-building.

As the important thing is to lessen the deposit of the lime salts, we must direct our diet principally to the diminution of these salts in the mother's blood stream or to create a condition which renders their solubility more difficult. Calcium phosphate forms more than half the structure of bone, and calcium carbonate but a little more than nine per cent, while calcium fluorid and magnesium phosphate form less than three per cent. For practical purposes, therefore, we need consider only the calcium phosphate. This is the one particular element which we must diminish.

To regulate the general nutrition of the fetus is not so important, perhaps, but in cases in which a smaller fetus is desired it is my habit to cut down the mother's diet so that her weight remains stationary, allowing ten or fifteen pounds for the uterine contents. We must keep from the mother's blood stream any excess of those elements which we wish to deny the fetus and must create a competition for nutritive materials between the maternal tissues and the fetus, so that the latter will have no excess to draw upon. The diet recommended by Prochownik, whose method is generally followed when this prophylactic treatment is prescribed for dystocia in contracted or flattened pelvis, is, in short, the elimination of the carbohydrates, the cutting down of the fats, and the reduction of the fluids to from ten to fourteen ounces in twenty-four hours. This leaves a diet of meats, fish, eggs, green vegetables and cheese.

In detail, he allowed for breakfast a small cup of black coffee (3.38 oz.); zwieback or bread with a little butter (4 or 5 oz.).

Luncheon—Any kind of meat, fish, eggs, green vegetables, salad, cheese.

Dinner—Same as luncheon, with the addition of bread and butter (1 to 1¾ oz.).

He forbade soup, potatoes, farinaceous food, sugar, beer, and allowed ten to fourteen ounces of water.

In Edgar's "Obstetrics," the tabulation of cases treated by Prochownik and his colleagues, sixty-two in all, shows that:

I. The weight of the woman (allowing for fetus) remained practically stationary.

II. All the mothers bore the diet well after some initial hardship.

III. All confinements were relatively easy in comparison with previous labors.

IV. All children were born alive and survived (still-born before).

V. The children were lean at birth and the cranial bones were mobile, one upon the other.

VI. The children were of normal length and head measurements.

VII. The normal gain took place in the majority of cases.

VIII. The diet exerted no unfavorable influence upon lactation.

This diet is prescribed for the last six or eight weeks of pregnancy only, and if harmful results followed its use Prochownik does not relate them. Personally, I have had no case in which I have felt the necessity of adhering rigidly to this diet, but have used it frequently in modified form to inhibit fetal overgrowth and in first-degree contractions.

In nearly all my cases I limit the diet the last two months of pregnancy. This accomplishes a triple purpose; it lessens fetal growth, stops increase of weight in the mother, and lessens the work of her excretory organs. In no case have I relied upon the meats to the degree indicated in Prochownik's diet for fear that such a preponderance of proteids might cause an aggravation of any latent toxemia. Meat or fish is allowed once a day; the fats are decreased, butter and olive oil being allowed. The logic of the exclusion of the carbohydrates is easily understood as it is in the cereal food, the tubers, and the adult pea and bean that we find the earthy salts in abundance. By their elimination, calcification should be retarded, as well as the deposition of fat.

In no case have I reduced the fluid intake to the point of toleration, as I am unable to see the logic of this abstinence, except perhaps in obesity. Prochownik permitted a little less than a pint of wine or water per diem. Instead of this reduction, I allow a liberal amount of water acidulated with fruit juices. Clinically, acid drinks seem to lessen the amount of calcium salts absorbed by the fetus; just what the chemical and physiological reaction may be, it is difficult to find out.

The fruit and vegetable acids increase the alkalinity of the blood by producing an excess of carbonic acid gas which unites with the alkaline bases to form carbonates, especially sodium carbonate. Therefore, the citrates, tartrates, and other fruit acids will not only increase the alkalinity of the blood plasma but also make an alkaline urine in which there is an increase of the carbonates and phosphates.

During pregnancy the calcium content of the blood is increased, it being according to Lemmers, 11.67 mg. in 100 C. C. of blood plasma in pregnant women, against 10.81 mg. in 100 C.C. in non-pregnant women. A decrease in the amount of phosphate in the urine of pregnant women is noted also by Hawk.

As you know, the earthy phosphates are insoluble in water or in alkaline media, but are readily dissolved in acids. Is it not possible that the increased alkalinity of the blood caused by the fruit and vegetable acids holds the earthy salts in such stable equilibrium that they can not so readily be passed through the syncytium? Thus, by diminishing the amount of earthy salts ingested by the mother, so decreasing their presence in her blood stream; and by giving fruit and vegetable acids, thus increasing their excretions by the kidneys, may we be able to change the condition which is normal to pregnancy; *i.e.*, an increased calcium content of the blood and a decreased calcium excretion through the urine. (So much for theory)

In connection with a theory advanced by Dr. Jenny G. Drennan, it is interesting to note that Lemmers reported a diminished calcium content in four cases of eclampsia. Dr. Drennan's theory, as advanced in the "American Journal of Obstetrics and Diseases of Women and Children" of April 11, 1912, is that one of the causes of eclampsia is the withdrawal of the calcium salts from the maternal blood by the fetus. She holds that this deprivation causes a fatty infiltration of the liver cells, as calcium is necessary for the formation of lipoids, which are soluble fats. The resulting fatty infiltration of the liver cells interferes with their normal function so that toxic substances result, which, in turn, produce a fatty degeneration causing an excessive toxemia.

At present, it is a difficult matter to determine the correct cause of the toxemias of pregnancy from the many theories advanced. Practically, I have never been able to deprive my patients of enough calcium to cause any toxic symptoms, if such symptoms may be caused by calcium deprivation.

Another theoretical argument against this method of feeding is based upon the fact that blood lacking in calcium does not coagulate so readily and we would therefore be more likely to have post-partum hemorrhage and that hemorrhages in general could

be controlled less easily. Prochownik writes nothing of such complications, and I have never heard of any difficulty of this kind in dieted patients.

The effects of our limited diet might be harmful if carried out for too long a time or with too great strictness, but its dangers are largely theoretical, because in practise we get only relative changes. It is difficult to persuade some of our patients to carry out our orders, but when it is explained that an easier labor may be looked for and especially that operative measures may be avoided in contracted pelves, many of them will carry out the orders conscientiously.

In my cases, I advise during the last two months a diet of fruits, green vegetables, salads, meat or fish once a day, eggs, and when some carbohydrate is indicated, rice is allowed as containing but little earthy matter. A slice of bread or toast with butter is allowed with each meal. A cup of chicken or lamb broth is permitted once a day. Lemonade and orangeade are prescribed during and between meals. Cereals, tubers, peas, beans, and excessive eating of any kind, are proscribed.

A sample menu for one day would be:

Breakfast—Orange, 1 egg, 1 cup black coffee, 1 slice toast.

Luncheon—1 cup chicken broth, lettuce and tomato salad, 1 slice of bread and butter with cheese.

Dinner—2 lamb chops, string beans, spinach, celery, 1 slice bread, grape fruit.

The babies born of mothers on this diet usually weigh between six and seven pounds.

Health Talks at the Evans Memorial.

On Tuesday evening, March 4, Dr. Frank E. Allard lectured on "Human Efficiency" at the Evans Memorial. Dr. Allard made the statement that almost one quarter of our people are inefficient in one way or another, and that nearly \$10,000,000 is spent yearly for their care. In the course of his talk he showed how human energy is maintained by air, food, sleep and activity, and if these are properly controlled, he declared, we need die only of old age.

Dr. Wilcox's lecture on Tuesday evening, March 11, was on "Disease and Crime." Dr. Wilcox cited a number of cases where injuries to the brain were undoubtedly the cause of criminality, and where operations had changed the criminal tendencies in men. But alcoholism, he said, was the disease which is responsible for more crime than all the other diseases or all other causes known.

"Fresh Air" was the subject of Dr. Edward E. Allen's lecture on Tuesday evening, March 18. Dr. Allen spent some time in explaining the composition of the air and the action of each element on the body. He spoke of air as a carrier of infection, and talked at some length on the effects of impure air and the great importance of both indoor and outdoor ventilation.

A CONTRIBUTION TO THE STUDY OF TUBAL, OVARIAN AND TUBO-OVARIAN HERNIAS.

By AIME PAUL HEINECK, M. D., Surgeon to
the Cook County Hospital, Chicago.

(Continued from March)

HERNIAL SAC-CONTENTS.

TUBAL HERNIAS.

The tube, either in part or in its entirety, may be the sole content of the hernial sac. As associated hernial contents, a portion of the urinary bladder, normal intestine, gangrenous intestine and omentum were noted.

The herniated tube may be normal and free; may be adherent to sac; may be strangulated, may show inflammatory lesions; may be cystic; may be the seat of a pyosalpinx.

OVARIAN HERNIAS.

The ovary may be the only content of the hernial sac; or may be associated with a cystic parovarium, with omentum, with intestine or with a rudimentary uterus. The herniated ovary is reported as being in some cases normal, in others enlarged to twice its normal size, infiltrated with blood, the seat of a large hematoma, adherent to sac, cystic, as presented areas of suppuration, or having shown gangrenous changes.

TUBO-OVARIAN HERNIAS.

Hernias of the tube and ovary constitute the largest number of hernias of the uterine appendages. As associated hernial contents may be mentioned: urinary bladder, Meckel's diverticulum, the appendix vermiformis, omentum, intestine and the uterus.

We know of only two cases in which gestation occurred in an inguinal hernial sac; both were tubal pregnancies.

The herniated organs may be normal, may show slight or marked pathological changes. The displacement of a tube or of an ovary into a hernial sac is unfavorable to its anatomical and functional integrity. In a hernial sac these organs are exposed to repeated slight traumatisms and to circulatory disturbances. The herniated ovary frequently undergoes cystic changes; may show atrophy; may show enlargement; may be undersized.

The herniated tube may be the seat of suppurative salpingitis, of abscess, of tuberculosis; may be adherent to sac by an inflammatory band.

We must not forget to state that a tube and ovary present in a hernial sac do not always have the same reciprocal relation that they have in the abdominal cavity, and that the pathological changes which they show may antedate their displacement into a hernial sac.

REDUCIBLE HERNIAS.

In reducible hernias,—and, at first, practically all hernias are reducible,—the hernial contents either return spontaneously into the abdominal cavity when the patient assumes the recumbent posture or they can be manipulated back, with more or less difficulty, but without a cutting-operation, into the cavity from which they escaped. Even in reducible hernias, the sac early contracts adhesions to neighboring tissues and becomes irreducible. The terms reducibility, irreducibility, torsion and strangulation have reference only to the hernial contents and not to the sac.

Reposition, spontaneous or manual, may be temporary, may be permanent. Many reducible hernias reappear as soon as the standing posture is assumed; others, to reprotrude, require more or less muscular effort on the part of the patient.

IRREDUCIBLE HERNIAS.

When the contents of a hernial sac cannot in their entirety be manipulated back into the abdominal cavity, the hernias is said to be irreducible, provided that there is not any or but a very slight interference with the blood supply of the herniated organ or organs, and that there is no disturbance of function. If irreducibility and both functional and circulatory, disturbances are present, the hernia is designated as strangulated. Irreducibility, partial or complete, predisposes to complications of a serious nature: inflammation, incarceration, strangulation and torsion.

The irreducibility of hernias is dependent upon one or more of the following factors:—

(a). Difficulties incident to manipulating a small movable body, such as the ovary, through a small opening.

(b). Relative narrowness of the hernial canal: femoral, inguinal, etc.

(c). Sudden increase in size of hernia resulting from some unusual muscular effort.

(d). Changes in the hernial contents: increase in bulk from deposit of fat, from cyst formation in mesentery, in omentum, from inflammatory or neo plastic changes.

(e). Adhesions of inflammatory origin: (1). Between sac and contents; (2). Between the different contents.

(f). Large volume of the hernia.

(g). Sliding hernias (*Hernias par glissement*).

The irreducibility of a hernia of the uterine appendages is due in some cases to the presence as associated hernial contents of the urinary bladder, of the cecum, or of the sigmoid. In other cases, the irreducibility is due to the fact that the layers of the broad ligament, as they leave the Fallopian tube, enter into the formation of the hernial sac.

STRANGULATED HERNIAS.

All strangulated hernias are irreducible. In addition to irreducibility, they present a constriction of the hernial contents of such a degree as to seriously interfere with the circulation of the blood in the herniated organ or organs. "If the pedicle of a tumor is tied off or if a finger is surrounded tightly by a string, the parts distal to the ligature do not become inflamed; stasis and gangrene result" (Alberts). The same primary changes occur in the contents of a strangulated hernia; the inflammatory changes are secondary to the circulatory disturbances. There is interference first with the venous circulation; then with the arterial. As a result of this interference with the circulation, we have a serous exudate the amount of which depends upon the degree and duration of the strangulation and also upon the extent of the secreting surface. The sequence of events is as follows:—Congestion, stasis, serous exudation, then inflammatory phenomena and gangrene. Strangulation of a herniated tube or ovary is not as dangerous a complication as strangulation of a herniated loop of intestine.

Strangulated inguinal hernias may be congenital or acquired. Strangulation may occur at any age, irrespective of type of hernia or of hernial contents.

As hernial contents may be mentioned the following organs:—Fallopian tube, ovary, tube and ovary, tube and a portion of the urinary bladder, tube and a loop of small intestine, ovary and intestine, tube, ovary, intestine and omentum, uterus and adnexae of one side, loop of intestine, uterus and left adnexa.

The symptoms given by the strangulated inguinal hernias are those of inflamed hernias. Symptoms of intestinal obstruction may also be present.

TORSION OF THE PEDICLE.

This complication, peculiar to ovarian and to tubo-ovarian hernias, is not of unusual occurrence. As far as we have been able to determine, torsion of the pedicle has been observed only in irreducible congenital hernias of the inguinal type.

The two youngest patients were four and eleven weeks old respectively; the oldest, a poorly nourished child, was fourteen months old. All the other patients were less than one year old. The right and left side are involved with about the same frequency. The occurrence of this accident is favored by the mobility of the ovary and the slenderness, at this period of life, of the pedicle of the herniated organ or organs.

The pedicle, usually composed of the Fallopian tube, broad ligament and contained vessels, may have made a half-turn upon itself; may be twisted twice, thrice or several times upon its axis. The pedicle may be twisted in any part of its course.

If unrelieved, torsion of the pedicle determines in the hernial contents anatomical changes similar to those caused by strangulation. The impeded return of blood in the veins leads to congestion and swelling of the organ or organs below the twist. There are noticed in the hernial contents, the following circulatory disturbances:—congestion, stasis, thrombosis, vascular rupture (ovary seat of large hematoma) and interstitial hemorrhages. The interstitial hemorrhages and the serous transudates lead to tissue dissociation.

In torsion of the pedicle, the amount, odor and color of the hernial fluid depends upon the tightness and duration of the twist and upon the extent of the gangrenous changes. The fluid present in the hernial sac may be serous, may be blood-stained, dark colored, reddish-brown.

Torsion of the pedicle gives rise to symptoms somewhat analogous to those of strangulated intestinal or omental hernias. In fact, the condition has frequently been diagnosed a strangulated intestinal hernia.

POST-OPERATIVE VENTRAL HERNIA OR HERNIAS IN ABDOMINAL SCARS.

The protrusion of parietal peritoneum with stretching of the cicatrix over it, may occur after any operative or other penetrating wound of the abdominal wall, except these of very small dimensions.

Though these hernias may occur in any part of the abdominal wall, they are located almost always either in the median line or in the region of the appendix. Owing to the employment of improved operative technic, and to the more rigid observance of the requirements of surgical asepsis, post-operative hernias are decreasing in frequency.

There are two types:—In one, there is a uniform distention of the cicatricial tissue producing a condition somewhat analogous to separation of the recti muscles; in the other, the hernia is due to the giving way of weaker portions of the scar.

The main predisposing etiological factors of post-operative hernias are:—

1. Long incisions.
2. Faulty closure of abdominal wounds.
3. Operations for suppurative processes which of themselves require, for healing, that the abdominal wound be maintained open for a considerable period of time.
4. Drainage.
5. Disturbed wound healing—Imperfect asepsis—Suppuration.
6. Failure to wear for some months after recovery from operation, a well-fitting abdominal binder.
7. Too early pressure upon the scar.
8. Pregnancy.

(Concluded in May)

MANNKOPF'S SIGN—ITS VALUE IN DIAGNOSIS OF NERVOUS DISEASES.*

BY CHARLES LEE BAILEY, M.D., Albany, N. Y.

I was once asked on the witness stand how I knew that a certain person was suffering pain, and undoubtedly many of you gentlemen here have at times wondered,—Is this patient suffering pain, or is it a hyperexcitation of his nervous system? In Mannkopf's sign we have a valuable aid in diagnosis, and when technic is perfect, we can positively say that our patient is or is not suffering pain.

The first question that confronts us is "What is Mannkopf's sign?" If we make a firm pressure over an area which the patient says is painful, and there is inflammation sufficient to produce pain, there will be during the time we are pressing over the painful area an acceleration of pulse beat of from 10 to 30 per minute.

In functional diseases, we at times have an acceleration of heart beat, but in organic diseases pressure over painful areas will as a rule increase the pulse beat.

I have had quite a large experience in the examination of litigants, and I have examined men who were fakirs, and I have examined men who were suffering from some organic disease of the nervous system. It is true that during a trial, or previous to a trial of a case, a person's nervous system is usually hyper-sensitive, his eagerness to win his suit has a great tendency to increase the pulse beat, and when the suit has been either lost or won, and the final decision has been given by the court of last resort, we have positive evidence whether the patient was suffering from some organic disease or was faking.

The past summer I spent the month of August taking a post graduate course at the University of Edinburgh, Scotland. Each morning we had two sessions of nervous diseases, and during the intermission I usually stepped into the surgical clinic held in the Royal Infirmary.

One morning a patient was brought before the clinic, and the history given intensified my belief in the value of Mannkopf's sign. The patient was a woman 34 years of age, married, wife of miner. She had three children, four miscarriages, and all these miscarriages had happened at the seventh month. Wasserman's reaction proved that she was not syphilitic. Her history was as follows:

For some time she had complained of an intense pain in the

* Read before the State Homœopathic Medical Society, Albany, N. Y., Feb. 11-12, 1913.

iliac-fossa, femur somewhat flexed, temperature ranging from 100 to 101 degrees, suffering severe pain; abdominal muscles rigid. A diagnosis of appendicitis was made, and an operation performed, and the appendix removed. The woman left the infirmary after two weeks apparently cured. In two or three months, she presented herself again at the clinic still suffering pain in the right iliac-fossa, loss of appetite, headache, at times vomiting immediately after eating; exceedingly nervous and irritable. The area in the right iliac-fossa was very sensitive, so that even the weight of the bed clothes was intolerable. Sedatives were given, and she was sent on her way. She returned within a few days still complaining of pain, when a diagnosis of gastro-ptosis was given, and an abdominal bandage was prescribed for keeping the abdominal viscera in proper position. She returned in a few days still suffering pain, no relief from remedies or from bandage, and it became general talk that she loved to be examined and lectured about, and that she was suffering from hysteria.

This history was given one morning when I visited this clinic and before the patient was brought before the class. When she was brought in, the interne, while making a deep pressure over the right iliac-fossa called the attention of the surgeon to the acceleration in the heart beat. The surgeon examined the patient, keeping his finger on her right radial, and had her removed to the waiting-room to be brought in at a later hour during the clinic. She was brought in during the afternoon and again examined. Pressure revealed a perceptible acceleration of heart beat, and it was such that the surgeon decided to make an abdominal exploring incision, regardless of the previous operation for appendicitis, basing his opinion upon the degree of acceleration of the heart beat, when he had made deep pressure over the right iliac-fossa.

She was prepared for operation the next morning, brought before the class, and an abdominal incision was made. It was then discovered for the first time that she was suffering from Lane's kink of the ileum. The patient, undoubtedly, when operated on for appendicitis was suffering from Lane's kink. I endeavored to obtain a history of the operation for appendicitis, but was unsuccessful. In many cases of spinal trouble, when we are at times skeptical about our patient suffering from any pathological lesion, if we will make deep pressure over the complained of area, the degree of acceleration of the pulse will invariably prove that our patient is not hysterical but is suffering from a pathological condition. We are too quick at times to arrive at a conclusion. We are bound to give our patients our best services

and the benefit of every test in order that we may give clear opinion regarding their condition.

My experience has been such I believe that in obscure cases if before we put our patients in a hysterical class, we would be more careful and be ever on the look-out for Mannkopf's sign, the true pathological condition would be discovered. I firmly believe in the efficiency of Mannkopf's sign.

A CASE OF MERCURIAL POISONING WITH ANURIA LASTING SEVEN DAYS.

BY EDWARD S. CALDERWOOD, M.D., Boston, Mass.

Miss F—, a well nourished and healthy appearing young woman of twenty-four years, took five of the ordinary mercurial tablets in a glass of water, probably with suicidal intent, late Wednesday night, March 5th. She said that she began to vomit a short time after taking the draught. A physician was called, raw eggs given, and the stomach pump used. According to her story she had a great deal of pain and vomited considerable blood during the night, and passed blood from rectum and bladder. The next day, Thursday, the urine changed from blood to a muddy fluid and was scant. The last she passed before entering the Hospital was a small amount on Thursday afternoon.

She entered the Massachusetts Homœopathic Hospital Saturday morning, March 8th. Her face was flushed, lips dry and red, mind was clear, and there were no signs of prostration or collapse. She complained of burning sensation in the throat and all through intestinal tract, frontal headache and pain in lumbar region; was vomiting greenish fluid mixed with blood and said she had kept nothing on her stomach from the start. The gums were dark, swollen, with a few ill defined small ulcers, the tongue was very red at tip and edges, coated over the center, breath was very foul, with metallic odor, heart and lungs were negative, abdomen tender and somewhat tympanitic, reactions normal.

Her condition remained about the same and she was fairly comfortable, sleeping the greater part of each night, until the 14th. Diarrhoea set in on the 10th and persisted for five days, the stools being mostly mucus and blood, and passed with considerable pain. The ulceration of the mouth grew steadily worse until the 15th, when large necrotic areas had developed and blood was constantly oozing from her mouth and being vomited. Also at this time there was some salivation, a slight hacking cough, throbbing, occipital headache, and a numb sensation in the right leg. Blood pressure was 100.

After this day the stomatitis improved rapidly, but the headache increased in severity, the nights were sleepless after the 13th, and she complained of intense pain at first in the abdomen, and later all over, which increased in severity until at the last she was in terrible agony, which opiates would not relieve.

She passed no urine from the afternoon of March 6th till the afternoon of March 13th, seven full days, save one ounce of thick fluid which was drawn by catheter on March 9th. On March 13th, 3 P.M., she passed $\frac{1}{2}$ ounce,—March 14th, 3 A.M., 7 ounces,—same day 3 P.M., 7 ounces,—March 15th, 3 A.M., 7 ounces,—and in the afternoon, 5 ounces. The urine which was drawn by catheter on the 9th contained a large amount of albumen, masses of renal epithelium cells, a few blood disks and some fine granular casts. That of the 14th had albumen and epithelial cells but no casts.

The patient died at noon of the 16th after suffering 48 hours of steadily increasing agony. She was conscious to the last and had no symptoms of uremia.

The temperature was slightly subnormal throughout her sickness, the pulse ranged from 80 to 110 but was seldom above 100 till the day she died.

Leucocyte counts:

March 9, 26000 neuts. 87 per cent.

March 13, 20600 neuts. 87 per cent.

March 15, 28000 neuts. 89 per cent.

No stippling of reds or evidence of cellular degeneration.

FEEBLE-MINDED SCHOOL-CHILDREN.

In a report to the committee on school inquiry of the Board of Estimate and Apportionment, just made public, the statement is made that 15,000, or 2 per cent, of the pupils in the public schools of New York are feeble-minded, by Dr H. H. Goddard, director of the department of psychological research of the New Jersey State Training School for Feeble-Minded Boys and Girls, who is one of the eleven educational experts employed under Prof. P. H. Hanus of Harvard to investigate the public school system. After detailing some of the prevalent conditions, Dr. Goddard makes various recommendations for handling the problem of the feeble-minded.—*Boston Med. and Surg. Journal*.

THE INCREASING SALE OF NOSTRUMS.

In spite of the campaign against secret remedies their sale appears to be increasing. According to statistics issued by the Board of Customs and Excise the revenue from medicine stamp duty for the year ending March 31, 1912, was \$1,600,000, an increase of \$10,000 on the preceding year. On this basis the amount spent on secret remedies in Great Britain can be approximately calculated. All shilling (24-cent) packages must bear a 3-cent stamp. The revenue would therefore account for over 52,000,000 shilling packages, which would be sold for \$12,500,000. This estimate is subject to the correction that some of the nostrums are of higher value and bear a higher revenue duty, but this correction would not make a substantial difference. The number of licenses issued during the year to venders of nostrums was 43,131, a slight increase on the preceding year.—*Journal A. M. A.*, December 28, 1912.

CLINICAL DEPARTMENT.

Conducted by A. H. RING, M.D.

Case III-D. Diagnosis: Manic-Depressive Insanity (Depressive phase). This condition is also spoken of as simple melancholia, especially by the English writers who seem not so ready as we in America to accept Kraepelin's classification.

There is perhaps no single psychosis which occurs with such frequency. Diefendorf says it constitutes from twelve to twenty per cent of admissions to insane hospitals. In its early state there is no psychosis which so commonly goes unrecognized and is tagged "just nervousness," "the blues," neurasthenia or even as hysteria, and it frequently does not get beyond this mild form. Because of the mildness of its early symptoms and the slight degree to which the intellect is involved at first, its victims form by far the larger part of the so-called border-line psychoses. Certainly, there is no psychosis in which an early diagnosis is of such vital importance and none from which so much may be expected of timely and well directed therapeutics. In this it almost ranks with tuberculosis, for prompt treatment instigated in its incipency may abort or at least modify the severity of most attacks. I believe the reason this fact has not been more strongly emphasized is because the larger institutions do not get these patients until the manic or depressive phase is so pronounced that the patient cannot be kept at home. They do not, therefore, see the lighter forms, and the general practitioner who does perhaps see them is not commonly interested or trained in psychiatric matters. Again, many of these patients think they are "just tired" and treat themselves at home until suddenly they are found climbing out of a window in their nightclothes, or attempting suicide.

In the more severe forms with persistent insomnia, great elation or depression, and anomalies of nervous (volitional) control (excessive rapidity or retardation) it is easy enough to recognize manic depression, especially if accompanied by evident hallucinations or delusions.

Diefendorf gives the following definition: "Manic depressive insanity is characterized by the recurrence of groups of mental symptoms throughout the life of the individual, not leading to mental deterioration. These groups of symptoms are sufficiently well defined to be termed the manic, the depressive, and the mixed phases of the disease. The chief symptoms usually appearing in the manic phase are: psychomotor excitement with pressure of activity, flight of ideas, distractibility, and a happy though unstable emotional attitude. In the depressive phase we expect to find psychomotor retardation, absence of spontaneous activity, dearth

of ideas, and depressed emotional attitude; while the symptoms of the mixed phase consist in various combinations of the symptoms characteristic of both the manic and depressive phase."

This definition could scarcely be improved, and a description of the symptoms when the disease has settled down to this point could only be an elaboration of this concise statement. I prefer, therefore, to let it stand for these late symptoms and to dwell here upon the early pre-manic-depression symptoms.

Every one has felt tired and blue. We are told that this feeling is due to the development in the system, of toxins, the result of incomplete elimination of the day's waste products; in other words, a lack of nutritional balance. Now let this failure of metabolic equilibrium go a little further and we have the neurasthenic. At this stage, simply going to bed for a few days at home and living on a light diet, is sufficient for a cure. But suppose there is some strain upon the machine, or some faulty chemistry which keeps up an over-production of these poisons, and suppose that they have a predilection for the finer nervous tissues. Then evidently the disturbance is going to appear first in that part of the nervous system most directly involved, and since that would naturally be in the sympathetic nervous mechanism, especially the larger abdominal or pelvic plexes, we would expect to find our main mental disturbance in the psychic field over which these preside, *i.e.*, the feelings. And this is just what happens. Manic-depressive insanity is primarily a disease of the feelings. The patient feels excessively happy (mania) or blue (depression). At first he does not attempt to explain this except in the simplest way. Any of us can look into our recent experiences and with a very little distortion find intellectual excuse for being either happy or sad, and this is what occurs in these patients. It is but another verification of the James-Lange view of emotional genesis, *i.e.*, that the emotions grow out of (is the psychic equivalent of) the bodily state.

Max E. Witte ("Psychological Observations in the Insane," American Journal of Insanity, Jan. 1913) says: "Thought and feeling are in reciprocal relation. Feeling by association influences, colors, even calls up thought; thought on the other hand likewise by association of past experiences in memory gives rise to feeling. In this manner a vicious circle is established. The morbid, painful feeling gives birth to the distressing delusion of being forever lost which in turn revives and intensifies the already existing anxious emotional state, to one of utter terror and despair. As is so characteristic in painful states of feeling, the vital processes of the body are depressed and disordered, the nutritional functions are impaired, appetite is lost, digestion is poorly performed, excretion is deranged, (especially the sebaceous) *respiration is shallow, circulation*

weakened. The patient is thin and emaciated, autogenic poisons circulate and influence the central nervous system already suffering from deficiency of nutriment in the blood."

I quote Witte thus at length to show the importance of (1) the feelings and (2) the bodily state in manic depressive insanity and (3) to emphasize the fact that the intellect is only affected secondarily and that little attention should be paid to what the patient thinks about his own illness or the phases with which he attempts to explain his feelings. This is most important in mild cases since it reverses the common practise of accepting the patient's statements as a basis of treatment. To me, the disease is primarily a physical one and the psychic disorder only an unfortunate result of a much disturbed metabolism.

Space does not permit of a discussion of what the nature of the disturbance may be, but these lines of investigation suggest themselves, namely: (1) bacteriological, (2) chemical, and (3) postural disturbances. In the next issue, I will discuss these as a basis of therapeutics.

Case 4-D. For Diagnosis:

The patient is an American woman, 31 years old, of excellent family. She looks well nourished, but we are told that she has lost several pounds in the past three months. Her father is dead, and her mother has cancer and has been mildly melancholic for past year.

The patient was a nervous, sensitive child, but had little illness and was considered very bright at school, going through grammar and high schools. She has a musical and aesthetic temperament and is over conscientious.

Menstruation was established at 14 and was very painful, and later she required a suspension operation and was curetted twice, since which she has had comfortable periods.

Last Fall, on learning the nature of her mother's illness, she became hysterical and worried much. Through the winter lost weight and was "blue"; slept poorly. Six weeks ago "she went to pieces, rolled on the floor and screamed." However, she soon got herself in hand, but has been growing more queer since. Persistent insomnia set in and she began to be very irritable, especially with her mother, so that they had to be kept apart. She was so imperious to the help that two of them slapped her face and left. She bought a railroad ticket and was greatly incensed because the ticket agent did not know her name. She called up many persons on the telephone and was too impatient to wait for the operator to make connections, throwing the receiver down in a rage; then when called back did not know what she had wanted to say. At this point the family began to realize that she was confused and at times twisted her words and was so unreasonable that she had to be

sent away for care. In transit she did not realize the significance of the trip, nor recognize friends whom she passed, refused to stay on the seat, but sat on the floor crouched up.

Since then the patient has been confused and disorientated, crying over the supposed death of friends or laughing hilariously at some feeling of her own without apparent cause. She will impulsively jump up and run about, but when told to do things, obeys fairly well. In conversation she very cleverly covers her own lack of associative elaboration of thought by repeating the question or a similar one.

Systolic Blood Pressure, 100; diastolic blood pressure, 60; Pulse, 80. Knee Jerks and Clonus absent. Great deal of rigidity of muscles. Pupils react to light and accommodation. Inattention of eye in following pencil; tongue furred and white.

Specimen urine; Sp. Gr., 1005; albumen, slight trace; sugar absent. Sediment; Pus cells and squamous cells.

Query:—What is the matter with this patient; what would you do for her?

OCCUPATIONAL DISEASES.

Before the woman's department of the metropolitan section of the National Civic Federation, on Feb. 6, the evils of occupational diseases in dangerous and unhealthful lines of industry and manufacture, and of mercury, lead and arsenic poisoning in particular, were described by Prof. W. F. Willoughby of Princeton and Dr John Andrews, respectively president and secretary of the American Association for Labor Legislation, and by Dr E. E. Pratt, an expert on labor conditions. At least 13,000,000 cases of illness among workers and a money loss of \$750,000,000 annually, it was estimated, could be ascribed to occupational diseases in the United States.—*Boston Med. and Surg. Journal.*

A report issued by the Army Medical Corps shows that in the last year 81,340 men were vaccinated and that but 12 cases of typhoid developed—and this in face of the fact that 18,000 soldiers were encamped in Texas for several months. Not a single case of typhoid originated with a soldier or camp employe who had received the prophylactic vaccination.

POLISHED RICE vs UNPOLISHED RICE.

Editor N. E. Medical Gazette:

Lest certain facts relating to the preparation of rice for market may be unknown to your readers and because of a subterfuge under which grocers are still supplying polished rice to their customers even though unpolished rice is asked for, I beg to submit this communication.

The term "unpolished rice" is generally accepted by the medical profession as meaning rice which is "whole" or rice which has not been subjected to any milling process for removal of the mineral bearing outer layer or pericarp.

Recent investigations proving the priceless value of this mineral bearing portion in the maintenance of health, strength and resistance to disease are well known to the medical profession and have filtered through the public press more or less to the general public, with the result that thinking people are asking for unpolished rice and health boards are requiring that polished rice shall not be offered for sale.

Let us see how this works out. The method of milling rice for commerce which has prevailed up to a recent date is substantially as follows:—The rice grains as they come from the threshing are put through a milling process which grinds off all the brownish outer layer until the grains show pure white. Then a coating consisting of glucose and talc is applied which makes a sort of varnish and in the further process of milling gives the grains a high lustre. In the language of the "trade" this last step of coating with talc and glucose is called "polishing." The first step whereby the grain is robbed of its "food salts" is lightly considered, and the product is placed on the market as "unpolished rice."

What we get when we call upon our grocer for unpolished rice is exactly what we have heretofore received except that it has not received the coating of glucose and talc. At the present time it is impossible to obtain in Boston any real unpolished rice because of the subterfuge above described which is practiced by the dealers. This is not wholly the fault of the grocers, for plausible circulars are sent them by the rice producers throwing ridicule upon those who are "railing against polished rice" that "polished rice is obviously just the same as unpolished rice except that it hasn't the coating of glucose and talc and that these are harmless anyway," that "the first process of milling takes away only the insignificant quantities of protein, fat and disfiguring coloring matter, making the product more digestible and much more pleasing to the eye."

Thus the whole moneyed influence of the producers and manufacturers is lined up against efforts of the medical profession to teach the world that in the eating of polished rice they are consuming material consisting of but little more than rice starch—a food product which has been robbed of its valuable mineral elements which are the real life and health givers and which furnish material for growth of bones, muscle, teeth, hair, nerves, and brain, and which maintain resistance to disease.

I am glad to announce that arrangements have been made with S. S. Pierce & Co. to keep in stock genuine unpolished rice, but to make sure of getting it the buyer must ask for *natural yellow rice*.

Very truly,

Horace Packard, M.D.

Boston, Mass.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only and preferably to be typewritten—personal and news items should be sent to THE NEW ENGLAND MEDICAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business should be sent to the Business Manager, 80 East Concord Street, Boston, Mass.

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THE QUINTESSENCE OF ARROGANCE.

Somewhere we have read an account of a certain man who went up into the temple to pray, and in a loud voice intended to be heard afar, thanked God that he was “not as other men are;” and from what was said of him later we judge that God also was thankful for the same thing.

The leading article in the *Journal of the American Medical Association* for February first is from the pen of one John Benjamin Nichols, of Washington, D. C., entitled, “Medical Sectarianism.” In that article Dr. Nichols proceeds to thank God that he and his ilk are not like other physicians, or even as those poor, deluded homœopaths, “who must be studied as any other pathological condition.” He tells God not to forget that he and his only have been given the divine right to be called “scientific,” and that all others who do not think just as he does are “pathologic.” The poor homœopath standing afar off can only beat upon his breast and ask God to be merciful to him, a poor paranoiac.

If we have read that story aright the concluding sentence is something like this: “I tell you this man went down to his house justified rather than the other,” “for every one that exalteth himself shall be abased.”

While we regret any controversy which would in the least postpone the millennium of medical unity, while we deprecate the discussion of such things as tend to emphasize the existence of “homœopaths” or “allopaths,” yet for any body of self-respecting men to allow themselves to be classified as “pseudo-medical” and “pathological” without a protest would be admitting imbecility as a further weakness.

Such papers as Dr. Nichols has written never have helped and never will help the cause of real scientific medicine; they only intensify the bitterness of feeling, draw the line of demarcation more deeply, and postpone unity of action.

Abe Martin says, "Ther ain't nobody who can talk so interestin' as him who ain't hampered by fact or information"; upon that basis and that only Dr. Nichols' paper is intensely interesting. Firstly he classifies homœopathy as belonging to sectarian medicine, and then shows most conclusively by his definition of *scientific medicine* that homœopathy is really more scientific and less sectarian than his so-called regular school. Notice, "scientific medicine," he says, "is by no means limited to the use of drugs, but employs any and every agency that may be of use." Has he ever been inside the walls of a homœopathic medical college? Did Hahnemann or his followers ever teach that there were no therapeutic agents outside of drugs? Is there any curative agent of recognized value which is not taught in our colleges and employed by our representative men? Will Dr. Nichols name one?

"THE WHOLE FIELD OF THERAPEUTIC TECHNIC IS OPEN TO US"

says Dr. Nichols. Who gave them the divine right to close it to all others; did they go into the field and pull the field in after them? And because it is *open* to them does that mean that they have exercised their full privilege? Have they ever tested the law of similars in a scientific spirit of inquiry? Because a physician prefers to administer his internal remedy according to a law which seems to him scientific, does that preference debar him from employing every other known therapeutic agent? Because a man believes thoroughly in the serum treatment does that belief disqualify him from a knowledge, or the employment of surgery, electricity, sanitation, diet, psycho-therapy and prophylaxis?

Has he ever read the accepted definition of a homœopathic physician? As he was not apparently hampered by that fact or information, we will enlighten him. "A homœopathic physician is one who adds to his knowledge of medicine a special knowledge of homœopathic therapeutics and observes the law of similia. All that pertains to the great field of medical learning is his by tradition, by inheritance, by right." Will Dr. Nichols please note "one who *adds to*." It does not say, as he seems to think in his limitless ignorance concerning homœopathy, "one who is limited by," or one who cannot employ any other agent but the internal remedy. It simply means that the homœopathic physician of today is so much broader in his equipment than the "holier than thou" type, that after learning all that Dr. Nichols has learned he *adds* to that knowledge a working knowledge of how to select an internal remedy according to some semblance of law. Had he not added such knowledge to his medical equipment, he would select his internal remedy according to the pointers which he received from some sample man representing the big drug houses,

or from the label on the bottle, or from the advertisements in the medical journals and then be taken to task by the A. M. A. because he was prescribing proprietary medicines. Perhaps in his enthusiasm he would write a glowing testimonial for Sanatogen or Plylocogen, and later learn that one was cottage cheese and the other a deadly poison. In his desperation to find something to fit the case, and having no knowledge of any scientific law governing the selection of a remedy, he might advise Duffy's Malt Whiskey, Bell's Pa-pay-ans, or Parke Davis' latest cough syrup which contains eleven ingredients and of which the last number of the Journal of the American Medical Association says, "Its prompt recognition by the profession lay not in its composition, but in the liberal and persistent advertising." *The man who had not added to his knowledge of medicine a knowledge of the law of similars would be justified in prescribing any or all of these concoctions, because they are endorsed by the journals representing "true scientific medicine."*

Will Dr. Nichols kindly tell us "homœopaths" why that kind of prescribing and testimonial writing is more "scientific" than giving the homœopathic remedy; or why we, in taking the pains to select a remedy according to law instead of taking the advice of the travelling drug man, are to be classed as sectarian and pathologic?

Again, Dr. Nichols says, "To us the practice of medicine is the practice of the healing art by any and every method or combination of methods, medicinal, hygienic, physiologic, biologic, mechanical, surgical, psychic and prophylactic." Very good. Will Dr. Nichols name any one of those branches which is not taught in our representative homœopathic colleges? We not only teach all those branches, but we go him one better and teach that of which he has not even a rudimentary knowledge,—homœopathic therapeutics; aye, more, we teach all the branches he enumerates, and teach them so successfully that a less per cent of the students from our colleges fail to pass their respective State examinations than those from his "only truly scientific colleges which are not pathologic," and we don't have to wish that "old Bill Jones was alive to prove it" either.

"It brings a shock," says this Washington scientist, "to our self-esteem when we discover that the public does not accept us at our own valuation"; in other words, when the poor, deluded, short-sighted public accepts a homœopath at the same valuation as it does a real scientific physician who is not pathologic, it shocks him tremendously. The trouble is, Doctor, your self-valuation is too high. To be valued at a high price today a

thing must be either an antique or hand-made; you fall between them,—venerated.

The second sentence in the article reads thus: "The regular (sic) profession feels that scientific medicine being grounded on rational and comprehensive principles, while far from perfect, possesses an entirely different status from that of the sects, and has unimpeachable claims to acceptance."

In this discussion we are interested only in that one sect (so-called) homœopathy. What *are* your *rational, comprehensive* principles, which ground you more stably than we are grounded? We will frankly admit that seventy-five per cent (as proved in a certain investigation mentioned recently in one of your journals) of our men do not prescribe proprietary medicines; we admit that the big drug houses which tell you what to prescribe would "go broke" if they depended upon us for support; we admit that we do not laud one drug today and get an article in every medical journal on its wonderful therapeutic power, and tomorrow pronounce it inert; we admit that we have practically no therapeutic nihilist in our ranks, but rather that the longer a homœopath prescribes, and prescribes accurately, the greater becomes his faith in his remedies, *where remedies are indicated*.

Two ladies went to character ball. The usher, in order that he might announce them, asked what characters they represented. They replied, "Oh, we don't represent anything particularly." So he bawled out to the assembled guests, "Two ladies of no particular character." It seems to us "the rational and comprehensive principles" of which Dr. Nichols speaks *have no particular character*.

Is it serum therapy, of which he boasts an exclusive possession, that renders him scientific and us "pathologic?" Who was the first State Health Commissioner in the United States to place diphtheria antitoxin in the hands of all Health Boards, so that the public at large might have it for the asking? A homœopath.

Is it vaccine therapy of which he boasts an exclusive possession? Who but Dr. Wright of London said "The law of similars best answers the question of how vaccines operate?" And did not Von Behring himself freely give credit to Homœopathy and its principles for his discovery? One of the most scientific explanations yet presented for the action of vaccines in the human body is written by Dr. Charles E. Wheeler, a homœopathic physician of London, and published in the *British Homœopathic Journal*, also republished in the February number of the *North American Journal of Homœopathy*.

IT WOULD STAND READING EVEN BY A "SCIENTIFIC PHYSICIAN."

Hahnemann's psoric theory, which sorely troubles Dr. Nichols, receives in this number of the *Gazette* a very scholarly consideration by Dr. August Korndoefer. Can any fair-minded man read that article and not feel that Hahnemann was the first to catch a vision of the germ theory of disease?

Dr. Nichols states this: "The sole distinctive characteristic of regular medicine which . . . makes it different from all medical sects is its . . . employment of the scientific method." Again we ask, will he tell us what scientific method his school employs which enables him to select an internal remedy with the least possible assurance that it will cure the patient? Now remember Dr. Nichols has classified the homœopathic school with the other sects "which must be considered as any other pathological condition"; hence in the following he refers to our literature: "The general tone of sectarian literature *and thought* is one of shallowness and superficiality, generalities and mysticism." If his article is a sample of *scientific* literature, God pity the superficial and the shallow!

We can fully agree with the writer when he says, "For thousands of years medicine was under the influence of speculative methods of thought . . . but within the last hundred years . . . it has undergone a wonderful transformation and made stupendous advances." Medical history distinctly shows that there was scarcely an iota of advance in the healing art until the time of Hahnemann. Until he set the medical world thinking, the thousand-year-old methods of blood-letting, leeching, blistering, purging, salivation, sweating, heroic dosing, and empiric prescribing were as rife then as they were two thousand years previous.

WITH HAHNEMANN CAME THE MEDICAL RENAISSANCE.

Notwithstanding the opposition to his ideas and the cruel persecution visited upon him, medical men began then to think; blood-letting dropped off; heroic dosing lessened, and the true spirit of scientific medicine was born,—the spirit to investigate and find the truth for the truth's sake. For the first time in medical history men ceased to bolster up superstition and empiricism for the sake of the cult. They began to study medicine for the benefit of the patient.

After the writer has acknowledged that the patrons of the pseudo-medical sects (and he classifies Homœopathy as such sect) are from the better rather than from the lower classes of society, he consoles himself and his scientific brethren by saying, "It is doubtful, however, if the profession feels financial deprivation

from sectarian practices . . . ; much of the practice that goes to sectarians is of a psychic character, irksome and uninteresting to the average practitioner which he is glad to get rid of." Did you ever hear such rot, such slush? Can "sectarian literature" equal that for shallowness and superficiality,—plus falsehood?

Not long since a prominent homœopathic physician died in a certain town. He had the acknowledged largest practice in the place; his *scientific* medical brethren could not wait for his burial before they began "scrapping" for his practice. They had had such a long rest from caring for those "irksome and uninteresting patients" that they fractured the ethical law in coaxing them back again.

We will pass over the insinuation that the underlying motive which actuates a man to study Homœopathy is mercenary, plus the fact that the study is easier and consumes less time. It is too shallow to consider. If the mercenary spirit is more rife in the homœopathic ranks than in the "only true scientific ranks," then we must have a new definition of mercenary.

Will Dr. Nichols tell us what medical college was the first in this country to make obligatory a four years course? And wherein it is easier for a student to enter or graduate from a homœopathic college than an old school college?

NOW FOR A GENTLER NOTE.

There was once an old minister who had preached a red hot sermon on hell and damnation; realizing at the close that he had condemned most all of his congregation to that place of torrid heat, he closed thus: "And now, my brethren, you must repent, as it were, and be converted to some extent, or you will be damned in a measure."

We must not blame Dr. Nichols for what he does not know, or that he "knows so much that ain't so." We must "treat him as we would any other pathological condition"; vaccinate him with a little truth serum. We fear his resistance is so high it will not take, but we should enjoy making the hypodermic jab.

Homœopathy is not sectarian medicine. First, because it does not profess to have a complete system of cure; second, by its accepted definition it employs all the curative agents which scientific medicine has recognized or ever will recognize as possessing therapeutic value. Third, it is not the "product of theorizing and speculative methods of thought," but the product of deductions based upon painstaking research experiments and verification.

When Hahnemann gave the law of similars to the medical world in 1810 the practice of medicine consisted almost exclu-

sively of administering an internal remedy. Surgery, hygiene, psycho-therapy, prophylaxis, and the other collateral branches were either unknown or but little practised; blood-letting and internal medicine constituted practically the practice of medicine. It was not at all unnatural, therefore, that when he discovered a law by which an internal remedy could be chosen, (no law having previously existed) and there being nothing else to the practice of medicine, he should have proclaimed the discovery of a "system cure." For that time it was a system. New discoveries have led to other methods of cure besides medication; the homœopathic physician of today is practising medicine in the light of modern science, not in the light of Hahnemann's time.

Lister made one of the greatest discoveries in medicine, but who follows Listerism as first taught by Lister? It is as idiotic to say that one who calls himself a homœopathic physician is insincere and is practising upon a name because he does not follow *all* that Hahnemann taught, as it would be to call a surgeon insincere who professed to believe in aseptic surgery, and yet did not use the carbolic spray and the antiseptic solution of Lister. Lister discovered a great truth, but that truth can be successfully employed by methods vastly different from those taught by Lister. As well call a believer in vaccination insincere because he does not vaccinate just exactly as Jenner did. Columbus, thought he had discovered a new route to the East Indies. He did not know the great country which he had discovered; but that error did not lessen the importance of his discovery. Hahnemann discovered something so far superior to blood-letting, blistering, purging and salivation that men began then to investigate other methods of cure. But not until then. Those discoveries, many of them, have been beneficial, some of them superior to the giving of any medicine whatsoever, (hygiene, sanitation and surgery, for instance).

But while the giving of an internal remedy is only a part of the practice of medicine today, and perhaps a small part, the fact remains that as yet no one has brought out a system or a law which offers a better guide for the selection of an internal remedy with a record of demonstrable cures than that law of similars.

Paul Ehrlich tells us he experimented 606 times to find his remedy for syphilis; Hahnemann experimented thousands of times to prove the action of his remedies, and neither Ehrlich, Flexnor nor Carrell have shown a deeper devotion to true science, have shown more thoroughly the spirit of the scientific investigator, nor a more unselfish and determined zeal to find the truth than did Hahnemann during all those years of persecution and ostracism.

THE RANK AND FILE OF HOMŒOPATHIC PHYSICIANS TODAY
ARE BROAD MINDED,

well educated, liberal men in their practice, and because they employ every known agent of curative value they are not to be condemned and called insincere. They do not give an internal remedy where such a remedy is not indicated; but when in their judgment it is indicated, the law of similars enables them to select a remedy after some semblance of law which is more nearly scientific than the ready-made "shot-gun" prescription of the drug house or the canned goods of the patent medicine man. The majority of homœopathic physicians are not sticklers for sectarianism; they prefer one school, one system. But until the men of the old school are willing to give the law of similars the investigation it deserves, and either accept or reject it on its merits, just so long will that body of physicians keep their distinctive name. When the old school colleges teach homœopathic therapeutics, by men qualified to teach it, then our schools will not be one whit different from theirs, and will live or die according to the merit which they possess for teaching medicine in its broadest accepted terms.

But there is one thing we will not do, and that is to sit supinely by while some man or set of men set up claim to the possession of all the scientific knowledge extant in medicine. When such a self-styled medical autocrat speaks of his brother physicians as pathologic, as pseudo-medical, and uses in connection therewith the phrase "fakirs, quacks and sectarians," he has done more harm to the cause of scientific medicine than all its enemies. When such a man sets himself up as a medical pope, and asks all those men who do not think just as he does but who are as well educated medically, who are every whit as intellectual and even more scientific, whose ideals are as lofty, whose purposes as pure and unselfish, and who are as altruistic in their aims,—when he asks such men to bow down and kiss his scientific toe, then we exclaim with the Psalmist,—“To Hell wid the medical Pope!”

DEPARTMENT OF EUGENICS.

EDITED BY MARA L. PRATT-CHADWICK M.D., MALDEN, MASS.

Dr. Chadwick will gladly receive communications, reports of cases, etc., etc., pertaining in any wise to the matter of child culture and race improvement.

VINELAND TRAINING SCHOOL

To the Training School at Vineland, N. J., belongs the credit of establishing the first bio-chemical laboratory in the world for the purpose of investigation of feeble-mindedness.

In describing the Eugenics work done at this school, of which Dr. H. H. Goddard is Director of Research, Dr. Peters says:

The large problem which this unfortunate affliction of a considerable portion of humanity presents to organized society is becoming daily more evident, as its economic burden and its social consequences force themselves on public attention. Research on the problem is a crying need not simply from the humanitarian standpoint, but also as an economic necessity. The care and treatment of these cases and the governmental management of this problem including its ameliorment and prevention will in future rest on the basis of data obtained by scientific research. At present we are proceeding on a very small amount of such data and we are just discovering after some preliminary efforts made in the psychological direction how extensive and many-sided this problem is. What assurance have we that our present method of dealing with the problem is in rational accord with the nature and origin of the condition? Our procedures are in the stage of costly empiricism and in the very infancy of scientific investigation. It is therefore an important step forward when this institution ventures to add to its present psychological method of investigation that of the rapidly growing and fundamental science of biochemistry. The need for this additional method of attack and the tendency of expert thought toward it, is well illustrated by the following quotation from the words of a leader in the problems of psychopathology. Dr. Southard:

"The majority of cases of mental diseases are, I am convinced by special studies, characterized by the occurrence of obvious brain lesions, *i. e.*, even in the present stage of science they possess a structural pathology. Do they therefore possess no functional pathology? Their possession of the two aspects is a truism. Should we not study both aspects?"

"Furthermore, suppose we learn that, whereas three-quarters of our cases of mental disease exhibit obvious irrecoverable brain lesions, another quarter fails to show these. Suppose the methods of microscopic research should still fail to show in many cases essential or irreversible brain lesions, should we not stultify ourselves if we did not abandon *for the research campaign* both that psychopathology which has taught us the main course of our disease and the neuropathology which has proved usefully negative? Should we not repair at once to the chemistry of metabolism, the physiology of internal secretions, and the entire point of view of psychopathology? Discoveries in the latter fields, concrete and pertinent facts, would carry us back to the tissues and back to the processes of the nervous system, to neuropathology, structural and functional, and to psychopathology, and enlighten many dark corners therein. *He who adheres to the classical problems as they lie within the teaching divisions of any science is not apt to change the face of that science.*"

In so far as this school investigates and charts the lineage of these defective children, it is doing a world-wide work in calling attention to the need for such investigation. Physicians know well how the inheritance of a patient interferes with the action of a remedy; every teacher knows how

the inheritance interferes with the working out of the Educator's fine theories; and if at last we are coming to generally acknowledge this, it is well for the race.

We have heard of late too much about environment; the emotional type of reformer has learned many a sad lesson through his defeats in attempts to make over. It is well that the pendulum is swinging the other way and the relentless laws of heredity are coming to the attention of the professional world; by and by it will percolate down through to the densest of the laity layers, and in consideration that a very large per cent of our degenerates supported by the state, are foreigners, its significance may at last penetrate even the brains of Congressmen.

When heredity is accepted there will be a great reduction in the money poured into our public schools; for every practical teacher knows that no small percentage of children are not only unprofited by the school curriculum but are injured by it. What the European countries have worked out through long centuries of struggle and suffering, the present trend of scientific investigation justifies today. Every teacher knows that with all the training that all the Normal Schools can give her, it is the pupil himself who decides what she can or cannot teach him.

In the ministry it is the same. We harangue on the poor work that the churches do; but after all what can the preacher do with the youthful material that he has to work upon? And if sometimes he feels that he preaches to those who need it least, he must comfort himself with what the social workers are finding too true—namely, that a very few in the "submerged classes" respond at all to the bounteous gifts laid out before them.

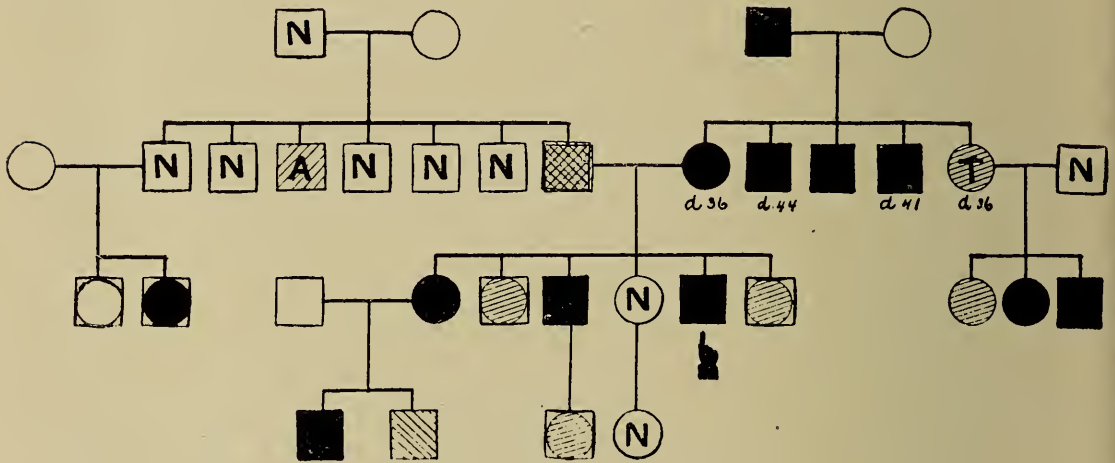


CHART I

Even in matters of food and sanitation we are forced to recognize that there are children in the slums who do not die even under the worst conditions; and children in the favored classes that die even under the most favorable conditions.

A half century ago little attention was paid to feeble-minded children; and we are only now beginning to look into the matter seriously. In recent years a wave of adenoid interest has passed over our school experts and wonderful results have followed removal of said adenoids. But no one has asked, why do adenoids in A cause such mental stupor and not in B?

Two years before the British Royal Commission reported on conditions in England the school at Vineland had begun the laboratory study of feeble-mindedness. First, blanks were sent to the parents of the feeble-minded children in the institution; the information gained threw such light upon the children that systematic work was begun. The charting system (see Chart I) for this school is as follows:

Interpreted, this chart tells us that on one side of the family was a feeble-minded father (black square) and a mother (open circle) of whom

nothing is known.

Of this marriage came three feeble-minded sons, (black squares) a feeble-minded daughter (black circle) and a tuberculous daughter.

The tuberculous daughter married a normal man (N in a square) and these had two feeble-minded children (black) and one more or less defective (striated circle).

Taking the feeble-minded sister of this tuberculous one, we find that she married a defective. Of this marriage came five feeble-minded or defective children (black squares and circles) and one normal daughter (N in circle).

From one of the reprints from this school we submit the following:

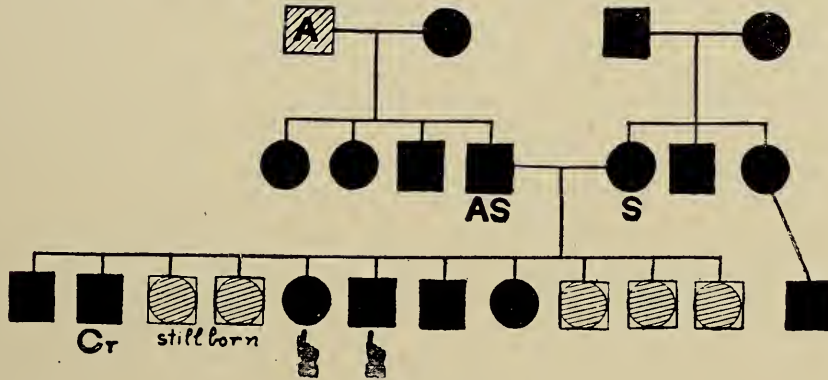


CHART II

Chart II. The feeble-minded paternal grandmother of our two children married an alcoholic (A in a square) and immoral man;—result, four feeble-minded children. One of these became alcoholic and syphilitic and married a feeble-minded woman. She was one of three imbecile children born of two imbecile parents. The result here could, of course, be nothing but defectives. There were two still-born, and three that died in infancy. Six others lived to be determined feeble-minded. One of these was a criminal. Two are in the institution at Vineland. The mother's sister also has a feeble-minded son.

Chart III perhaps adds nothing new for heredity, mainly emphasizing what we have already seen. However, for a social study, it is perhaps the best of anything we have yet found. Here we have a feeble-minded woman who has had three husbands, (including one "who was not her husband,") this daughter of a degenerate alcoholic father and a tuberculous mother and the result has been nothing but feeble-minded children. The story may be told as follows:—

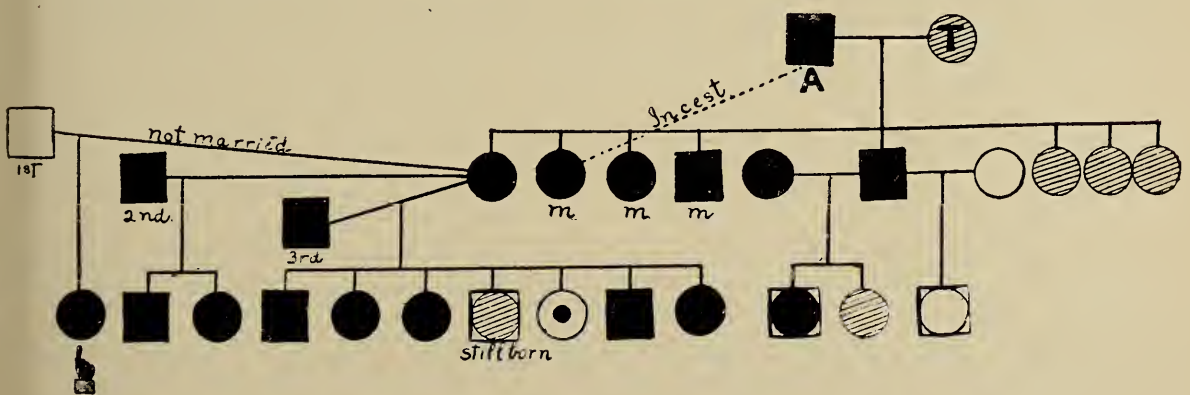


CHART III

This woman was a handsome girl, apparently having inherited some refinement from her tuberculous mother, although her father was a feeble-minded, alcoholic brute. Somewhere about the age of seventeen or eighteen she went out to do house-work in a family in one of the prominent towns of

this State. She soon became the mother of an illegitimate child. It was born in an almshouse to which she had fled after she had been discharged from the home where she had been at work. After this, charitably disposed people tried to do what they could for her, gave her a home for herself and her child in return for the work which she could do. However, their confidence and help were misplaced,—she soon appeared in the same condition. An effort was then made to discover the father of this second child, and when he was found to be a drunken, feeble-minded, epileptic in the neighborhood, it was thought that they should be married. The good friends saw to it that the ceremony took place. Later another feeble-minded child was born to them. Then the whole family secured a home with an unmarried farmer in the neighborhood. They lived there together until another child was forthcoming which the husband refused to own. When finally the farmer himself acknowledged that it was his child, the same good friends interfered, went into the courts and procured a divorce from the husband, and married the woman to the prospective father of the fourth feeble-minded child. They have since had four other feeble-minded children, making eight in all. There has also been one child still-born, and one miscarriage.

As will be seen from the chart, this woman had four feeble-minded brothers and sisters. These are all married and have children, but we know nothing of any except two of them. One of these is feeble-minded and the other died in infancy. The mother had three other sisters that died in infancy.

Chart IV (No Chart) is in some ways the most astonishing one we have. There are in the Institution at Vineland five children representing, as we had always supposed, three entirely independent families. We discovered, however, that they all belonged to one stock. In Chart 8 the central figure, the alcoholic father of the three children in the institution, married for his third wife a woman who was a prostitute and a keeper of a house of illfame, herself feeble-minded and with five feeble-minded brothers and sisters.

This woman had had three illegitimate children, which, however, are generally referred to this man. After their marriage, they had three other children, all of whom are feeble-minded. Two of these are in this institution.

A sister of this woman married a feeble-minded man, and the result of that union was six feeble-minded children, one is a criminal, and one an epileptic; three are married. This feeble-minded epileptic woman married a man who is one of a fairly good family. As the result, however, of this marriage, we have six feeble-minded children, four others that died in infancy and there were two miscarriages.

NOTE.—These charts are reproduced through the courtesy of Dr. Goddard of the Vineland Training School.

Heredity in Relation to Eugenics. By Charles B. Davenport, Director of Department of Experimental Evolution, Govt. station, Cold Spring Harbor, L. I. Published by Henry Holt, N. Y.

One notes, first of all, that the author dedicates this book to Mrs. E. H. Harriman (wife of the late railroad magnate) in recognition of the generous assistance she has given to research in Eugenics; and this is well, for few people know how much our people are coming to be indebted to this woman who is using her inheritance so largely in scientific philanthropy.

This book is strictly scientific. The conservative note is struck in the preface when the author says:

“Recent great advances in our knowledge of heredity have revolutionized the methods of agriculturalists in improving domesticated plants and animals. It was early recognized that this new knowledge would have a far-reaching influence upon certain problems of human society—the problems of the unsocial classes, of immigration, of population, of effectiveness, of health and vigor. Now, great as are the potentialities of the new science of heredity in its application to man it must be confessed that they are not yet realized. A vast amount of investigation into the laws of the inheritance of human traits will be required before it will be possible to give definite instruction as to fit marriage matings. Our social problems still remain problems. For a long time yet our watchword must be investigation.”

Farther on in the preface, the author says again: “Modern medicine is responsible for the loss of appreciation of the power of heredity. It has had

its attention too exclusively focussed on germs and conditions of life. It has neglected the personal element that helps determine the course of every disease. It has begotten a wholly impersonal hygiene whose teachings are false in so far as they are laid down as universally applicable. It has forgotten the fundamental fact that all men are born *bound* by their protoplasmic make-up and unequal in their powers and responsibilities."

"It is an incomplete statement that the tubercle bacillus is the cause of tuberculosis or alcohol the cause of delirium tremens or syphilis the cause of paresis. Experience proves it, for not all that harbor the tubercle bacillus show the dread symptoms of tuberculosis (else there were little hope of escape for any of us); nor do all drunkards have delirium tremens, nor are all who are infected by syphilis parietic, else our hospitals for the insane would be fuller than they are. Rather, each of these diseases is the specific reaction of the organism to the specific poison. In general, the causes of disease as given in the pathologies are not the real causes. They are due to inciting conditions acting on a susceptible protoplasm. The real cause of death of any person is his inability to cope with the disease germ or other untoward conditions.

How prone we are to neglect the personal side of the result! We explain that Mr. A. has gone insane from business losses or overwork. Yet hundreds suffer great losses and work hard and show no signs of nervous breakdown. It would be more accurate to say A. went insane because his nervous mechanism was not strong enough to stand the stresses to which it was put. As a matter of fact insanity rarely occurs except where the protoplasm is defective. Also epilepsy, which is so often ascribed to external conditions, is, like imbecility, determined chiefly by the conditions of the germ plasm; and the trivial circumstance that first *reveals* the defect is as little the true cause as the touching the electric button that opens an exposition is the motive power of its vast engines. "Father," says the young hopeful, "may I go skating?" "So far as I am concerned; but you had better ask your mother," replies the father. "No, indeed," puts in the mother, "for I read in the paper the other day of a boy who fell on the ice and had an epileptic fit." Thus does the untrained mind confuse contributing and essential causes."

Chapters IV and V are of particular interest; dealing as they do with the geographic distribution of inheritable traits, barriers geographic and social, to marriage selection; migrations and their eugenic significance.

Summarizing this review of recent conditions of immigration it appears certain that, unless conditions change of themselves or are radically changed, the population of the United States will, on account of the great influx of blood from South-eastern Europe, rapidly become darker in pigmentation, smaller in stature, more mercurial, more attached to music and art, more given to crimes of larceny, kidnapping, assault, murder, rape and sex-immorality and less given to burglary, drunkenness and vagrancy than were the original English settlers. Since of the insane in hospitals there are relatively more foreign-born than native it seems probable that, under present conditions, the ratio of insanity in the population will rapidly increase.

Another chapter of this book is devoted to a comparison of the Jonathan Edwards family of Massachusetts and the criminal Juke family of New York.

Timothy Edwards, graduated from Harvard College in 1691, gaining simultaneously the two degrees of bachelor of arts and master of arts—a very exceptional feat. He was pastor of the church in East Windsor, Connecticut, for fifty-nine years. Of eleven children the only son was Jonathan Edwards, one of the world's great intellects, pre-eminent as a divine and theologian, president of Princeton College. Of the descendants of Jonathan Edwards much has been written; a brief catalogue must suffice; Jonathan Edwards, Jr., president of Union College; Timothy Dwight, president of Yale; Sereno Edwards Dwight, president of Hamilton College; Theodore Dwight Woolsey, for twenty-five years president of Yale College; Sarah, wife of Tapping Reeve, founder of Litchfield Law School, herself no mean lawyer; Daniel Tyler, a general of the Civil War and founder of the iron industries of north Alabama; Timothy Dwight, the second, president of Yale University from 1886 to 1898; Theodore William Dwight, founder and for thirty-three years warden of Columbia Law School; Henrietta Frances, wife of Eli Whitney, inventor of the cotton gin, who, burning the midnight oil by the side of her ingenious husband, helped him to his enduring fame; Merrill Edwards Gates, president of Amherst College; Catherine Maria Sedgwick of graceful pen; Charles Sedgwick

Minot, authority on biology and embryology in the Harvard Medical School, and Winston Churchill, the author of "Coniston." These constitute a glorious galaxy of America's great educators, students and moral leaders of the Republic.

As a telling contrast Dr. Davenport compares the Juke family:

On the other hand, we have the striking cases of families of defectives and criminals that can be traced back to a single ancestor. The case of the "Jukes" is well known. We are first introduced to a man known in literature as Max, living as a backwoodsman in New York State and a descendant of the early Dutch settlers; a good-natured, lazy sot, without doubt of defective mentality. He has two sons who marry two of six sisters whose ancestry is uncertain but of such a nature as to lead to the suspicion that they are not full sisters. One of these sisters is known as "Ada Juke," also as "Margaret, the mother of criminals." She was indolent and a harlot before marriage. Besides an illegitimate son she had four legitimate children. The first, a son, was indolent, licentious and syphilitic; he married a cousin and had eight children all syphilitic from birth. Of the seven daughters five were harlots, and of the others one was an idiot and one of good reputation. Their descendants show a preponderance of harlotry in the females and much consanguineous marriage. The second son was a farm laborer, was industrious and saved enough to buy fourteen acres of land. He married a cousin and the product was three stillborn children, a harlot, an insane daughter who committed suicide, an industrious son, who, however, was licentious, and a pauper son. The first daughter of "Ada" was an indolent harlot who later married a lazy mulatto and produced nine children, harlots and paupers, who produced in turn a licentious progeny.

Ada had an illegitimate son who was an industrious and honest laborer and married a cousin. Two of the three sons were licentious and criminalistic in tendency and the third, while capable, drank and received out-door relief. All of the three daughters were harlots or prostitutes and two married criminals. The third generation shows the eruption of criminality. Excepting the children of the third son, twelve criminals, one licentious, five paupers, one alcoholic and one unknown; none were normal citizens. Among the females three were harlots, one a pauper, one a vagrant and two unknown; none were known to be reputable. Thus it appears that criminality lies in the illegitimate line from Ada and not at all in the legitimate—doubtless because of a difference in germ plasm of the fathers.

The progeny of the harlot Bell Juke is a dreary monotony of harlotry and licentiousness to the fifth generation. Two in the fourth generation there are and two in the fifth against whom there is nothing, and their progeny mostly moved to another neighborhood and are lost sight of. Very likely they have married into stronger strains and are founders of reputable families.

The progeny of Effie Juke and the son of Max (a thief) show to the fifth generation a different aspect. Some larceny and assault there is and not a little sexual immorality, but pauperism is the prevailing trait.

Thus, in the same environment, the descendants of the illegitimate son of Ada are prevailingly criminal; the progeny of Bell are sexually immoral; and the offspring of Effie are paupers. The difference in the germ plasm determines the difference in the prevailing trait. But however varied the forms of non-social behavior of the progeny of the mother of the Juke girls the result was calculated to cost the State of New York over a million and a quarter of dollars in seventy-five years—up to 1877, and their protoplasm has been multiplied and dispersed during the subsequent thirty-four years and is still marching on.

Of alcohol and narcotics, after disposing of the shallow notions that the drink habit comes because of environment, poor food, etc., etc., Davenport says:

"So long as there is a call for these narcotics must our race be stamped as degenerate" (Gaupp quoted by Mason, 1910). Says Lydston (1904, p. 200) "Practically, then, inebriety means degeneracy, the subject being usually primarily defective in nervous structure and will-power. It is a noteworthy fact that the family histories of dipsomaniacs are largely tinged with nerve disorders. Hysteria, epilepsy, migraine and even insanity are found all along the line. In such cases inebriety is but one of the varying manifestations of bad heredity." Each of these contrasted views is partial. Whether a person who has taken a first glass of alcoholic liquor shall take another is determined largely by the effect upon him of the first. If the alcohol is very distasteful he will probably not continue to drink; if it wakens a strong desire for more he will probably become (or is) a dipsomaniac. The result in these extreme cases is determined by innate tastes which are doubtless hereditary. But in most cases the person who takes a first glass finds it indifferent. His subsequent relation to alcohol depends largely upon his associates; but his selection of associates again depends on innate tastes. Some like the steady, quiet, serious youth for their companions; others select the reckless, jolly fellows, careless of the proprieties and—"birds of a feather flock together." The influence of precept is not to be overlooked; this is, however, most important in determining the first drink. No doubt a strong susceptibility to social sentiment restrains many of the border line cases.

A point of great interest and value is the charting of families with which this book abounds; and the charts are clearly explained, as for ex-

ample Chart 53 (which for economical reasons we do not reproduce) has the accompanying interpretation.

An intelligent and esteemed physician (Fig. 54, II, 2) with training abroad as well as in this country and of a good family (his brother, II, 1, is a college professor and his father a methodist preacher) married a lady (II, 3) of good family, with much musical talent, but subject to migraine and formerly to chorea. They have two sons born in the best of environments. The younger (III, 3) is still in the kindergarten, seems wholly normal, truth-telling and lovable; the other, (III, 2) now thirteen, developed normally, has had no convulsions, and has never been seriously sick and ordinarily sleeps well. He has regular, refined features and a normal alert attitude and is very industrious. He attends Sunday school regularly, has excellent talent for music. At three years of age he walked to a near-by railroad, boarded a train and was carried twelve miles before the conductor discovered him; since then he has run away very many times. From an institution for difficult boys, where he was placed, he ran away thirteen times. He escapes from his home after dark and sleeps in neighboring doorways. His mother used to make Saturday a treat day. She would take a violin lesson with him and spend the afternoon in the Public Library which he much enjoyed but he would slip away from her on the way home and be gone till midnight. He is an unconscionable liar. He contracts debts, steals when he has no use for the articles stolen and has been convicted for burglary. Much money and effort have been spent on him in vain. His mother's father, (of whom he has never heard) was a western desperado, drank hard and was involved in a murder, but finally married a very good woman and has two normal daughters in addition to this boy's mother.

The typical skipping of a generation, seen in these pedigrees of the wandering instinct, suggests that it is a recessive—like most neuroses—and strengthens the probability that it is due to a real mental defect.

The final chapter of this book we should like to quote in full; and it is a pity that every sentimental philanthropist in the land could not be made to read it and read it again. We quote a few lines:

The practical question in Eugenics is this:—What can be done to reduce the frequency of the undesirable mental and bodily traits that are such a burden to the tax payer?

First—There is the surgical operation. There is no question that if every public minded epileptic, insane, or criminal person in the United States were operated upon this year there would be an enormous reduction of criminals twenty years hence. This, however, the author states is by no means scientific or sufficiently inclusive; for a feeble minded mother often, married to a mentally strong man, produces normal children. Again, degenerates are often born of fine parentage.

Secondly, laws against the marriage of feeble-minded are unscientific because what real standards have we by which to judge? Again, is it wise to sterilize, leaving the man free to act but with no responsibility for his act? Again, would not segregation in the course of a generation produce equally good results? As an illustration, the Cretins of northern Italy were segregated in 1890; in 1910 there were only one 60-year-old cretin and three demi-cretins in the community.

The book closes with a rich bibliography, including special magazine articles from specialists. Woodrow Wilson's History of the American People is found in this bibliography because of its strong chapters on immigration.

The Author invites cooperation. The Eugenics Office at Cold Harbor wishes to get in touch with persons interested in the eugenics movement. It invites every person who is willing to do so to record his heritage and place the record on file at the Record Office. "Drop a postal card" at once to the Eugenics Record Office, Cold Spring Harbor, New York, and ask for the blank schedule they furnish. It is understood that all data deposited in this way will be held as confidential and be used only for scientific purposes. The data received are carefully preserved in a fireproof vault and indexed so as to be available to the student. Specifically, the Record Office seeks pedigrees of families in which one or more of the following traits appear:—short stature, tallness, corpulency, special talents in music, art, literature, mechanics, invention and mathematics, rheumatism, multiple sclerosis, hereditary ataxy, Ménière's disease, chorea of all forms, eye defects of all forms, otosclerosis, peculiarities of hair, skin and nails (especially red hair), albinism, harelip and cleft palate, peculiarities of the teeth, cancer, Thomsen's disease, hemophilia, exophthalmic goiter, diabetes, alkaptonuria, gout, peculiarities of the hands and feet and of other parts of the skeleton.

The Eugenics Record Office will be glad to assist in the establishment of local eugenics societies which shall become centers for the study of local blood-lines and for local instruction. The Office seeks to assist state officials in the study of the classes which are supported and protected by the State, and to assist the States to locate the centers in which their defectives and delinquents are being bred. It is believed that a little money spent in studying the sources of reproduction of persons who are destined to become state wards will prove a highly profitable investment, since it may lead to steps that will diminish such reproduction.

HOW THE BOY WAS LOST, by Frank B. Congill is a little book of no interest to physicians professionally, but is one which will respond to the needs of the average mother. It is the story of a boy who "joined the church" but later went "all wrong." The physician doesn't know much about that boy; but mothers and teachers know him well. The book is a kindly but vigorous arraignment of the disastrous methods of both churches and parents in dealing with the adolescent boy. The last chapters of the book are devoted directly to adolescent psychology.

PSYCHOLOGY OF ADOLESCENT BOYHOOD. The editor of this department wrote twice for a copy of this book to review in this issue of the *Gazette*; but received no reply. She then bought a copy and reviews it gladly because she so realizes that this is the book which mothers have asked for and have needed. ADOLESCENCE by Dr. G. Stanley Hall is a classic, but not available to the average mother. ADOLESCENT BOYHOOD, however, exactly fills the demand of mothers and teachers for something scientifically accurate but readable and understandable. The author, Dr. Burr, of the Y. M. C. A. Training School, Springfield, Mass., has made Dr. Hall's book a study and quotes that author generously. The book is an epitome of Dr. Hall's book; but is warmed and illuminated from cover to cover with the profound understanding and human sympathy which Dr. Burr has with youth. The following paragraph heads indicate the scientific scope of the book:

Chapter I—Nature of the Problem; General Characteristics of Adolescence; The Development of New Powers; the Quickening of the Senses; Imagination and Idealism; The New Centering of the Ego.

Chapter II—The Intellectual Side of Adolescence; The Emergence of New Interests; The Encouragement of Spontaneous Activities of the Mind; The Proper Studies for the Period; The Necessity of a Diversified Intellectual Diet.

Chapter III—The Social Side of Adolescence; The Sex Instinct and the Gang Instinct; The Rôle of Social Suggestion; The Growing Influence of Sex; The Educative Function of Group Life.

The remaining four chapters are of equally broad sweep; but the charm of the book to the mother is that these phases of psychology are elaborated in simple language and with human sympathy. She cannot fail to recognize them as picturing her own boy. As the average mother is particularly lacking in power to cope with adolescent problems, she should be given an opportunity to read and study this book.

AMERICAN ASSOCIATION OF ORIFICIAL SURGERY

The Spring Clinic of The American Association of Orificial Surgeons will be held in the surgical amphitheatre of Hering Medical College, corner of Wood and York Streets, Chicago, Ill., April 23-4-5-6. Dr. E. H. Pratt, A.M., M.D., LL.D. and assistants will operate on clinical patients, demonstrating the fundamental principles of Orificial Surgery as applied in the treatment of Chronic Diseases and as an adjunct to major surgery in general.

On April 26, the fourth and last day of the clinic, Dr. Pratt and assistants will demonstrate other therapeutic measures which have been recently introduced to the medical profession, including abdominal calisthenics, manual therapeutics, high frequency treatment of internal organs, spondylotherapy and new hydro-therapeutic measures. These measures will be introduced and demonstrated not as curative within themselves alone, but as adjuncts to the ordinary armamentarium of the physician.

Tuition for this clinical course is free to all practicing physicians, medical students and nurses.

Physicians are invited to bring clinical cases for operation. No operating fee will be charged. Excellent hospital accommodations will be provided. Opportunity will be presented for the physicians bringing clinical cases to assist personally in the operation.

The Clinic headquarters will be Hotel La Salle, where reservations may

be made in advance. For further information address the secretary of the association.

W. A. Guild, Des Moines, Iowa.

BOOK REVIEWS.

Textbook of Ophthalmology in the form of clinical lectures by Dr. Paul Roemer, Professor of Ophthalmology at Greifswald; translated by Dr. Matthias Lanckton Foster, Member of the American Ophthalmological Society; Member of the American Academy of Ophthalmology and Oto-Laryngology, with one hundred and eighty illustrations in the text and thirteen colored plates. New York. Rebman Company, 1123 Broadway. p. 300. Price \$2.50 net.

The subjects treated in Volume II are Diseases of the Eyelids, Injuries of the Eye, Diseases of the Vitreous, Diseases of the Sclera, Diseases of the Lachrymal Organs, Diseases of the Orbit, Glaucoma, Muscular or Concomitant Strabismus.

After an extended presentation of the various theories, the author concludes "still glaucoma remains an enigma." The discussion of sympathetic irido-cyclitis is very thorough, and the indications for enucleating a dangerous eye are clearly stated. The teaching about the treatment of strabismus is very much up to date. The importance of training the fusion faculty and the class of cases in which orthoptic treatment may be successful are explained. The time to operate is discussed at some length. Tenotomy is recommended only in connection with or following advancement.

The general practitioner will find many timely suggestions concerning the wisdom of assuming the responsibility of treating eye diseases.

D. W. W.

Specific Diagnosis and Medication, by the late John M. Scudder, M.D., 12th edition reprinted. 12 mo., 819 pp., cloth \$3.00. John K. Scudder, Publisher, 630 W. 6th St., Cincinnati, Ohio.

This text book of eclectic medicine was written in 1874, and has not been revised since 1890. This explains many of the obsolete ideas contained within its pages, and the absence of any of the recent advances in our knowledge of pharmacology and pharmacodynamics. (The most striking is that quinine "antidotes the malarial poison.") Although the author disclaims any law of cure, and recommends certain drugs for certain conditions "simply because they have been previously used with reputed success," we find that this purely empiric practice conforms closely with the indications by which homœopaths are led to prescribe. In fact the majority of homœopaths prescribe purely empirically in this same way, but the difference is that they can explain their results by *similia similibus curentur* instead of by "*contraria contrariis opponenda*"

The first half of the book is devoted to diagnosis. Here the author goes into many details which modern text-books neglect. Very interesting discussions are entered into regarding observations of the tongue, pulse, etc., which are full of valuable clinical information. The second half is devoted to a discussion of eclectic practice and to materia medica. The materia medica is very brief. The last pages are devoted to reports of cases illustrating eclectic practice. The absence of the single remedy, and the relatively large doses make this practice considerably remote from the practice of Homœopathy. As an example, the following was given to a case of intermittent fever. Take Tinct. Aconite gtt. XX; Tinct. Asclepias one drachm; water four ounces; Sig. (take) 1 drachm every hour; also the following inunction twice daily; Quinia Sul., 2 drachms; Lard 2 ounces; Oil of Anise half a drachm, M.

MEDICAL JOURNAL REVIEWS.

North American Journal of Homœopathy, March.

1. *The Teaching of the Materia Medica.* Copeland, R. S.
The author suggests the following plan:—Freshmen—one hour a week throughout the year; Sophomores—two hours a week throughout the year; Juniors—three hours a week throughout the year, and an extra hour for one semester; Seniors—four hours a week throughout the year.
2. *The Repertory and Prescribing.* Van Denburg, M. W.
3. *A Record of Eight Years in the New York State Health Department.* Cole, H.
4. *Materia Medica—Drugs in Maniac Cases.* Potter, C. A.
In New York State from 1903 to 1911 inclusive there were recoveries in 25 per cent of the cases treated at the allopathic institutions, and in 33 per cent of the cases treated in the homœopathic institutions.
5. *An Experience with Lachesis.* Rieger, J.
A recovery from a cough after the administration of the 8x, followed by joint and skin symptoms pathognomonic of the drug.
6. *The Rural Death Rate of the State of New York.* Hoffman, F. L.
C. W.

Journal of the American Institute of Homœopathy, March.

1. *The Undeveloped Anteflexed Uterus and the Sterile Woman.* Wilcox, D. G.
2. *Extra-Uterine Pregnancy During the Early Months.* Lee, J. M.
3. *Does Internal Medication Influence the Growth of Tumors?* Smith, D. T.
4. *After Primary Operation for Carcinoma, What?* Bailey, E. S.
5. *Cholelithiasis.* Lane, N. F.
6. *Internal Hernia.* Fobes, J. H.
7. *The Vaccine Treatment of Septic Infections.* Southwick, G. R.
An exceedingly optimistic view of the benefits derived from vaccine therapy.
8. *General Anæsthesia by the Intravenous Route.* Honan, W. F.
9. *The Question of Homœopathy.* Krauss, J.
In this scholarly paper the author answers the question, *What is Homœopathy?* After taking up in detail the origin of the term and its history he criticises the translation of das Aehnlichkeitsgesetz into the law of similars. In German, Gesetz is used in the sense of the English law and also in the sense of the English proposition, Cure through symptom similarity is Homœopathy. While Hahnemann speaks of it as a Naturheilgesetz, he is merely giving logical directions for a method of procedure. Homœopathy is a method, not a law. It is the efforts and not the conclusions of the great philosophers which made them famous. It is their working method that receives and will receive the admiration of the judging world. It is Hahnemann's effort and working method that made him rank with the greatest of medical men. We should not speak of homœopathic medicines. All drugs may be used homœopathically, antipathically, allopathically or empirically. The dose is a matter of pharmaco-therapeutics, and it varies according to how we use it. There is no homœopathic pharmacology or pathology. Pharmacology and pathology are sciences. Homœopathy is not a science but a method of therapeutics connecting these two sciences.

C. W.

Berliner Homœopathische Zeitschrift, February.

1. *Homœopathy experimentally proven.* Cahis, M. (translated from the Spanish).
A brief report of the author's results with various toxin administrations Rabbits which were given lethal doses of strichnine by intraperitoneal injection recovered if they were given weak dilutions of strychnia every five minutes afterward by mouth. Recovery of a case of epithelioma by the administration of cancer toxin.

2. *Plasma de Quinton.* Arnulphy.
3. *Iodine and its Salts.* Senkspiel.
4. *Regarding the Foundation of the Law of similars.* Schlegel, E.

The Journal of Ophthalmology and Oto-Laryngology, February, 1913.
Blood Changes in Sympathetic Ophthalmia. Harry S. Gradle, M.D.

"In 1910 at the Thirty-Sixth Heidelberger Congress, I reported that blood changes existing in sympathetic or impending sympathetic disease, together with the blood findings in a series of cases of uveitis of other than traumatic etiology as a control. Briefly stated, these changes consist in a relative increase in the mononuclear elements of the white cells at the cost of the polynuclear elements, particularly the polynuclear neutrophils. The increase in the mononuclears, according to my conception of the subject, is mainly among the true lymphocytes, to a lesser extent among the large mononuclears. I reported six cases of traumatic uveitis in which enucleation was subsequently performed in order to prevent an outbreak of sympathetic ophthalmia. In these cases there was an increase of the mononuclears from the normal 25 per cent of the white cells to as high as 67 per cent of the white cells with a corresponding decrease of the polynuclears. None of the cases showed a leucocytosis. The second series consisted of ten cases of perforating injury of the eye, followed either by panophthalmitis or by rapid normal restitution ad integrum, i.e., cases which would not develop a sympathetic disease. In all of these cases, the blood showed normal relative proportions. The third class consisted of twelve cases of iridocyclitis of non-traumatic origin which could not lead to sympathetic ophthalmia. Here, too, the blood was invariably normal. On the basis of these observations I was able to state that amonucleosis, developing during the course of traumatic uveitis was of great diagnostic significance in predicting the outbreak of a sympathetic ophthalmia."

D. W. W.

The Journal of Ophthalmology, Otology and Laryngology, March, 1913.
Hæmorrhagic Glaucoma. John H. Payne, M.D.

"I have reported this case in extenso as it is fresh in my mind, has run a typical course with exception of a halt for a few months under a Galezowski sclerotomy, and has had an experience with x-ray flashes and the Dowling method, both of which you may say were applied too late to be of positive value. The lesson I have learned is not to make an iridectomy until the last thing, and *then* not to do it, but if surgery is to be adopted, then to confine efforts to some form of sclerotomy in which I personally up to the present time have a preference for the Galezowski, as that can be repeated as often as desired. You will note in this connection that the first Galezowski restored the vision and held it there for seven months, and that later when the sight was rapidly declining from day to day a repetition of the same operation held it stationary for a month. I hope that instillations of warm olive oil may prove to be of some definite value, and that this may be tried by others and reported on later."

The Ophthalmic Record, February, 1913.

Protection of the Eyes of School Children, Nelson M. Black, M.D., and F. A. Vaughn, Consulting Engineer, Milwaukee, Wisconsin.

The Board of Education of the City of New York have adopted the following regulations:

"1. That hereafter no calendered or coated paper be permitted in the text-books given to the children, as the dazzle of such paper is injurious to their eyes.

"2. That half-tone pictures be not permitted in school books but that simple, easily seen outline pictures be substituted for them.

"3. That the length of line in school books be from a minimum of 2½ inches to a maximum of 3 inches.

- "4. That the space between lines be not less than 3 mm.
- "5. That in reading, the children hold their books at an angle of approximately 45 degrees, and that in oral reading they be required to look up frequently.
- "6. That after a lesson demanding close work the children be asked to look up at the ceiling, or out of the window, to change the focus of their eyes and rest the muscles of accommodation.
- "7. That classrooms be equipped with loose chairs of different sizes so that the children may sit in seats that fit them, placed where they can see best.
- "8. That in the first two years of school, all writing be upon the black-board instead of upon paper.
- "9. That all rooms in which artificial light is burned continually, be closed.
- "10. That no part-time classes be permitted to occupy any room in which the light is not entirely satisfactory.
- "11. That electric bulbs used in lighting classrooms be made of frosted glass, and that clusters of such bulbs be provided with pale amber shades to screen the pupils' eyes from the direct rays of light."

MEDICAL EVENTS

American Institute of Homœopathy

Office of the President.

Ann Arbor, Mich., April 1, 1913.

My dear Mr. Editor:

The time is not far distant for the convening of the American Institute of Homœopathy in the City of Denver. Naturally, I am intensely interested in the success of the meeting and believe you will lend the use of your valuable journal for me to say to the profession that it is of unusual importance that we have a full and enthusiastic convocation. These are the times of strenuous society activities. Scientific people, pseudo-scientific people, and all others for that matter, are active in organization work. This is also the era for long-sighted, purposeful co-operation upon the part of those who wish to be identified with progress.

Let no one say he gets nothing worth while out of the Institute; rather let him feel the Institute can get something from him. Denver is the only place in the country where one can receive the invigorating influence of a wide-awake, enthusiastic medical meeting and by a slight expense see the greatest sights that Nature unfolds to the physical senses. The Transportation Committee have given special attention to "side-trips" and will have a long list of delightful long or short excursions to select from after the Institute is over. Not only that,—the accommodations for the trip are being delightfully arranged. Those who go, as they should, "with the crowd," from Chicago, or even from farthest east, will experience the benefits of an Institute *en transit*, because the good conversationalists, the best story tellers and the enthusiastic good fellows will be on the train.

Pass the word along. Take as a companion at least one candidate for membership. Urge the young men to seek the place where the enterprising and progressive element of our profession congregate.

The local committee are perfectly organized to make your coming to, stay at, and departure from, their beautiful city an event to be remembered and a celebration royal. Everybody, from now to the date of departure, be a "booster" for Denver and the sixty-ninth meeting of the American Institute of Homœopathy.

Most cordially yours,

W. B. Hinsdale.

The Control of Ophthalmia Neonatorum in Massachusetts.

DR MARK W. RICHARDSON, Secretary State Board of Health, Boston: In the year 1910 there were 257 cases of ophthalmia neonatorum reported; in 1911 there were 1,364 cases, and in 1912 there were 1,173. The activities of the board, especially through its prosecutions of offending practitioners, has brought the number of reported cases from 16 in 1905 up to 1,173 in 1912. The efforts of our inspectors are often of great value, as shown by some typical instances. 1. An infant was found with badly inflamed eyes. He was not receiving the proper care. Two days had elapsed between the visit of the physician and the report of the case to the local board of health. The attention of the local board of health was directed to the case, and the child was sent to the hospital where it received proper treatment. If the conditions which were found at the time of the visit had been allowed to continue there is reason to believe that the child's sight would have been destroyed. 2. A patient was found improperly treated by a private physician. The disease was progressing unfavorably, and at the advice of the state inspector of health expert treatment was obtained. The child completely recovered. 3. A case was found in which the disease originally affecting one eye had spread to the other, in consequence of improper care. The conditions were immediately brought to the attention of the local board of health. The child was removed to the hospital, where, under proper treatment, the sight of one eye was saved. Unfortunately a corneal ulcer had destroyed the sight of the other eye. In another case no prophylactic had been used at the time of birth by the physician, and four days had been allowed to elapse before reporting the case to the local board of health. The child's eyes were found to be badly inflamed, with a heavy purulent discharge. The conditions were brought to the attention of the local board of health, proper treatment was instituted, and the child's eyes were saved.

In any campaign against ophthalmia neonatorum, early birth returns are of the greatest importance. The legislature of 1912 helped our campaign along by requiring a preliminary birth return within forty-eight hours, and by empowering the secretary of the commonwealth to place information concerning ophthalmia neonatorum on the birth certificate. At the top of this certificate in red ink the physician or midwife is warned that inflammation of the eyes must be reported immediately to the board of health. Although midwives have no legal status, they exist in our community. Investigation shows, however, that they have played little part in the bad cases of ophthalmia neonatorum. The chief offenders seem rather to be physicians, often in good standing.

Journal of the American Medical Association, March 8, 1913.

AN OPEN LETTER TO THE HOMOEOPATHIC PROFESSION OF THE UNITED STATES AND CANADA

The American Institute of Homoeopathy meets this year in Denver, the Queen City of the West, from July 6 to July 12. There are in the United States and Canada approximately 15000 homoeopathic physicians. Of this number but 2700 are members of our National Organization—the oldest National Medical Organization in the United States. Never was there a time in the history of homoeopathy when it was mere necessary for the protection of the individual homoeopathic physician to have back of him a strong, national organization than at the present time. In every State in the Union restrictive and proscriptive medical legislation is taking place, whose chief object it is to limit the number of physicians in each State, and especially the number of so-called "irregular" physicians. That such legislation, which in many instances results in much good, may result in infinite harm to the homoeopathic profession, there cannot be the slightest doubt. Up to the present time a comparatively small number of homoeopathic physicians in the United States have made the fight in your behalf. The Institute is protecting

your interests through its various committees on education, on legislation, etc. We, however, need the coöperation of every homoeopathic physician in the United States and Canada.

With this end in view, the admission fee has been reduced to one dollar for the first year, two dollars for the second year, three dollars for the third year, four dollars for the fourth year, and thereafter five dollars a year. In twenty-five years you become a senior member and further dues are not required. Subscription to the official journal, which contains the papers and the transactions of the Institute and is issued monthly, is one dollar per year. You are therefore taken into the Institute for the small sum of two dollars, including one year's subscription to the Institute Journal with access to all its transactions and scientific papers.

If you have never attended a meeting of the Institute, Doctor, you have missed one of the greatest privileges of your life. Aside from the social features of the Institute, which bring you in close touch with the men and the women in the profession who are "doing things," there is the scientific aspect which you will find of even greater value. The Institute is in session six days, and I have never yet attended a meeting that I have not been repaid a hundred fold for the time and money spent. To me this week is a "post-graduate week" and I come home refreshed, full of new ideas and in infinitely better shape to take up my work.

It has been the effort of the undersigned to organize the United States and Canada in such a way that every homoeopathic physician not a member of the Institute will be personally solicited to become one. Should you not receive such solicitation, notify the chairman of this committee, or its secretary, Dr. Alden E. Smith of Freeport, Illinois, and a proper application blank will be sent you. Your colleagues who know you will gladly endorse your application.

Will you, Doctor, join the Institute this year, attending the Denver session if possible, and if not possible, at least give us your moral support? The meetings usually alternate between the East and the West, and in all probability next year's session will be held in the East or in the Middle West.

JAMES G. WOOD, M.D.,

Chairman of the Committee on New Members.

The Dental Nurse Bill.

The dental nurse bill should be enacted as a health measure, if for no other reason. It is definitely a preventive measure and a measure in the way of conservation of our growing humans. The State has been amazed by the figures showing the number of school children rated as defectives because of their teeth. On the effect on school work of bad teeth, the school authorities are a unit. They are heartily in support of the measure. It is designed to fill the gap that exists to-day. The dental work of the community is not completely done.

The licensing of the dental nurse will supply a force of workers to meet this demand. It will be economy to the child, parent and State. The call from cities and towns for dental treatment for children is increasing in every well supervised school system. It is impossible for towns or parents in a majority of cases to pay the dentist. But attention by the dental nurse in the simple work of preventing decay at the school time of life will save teeth and save health.

The opponents center largely on the increased danger of malpractice in dentistry. In a bill safeguarded as at present this seems out of the question. The dental nurses will work under direction of registered dentists. They will do work a greater part of which will not otherwise be done at all. What they can do for the community is nearest the work of the district nurse. The State should use the field, as has been done in Connecticut and New Hampshire.

OBITUARY.**Francis Hodgson Orme, M.D.**

Born in Dauphin, Pennsylvania, January 6, 1834.
Died in Atlanta, Georgia, January 28, 1913.

There were real tears and genuine sorrow in Atlanta on the morning of January 28, when Dr. Orme laid aside the mantle and entered upon the broad highway of a never-ending eternity. For more than fifty years he had ministered unto the sick of his city and State, the people of which loved him, because they knew him. In Atlanta are families whose physician, counselor and friend Dr. Orme had been through five generations. In death, as in life, these arose and called him blessed.

His was a beautiful personality, his a truly beautiful life. He had served every interest ever espoused with a fidelity which is rare, an intelligence that left its impress upon his profession and State, and with a wisdom that belongs not to every man. The press, the pulpit and the people of Georgia join in praises to Dr. Orme's memory because his life and work among them carries the knowledge that all they may be able to write and speak in his behalf is more than richly deserved.

In the awful yellow fever days of Dr. Orme's early professional career he had gone through the fiery furnace of a violent attack of the plague, which for many weeks had been relentlessly mowing down the best young manhood and the very flower of the South's young womanhood, he barely escaping with his life after having already largely sacrificed his strength and reserve power by day and night vigils and indefatigable labor among the multitude of Savannah's stricken. This was in 1854. The epidemic was the worst the South had known to that day. Others followed, but none so violent as the plague of 1878, when not only New Orleans, Memphis and Vicksburg were devastated, but when the fever followed the fleeing multitudes up the rivers and out into the interior, extending its death-grip to Grenada, Holly Springs, Chattanooga and other points far away from the coast and river, to which it had theretofore been a stranger. For the first time in the history of the scourge in this country children and negroes suffered and died as did the white men and women. Previous to this they were supposed to be immune. In Georgia on that wedding trip, we were held in quarantine by the South's defensive shot-gun measures. We had been in New Orleans after the epidemic had been officially declared, and that was sufficient. The entire infested area had been isolated.

Chattanooga to the North called for help. Vicksburg and Memphis had declined the services of non-immunes. With Chattanooga it was different. The battle fields of Chickamauga were swampy, and green with pestilential miasms, unequalled fields for the breeding of the culex, not yet suspected. The crude sewers and open ditches of the town were hot-beds of pollution. Death stalked abroad by day and by night. Two of the practitioners had died, four others were stricken. The medical corps was decimated and doctors were needed. Fifty-two per cent of the afflicted was death's awful toll. In a moment of unmeasured zeal and sympathy my services were tendered. I hardly know now whether I was glad or sorry when they were accepted by wile. It was another case of a fool rushing in where even an angel would have feared to tread. Dr. Orme had not been consulted, or it is doubted if the tender would have occurred. For he had experienced the awful ravage of the scourge upon himself, and had had the curtain partly drawn that he might peer in upon the borderland of eternity. From the knowledge thus acquired he accounted all the volunteers of that frightful season heroes of a high order.

Following the epidemic of 1878 the American Institute of Homœopathy created a special Homœopathic Yellow Fever Commission, of which Dr. Holcombe of New Orleans was chairman and Dr. Orme a member, to investigate the results of homœopathic treatment and report to it and to

the Congress of the United States. Naturally, Dr. Orme's previous experiences with the scourge proved of great value to the Commission, and, naturally, his mature judgment, calmness in deliberation, firmness in decision and conscientiousness in desiring to get at all the facts of the epidemic, proved exceedingly helpful under very trying circumstances. For not all of the profession of the South were in direct sympathy with the commission and its work. But so thorough were its labors and so indubitable its conclusions, clearly sustaining the superiority of homœopathic treatment of the South's worst enemy, that Congress abided its decisions and gave us two of the nine members of the National Board of Health, created by it as the direct result of the epidemic, the first official recognition by this Government accorded Homœopathy through its national legislature. Dr. Orme always looked upon this work as of the greatest possible importance to Homœopathy and the people of the South, and was always glad that he had been enabled to take part in it, a part which with characteristic modesty he held to be a very small one, but which was, in reality, of the utmost value.

Dr. Orme studied medicine under men of the olden time, Dr. Gilbert of Savannah and that venerable New York patriarch, Dr. John F. Gray. From these, as also instinctively and intuitively, he took an exalted cue. He lived the life of a faithful family physician. Nor did he become so altogether emancipated from the old and generally better way of the profession in the more commercial days that he ever learned to commonize his demeanor or his wardrobe. Yet nothing supercilious nor sycophantic found favor in his eyes. He was dignified yet gracious. He was reserved yet courteous. He was always straight-away honest and sincere. If he differed with a friend he differed conscientiously and in the open. Never quite accepting the necessity for the Southern Homœopathic Medical Association, in deference to the views and judgments of others whom he respected he generously assisted at its birth and attended several subsequent meetings. At no time in its history, however, nor in his own, would he yield a point when his conscience told him it were wise not to do so. Not always did he essay to be right; but when convinced that others were in the wrong he was as firm as the Rock of Gibraltar.

Of old English stock, Dr. Orme was deservedly proud of his lineage. His paternal grandparent was Dr. John Orme, *Verbi Dei Ministri*, while on his maternal side he sprang from Sir Joseph Priestly, the discoverer of oxygen, one of the giants of science. Dr. Orme brought no blush other than that of joy to the family pride and name. He read much, thought more, versed not a little, and contributed liberally to literature, both in prose and rhyme. He wrote the National Hymn of the Daughters of the Revolution, while his excellent volume of *Memoirs* contains many classical poems and substantial philosophies in verse.

In his domestic life Dr. Orme was a fine example of the gentleman. Married in 1867 to Miss Ellen V. Woodward, of the Beaufort district. South Carolina, his home life cycled over forty-six years in satisfaction and contentment. Some of his most beautiful verses are dedicated "To My Wife!" As their intimate friends have known them, their union was of the God who gave them birth. Two children survive to comfort the widow and revere their father's memory,—Frank Orme, a successful business man of Atlanta possessed of great moral worth, and a widowed daughter, Mrs. Elizabeth O. Block, also of their home city.

His last four years were a marvel of patience and submissiveness, and as Christmas approached with its joys and good cheer, and he felt that the Father on the Great Throne was beckoning, he peacefully folded his hands across a breast that had known no guile and quietly waited for the final summons.

His family and friends were in deep sorrow. But he bade them dry their tears. He had lived almost a decade beyond the Psalmist's limit. He had done all the good in the world he could do. Death is but the severing of a silken cord that binds man to his earthly environment and keeps him

from a Heaven which God has prepared. He wanted them all to know that he hearkened for the Master's call without fear or trembling, confident in the assurance that the Future is better than the Present. For weeks he waited the message from the sky. Friends called in legion. Flowers from family, former patrons, neighbors and citizens made of his sick room a bower of fragrance and beauty. During it all the silvered hero, hard touched by the white hand of life's winter, lay dying. And daily he lovingly smiled his benedictions, blessed his family and friends, cheered them with words of consolation filled with the solace of sincerity, told them not to grieve when he was gone, and bade them wear no mourning. This he put in his will, that the public might understand and excuse. He believed not in sable habiliments nor outward display of grief. He had met death in every form, had fought it hard in many a contest hand to hand, for more than a half century, why should he fear the messenger now? Was he not acquainted with him in every garb? Had he shirked when it had been yellow, and the South was scourged as by a prairie fire? His day had come, his hours of usefulness were past. He would gather his mantle about him and await the summons of the Master. And thus he laid himself peacefully to die.

And the Lord who reigneth stretched forth His hand in gentle welcome and bade the spirit of our departing friend and brother enter the portal, with the deserved blessing.

"Well done, thou good and faithful servant,
Thou hast been faithful over a few things,
I will make thee ruler over many things.
Enter thou into the Joy of thy Lord!"

Charles E. Fisher.

Dr. Richard R. Trotter.

Dr. Richard R. Trotter of Yonkers, N. Y., died at his home, 189 Warburton Avenue, on March 28 after a short illness. He was born in Roxbury, Mass., sixty-three years ago, was a graduate of Boston University School of Medicine and had practised in Yonkers for thirty-one years. He was identified with the founding of the Yonkers Homœopathic Hospital and Maternity and continued as a member of the staff until his death. He was a member of the American Institute of Homœopathy, the New York State, New York County and Westchester County Homœopathic Medical societies, the Academy of Pathological Science, the Yonkers Clinical Club and the Masonic fraternity. He had served as a Health Commissioner in Yonkers. He is survived by his wife, a son, Dr. James P. Trotter, and a daughter, Miss Margaret Trotter.

Dr. John H. Yeagley, of York, Pa., died on December 17 last at the age of sixty years. Dr. Yeagley was a graduate of Hahnemann Medical College of Philadelphia and a prominent physician.

Dr. Carlton R. Thomas (B.U.S.M. 1901) a successful practitioner in Neponset, Greater Boston, was fearfully burned on the morning of March 8 by an explosion of gasoline in his garage. He was carried at once to the Homœopathic Hospital, but he died before midnight of the same day. Dr. Thomas has built up a good practice and was greatly beloved by his patients. He leaves a widow and two very young children. The *Gazette* extends its sincerest sympathy to Mrs. Thomas in her affliction.

George Smith Adams, M.D.

Dr. George S. Adams, formerly superintendent of Westborough State Hospital, died on March sixteenth at his late residence, Stamford, Connecticut. He had been ill three days from an attack of influenza, when a heart complication developed which proved rapidly fatal.

Last May after more than twenty-five years continuous service at



GEORGE SMITH ADAMS M.D.

Westborough, Dr. Adams resigned the superintendency of the Hospital to become the medical director of Dr. Givens' Sanatorium, Stamford, Connecticut. His friends had hoped that with less arduous duties many years of usefulness would be preserved to him. There are many who feel a great personal loss in his death and a great number to whom he will be always a pleasant memory.

Dr. Adams' career was a credit to the profession and to the Commonwealth of Massachusetts in whose service he labored. The Hospital at Westborough, for a long time to come, will be the best memorial to his administrative genius and the splendid success of his service a constant stimulus to those who follow.

Dr. Adams was born at Norwich, Connecticut, February 7th, 1848, but from his third year on lived the greater part of his life in Massachusetts. He was graduated from Hahnemann Medical College, Philadelphia, first in a class of fifty—in 1876 and, except for the first two years of practice, all of his professional life up to the middle of 1912, was spent in this State.

A sketch of Dr. Adams' life and professional achievements was published in the special Psychiatry number of the *New England Medical Gazette* (September, 1912) devoted to Westborough State Hospital papers and issued as a testimonial to Dr. Adams.

The trustees of Westborough State Hospital at a special meeting, Tuesday, March 18, delegated Dr. John L. Coffin, (Chairman) and Mr. John M. Merriam, of the Board, to be their representatives at the funeral services in Worcester for Dr. Adams. The trustees voted also that there be sent to Mrs. Adams and the family, an expression of sympathy in their deep sorrow.

PERSONAL AND GENERAL ITEMS FOR APRIL, 1913.

In the announcement of the Mental Hygiene Exhibit and Conference, held in Boston at Tremont Temple March 31 to April 4, we read that Frank C. Richardson, M.D., Professor of Diseases of the Nervous System, Boston University School of Medicine, read a paper on Mental Deviates.

Dr. Carroll C. Burpee of Malden is to address the graduates of the Malden Commercial School on Sex Hygiene. This is an innovation on the part of the Principal, Prof. W. Leroy Smith, who thus takes the initiative among Commercial Schools in making an attempt to prepare the students for the temptations and dangers which await them in the business world.

Dr. Mara Pratt Chadwick opens April 1 a five weeks course in Eugenics under the auspices of the Hyde Park Maternal Union.

A committee from the Boston Y. M. C. A. has conferred with Dr. Eliza Taylor Ransom, (B. U. Sch. of Med.) in collecting reliable statistics regarding conditions existing in the public schools of Greater Boston.

Dr. Edwin D. Smith, class of 1901, B.U.S.M., has succeeded to the practice of the late Dr. James F. Bothfeld, in Newton, Massachusetts.

Dr. Frederick E. Wilcox, of Willimantic, Connecticut, has been re-appointed a member of the Homœopathic Board of Medical Examiners of Connecticut for a period of five years.

The *Gazette* extends its sympathy to Dr. John R. Noyes (B.U.S.M. 1904) of Brockton, Mass., in the death of his wife, which occurred on February 24.

The Trustees of the new State Homœopathic Insane Hospital at Rittersville, Pennsylvania, are meeting some embarrassment in the matter of hospital maintenance, on account of the unfavorable situation of the hospital.

It is built on a hill, and as the supply is insufficient, water has to be contracted for. Then, also, whereas at other asylums there is usually an opportunity to meet some of the expenses through cultivation of the land and the raising of vegetables and fruit, the ground at Rittersville is thin and poor, incapable of producing normal crops. The regulation allowance for maintenance made asylums is not sufficient for the Rittersville institution

Dr. Horace Packard left Boston on March 10 for a trip around the world. He will probably return in October.

Dr. and Mrs. George E. Boynton (B.U.S.M. 1909) are receiving congratulations on the birth of a son, Richard Elwood Boynton, on March 2nd. Dr. Boynton is in practice at Mount Vernon, State of Washington.

WANTED, an interne. On July 1, an interne will be needed at the Ring Sanatorium and Arlington Health Resort, a private hospital of forty beds, for chronic nervous and mental diseases. The hospital is beautifully located on Arlington Heights, eight miles from Boston, and the opportunities for clinical and laboratory work are excellent. Salary \$600 a year, with room and board. A man interested in problems of metabolism or orthopedics preferred.

APPLICATIONS, will be received for an appointment as assistant in the Genito-Urinary clinic of the Out-Patient Department of the Massachusetts Homœopathic Hospital.

S. H. Blodgett, M.D.
O. B. Sanders, M.D.

For Sale.—An unusual opportunity to secure the country home of a physician recently deceased. It is located between Springfield and Worcester on the Boston & Albany R. R., a stately Southern colonial mansion, two hundred feet from highway, enclosed by attractive stone wall five feet high; garage, stable, bungalow, twenty-three acres of land; 1100 feet elevation. A rare summer home or private sanatorium, with room for tents for out-of-door-patients. Fine views and drives. Property must be sold to settle estate. Address "Colonial," 6 Charlotte St., Worcester, Mass.

FOR SALE—A four-cylinder Cadillac runabout, model G. 1909, in first class condition. Price very low. Address "Automobile," care of New England Medical Gazette, 80 East Concord St., Boston.

Dr. Albert W. Horr has removed his office from 14 Beacon Street to Warren Chambers, 419 Boylston St., Boston.

LESSONS IN THE ITALIAN LANGUAGE.

Signor Ettore Ciampolini of Siena, Italy, (class of 1916 B.U.S.M.) is desirous of obtaining pupils in the study of Italian or for Italian conversation. Signor Ciampolini is lecturer for "Circolo Italiano di Boston" and is endorsed and recommended by Prof. Geddes of Boston University and by Prof. Grandgent of Harvard College. Address Ettore Ciampolini, care of Boston University School of Medicine, 80 East Concord St., Boston.

COURSE OF CLINICAL LECTURES AND DEMONSTRATIONS.

Governors of the New York Skin and Cancer Hospital, Second Avenue and 19th St., announce a course of six lectures on Surgical Diseases of the Skin by Dr. Bulkley on Wednesday afternoons, April 2, 9, 16, 23, 30 and May 7, and one lecture on May 14 on the Surgical Treatment of Malignant Diseases by Dr. Bainbridge. These lectures are to be illustrated by cases, models, colored plates, photographs, etc., and will be free to the medical profession.

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ORIGINAL COMMUNICATIONS.

MENTAL DEVIATES.*

BY FRANK C. RICHARDSON M.D.

Professor of Nervous Diseases, Boston University.

I might preface what I have to say by quoting John Taylor :---

“’Tis a mad world (my masters) and in sadness
I travail’d madly in these dayes of madness.”

The question of the insane has never been solved, although it has been with us a long time.

It is customary for the law and society to divide humanity into two groups, the group of reasonable beings and the group of those who have no reason; the group of those that do the locking up and the group of those who are locked up. The basis of differentiation between these two groups is not always clear. To the discriminating medical mind there would at times seem much truth in what Emily Dickinson says in one of her poems :

“Much madness is divinest sense
To a discerning eye;
Much sense the starkest madness.
’Tis the majority
In this, as all, prevails.
Assent, and you are sane;
Demur, you’re straightway dangerous,
And handled with a chain.”

* Read before the Convention on Mental Hygiene, Boston, April, 1913

It is so simple, as Michel Corday has made one of his characters say, "to put up a fence around an asylum and to announce 'On this side they are insane; and on that they are sane'."

In this ideally simple classification everything is easy and is so convenient for the exercise of justice that most magistrates adopt it, or rather, would like to impose it upon physicians. Yes or no? Sane or insane?

On the other hand, an increasing number of thinkers hold the theory that there are neither sane nor insane people; there are only people who are more or less sane. It all becomes a question of degree. Mankind is graded in a long continuous series, in which it is impossible to draw a boundary line between the insane and those who are not so. "All the world's a little queer, except thee and me,—and sometimes I think thee's a little queer," is a saying which is not infrequently brought to mind. This continuity, this lack of separation and sharp definition between a physiological state and a pathological state, is certainly much less crude and more scientific than the arbitrary division generally accepted.

There is no difference except that of degree between a dream and delusion. Everybody dreams more or less, and the delirious person is often only a dreamer who goes on with his dreams when he is wide awake.

Between calm, cold reason and a transport of passion, between originality and eccentricity, between nervousness and agitation, between a person who is slightly touched and one who is demented, there are all degrees of transition, and it is impossible to say where insanity begins. A sharp line of demarcation would be arbitrary and false, and the borderland is passed with startling ease. It all depends upon the power of rectification.

"A man corresponding to the ideal type of normal anatomy and physiology as well as perfect mentally does not really exist anywhere," says Héricourt. "On the other hand, we all of us show some defects, some anomalies and some weak points."

And as Michel Corday says, "the greatest mental misery is only an exaggeration of all these little miseries." "Wait," cries Parrot, "look around you on all your little company. Do you not believe that all your comrades are more or less cracked? Think of the slight knocks which would break their reason completely and make them totally insane. It is only a question of degree."

Realization of our susceptibility in this "mad age" to the easy transition from a true to a distorted rectification of our fancies is rather disquieting and we may say with Don Quixote, the "Knight of mad illusions":—

"Who has the right here, I ask you, to punish?

Who dares place himself as the judge of another,

Comparing his crimes and condemning his brother?
From the voice of what altar, the power of what throne
May a sinful man dare to condemn or condone?
What heart is so pure as to be worthy this trust,
What justice is God-like enough to be just?"

While we may not arrogate to ourselves the ability to determine the mental norm, it is within the province of those having a psychopathological knowledge of man to analyze his psychic functions as they would his motor and digestive functions and to determine, approximately at least, what in a given case constitutes abnormality.

I believe no one can go far with such analytical study without recognizing that between the sane-minded and entirely responsible on the one side and the entirely irresponsible insane on the other there lies a great region, a so-called borderland, peopled by individuals who have blemishes of various degrees and who in consequence have different degrees of responsibility.

Such individuals cannot properly be called degenerates because their unusual mentality may not involve depravity or retrogression implied by the term degeneracy. Neither should they be termed defective because rather than being deficient their mental endowment may transcend in excellence that of the average person. Yet their mental operations do not conform to the conventional idea of normal. Their reasoning faculty is erratic or their conclusions faulty because of false premises. In short, they present a mental deviation from what is generally considered a normal individual.

It is to these mental deviates, who can be treated neither as irresponsibly insane, nor as entirely rational and fully responsible beings, that I wish to call attention.

While the insane have their own place in the social order of things as it exists today, this is by no means true of the merely unbalanced, or, more technically, the mental deviates. Yet they are no less numerous and may be no less a hindrance. Everybody knows such people, but they have not yet been given a place in the social system. Moreover, they are as a rule misjudged. Some people treat them as poor unfortunate devils, or cranks, or fools, paying no attention to anything they say or do, and while regarding them as harmless, allowing them no merit for their good deeds. Others regard all eccentric and slightly unbalanced people as irresponsible patients to be at least shunned and perhaps shut up.

One exaggeration is as bad as another. On the one hand we cannot deny the high social merits of certain individuals of this class, and we must beware of depriving society of all unbalanced geniuses. On the other hand, the fact must be recognized that the unbalanced are sometimes harmful characters that we should be able to in some way deter from misdeeds.

In what we have termed the mental deviate the whole of the mental organism is not atrophied, degenerated or diseased. There are inequalities in the development of his various psychic senses. Certain of them are weakened, and certain others may be more active, and even more brilliant and render more service to society than other more weighty and better balanced brains which are considered more normal.

It was semi-insanity that Anatole France wished a little grain of for those he loved; and Dryden said:—

“Great wits are sure to madness near allied,
And thin partitions do their bounds divide.”

In short, we must all acknowledge that there are many to whom the aphorism “They are certainly cracked, but the crack lets in the light,” might apply.

History and literature as well as contemporary characters furnish countless examples of more or less serious defects in people of superior qualities.

Most fascinating and intensely interesting are the biographical anecdotes of men of genius which abound in expositions of most amazing temperamental vagaries of many of the world's famous characters.

Forexample, L. F. Lelut in a work entitled “Genius, Reason and Folly,” written in 1855, tells of Socrates, “the wisest man,” that he went into ecstasies which were almost cataleptic fits. At table, or in the streets of Athens, or in the camps he would suddenly stop short without apparent motive. At other times in the occasion of a sneeze, either by himself or one of his neighbors, he would act, or would not act, according to whether the sneeze had taken place on his right hand or on his left. Socrates thus lived during his whole life, without doubt, a pronounced psychopath, but none the less the exponent of reason, philosophy and virtue.

Pascal had a psychopathic temperament and for a long time was subject to hypochondriasis, hysterical palsies, hallucinations and ecstasies. From his earliest years he could not stand seeing water without falling into a perfect fit of passion. Notwithstanding these evident neuropathic tendencies his mathematical genius astounded the world.

Tolstoi belongs to the category of psychopaths who are termed “originals.” At eight years of age he was seized with an irresistible desire to fly in the air. This idea haunted him to such a degree that he decided to put it into practice. He shut himself up in his study room, climbed up to the window, made the movements for flying and jumped out. In his youth he never wanted to do anything that everybody else did, and he chose courses in the Oriental languages,

only because everybody else preferred the law. One of his aunts wrote to him: "You have always wanted to be taken for an original being; but your originality is nothing more than an excessive self-esteem." Tolstoi's many eccentricities have been much exploited, but his genius has never been questioned.

Jean Jacques Rousseau had a neuropathic heredity. His father occasionally had ideas which "apparently emanated from the moon." Jean Jacques himself was successively clock-maker, mountebank, music-master, painter and servant, and then followed the paths of medicine, music, theology and botany. He used to meditate bareheaded in the sun at midday. He believed himself to be first the subject of everybody's enthusiasm and then persecuted by the whole world.

Regis' conclusion to his very excellent study of Rousseau is so characteristic of this type of mental deviate that I venture to quote:—"At that time he seemed to me," says Regis, "not only to be a great writer, but an exquisitely tender nature, a being essentially good and gentle, whose moral weaknesses arose from morbidity rather than from vice, and who owed to his hyper-sensitiveness not only the essentials of his neurotic vagaries, but his very talent itself."

Alfred de Musset was restless, visionary and subject to attacks of hysteria. He had colored audition. He related in one of his letters that he had been extremely annoyed while driving with his family, to be obliged to enter into a discussion to prove that fa was yellow and sol red, and that a soprano voice was blonde and a contralto voice was brunette. He believed that these things went without saying. It is related that when he desired especial inspiration he would write with his feet in a tub of ice water.

Napoleon suffered from a habitual twitching of the right shoulder and of the lips. He believed in presentiments and horoscopes, and sought and accepted the prophesies of any sorcerer who promised him good fortune. He was in despair when he broke a mirror; he was in terror of Friday and the number thirteen.

It is a great temptation to continue indefinitely this recountal of the vagaries of genius. Much of interest might be told of Balzac, Swift, Poe, Erskine, Wilberforce, Coleridge, Darwin, Goethe, but enough has been said to demonstrate that mental deviates are very often intelligent,—so intelligent in fact, that they may be men of talent and even of genius who have made a marked difference in the progress of their century.

The fact, however, that certain mental deviates have a social value does not do away with the duties and rights of society towards these patients, either in the matter of taking care of them or of protecting itself against them.

All mental deviates are not geniuses, and even when they are, their unstable mental condition warrants special supervision. As Shakespeare has made Hamlet say:

“Madness in great ones must not unwatched go.”—

The mental deviate may be hurtful to his fellows, and some of them are even dangerous, either all through life or at least at certain periods of their morbid development. They may be pernicious without committing any illegal or reprehensible acts, merely by the influence of their example upon those about them. They are apt to be a source of anxiety to their family and of annoyance to their neighbors. They are particularly detrimental to society when they marry and establish a family by bearing and bringing up children.

Speaking of the pernicious mental deviate, Ranbinovitch has very aptly said:—“Under the appearance of a seeming but deceitful lucidity, they have a superficial but inconsistent conscience, and, above all a wax-like will which never succeeds in governing their desires and instincts. When these latter pursue them, like the fierce and cruel blood hounds of which Shakespeare speaks in one of his works, they are not able to resist them, and simply let themselves go, as they often tell us, without thinking of or without reflecting upon the consequences. Some insist that they know what is right and what is wrong, but they know it only theoretically. When they are possessed by tormenting desires which tempt them, their conscience is too weak to stop them, while their natural appetites, on the other hand, are voracious and insatiable.”

The above is certainly a graphic description and true to life, but the elements contained therein are in very many cases difficult to detect. The lucidity which even extreme mental deviates retain is most deceptive. They appear as rational in public as anybody else; as a result they are not only permitted to go about freely, but they enjoy all the rights of a free citizen; they can buy and sell, enter upon and take charge of business affairs, marry and bring up families, direct the education of their children, draw up wills and make bequests. In spite of their unbalanced condition they may talk logically and convincingly and answer correctly any questions which are put to them; to the average observer they have no appearance whatever of abnormal mentality, and often it is impossible to discover or guess their condition except in their family life. It is not only the laity who are deceived in such instances, but even the physician until he receives the secret confidences of family troubles and discovers that he has the tremendous responsibility of dealing with a psychoneurosis.

Fortunate for all concerned if the chosen adviser prove adequate to the situation. Personal, family, even social integrity may depend upon his judgment, tact and intelligence.

The general principles underlying the conduct of the mental deviation problem are chiefly prophylaxis, mental hygiene and education.

Prophylaxis is, of course, the greatest hope for social preservation against the ever increasing psychoneuroses. Such prophylaxis must start out with an exact knowledge of the numerous causes which may develop these maladies, and methods of pointing out and disseminating a knowledge of how to avoid these causes.

It should be realized that any one of these causes, no matter how powerful and redoubtable it may seem, is neither absolute nor inevitable.

Heredity itself, which has so long and so universally been recognized in this etiology, is not certain and constant in its results. The partisans who are most convinced of morbid heredity recognize that the transmission of pathological characteristics is not inevitable, and if it does take place the result is not necessarily fatal. Heredity more often needs a nervous contagion, or a bad moral or physical hygiene, or an infection, or intoxication, in order to bring about the disease.

The effort at discovery and elimination of the psychic causes of nervous and mental diseases by workers in those fields is no less important than that of the laboratory worker in his search for virulent micro-organisms and immunizing sera.

Whether or not nervous and mental diseases are on the increase, it must be admitted that the American people of today are deservedly looked upon as a nervous race.

The pernicious influences with which our business and social life abound are well recognized and considerable has been accomplished in the way of correction, but notwithstanding many evidences of an awakening realization of the necessity for conservation, under the impulsion of the modern necessity for luxuries, the strife for gold and place still wages fiercely. Business methods tug hard at the restraining bond of legitimacy, and social custom approaches perilously near the border line of license. Conscience may be stilled by the specious excuse of "universal custom," but the steadying, uplifting, ennobling influence of conscious rectitude is lost, and for this there can be no compensation.

Competition makes tense every power of mind and body, and the frequent combination of intellectual superiority with mental instability furnishes to the young and ambitious an alluring but dangerous example.

It is, therefore, necessary that the educational campaign against influences pernicious to nervous and mental integrity be steadily carried on, not only by organizations like that under the auspices of which we are convened, but also by individuals, both medical and lay.

It is not an exaggeration to say that the majority of nervous and mental disorders may be classified as induced diseases, that their causes are in most cases avoidable. It is the province of the scientist to understand these phenomena of cause and effect, but the value to mankind of such knowledge will be but small unless it is disseminated to the people, stripped of technical verbiage and clothed in such unmistakable and forceful terms that it must appeal to the intelligence, the sentiment and the self-interest of the laity.

The popular "tuberculosis classes" have done more to instruct the people in the fundamental laws of sanitation than any other influence of recent times. A similar campaign of education in mental hygiene is of equal necessity and would not only prevent much human misery but would be of incalculable economic value to the world. Such a campaign it is proposed to inaugurate in connection with the neurological branch of the new Robert Dawson Evans Department of Clinical Research and Preventive Medicine. In the auditorium provided for public education will be formed classes for instruction in the self-correction of errors of thinking as well as of living. Popular education along these lines is needed in every community and should be given by the physician who, by reason of his unparalleled intimacy with the vast range of human individuality, is best qualified for a work which too often in the past has been left to the innumerable parasites of the healer type, ranging from the medical outlaws who prey upon impressionable men and women to the more honest, but often over-zealous exponents of the various cults of pseudo-religious psychotherapy.

In our search for the causes of mental deviation we must not ignore the potent influences to be found in everyday life, and it is desired to offer the suggestion that, exclusive of true psychoses and organic neuroses, a considerable proportion of so-called psychoneurosis originates as an affectation and becomes a habit more or less fixed in character.

Even a casual observer must recognize the frequent mimetic origin of certain gestures, shrugs, poses or attitudes and gaits. Of equally common observation is the assumption of some peculiar manner of speech, the repetition of words and phrases, use of intonation, etc., which have appealed to individual taste and have been adopted as especially fitting some phase of business or social activity.

Every public conveyance is sure to contain its quota of "tiquers." The man who squirms his neck as the relic of an effort to obtain relief from a tight collar; or he who continually shrugs one shoulder as he once did to ease an ill-fitting coat; or the woman with the head-toss acquired in adjusting a wide hat no longer worn; or she who repeatedly contracts one corner of her mouth in spite of the vanished hope of producing a dimple.

These and a thousand other facial and bodily contortions, visible to anyone who observes, were, without doubt, originally purposive and therefore constitute so-called motor tics.

Whether the original purpose of these motor acts was to secure temporary comfort, or pleasurable sensation, or to imitate what was considered an "outward semblance of grace within" they are no longer volitional, but automatic; in short, they have become fixed habits.

Equally numerous are stereotyped habits of thought engendered in similar manner from causes as easily avoidable.

Of this type are the assumed mental attitudes, whether of impatience or tolerance, of fortitude or self-pity. To be sure these, and similar emotions, may be found within normal limits, but when their exhibition is untimely and illogical they become abnormal and by frequent repetition gradually acquire the pathological features of tenacity and irresistibility. The habitual air of martyrdom so common in hypochondriacs is rarely backed by the requisite philosophy to render it attractive; assumed originally as one of many products of their ingenuity in vindicating their weaknesses, it has become part of their life and personality.

The role played by imitation as an etiological factor in the production of these psychic states is no less important than it is in the case of motor obsession; indeed, the thought and the gesture being well-nigh inseparable, both classes of phenomena may arise from a common cause.

For example, the purposive imitation of an impressive gesture of impatience may, if frequently repeated, beget a corresponding mental state which becomes as habitual as the motor demonstration.

Nine times out of ten the man who lights cigarette after cigarette, taking a few whiffs, and throwing them aside scarce touched, does so not for the sake of the effect of the narcotic, but from force of habit originally contracted by imitation of some one in whom the practice was supposed to indicate tremendous nerve energy.

The feminine fear of a mouse arises less frequently from instinct than from conformity with tradition, and, doubtless, the habit would continue even though the sex adopted the fashion of bloomers.

As all habits are, to a greater or less extent, the products of education, it might be contended perhaps that the prevention and correction of those that are prejudicial might properly be left to the parent and the pedagogue. Such sources of possible relief cannot be relied upon to be productive of much good until the medical profession has succeeded in impressing upon the lay mind the potent influence for material good or evil of every human life with whom we come in contact.

This is an old theme often expounded from a moral and ethical standpoint, but from a medical standpoint much of importance to the physical and mental welfare of humanity is still left unsaid.

As has been said, between the integrity of the intellectual faculties and complete mental alienation there are infinite degrees of difference, but, speaking generally, it lies within the scope of man's faculties to determine, so far as motives are concerned, of what his normality should consist.

In every voluntary and deliberate act there is a judgment in which the individual compares and weighs, to some extent at least, the desire which he has to do a given thing and the duty which he has not to do it.

Horace Mann said that "for all that grows one former is worth a hundred reformers."

The formation of habits is as easy as their reformation is difficult. Were it possible to inculcate into the mind of the individual that his desire should be for a grade of normality most useful to the world and least harmful to himself and others, duty and desire would not so often conflict, and judgment would less frequently err in the selection of fitting models. The consummation of such a standard may seem idealistic, but it is confidently believed that an intelligent effort to bring to the minds of people a realization that the establishment and preservation of nervous and mental stability is dependent largely upon the acquisition of those habits which are healthful,—that it is not difficult to be the author of a habit of which one afterwards becomes a victim,—would do much to modify some of the causes of mental deviation.

Ruskin, with his usual perspicacity, has written: "Any interference which tends to reform and protect the health of the masses is viewed by them as unwarranted interference with their vested rights to inevitable disease and death." This statement applies as well to mental and moral health as to physical health. Standards of right and wrong vary greatly, and any attempt at altering them is apt to be looked upon as pharisaical, but when a man's physician demonstrates to him that some stereotyped thought or act is sure to have a pernicious effect upon the integrity of his brain or nerves, that man is very likely to pay respectful attention and to exercise whatever will power he may possess in an effort to escape the impending thralldom.

Prominent among influences calculated to facilitate the evolution of undesirable habits is environment, especially where children are concerned. Mimicry is strong in the child's nature, and bad habits are quickly contracted. Should he be tainted with a neurotic inheritance in addition, the development of some bad mental habit may result from the slenderest pretext.

We must put aside all illusions and confess that the present generation of youth, both boys and girls, presents abnormalities of nervous and mental development to an extent not known in former years. That the modern obsession by the demon of education is in part responsible for this there can be no doubt. It must be admitted by the most casual observer that the educational standard set for the youth of today cannot be successfully maintained by those of average intelligence except at the cost of undue mental effort. Under such stress, at the pubescent age, when the imitative faculty reaches its acme, it is inevitable that the youth more or less consciously reproduces and exaggerates the idiosyncrasies of teachers, fellow pupils, and home associates, and under the influence of the "juvenile serfdom" imposed by present educational methods it is not strange that various eccentricities become strongly entrenched.

Teachers are indifferent and parents are often deplorably indulgent. Their thoughtlessness or their ignorance permits the installation of obnoxious habits and fosters their growth. For the watchful discipline which should curb childish tricks and caprices there is unfortunately substituted a disastrous tolerance that only stimulates the development of habits more or less harmful according to their character.

The physician should appreciate these etiologic conditions and earnestly endeavor to, at least, improve them.

In a given case patient analysis will usually reveal the origin of the obsession. To accomplish this it is rarely necessary to resort to the tedious and complicated reaction tests or to hypnosis, or even to "hypnotical states of abstraction." These much lauded methods, by their complexity and their air of mystery, tend to confuse the patient and frequently produce results which are inaccurate and misleading.

Far more satisfactory results can be obtained by direct interrogation when the patient's intelligence is keenly alive to aid us in our inquiry the object of which is entirely within the power of average comprehension.

Having fixed the responsibility for the obsession it is not always easy to convince its victim of the possibility or even the desirability of removing it. Sometimes the mere interpretation of the symptoms together with explanation of its cause is sufficient to arouse a confident effort at self-correction. More often, repeated explanation, suggestion and persuasion are found to be necessary in order to successfully eradicate the deeply rooted sub-conscious complex.

When we seek to analyze the pathogeny of obsession and especially the obsession of an automatically recurring rhythm

(obsession of habit) we almost invariably find a constitutionally prepared pre-disposition which may be simply defined as a weakness of will. This faculty of the higher psychism it should be our constant aim to strengthen.

In proportion to our ability to promote will power and reasoning faculty, will our task be easy. If by reason of heredity, of youth, or of defective training, these two higher attributes be notably lacking, then self-help is not to be looked for, and rescue is well-nigh impossible. The obsessed of this type hug their habits closely to themselves, and, because of their deficient judgment, prefer the darkness of slavery rather than the light of emancipation.

Fortunately, however, the majority of cases are amenable, in some measure, to treatment. Realization of the character of the affection and the discovery and removal of the cause will often succeed in bringing about a surprising improvement, physically as well as mentally.

It is believed that one of the most important results of a general recognition and better understanding of the mental deviate would be a more liberal interpretation of mental responsibility leading to the establishment of new standards of incapacity and the devising of new means to safeguard against the many crimes which are due to folly rather than to depravity. Furthermore, there should result a radical change in the character of punishment visited upon these unfortunates when they have committed some illegal act.

While recognition of the so-called "criminal insane" has in many states led to special provision for their care in separate institutions, no discrimination has so far been made between ordinary criminals and those whose offenses result, not from insane delusions or maniacal outbursts, but from mental deviation.

The question may arise, "are not all criminals mental deviates?" This is not true according to the conception of the term as used in this paper. Many persons are criminals by nature and more are such by training in a criminal atmosphere, adopting crime as a means of livelihood, (and this not from ignorance or necessity, but from choice) and living in a world having its own classes and standards. Such persons constitute a type distinct from the delinquent mental deviate as I would classify him.

I refer to that large class of offenders whose chief characteristic is aboulia, or weakness of will, where the subject has not the mental or moral stamina to resist inclination or suggestion. "Drifting about like a ship without a rudder, fairly well if the winds be fair and the sea be calm, but dependent upon the elements for the character and the time of the final wreck." Or those whose delin-

quencies arise perhaps from mental and moral relaxation due to the harassing tire of hard and wearing life, or the pressure of a too complicated civilization, or through the use of alcohol or drugs,—the disequilibrated with distorted concepts, who have lacked the guidance necessary to keep them off the rocks of disaster. These unfortunate victims of a faulty mental equipment are neither criminal nor insane, yet society and the law decrees that they shall be considered either the one or the other and treated accordingly. Reform in the manner of dealing with these delinquent mental deviates is imperative and should be immediate and radical.

That there are individuals who are not insane and yet whose criminality is due to mental deviation there can be no doubt. It seems equally true that while such persons should not be granted an absurd impunity they should not be treated like ordinary criminals.

In pursuance of present custom he who through lack of judgment, or by reason of undue susceptibility to the influence of circumstance, breaks the law may be subjected to association with those of distinctly criminal instincts and habitual practice. Such a person may upon incarceration be entirely ignorant of criminal methods, but it does not need a long sentence for the acquirement of a liberal education in the technic of the grossest crimes as well as linguistic proficiency in the jargon of the under-world.

It is contended that it is the duty of the State to extend to the mental deviate guilty of crime the same judicial inquiry that is now made into the crime itself. If this contention is well based the injustice of passing sentence upon a convicted criminal without investigation of his personality and his past must be conceded. If it is found that the offence is the result of distinctly criminal mind and intent the proper disposition of the case would seem obvious. On the other hand should investigation show an absence of malice or criminal purpose, and that this offence has been the outcome of mental deviation, it would seem as manifestly unjust to force upon such an individual association with frankly criminal minds as it would be to thrust a mildly insane person into a ward devoted to raving maniacs. Under the influence of such association if he is not a criminal he is liable to become one, or if he escape this fate, constant brooding upon the disgrace he has brought upon himself and others, as well as the ignominy of consorting with the lower types of mind, inevitably tends to still further exaggerate his mental deviation as well as impair his physical health, until at his release he is simply one more human wreck for the community to care for and guard itself against.

If, however, such an individual could be placed in an environment conducive to mental and moral uplift, subject to intelligent

observation and study by those qualified for the work, principles of self-restraint, unselfishness, mutual consideration and general integrity might be inculcated and a human soul redeemed.

Is it impossible, or even impracticable, to establish what might be called a redemption colony where those who have transgressed through their misfortune of mental deviation, may be studied and treated as well as punished by detention, where by environment, education, admonition and persuasion, their weak characteristics may be strengthened and their superior endowments rendered available to the world's profit?

Such a differentiation and such a plan of procedure as has been proposed is not Utopian, and the attendant expense would be in nowise comparable to the enormous economic waste incident to present punitive measures whereby it not infrequently happens that instead of unfortunates being returned to the world fitted for the duties of good citizenship, a finished product of criminal education is turned out to prey upon society and evade the law by the aid of the knowledge obtained from experts.

While it is possible that public opinion is not yet moulded so as to bring about abruptly a radical departure from our present modes of legal enactment, it is confidently predicted that the time must soon come when the courts considering offences against the law will regard the criminal rather than the crime.

And now in closing I may say the chief object of my effort is to point out the responsibility which devolves upon society and the law to recognize a steadily increasing psychopathic tendency in the community, to search for and combat the causes thereof, by educating the laity in mental hygiene to use all knowledge and intelligence to protect society from the mental deviate and the mental deviate from himself and from society.

SYPHILIS AND THE LABORATORY.

BY W. H. WATTERS, M.D., Director of the Department of Pathology and Bacteriology, Evans Memorial for Clinical Research and Preventive Medicine, Boston, Mass.

During the past six months a considerable amount of special attention has been devoted to syphilis, its diagnosis and treatment, in the new Evans building of the Massachusetts Homœopathic Hospital in order to ascertain, as far as possible, by personal experience, the value and limitations of the more modern methods of diagnosis and treatment. Patients have been admitted suffering from the disease in its various stages and from its protean manifestations, the cases have been studied, treatment has been applied and the results noted.

Upon this work and observations elsewhere this general paper is based, as will be others to follow in the near future dealing more minutely with various details. In such a general paper two natural divisions are noted and will be followed. These are diagnosis and treatment.

Diagnosis.—It was only about eight years ago that Schaudinn reported the discovery of the spirochæta pallida, and with Hoffman, clearly demonstrated its etiologic relation to syphilis. Following shortly after came the report of the Wassermann reaction for the diagnosis of the disease by examination of the blood serum. Prior to 1905 the diagnosis of syphilis rested entirely upon a clinical basis. That this basis was sufficient in many cases is undoubted, but that it proved inadequate in many others cannot be gainsaid. Not a few cases of non-specific dermatitis were incorrectly labelled, while whole classes of certain diseases now recognized as definitely of syphilitic origin were passed unrecognized. At present, by combining the two new tests, actual demonstration of the causative organism and examination of the blood serum for the Wassermann reaction, it is probable that from ninety to ninety-five per cent of cases or even more can be correctly placed in their proper category as either syphilitic or non-syphilitic.

Demonstration of the spirochæta pallida.—This organism derives its name from its low refractive power and its inability to well retain the usual bacterial stains. In appearance it is a delicate spiral or cork-screw organism usually showing 10 to 40 distinct and rather sharp curves. Some of the smaller forms are less tortuous. In length it is about 4 to 10 micra, averaging about as long as the diameter of a blood disk. The width is about .5 micra. It is most satisfactorily examined while in its fresh and living state with the dark field illumination apparatus. By this means

the organisms can be seen moving in an oscillatory manner, appearing as silver spirals against a black background.

The spirochætes are best found in the chancres or the moist papules, the material for examination being obtained by lightly curetting the lesion until a small amount of serum is obtained. This is then examined immediately or films are made that can be stained later.

Until recently no one has been able to cultivate the organisms under artificial conditions, but finally Noguchi, after repeated failures, has elaborated a method whereby in some instances his efforts have proven successful. In a recent conversation with the writer he expressed himself as surprised at the percentage of success in his earlier studies, as even now the failures much predominate. Cultural tests are not therefore practicable from the standpoint of diagnosis, at least at present.

The Wassermann reaction.—Much superior to the above in point of value in the diagnosis of syphilis, particularly at or after the secondary stage, is the Wassermann reaction. This reaction consists in a series of steps by means of which the blood serum of the patient is brought into contact with a number of other animal products. It is too complex to be considered at present in detail either in its original form or in any of the various modifications. It is hoped to take up this technical phase at a later date. Suffice it to say that there are several degrees of positiveness to this reaction. The writer originally classified his results as negative, feebly positive, mildly positive, positive, and strongly positive. More recently he has changed to the more commonly used division into negative and positive, subdividing the latter according to strength of reaction in +, ++, +++ and ++++. From the standpoint of diagnosis, the "feebly positive" and "mild positive" or the later "+" and "++" should be looked upon with caution unless they correspond to the history of the case. In other words, a positive diagnosis of syphilis from the blood alone in such a case might lead one at times into error, as the reaction is more or less atypical.

With a "positive" or "strong positive" (or "+++ and ++++"), one can, in this climate, state with considerable certainty that a condition of syphilis exists, even though the symptoms may be rather indefinite.

A negative reaction will not definitely exclude the disease, although such a result has more weight in some stages than in others.

Thus the reaction may not appear for several weeks after the primary inoculation. A certain length of time always intervenes between the infection and the appearance of the reaction, this being very variable, dependent upon the formation of antibodies,

Allowing for a fair average interval after infection the reaction is positive in from 85 to 95 per cent of primary cases, from 90 to 95 per cent of secondary ones, from 75 to 90 per cent of tertiary ones, from 50 to 75 per cent of latent ones, and from 50 to 60 per cent in tabes.

A single negative test in a clinically suspicious case should not be considered conclusive, particularly if active medication has been followed. In the latter contingency, there should be complete abstinence from medication, particularly mercury, for at least two weeks.

It will be seen, therefore, that several factors must be taken into consideration in order to properly interpret all the various forms of reaction, and particularly those marked “—,” “+” and “++.” It will also be noted that of the three classic stages of the disease the third is the one yielding the lowest percentage of positives. For the purpose of obviating this difficulty Noguchi has devised a cutaneous test for syphilis, analagous to the cutaneous test for tuberculosis. This is performed by the introduction into the skin itself rather than sub-cutaneously of an extract made from the bodies of the syphilitic organisms. The reaction consists in changes not unlike the well-known Von Pirquet test for tuberculosis, an area of redness, induration and papule appearing within a period of time varying from two or three days to two or three weeks. Sometimes this progresses to pustulation. A more detailed description of the entire subject will be given at a later time. The reaction is not particularly valuable in the primary stage, but is more so in the secondary. It is claimed that its principal value is to be found in the tertiary stage of the disease and in the latent and hereditary cases. It is also claimed that a negative Luetin test, as this is called, is of more value as a means of definitely ascertaining whether the disease has been entirely eradicated by treatment or not, than is the Wassermann. The subject is now under investigation, and more will doubtless be learned in the near future concerning its real value.

It may at present be advantageous to state briefly the outlook from the standpoint of treatment. For years past the routine treatment has been mercury or iodides or a combination of both. Not very many years ago Ehrlich introduced his Salvarsan or “606” as it is often called. This was at first considered to be an absolute cure for the disease, a single treatment being all that was required. It was soon ascertained, however, that the ideal thus supposed to have been reached had not been so satisfactorily attained as was at first assumed. Repeated injections of the drug at varying intervals were recommended by different workers and an increasing degree of success was followed by this repetition. The preferable

method of using Salvarsan was soon found to be by means of intravenous procedure. Many unpleasant results, usually temporary in nature, were noted after the drug had been administered. In order to obviate this feature Erhlich in pursuing his studies further, introduced a modified form of the preparation to which the name of Neo-Salvarsan was given. This at the present time is largely supplanting the older preparation. It has a number of advantages, among which may be mentioned rapid solubility in distilled water, complete obviation of the need of obtaining the exact reaction, whether alkaline, acid or neutral, and elimination of a large proportion of the unpleasant effects upon the patient.

This later preparation has been given by the writer in more than one hundred instances with decidedly gratifying results over those reported after the use of Salvarsan. From the standpoint of treatment the plan now adopted is to administer the drug intravenously three successive times at intervals of from five to seven days, following it by material doses of mercury, preferable in the form of protoiodide. The patient should be kept in bed and quiet from twelve to fifteen hours subsequent to each treatment, should be put upon a limited diet without solids during that treatment as well as for a few hours preceding it, and care should be taken that proper elimination, particularly intestinal, be provided for. The mercury should be continued for a period of about two months and should then be discontinued for two or three weeks, at the end of which time the blood should be examined for the Wassermann reaction. If it is examined during the course of mercurial treatment it will frequently show negative results, presumably due to the effect of the mercury itself upon the blood. At the time of this blood test it should be noted whether the reaction is as strong or weaker than it was at first. In this way, some guidance is obtained for further treatment. If it should be negative at this time the mercury should be continued for a period of months after which another blood examination may be made. The treatment in the light of our present knowledge should be continued for one or two years, and in some instances it may be found necessary to make further repetition of the Neo-Salvarsan administration. The entire subject is as yet comparatively new, and the interval between the introduction of the drug and the present date is as yet too recent to speak with certainty concerning the ultimate results. It does seem safe, however, to state that by using Neo-Salvarsan combined with the mercurial treatment better results can be obtained and a larger percentage of cures will follow than by using either alone.

It is hoped to follow this preliminary and general paper in the near future by others that will deal in more detail with certain definite aspects of the condition.

A CONTRIBUTION TO THE STUDY OF TUBAL, OVARIAN AND TUBO-OVARIAN HERNIAS.

BY AIME PAUL HEINECK, M. D., Surgeon to
the Cook County Hospital, Chicago.

(Continued from April)

The only ventral hernia of the uterine appendages which we could find is a tubo-ovarian hernia in an abdominal scar resulting from the opening and prolonged drainage, ten years previously, of an appendiceal abscess. The scar was about six inches in length. Cullen, to cure this case, resected the entire cicatrix, loosened the adhesions of the omentum to the ovary; then removed the herniated ovary and hydro-salpinx and followed this by closure of the abdominal wound without drainage. A satisfactory recovery was obtained. The sac was incomplete for a considerable distance; the ovary lay directly beneath the skin.

GLUTEAL, SCIATIC OR ISCHIADIC HERNIAS.

This is a very uncommon condition; in the medical literature of the last one hundred and fifty years, only twenty-three cases are recorded (E. Koeppl). This class of hernias escape from the abdominal cavity by way of either the greater or the lesser sacro-sciatic foramen. There are three varieties, the supra-pyiformis, the infra-pyiformis and the spine-tuberosa. These hernias may be congenital or acquired, may occur on either side of the body, and are subject to all the complications of hernia in general. Thirteen of the cases on record were observed in women. Schilbach's case is the only one on record making its exit through the lesser sacro-sciatic foramen. The diagnosis was first made at the autopsy table. During life, there had been genital hemorrhage and symptoms of ileus. At the post-mortem examination, the ovary was found in the hernial sac, the tube and the broad ligament being caught in the hernial ring.

We found only two cases of ischiadic hernia of the uterine appendages. Both were acquired hernias of the right tube and ovary, occurring in multiparous patients. Both were subjected to operation and recovered.

Woelfler's case is interesting in that it was successfully subjected to an operation for radical cure. The hernia, an infra-pyiformis one, emerged like all others of its type along the lower border of the pyiformis muscle in close relation to the internal pudic, inferior gluteal and sciatic nerves and vessels. For the previous two years, the patient had had attacks of pain radiating along the course of the sciatic nerve, and abdominal suffering

associated with nausea and, at times, vomiting. In the right gluteal region, there could be palpated below the muscles, a globular, fluctuating, fist-sized, non-reducible swelling from which, at one time, there was removed by aspiration fifty cubic centimeters, and, at another time, five hundred cubic centimeters of dark reddish fluid containing much albumen, red blood corpuscles and leucintyrosin crystals.

The following operation was performed:—An eight centimeter long incision, parallel to the course of the fibres of the gluteus maximus, was made over the summit of the hernial swelling. The muscle fibres were separated; the hernial sac exposed, isolated and opened. It contained the ovary and the end of the tube. The sac contents were ablated; the resulting stump reduced in the abdominal cavity. The sac was then ligated and cut off; after which, the operator closed the hernial orifice by approximating the pyri-formis muscle to the lesser sacro-sciatic ligament.

OBTURATOR HERNIAS.

In obturator hernias, the herniated viscus or viscera always escape from the abdominal cavity by way of the obturator or sub-pubic canal.

These hernias, though less infrequent than ischiadic hernias, are nevertheless uncommon; not more than two hundred cases are recorded in the medical literature.

They are usually small; may be unilateral or bilateral (are more frequent on the right side); may co-exist with hernias of a different type. They may be reducible, irreducible or strangulated.

Piqué and Poirier recognize three main anatomical varieties of obturator hernia. In the first variety, the most common, the hernia follows the entire course of the obturator canal, appearing as a swelling in front of the external orifice of this canal. In the second variety the hernia escapes from the abdominal cavity through the pelvic orifice of the sub-pubic canal, but following the course of the inferior division of the obturator nerve, does not traverse the canal's entire length, and makes its exit by passing between the superior and middle bundles of the obturator externus muscle. In the third variety, the hernial protrusion also enters the pelvic orifice of the obturator canal, but becomes lodged between the obturator membrane and the obturator externus muscle.

Objective symptoms are frequently absent. When a swelling is visible and palpable, it is usually of small volume and is located in the most internal portion of Scarpa's triangle, somewhat resembling a femoral protrusion. It is, however, non-pediculated and does not extend in the direction of the crural canal. In suspected cases, one should always determine whether there is increased pain

when the obturator externus is put under tension-abduction and rotation inward of the thigh.

Vaginal examination is important. The internal orifice of the sub-pubic canal is accessible to the vaginal hand.

Two routes are advised for the treatment of obturator hernias; the abdominal route and the obturator route. In the obturator route, the following steps are employed:

1. An incision eight centimeters long is made about three and a half centimeters internal and parallel to the femoral artery.
2. Separate with a grooved sound the internal border of the pectineus muscle from the outer border of the adductor brevis and adductor longus muscles.
3. If necessary, divide a few of the fibres of the pectineus muscle close to their insertion on the pubic bone, so as to facilitate digital exploration of the obturator region.
4. Expose, isolate and open sac; determine its relation to the obturator nerve and vessels, after which nick constricting point if hernia be strangulated and reduce or ablate hernial contents.
5. Closure of wound.

FEMORAL HERNIAS.

Hernias which in their escape from the abdominal cavity pass between Poupert's ligament and the horizontal ramus of the pubis and sooner or later protrude in Scarpa's triangle, are called femoral hernias. Common femoral hernias escape from the abdomen through an orifice bounded anteriorly by the most internal portion of Poupert's ligament; posteriorly, by the horizontal ramus of the pubis; externally, by the femoral vein and the sheath of the femoral vessels; internally, by Gimbernat's ligament. They descend along the most internal compartment of the femoral sheath and ultimately emerge through the saphenous opening. These hernias are contiguous to the femoral vein which always lies external, and they carry along in their progress through the crural canal a mass of condensed areolar tissue, known as the septum crurale. They show a greater tendency to expand upward than downward because the cribriform fascia is less adherent to the upper margin of the saphenous opening.

The small number (sixteen cases) of femoral hernias which we were able to collect, as compared to inguinal hernias, confirms the now accepted but previously disputed fact that, in the female, inguinal hernias are of more frequent occurrence than femoral hernias. All these femoral hernias were of the acquired type; it is known that congenital femoral hernias are pathological rarities. A femoral hernia is essentially a hernia of adult life. Either side of the body may be involved. The tendency to double femoral hernia is less than that to double inguinal hernia. All femoral hernias irre-

spective of contents or of sex of bearer are of more frequent occurrence on the right side (Wernher, Macready, Berger).

The tubal hernias contained the oviduct either in part or in its entirety, alone or associated with intestine, omentum or both. The presence of the appendix vermiformis in a femoral hernial sac is rare. Coley states that in 2200 cases of hernia operated upon from 1890 to March 1908 in the Hospital for Ruptured and Crippled, the appendix vermiformis alone was found in ten, the cecum and appendix together in seven. In not a single one of Coley's cases was the appendix found in a femoral hernial sac (W. B. Coley, *Keen's Surgery*, 1908, i. p. 78.)

These hernias may be reducible, irreducible or strangulated. Strangulation can occur at any one of the following sites:—

- (a). Internal femoral ring.
- (b). Margin of Gimbernat's ligament.
- (c). Margin of the saphenous opening.
- (d). Meshes of the cribriform fascia.
- (e). Irregularities in the hernial sac.

The following operations were performed:—

- (a). Amputation of fimbriated end of tube.
- (b). Incision of hernial swelling and creation of an artificial tube.
- (c). Ablation of tube.
- (d). Ablation of ovary.
- (e). Ablation of tube and ovary.
- (f). Excision of hernial sac and return of tube to abdominal cavity.
- (g). Removed tube and ovary and resected gangrenous intestine.

Truss treatment of femoral hernia is notoriously unsatisfactory and is considered as being only palliative and not at all curative. In femoral hernias, on account of motions of thigh, it is difficult to apply, and especially to maintain pad-pressure in a position conducive to closure of the hernial openings.

Coley, whose clinical experience with the treatment and cure of hernia is greater than that of any other living American surgeon, supplements to high ligation and ablation of the hernial sac with the thorough removal of all extra-peritoneal fat the following step. He introduces a purse-string suture of kangaroo tendon in such a way as to bring the floor of the femoral canal in contact with the roof.

INGUINAL HERNIAS.

Hernias which escape from the abdominal cavity, either through the internal or external inguinal fossae, and which emerge upon the surface when complete by way of the external abdominal ring,

are known as inguinal hernias. Of all hernias, they are the ones most frequently noted in the female.

Inguinal hernias of the uterine adnexae may be complete or incomplete. In the incomplete form, the hernia has not escaped beyond the external abdominal ring. Inguinal hernias may be right-sided or left-sided. They may be unilateral or bilateral. As previously stated, all the bilateral hernias of the uterine adnexae, tubal, ovarian or tubo-ovarian, recorded in the medical literature of the last twenty years were of the inguinal variety. They may be reducible or irreducible. They may be strangulated or the seat of torsion. This last accident has only been observed in congenital inguinal hernias, the contents of which were irreducible.

Of the uncommon types of inguinal hernias only several could be found. There was one direct hernia. This, especially in the female, is an uncommon form. The main characteristics of direct hernias are that the protrusion takes place by way of the internal inguinal fossa, that the neck of the sac is always to the inner side of the deep epigastric vessels and, in the female, that the round ligament is distinct from and to the outer side of the sac. We found three interstitial or intra-parietal hernias. All the other inguinal hernias were of the ordinary type, that is, external or indirect or oblique. An ordinary or oblique inguinal hernia in its course through the inguinal canal (narrower in the female than in the male) is accompanied by the round ligament; as it escapes from the external abdominal ring, it appears in the upper portion of the labium majus, in which it descends to a greater or less extent.

Inguinal hernias vary in size and in form. They may be almond-shaped, ovoid, sausage-shaped, pear-shaped, pyriform, globular or other forms too numerous to mention.

SYMPTOMS AND DIAGNOSIS.

Hernias of the uterine appendages present all the symptoms common to hernias in general. In some hernias of slow and gradual development, owing to the absence of symptoms, not uncommonly the patient is ignorant that he has a rupture. Some cases do not give rise to any symptoms; some give rise to very slight disturbances; many remain painless until the appearance of the menses and thus are first recognized at about the age of puberty. Pain may be absent during the entire course of a slowly developing hernia. In other cases, the hernial swelling may be so small as to be completely overlooked by a careless observer. Inspection, palpation and percussion of the hernial regions are routine steps in the examination. After having demonstrated the presence of a hernia, the operator has to determine the type of hernia present and the nature of its contents. The existence of other malformation is to

be ascertained as they may be of such a nature as to partially justify the sacrifice of healthy herniated organs.

Clinicians usually do not experience any difficulty in diagnosing a hernia; at times, they are in doubt as to the type of the hernia present in the case at hand. In fatty individuals, the exact position of the hernial neck is difficult to determine. Obturator hernias are rare, and are found internal to the femoral opening; in femoral hernias, the swelling is found to be almost if not entirely below a line extending from the anterior superior iliac spine to the pubic spine.

In the female, the tumor-mass caused by a complete oblique inguinal hernia, even of a moderate size, will cause a swelling extending into the labium majus.

In some hernias of the uterine appendages, the patients complain of a feeling of weight and discomfort. The symptom "tenderness on pressure" we find frequently reported. Some of these hernias are painless, some are so painful as to interfere very much with the patients' well-being. Impulse on coughing is not infrequently noted. It is not, however, a constant symptom present; it may be absent. Menstrual disturbances are recorded.

If an oblique inguinal hernia be incomplete, that is, if it does not extend beyond the inguinal canal, it may be mistakenly diagnosed tumor of the round ligament, bubo, epiplocele or encysted hydrocele of the canal of Nuck. In tumors of the round ligament, epiploceles, encysted hydroceles of the canal of Nuck, a mistake in diagnosis is not very significant, as in all these conditions one must, to obtain cure, resort to operative treatment and to exposure of the inguinal canal.

TREATMENT.

Six of the reported cases were either autopsy-table or dissecting-room discoveries. In some cases, the nature of the operative intervention is not stated. In the other cases, the operators, after performing either a laparotomy or a herniotomy, disposed of the herniated organs either by reducing or removing them entirely or by removing a part and reducing the remainder. In some cases, the reduction of the hernial contents necessitated a preliminary division or a dilatation of the hernial rings, internal or external.

In two hundred and thirteen operated cases the results are stated, eleven deaths; two hundred and two recoveries.

We advise that all hernias of the uterine appendages, irrespective of anatomical site or of size or of age of bearer, be subjected to an operation for radical cure:—

- (a). If the hernia be irreducible.
- (b). If the hernia be strangulated.

- (c). If the pedicle of the herniated organ or organs be the seat of torsion.

After the age of two years:—

- (a). If the hernia be bilateral.
(b). If other hernias be co-existent.
(c). When hernia cannot be painlessly, completely and permanently kept reduced.
(d). If organs other than the uterine appendages be also present in the same hernial sac.
(e). If the wearing of a hernial truss causes pain or aggravates the symptoms.
(f). If the patient has to be subjected to ether or chloroform anesthesia for the performance of an operation of election, double advantage can be taken of this anesthesia, and an operation for the radical cure of the hernia performed.
(g). If patient is exposed to pregnancy.

Operation in uncomplicated hernias of the uterine adnexae is no more dangerous than the operation for the radical cure of other hernias. It has practically no mortality. Infants bear hernia operations remarkably well. Broca performed four hundred and fifty operations in children under fifteen years of age, with but one death.

The operation which has given the most universal satisfaction in the treatment of inguinal hernias is that devised by Bassini. It has the advantages of safety, simplicity and efficacy.

We advise operators to observe in their operations for inguinal hernia, the following suggestions:—

1. Always wear and have the assistants wear rubber gloves.
2. All ligatures and irremovable buried sutures should be of absorbable material. The purpose of sutures is to keep divided tissues in apposition until organic union has been effected. After this has been accomplished, sutures if not absorbed or not removed may originate irritation, may act as predisposants to inflammation, to sinus formation. We strongly condemn the use of silk for vessel ligation or for buried sutures.
3. Always divide the aponeurosis of the external oblique muscle to an extent sufficient to give a good exposure of the inguinal canal, and of its contents. In the female, the inguinal canal in its normal state and after a hernia operation, in its restored state, should, outside of a few arterioles and nerve filaments, contain nothing but the round ligament, a structure much smaller than the spermatic cord, and the latter if not the seat of disease should never be sacrificed.
4. Always make a high and careful dissection of the hernial

sac from the surrounding tissues and especially from the round ligament to which it is often quite intimately adherent.

5. Always open the sac and determine by direct inspection and palpation the nature and state of the hernial contents.

6. After reduction or ablation of the hernial contents the sac is to be transfixed and ligated as high as possible. Sac is then removed flush with the peritoneal cavity. So as to prevent the occurrence of peritoneal bulging at the internal ring, we are in the habit of anchoring or fixing the stump of the sac about two centimeters above this point.

7. Never sacrifice the round ligament; it is harmful to the statics of the uterus. Never transplant the round ligament; it is unnecessary. The round ligament is left undisturbed at the bottom of the wound, emerging at the lower angle of the latter; the internal oblique muscle is sutured to the shelving portion of Poupart's ligament; the divided margins of the external oblique aponeurosis are sutured and the skin incision closed. No drainage. After operation, no truss should be worn; a truss does not support the scar, it weakens it.

8. In the female, the internal and external abdominal rings can be closed without detriment to the patient. In direct inguinal hernias, ligation of the deep epigastric artery is at times unavoidable.

In hernias of the uterine appendages, the operator must decide as to whether the hernial contents are to be returned to the abdominal cavity or whether they are to be removed.

As to the herniated tube, ovary or tube and ovary, when normal, it goes without saying that they should be returned, irrespective of patient's age; if adherent to sac-wall or to some hernial content the adhesions are to be loosened or divided, and if the organ or organs do not show marked structural impairment, they are to be reduced. These organs, when herniated, should be removed, if they be the seat of:—

- (b). Benign neoplastic disease.
- (a). Unavoidable or actual gangrene.
- (c). Malignant neoplastic disease.
- (d). Voluminous cyst-formation.
- (e). Malformation or incomplete development.
- (f). Suppurative inflammation.
- (g). Hematoma or interstitial ovarian hemorrhage.
- (h). Seat of tubal gestation previous or subsequent to rupture of fetal sac.
- (i). Tuberculosis limited to or extending beyond the herniated organ.
- (j). Distortion beyond recognition.
- (k). Such pathological changes as prevent function.

SUMMARY.

1. The Fallopian tube, the ovary or the tube and ovary, in part or in their entirety, may be herniated.

2. The herniated tube, ovary or tube and ovary may be the sole content of the hernial sac or there may be present as associated hernial contents one or two or more of the following structures or organs:—Meckel's diverticulum, appendix vermiformis, omentum, urinary bladder, intestine (small or large), uterus.

3. Tubal, ovarian and tubo-ovarian hernias are congenital or acquired, unilateral or bilateral; exist alone or in association with one or more other hernias of the same or of dissimilar anatomical types, of the same or of dissimilar clinical characteristics.

4. These hernias, in a small proportion of cases, coexist with malformations, underdevelopment or absence of other internal genitalia or of some external genitalia:—Imperforate vagina, absence of vagina, atresia of tube, unilateral absence of tube, of ovary or of tube and ovary, absence of cervix uteri, rudimentary uterus, absence of uterus, etc.

5. In individuals having a hernia of a tube, an ovary or of a tube and ovary, pathological states of other internal genitalia or of some external genitalia may be present:—vaginitis, ovarian cystoma, uterine fibroid, uterine prolapse and other uterine displacements, etc.

6. These hernias may coexist with pathological states of organs other than the internal or external genitalia:—multiple stenosis of intestines, hydronephrosis, etc.; these co-existing pathological states have no relation of cause or effect to the hernial infirmity.

7. Congenital or acquired hernias of the tube, ovary or tube and ovary, may develop at any period of life. These hernias have been observed in nulliparae, in primiparae and in multiparae. No age is exempt. No race is immune.

8. According to their anatomical site, hernias of the uterine appendages are designated as post-operative or ventral, gluteal, sciatic or ischiatic, obturator, femoral and inguinal.

9. The tube, the ovary or the tube and ovary may be present alone or in association with other organs in the sac of any variety of gluteal, obturator, femoral or inguinal hernias.

10. Clinically, these hernias are reducible, irreducible, non-inflamed, inflamed, strangulated or their pedicle may be the seat of torsion.

11. Torsion of the pedicle of a herniated ovary or of a tube and ovary, an accident peculiar to, and not infrequent in, hernias of the uterine appendages, gives the same clinical symptoms and determines the same anatomical changes in the herniated organs as are observed in the strangulation of hernial contents at one or another or more points.

12. We were able to collect eight times as many hernias of the inguinal type as of all the other hernial types put together.

13. Tubal, ovarian and tubo-ovarian inguinal hernias are recent, old or recurrent; are direct, interstitial or intra-parietal, indirect or oblique. If indirect or oblique, they are either complete or incomplete. A few sliding hernias are on record.

14. All the bilateral tubal, ovarian or tubo-ovarian hernias recorded in the medical literature of the last twenty years were of the inguinal variety. In bilateral hernias, both hernias may or may not show the same degree of development; they may have appeared simultaneously or one may have appeared a shorter or longer time before the other. They may show similar or dissimilar clinical characteristics. When bilateral, one hernia may be irreducible and the other reducible.

15. All the hernias in which the complication "torsion of the pedicle" occurred were irreducible congenital inguinal hernias.

16. All the femoral tubal, ovarian or tubo-ovarian hernias recorded in the medical literature of the last twenty years were of the acquired type and appeared in advanced adult life. "Femoral hernia is essentially a hernia of adult life."

17. Hernias of the uterine appendages, in the absence of anomalies of the other internal genitalia or of the external genitalia, do not prevent conception, do not interfere with gestation, nor unfavorably influence parturition. Pregnancy can occur previous to, during and subsequent to the existence of hernias of this nature.

18. The etiology of hernias of the uterine appendages is that of hernia in general. As main factors should be cited:—all conditions that weaken the abdominal wall, all conditions that increase the intra-abdominal pressure and all conditions that increase the mobility of the uterine adnexae. Heredity, pregnancy and the partial or complete persistence of the canal of Nuck are the most important causes.

19. The herniated organ or organs may be free from all degenerative changes.

20. The herniated organ or organs may be bound to the sac-wall or to each other; may be the seat of congestion, gangrene, hemorrhage, inflammation, suppuration, tuberculosis (primary or secondary), cystic and neoplastic disease (benign or malignant).

21. The herniated organ may be the seat of gestation.

22. The hernial sac and the herniated adnexa or adnexae may be the seat of an inflammation, suppuration or other in character, which in progressing by continuity of surface has extended upward from the vagina giving us the following anatomical picture:—Vaginitis, endocervicitis, endometritis, salpingitis or pyosalpinx, ovaritis and saccular peritonitis.

23. The hernial sac and the herniated contents may be the seat of an inflammation, suppurative or other in character, which has reached the tube and ovary by way of the parametrial and parasalpingeal connective tissue.

24. Pathological processes originating in the hernial contents may by extension by contiguity of tissue involve the sac and its overlying tissues.

25. The hernial sac and the herniated tube, ovary or tube and ovary can become the seat of pathological processes secondary to disease of the associated hernial contents. Epiploitis, appendicitis, gangrene gut, etc., infection spreading by contiguity of surfaces.

26. The herniated tube, ovary or tube and ovary and the associated hernial contents may be free of disease or the uterine adnexae may be normal and pathological changes be present in the associated hernial contents:—appendicitis, gangrenous gut, epiploitis, etc. The associated hernial contents may be normal and the herniated uterine adnexae be the seat of morbid changes.

27. It is at times difficult, at times impossible, to state with absolute precision whether the anatomical changes present in the herniated organ or organs developed previous to or subsequent to the displacement of the tube, ovary or tube and ovary into the hernial sac.

28. Truss-treatment for hernias of the uterine appendages is not curative, is often productive of discomfort and interferes with the nutrition and development of the herniated tube or ovary.

29. Women who suffer from any form of hernia should be carefully watched before, during and after their confinement so as to prevent or rather minimize any undue strain upon weak regions of the abdominal wall. These women, at the close of lactation or towards the end of the first year following their confinement, should in the absence of contraindications be subjected to an operation for radical cure of the hernia.

30. In the female, all hernias irrespective of anatomical site, of clinical condition or of nature of contents should, in the absence of a constitutional state contraindicating operations of election, be subjected to an operation for radical cure.

31. Clinical conditions so closely simulating hernias of the uterine appendages that a positive diagnosis without operation appears impossible, should be subjected to operative treatment. Only benefit can be derived from adherence to this rule. A diagnosis is established and a cure is effected.

32. In these hernias as in all other hernias, the ideal time for operation is previous to the development of degenerative or other pathological conditions in the herniated organ or organs and previous to the occurrence of any of the various complications incident to hernias.

33. The mortality of operations for the radical cure of hernias, if performed at an opportune time and by a rapid operator competently assisted is nil.

34. To be effective, operations for radical cure of hernias must well fulfill two essentials:—the suppression of the sac and the strengthening of the area through which the hernia has escaped.

35. In all herniotomies, the sac should be incised and the hernial contents examined.

36. In the female, the inguinal rings are comparatively small. They can, without inconvenience to the patient, be closed.

37. The herniated normal tube or ovary should never be sacrificed. These organs have an important role and in the absence of marked structural impairment should be returned to the abdominal cavity.

38. The herniated abnormal tube, abnormal ovary or abnormal tube and ovary should be removed if their return to the abdominal cavity is associated with peril, immediate or remote, to the patient or if these organs are so altered anatomically as to be functionally worthless. In sacrificing tissues or organs, the surgeon must be economical.

39. Until we are better informed as to the frequency and nature of true and false hermaphroditism, removed herniated uterine adnexae not having a distinctive structure should be subjected to a microscopical examination. This will avoid mistaking testicular for ovarian tissue and vice versa.

40. In the treatment of strangulated sciatic or gluteal, obturator and femoral hernias of the uterine appendages in which the hernial sac also contains gangrenous gut, a double operation is almost always indicated: a laparotomy for the repair of the intestinal lesions and a herniotomy for the radical cure of the hernia.

Health Talks at the Evans Memorial.

In his lecture at the Evans Memorial, March 25, on "Flies and Mosquitoes and their Relation to Disease," Dr. Watters showed how diseases are transmitted by these insects, and why and how war should be waged against them. In this connection he spoke particularly of malaria and yellow fever. His talk was very well illustrated by motion pictures showing the habits of flies and mosquitoes, their method of spreading disease and the means employed in exterminating them.

Dr. F. B. Percy, in his lecture on "Sleep and its Disorders," April 1, discussed the question of what sleep really is, and why it is we need to sleep. During the course of his talk he gave much practical advice concerning how to sleep—what sort of room and bed is best—when to sleep, and how much sleep is necessary. This, he said, varies with the age, the sex, occupation and race of the individual, and with the climate of the country.

The subject of Dr. Wesley T. Lee's talk, April 15, was "Clean Milk and Dirty Milk." Dr. Lee spoke of the importance of obtaining pure milk and of the great danger of transmitting disease by means of the disease germs present in milk. It should be most carefully handled, both by the producer and by the dealer, and there should be expert men to inspect it all along its route until it reaches the consumer.

CLINICAL DEPARTMENT.

CONDUCTED BY A. H. RING M.D.

Case 4—D. Diagnosis: Manic Depressive Insanity (manic phase).

This patient did not present a typical symptom-complex of the manic phase, yet from the first there was enough on which to make a diagnosis. She had been a bright, normal young woman, though frail and of neurotic temperament. Dementia precox might have been thought of, especially the paranoid form, as there was a suggestion of persecutory ideas and some euphoria, but her history was not that of a pre-dementia precox soil. She had been able to take a good training in literature and music; the continuity, rhythm and usefulness of her life was evidence of mental poise within normal limits. She came of good family without ascertainable mental defects and was from the eugenics point of view, a "dominant," having brown eyes. Dr. Davenport and others have pointed out that when regressives (blue eyed, light haired persons) develop mental disease, it is more apt to be of a deteriorating form, while if dominants (brown eyed, dark haired persons) do so, it is usually of the manic or depressive type, tending to a degree of intellectual recovery.

This patient was closely housed with a beloved though very melancholy mother, whom she knew to be suffering from a fatal disease. Her only brother, upon whom she leaned, was about to leave the home. This was a burden too great to bear, and she broke under the physical and emotional strain.

To repeat Diefendorf's definition, "the chief symptoms usually appearing in the manic phase are: psychomotor excitement, pressure of activity, flight of ideas, distractibility, and a happy though unstable emotional attitude."

Our patient had all these symptoms. The psychomotor excitement was shown early in the telephone incident and in her impatience with the help and the ticket agent, also in her attempt later to get out of the window,—a strange, purposeless thing that most of these cases sooner or later attempt to do. This is the reverse picture of psychomotor retardation so characteristic of the depressive phase, and bears the same relation to the motor outlets that the flight of ideas does to the association areas, the power running on a loose pulley, hence without direction and productiveness. Her flight of ideas was very slight. There was a little sound (clang) association; that is, her conversation would occasionally be switched off from its goal idea to another channel by the similarity in the sound of words. There was almost no pressure of activity when seen, although we were told that she had been extremely busy about nothing for some days.

Distractibility, or change in direction of thought, from outside influences, was only slightly manifest. But the unstable emotional attitude was plainly evident, and although she cried and laughed as her notions changed, the happy mood was decidedly the more common.

As I said last month, whether the depressive or the manic phase predominates, manic depressive insanity, in its essence, is a disturbance of the feelings, of the sense of pleasantness or unpleasantness. And since we know ourselves, by our accustomed feelings, the patient says:—"I am changed," "I am different," "things don't seem the same." To this extent, personality is disturbed, but the patient can, if he exerts himself, tell you that intellectually he knows the change is in himself, while, in dementia precox, it is the people or environment about him that are wrong, and he is not conscious of his changed personality.

Now, physiological psychology points out the intimate relation between the sympathetic nervous system and the feelings and personality, and without entering here into an elaboration of this idea, we are justified in assuming that *manic depressive insanity is a symptom complex, due to a functional disturbance of the sympathetic nervous system, possibly the result of some toxin or chemical change.* This idea is further borne out by the fact that one of the earliest symptoms is loss of weight, especially in the depressions; that appetite is lost and taste frequently is perverted, leading to the delusion that the food is poisoned. Bowel disturbances, especially constipation, are common, the urine usually has a great excess of indican as evidence of a faulty intestinal chemistry. Again, it is common to find cardiac disturbances: the heart is either slow and labored, or very rapid and weak. Respiration is commonly shallow and we have found a surprising number of narrow chests with visceral ptosis among manic depressive cases.

We know that all these somatic mechanisms are presided over directly by the sympathetic nerves, and so upon our hypothesis, which makes this system responsible for the mental symptoms, we should expect to find the most marked disturbance in the organs which it controls. It is an interesting question whether the type of delusion is determined by the organs most affected. It seems reasonable, therefore, to direct our researches and our treatment toward the abdominal and thoracic organs, in the first instance to determine the causative relation, and in the second, to effect a cure. Some years ago, Abrams of California brought out this latter point in a book entitled "The Blues." Here he dwelt upon the importance of intestinal putrefaction and laid down a set of exercises with electricity and vibration which aimed at improving the counterpressure and tone of the viscera and ab-

dominal muscles as a means of promoting a happier frame of mind. He should have added that the ptotic cases should have the aid of the orthopedist, and I believe much is yet to be done in this relation.

The question of the relation of the ductless glands is another of great interest. Slight degrees of goitre are commonly found, and these cases have a slightly greater restlessness, sometimes running over into periods of frenzy. We know that the thyroid secretion directly affects the caliber of the blood vessels through its action on the vasomotor (sympathetic) nerves. There can be little doubt that the mental disturbances found in exophthalmic goitre are in part reflexes from an over-tuned hyperthyroidized sympathetic.

In the mild cases the treatment is (1) rest in bed for a few days to a week or more. (2) Diet, simple and small in quantity. (3) Massage or vibration alternated with a fairly strong general faradism each day in the morning. (4) A cold wet compress covering the abdomen applied for an hour each afternoon. (5) A warm full tub bath at 96 degrees F. for from one to three hours in the evening, and (6) the indicated remedy. I have found arsenic in the form of Fowler's solution most often useful. It is wiser to allay extreme restlessness with a sedative at first, and bromide is most often useful, 15 to 30 grams a day. And for sleep, if the bath is not sufficient, five grains of veranol or a similar soporific may be used.

Case 5—D. For Diagnosis:

The patient is a man 27 years old; occupation, railroad clerk. His family history and his early personal history are unimportant. A year ago, his father was burned to death and he found and cared for him. At the time, he bore the shock very well, but the family think he has been very nervous and excitable since. His work allows him little exercise, and he weighs 190 lbs; has fair hair, blue eyes, and a pink and white complexion.

On the evening of February 22nd, he was caught in a hard, cold rainstorm, getting thoroughly drenched and chilled. The next morning he had a bad pharyngitis which was accompanied by aching all over. About ten a. m. he vomited his breakfast, including some sausage, and his temperature shot to 104, remaining high for several days. There was much tympanitis and abdominal distress, a very dirty tongue and great prostration. He could eat nothing because of persistent nausea, and on the third day nutrient enemas were begun. On the fourth day, slight delirium appeared and alternated with lucid periods, being much worse at night, when he was wakeful, had odd fancies,

hallucinations and dreamy confusion of thought, kept getting out of bed and tried to climb out of the window. These states were interrupted momentarily by a return to normal consciousness. This delirium so frightened the family that on February 28th he was removed to a hospital for care. That night his temperature was 101.2; pulse 100; respiration 30. He was confused and wandering, mentally; the abdomen was distended and gassy, with much gurgling. At this time nothing was found in the chest or heart, but two days later a distinct systolic murmur could be heard, loudest over the left margin of sternum at junction of fourth rib. The patient complained of breathlessness on the least exertion and a sense of general distress over the left chest. The urine was interesting. Feb. 28th, a sample had a specific gravity of 1016; acid; albumen marked band; sediment,—many red disks, epithelial casts, renal and squamous cells. On March 7th, 24 hour amount, 2500 c. c.; pale; acid; 1010; albumen,—a trace; urea, 45 grams; sediment less than before, contained hyaline casts, red disks, leucocytes, acid calcium phosphates and uric acid. March 10th, marked decrease in albumen: granular and epithelial casts and red disks had disappeared. There were a few leucocytes. Coincident with this renal change, the temperature gradually came down, till on March 7th, it reached normal, with pulse of 80 and respiration 26.

The mental clouding cleared up after the third day in the hospital and thereafter he was entirely normal in this respect. After two weeks, temperature was 98.3, pulse 68; respiration 18; and the patient was transferred to his home for further care. His blood showed some leucocytosis, the heart murmur was still present, and several joints were acutely inflamed. A swab taken from his throat grew abundant pure culture of pneumococci.

How does this man's mental state differ from that of the foregoing case and what did he have?

Massachusetts Homœopathic Hospital Service, April, May and June.

Surgical:

Dr. W. F. Wesselhoeft, assisted by Dr. R. C. Wiggin. Dr. Thos. E. Chandler, assisted by Dr. Harry J. Lee.

Medical:

Drs. F. P. Batchelder and Wesley T. Lee.

Nose and Throat:

Dr. Conrad Smith.

Obstetrical:

Dr. F. L. Emerson.

Eye:

Dr. Geo. A. Suffa.

Ear:

Dr. F. W. Colburn.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only and preferably to be typewritten—personal and news items should be sent to THE NEW ENGLAND MEDICAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business should be sent to the Business Manager, 80 East Concord Street, Boston, Mass.

The GAZETTE does not hold itself responsible for the opinions expressed by its contributors. Reprints furnished at cost.

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JOHN P. SUTHERLAND, M. D.

DEWITT G. WILCOX, M. D.

ARTHUR H. RING, M. D.

MEDICINE AND THE PUBLIC PRESS.

The safeguard of publicity cannot be overestimated. The moment an individual, corporation, a sect, trade or profession realizes that its every act may and will be exposed to the merciless gaze of an interested public, that moment it sets about cleaning house, and makes ready for the inspection. Moreover, it makes a great effort to keep clean all the time, not knowing when the inspection may come. The medical profession has little to fear and much to gain by publicity, and as we seem to be getting our full share at the present time, we should be able to make some estimate as to the results.

A generation ago the medical news items of the public press consisted largely of the "Almanac rules of life"; lectures by itinerant advertising doctors; and the marvellous tales of the impossible, wherein Mr. Serpentine once drank water from an old, abandoned well and inadvertently (and cruelly) swallowed a baby snake (very tiny, of course); a year after he distinctly felt something crawling around in his stomach. He never said he *saw* something but just *felt* it. His doctor, a wonderful man for linking up the past with the present, immediately connected the water incident with the crawling sensation and diagnosed, "snake in the stomach." The patient was starved a few days, then a saucer of milk was set at his bedside, when lo! the thirsty snake came up to lap the milk and the doctor caught it just as it was ready to dodge back. Mr. Serpentine feels very grateful to the doctor and not unkindly toward the snake which he had imprisoned a year.

Again, Mrs. Croaker drank water from a pond, and a few months later in the early fall, heard a faint croaking sound just beneath her corsage. The diagnosis was "frogs," and the neighbors came from miles around to put their ear to the corsage and listen to the croaking.

Such newspaper stories were common, even until quite re-

cently, and the more impossible they appeared, the greater the readiness to believe them. Then came the period of publishing sensational recitals of wonderful surgical operations made up of one part fact and five parts imagination of the reporter; or the featuring of some appalling accident wherein Mr. Eyelif, for instance, had his right eye knocked completely out of its socket and hung down his cheek by a delicate *shred*. Dr. Lachrymose was fortunately near at hand; he picked up the much startled eye, washed it, combed it, and placed it carefully back in its socket, and whereas Mr. Eyelif was blind in that eye before the accident, he now sees with it better than with the other. In fact he can see now just how the accident occurred.

Today the better class of newspapers are not only seeking medical news of interest and enlightenment, but most of them have a medical censor who carefully supervises such news to make sure it is scrupulously correct. The net result of this careful censorship has been most *wholesome*, both to the profession and the reading public. The public has learned and is learning something of the tremendous amount of investigation, research, study and infinite patience which one class of doctors is employing to find the cause of certain obscure diseases. They are learning how another class of doctors is adopting and applying these new found truths to the lessening of the sum total of physical ills. The public, through the censored press, is only just awakening to a full understanding of the amount of devotion, self-sacrifice—even physical suffering—and deprivation which the true physician of today has voluntarily assumed in endeavoring to rid the world of sickness, disease and deformity. The physician, be he laboratory worker, specialist or family physician, feels the stimulation which comes from encouragement, coöperation and the interested gaze of the public, and is speeded up to do his utmost to hasten the day of disease eradication. He is made to see his work more and more in its altruistic light and less in the commercial.

Lastly, this wholesome medical publicity has at last caught the eye and the heart of the philanthropist, and as a result, our research laboratories have begun to be born. They should have been born a generation ago, and they should not have been obliged to depend upon charity for their birth. Public safety and communal protection should have provided the funds for all the necessary machinery with which to prevent and cure sickness. State funds should now be appropriated to complete the work of the philanthropist and thus give ample support to our well-established Research Laboratories. We need but point to one concrete example of the value of such institutes to show the incalculable benefit which can accrue to mankind: Dr. Nowell's researches in cancer, and the Robert Dawson Evans Memorial Research Laboratory.

IS IT TO BE A NURSES' TRUST?

It would appear that the professional nurses of New York State desire to copyright the word "nurse" and then shut it up in the safety vault where none but she who has the magic letters "R.N." attached to her name dare ever pronounce it, and even she must do it with bated breath, at the witching hour of midnight, with her hands clasped over her bosom and her eyes lifted heavenward.

There was introduced in the New York State Legislature, February 13, 1913, Senate Bill No. 943 which in substance forbids the use of the word "nurse" by any person except a registered nurse, who must be a hospital graduate and must have passed a Regent's examination. Notice that the bill seeks to prohibit any and every person not so registered from calling himself or herself any kind of a nurse, even though that one does not profess or hold herself out to be a trained or registered nurse. The innocent little "nurse maid" who seeks only to take care of the children in and out of the nursery will offend the majesty of the law (should it become such) if she dare say, "I am a *nurse* maid." She must say "I am an animated, automatic juvenile protector." The motherly *wet-nurse* who seeks to dispense the "milk of human kindness" to the little unfortunate whose own "Mum's extra dry," will be haled into court, between nursings, if she dare say, "I am a *wet-nurse*"; she must use some other expression such as, "A dispenser of the lacteal fluid," or "A lactiferous assistant"—any expression that is lactigenous, so long as she does not use the word "nurse" either singly, hyphenated, annexed or prefixed. Even the legitimate mother holding her first born to her breast dare not, if there be a policeman within hearing distance, say she is "*nurs-ing*" her babe; unless perchance she has graduated from a recognized training school, has passed the Board of Regents and had an R. N. attached to her name before she received her wedding ring. Of course all prospective mothers can't take that three years course, especially just prior to their confinement, but there is no help for it; either the mother must be an R. N. or she must not speak of "*nurs-ing*" her babies, she must say, "I am lactinating my progeny."

But seriously, while we are in perfect accord with the wholesome desire of the graduate nurse who seeks to acquire an honorable degree and to defend that degree so that only those entitled to it shall assume it, yet we have no sympathy with an arrogant assumption which seeks to monopolize a word as old as the hills and as broad as the sea. If the registered nurse wishes a distinctive word which she can call all her own, let her coin one or take one which has not for generations belonged to the household vocabulary. As imperious would it be for medical men to

seek the monopoly of the word "doctor," and say to the LL.D. the D.D. and the Ph.D., "you can't use the title 'doctor' any more, *we* want it for our exclusive property; no doubt you had it before we did, but that makes no difference; we are very important now, we have accomplished great things, the public needs us more than it does you. You are only secondary, so we will proceed by legislation to deprive you of your title and appropriate it exclusively to ourselves."

Aside from the ridiculous legislative demand of the registered nurses to monopolize a word there is the ever increasing evidence of commercialism or unionism which seems to be pervading the ranks of the trained nurse. Each year it becomes a little more apparent, and it does not require the prophetic vision of the seer to foresee the gradual decadence of a noble profession into sordid commercialism, with all the ear-marks of trade unionism. Stripped of its unselfishness and self sacrifice, the profession of nursing becomes merely the "job of working for the sick." We sincerely trust that the wiser heads in the nurses' profession will call a halt in this legislative seeking privilege and commercial tendency.

The Mental Hygiene Exhibit and Conference.

Between March 31st and April 4th last the newly formed Massachusetts Society for Mental Hygiene held its first Conference at Tremont Temple, Boston, assisted by the exhibit owned by the National Society for Mental Hygiene, the first of its kind in the world.

Daily popular free talks were delivered at 3 and 8 P. M., by many leading alienists of the State as well as by others whose work brings them in contact with the relation and importance of normal mental life to society. The papers made a most interesting and instructive symposium. The attendance was good and from all classes.

The exhibit unfortunately could only be shown in part because of lack of space, and much of the more concrete and, to the lay mind, more interesting part had to remain unpacked. That which was shown consisted of graphic charts illustrating the relation of mind and body, the significance of insanity and mental deficiency, the cost of caring for the insane, and reasons for apparent increase in mental impairment. It also showed the relation of immigration to insanity and had an excellent section on its causes, nature and prevention.

The Committee in charge were Drs. Alfred E. P. Rockwell and Chas. E. Thompson and Miss Edith N. Burleigh.

There is a crying need of wholesome instruction of the laity in the subjects covered by this convention and exhibit to offset and correct the absurd ideas advanced by the mental cults on the one hand and to relieve his satanic majesty of some responsibility on the other. It may take a generation or more to decrease the numbers in our asylums and the tremendous expense which this branch of civilization imposes, but this sort of teaching is bound from the first to bear individual fruit which cannot be overestimated. When the laity grasps the great lesson which epitomized this meeting, namely, that "disease of the mind means disease of the brain," the first great step will have been taken towards that mental conservation and efficiency which is the good of all effort.

DEPARTMENT OF EUGENICS.

EDITED BY MARA L. PRATT-CHADWICK M.D.

Dr. Chadwick will gladly receive communications, reports of cases, etc., etc., pertaining in any wise to the matter of child culture and race improvement.

THE WAYWARD GIRL.

In these days when the matters of prostitution, "white slavery," immorality of youth, and kindred problems, are under such serious consideration it is interesting to note that much light is being thrown upon the "wayward girl" through the application of the Binet tests.

Binet was a French scientist who, after years of intimate association with mentally defective children devised a set of test questions, *the content of which* was such as to measure with comparative accuracy the mental development of any child.

For example, A. For a three-year-old child:

1. Where is your nose?
Where is your mouth?
Where are your eyes?
2. Give sentences of six syllables—It rains. I am hungry, for example.—Normal child can repeat six syllables.

3. Give two figures; pronounce them clearly, one-half second apart.

4. Show the child a picture in which are *people and a situation*: for example, a man and boy dragging a cart filled with furniture. A normal three-year-old child will *name the things* but not describe them.

5. Names.—Children of three know their own first names,—but not always the family name.

B. For a four-year-old child:

1. Normal children of four know themselves as boys or girls; normal children of three do not.

2. Name familiar objects such as key, knife, penny, etc.

3. A normal child of four can repeat four numbers.

4. Draw two parallel lines, one, one metre longer than the other. A normal child can tell the longer without hesitation.

C. Normal children of five tell the heavier of two weights; copy a square with pen and ink; repeat sentence of two syllables, count four pennies in a row.

Another interesting test for a five-year-old is this: cut a card diagonally; turn hypothenuses away from each other: lay another card of the same size and shape beside the cut card, and tell the child to lay the parts of the cut card so that they will make a figure like the uncut card. (One child in twelve will fail to do this.)

D. A normal child of six tells whether it is morning or afternoon; he will define a common object *by telling its use*; will take and carry out three simple orders; can point to right hand and left ear. (At four years, no child can do this; at five half can; at six all can.) A normal six-year-old can tell the prettier of two pictured faces.

E. The seven-year-old child counts thirteen pennies; describes instead of merely naming objects in a picture; notes which features are lacking from unfinished drawings of faces; names four colors; and can draw a recognizable rhombus with pen and ink.

F. A normal child at eight will note differences and tell wherein these differences lie; count from 20 to 1 (twenty seconds and one error permitted); repeat five figures; and arrange in groups, count and give values of three one-cent stamps and three two-cent stamps.

G. Children at nine make change for nine cents out of twenty-five; give definitions in other and better terms than used; name the day, day of the week; month, day of the month and the year; repeat the months of the year in fifteen seconds; arrange in order of weight five objects of graded weight.

H. In the tests for ten-year-old children questions involve comprehension. For example, if one were struck by a playmate unintentionally what should one do? Why judge a person by his acts rather than by his words? Of children of ten, fifty per cent are able to make sentences using three words given; at nine years one third do this; at eight, none.

I. The element of absurdity is brought into eleven year tests; for example, (a) A cyclist fell and broke his head and is dead from the fall. He was taken to the hospital and the doctors do not think he will recover. (b) I have three brothers, Ernest, Paul and myself;

Children at this age have a sense of rhymes; name sixty words in three minutes.

J. Normal children of twelve repeat seven figures; define abstract qualities like charity, goodness, etc; repeat twenty-six syllables; resist suggestion; guess missing facts from a story.

These tests are now used in many of our penal institutions. Dr. Goddard, of the Vineland, N. J., training school to whom again we are indebted for much of the data here given, is now trying to prove to the New York Legislature the need for using these tests at the immigrant stations. Finding that four and one-half per cent of our feeble-minded in institutions are immigrants; and feeling sure that many mental defectives are admitted with the in-coming of every steamer, Dr. Goddard asked permission to send experts to Ellis Island as an experiment.

"Accordingly," says Dr. Goddard in the December issue of *The Training School*, "in May of the present year the writer with two assistants from the Laboratory, Misses Bell and Mateer, made another visit to Ellis Island, merely for the purpose of seeing the place again. To the writer's great surprise, the problem seemed to have materially changed. In the first place, better facilities had been provided for the physicians and their work. The whole situation was no longer so new and overpowering as it appeared on the former visit. In consequence of this changed condition and the newer view, we were led to ask to be allowed to make an experiment. It is needless to say that our request met with a ready response on the part of the authorities on the Island. The request was this, that two of the Vineland Laboratory workers should be allowed to spend the day there, the one standing on the line and selecting such of the persons who came through as seemed to her mentally defective, her sole method of determining this being by her observation of them as they passed, based on her experience with mental defectives at the Institution at Vineland. The other assistant was to be in a nearby room with the Binet tests and without knowledge of whether the persons sent in were normal or defective, was to apply the test with the aid of an interpreter and see what the result might be. This was done.

"In the course of the day, twelve immigrants were selected for testing. Nine of these were picked out because it was thought they were mentally defective. Three were selected as control cases, the opinion of the selector being that they were normal. The result as found by the Binet Scale was as follows:

"Of the nine suspects, every one was from at least four to nine years backward. Of the three controls, one was seven years old and tested six; one was nine years old and tested ten; one was adult and went entirely through all of the Binet tests.

"Encouraged by this experience, it was planned to devote an entire week to this experiment. It was not feasible to take it up at that time and consequently it was postponed until September just past.

"A somewhat similar procedure was carried out with the following result:

"Although the work was not done under the most favorable conditions, remarkable results were obtained. There were many interested observers of every test: the interpreters were unused to the tests and many delays were encountered.

"Forty-four persons were tested. Thirty-three of these were selected

by the regular medical inspectors of the department. Of these thirty-three, *fifteen* proved to be defective, while *eighteen* were normal. Eleven cases were selected by the Vineland experts in feeble-mindedness: of these eleven, *only two* were *not* defective and one of these had been taken to compare with a very defective sister rather than because the case itself seemed defective.

"It is thus seen that of those selected by the physicians less than half were correctly selected, while of those selected by the experts seven-eighths were chosen rightly.

"On the last day of the experiment the Vineland workers stood in line and simply tallied every defective that passed, without calling them out of line. The physicians, however, called out such as they thought defective. The results were, of something more than 1,260 who passed in line, Misses Bell and Mateer recorded 83 as defective; the physicians selected 18. If the above ratio of correct selections holds, then there were about 72 defectives in that line of whom the physicians recognized about 8—approximately 10 per cent.

"It is hardly necessary to say that this is no disparagement of the physicians. They do not pretend to be experts on feeble-mindedness. The comparison simply shows what experts can do.

"On this basis then, experts would detect at least ten times as many mental defectives as are now recognized by physicians who are experts in other lines but not in feeble-mindedness.

"Our second point comes out of the foregoing argument and a further fact about the group of 1,260 who passed in line on the last day of the experiment.

"This 1,260 was made up of three groups: one of 600 from southern Europe. Of these 46 or 7.5 per cent were recognized as defective. The second was 260, also from southern Europe of whom 24 were checked as defective—9 per cent. The third group was 400 from northern Europe. Thirteen were defective or 3¼ per cent. This is an enormous proportion in comparison with our estimate in the United States of *three* or *four* defectives in a *thousand* of the population. But the Royal Commission found nearly twice as many defectives in Ireland as in Scotland.

"We have found that 2 per cent of the school population is feeble-minded. These immigrants, however, were not confined to persons of school age. Those actually tested range in age from 7 to 37 years, the most of any one age being found at 17 and 18 as will be seen from the following tabulation. The second part gives the distribution by mental age.

TABLE I

Chronological Age	7	8	9	11	15	16	17	18	19	20	21	23	24	25	28	30	31	36	37
Number Tested	1	1	1	1	1	3	6	7	4	2	2	4	2	3	1	1	2	1	1

TABLE II

Mental Age	3	4	5	6	7	8	9	10	Normal
Number Tested	2	1	2	8	5	4	1	1	20

"Such was the experiment and such the results. In view of all this, it seems possible to point out at least one solution of the problem of detecting the feeble-minded immigrant.

"I am now entirely convinced and satisfied that persons trained for a year or two in institutions for the feeble-minded where they have had opportunity to see and study these people as these two assistants have had, can go to Ellis Island or any Immigrant Station and standing by the line as the immigrants pass, pick out with marvelous accuracy every case of

mental defect in all those who are above the infant age. This will seem to many readers an extravagant statement, and yet upon second thought, I think it must be admitted that this is really not more than is done by the physicians who stand there and at a glance, pick out the various physical defects and even insanity. It is only that this is in a different line and a line that is less understood. But I believe that these ladies have absolutely demonstrated their ability to do that thing. But we would no more need to rely upon the mere observation of the person who stands in line than the physicians rely on that method in their cases. These suspected persons are detained and held for a more elaborate examination which may take place the same or on the following day. This in the case of mental defectives would be the Binet tests or some similar system, the essential thing in the plan being that by having this trained expert to pick out all of the suspected cases and only those, the great mass of immigrants would pass on and there would be left a comparatively small number to be tested by whatever method may be devised. This could easily be handled by the department if there were sufficient appropriation to provide for the workers.

"One other point was practically settled. The objection and fear had arisen that it would not be possible to give the Binet test by the aid of an interpreter, since in so many cases the value of the tests stands upon the question being given exactly right. There is no doubt that there is a great difference in interpreters, indeed, we found it in this experiment, and there is no doubt that a carefully trained psychologist who was conversant with the principal languages would be the ideal person to make this examination. Nevertheless, even with the non-psychological interpreters whom we used, the results were remarkably satisfactory.

"If Congress would appropriate the money and would provide for the appointment of say a half a dozen suitable persons to spend the next year or two in some of the institutions for the feeble-minded, studying the problem as there observed, especially under good direction, they would, at the end of that time, have a half dozen experts that they could send to Ellis Island with the practical certainty that they would reduce the number of mental defectives entering through that port to a minimum. There are many difficulties and many details to be worked out, but the difficulties are not insurmountable and the details can easily be arranged when once the problem is seriously attacked.

"The first requisite is adequate financial provision for this extension of the work of the immigrant stations. When the people demand that this shall be done, and Congress acts upon this proposition, then we shall begin to reduce the supply of mental defectives from this source. That it must be reduced is clear from the appalling percentage of defectives among the immigrants— $3\frac{1}{4}$ per cent of northern and $7\frac{1}{2}$ to 9 southern Europe. These figures are probably only rough approximations—because of the small number studied—but halve or quarter this per cent and we still have an alarming condition.

"We cannot act too promptly. The immigration officers are ready to act as soon as an appropriation is made."

Here, then, is one great use to which the tests for feeble-mindedness may be put.

Returning to our original text, the "wayward girl," much light is thrown also upon this class of unfortunates by means of these same tests. Anyone who has visited reformatories for young women must have been struck by the general well appearing of these "wayward girls." There are, of course, instances where imbecility is evident; but these are easily recognized as such and are dealt with in accordance with their feeble-mindedness. The well appearing, bright, witty, well developed and often attractive wayward girl is looked upon as a "sinner" merely and is blamed or pitied according to her circumstances.

As, however, moral and mental deficiency are closely allied, specialists in these studies began to suspect that the "voluntary prostitute" may be lack-

ing in mental development, rather than that she elects to live a life of shame from deliberate, free and normal choice.

"As the result of testing the fifty-six fourteen to twenty-year-old wayward girls in one Massachusetts reformatory, it was found," says Dr. Goddard,

1	fulfilled only the	8 yr. test
12	fulfilled only the	9 yr. test
14	fulfilled only the	10 yr. test
14	fulfilled only the	11 yr. test
4	fulfilled only the	12 yr. test
<u>4</u>	fulfilled only the	13 yr. test

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"Out of the fifty-six wayward but supposedly normal girls, then, forty-nine were defective mentally.

"Had these girls been tested in their childhood while in the public schools, and been placed in institutions for the feeble-minded, they might have grown up happy, contented, innocent and harmless. Instead, they have been allowed their freedom, have been subjected to the rules of normal society, have brought feeble-minded children into the world and are now a public expense.

"It is such errors as these on the part of those in authority that make heavy the burden of taxation, help to fill our brothels and increase more or less the menace to youths all too ready to utilize the moral irresponsibility of these girls—their *inability to adjust to life*—which may in itself be a test of sanity.

"Since these girls are for the most part well enough in appearance—slovenly, to be sure, but not unlike a large percentage of ordinary people,—their irresponsibility would not have been discovered in maturer life; hence the need of careful examination of all school children at an age when they are available and subject to state authority. Or if perchance any of these girls come over as immigrants at an age beyond that of compulsory school attendance then the greater the need that we have trained government examiners at our stations.

"But for these thousands of other such girls it is too late to apply these methods; the burden of their offspring is upon the state and will remain there. Instead, however, of leaving them in reformatories they should be colonized even now and trained into reasonably self-supporting wopmen; above all, they should be prevented in one way or another from reproducing their kind.

"The following are a few of the cases among the forty-nine defectives:

"The following few cases, picked out largely at random, will show the type of girl and something of the test, together with a little of the family history:

"No. 1. This girl is 16 years old and tests 8; that is, she has the mental capacity of a child of eight years. Father dead. Mother married him on his deathbed so that she might receive his pension. Had had three children by him. Mother died of tuberculosis; was intemperate and immoral. One child died at 18 of tuberculosis. Aunt and grandmother died in almshouse. Girl's history: Ugly disposition; very troublesome, quarrelsome, slow and dull; generally needed much direction in work. Lived an immoral life for a year. Was committed to the Reformatory for larceny. Very much excited by company of men. When brought into Probation Office for a few moments, attracted attention of workmen across the street. Plays with little boy of six in house where she works.

"In the test she could not make change by taking nine cents out of a quarter, nor could she put the words Philadelphia, money, river into two sentences. She saw nothing absurd in the story about the unfortunate painter who fell and broke his neck but was taken to the hospital, where they did not think he would get well. Nor the other one about the three brothers—'I have three brothers, John, Henry and myself.'

"No. 2. This girl is 20 years old and tests 11. Father drinking man, Never provided for family. Mother shiftless and ignorant. Preferred com-

pany of colored men to white. Girl's history: Place in eleven different places on probation from April 1905 to May 9, 1906. Was then kept in Industrial School until March, 1908. Was again placed out with about the same result. Arrested for larceny and immorality, which she admitted. Bad temper—moody, careless of dress and person. Said by employer to be 'boy crazy.'

"She could not arrange the weights which is usually done by nine-year-old children. She could not put the three words in a single sentence.

"No. 3. Is 19 years old, tests 10. Father drank, but has no court record. Hard working, industrious man. Mother has absolutely no control over children. Chronic victim of nervous prostration. Girl's history: Was wild for three years; easily influenced. Will do anything for anyone she likes; good worker, neat and willing. Especially good at scrubbing and cleaning, but cannot work without much supervision. Good with little children. Lady for whom she worked said she appeared no older than her seven-year-old daughter and enjoyed playing with her, but cared to have nothing to do with the daughter of the house of her own age. Was bold and forward. She could not repeat a sentence of twenty-six syllables. She could not give a word that rhymes with day, or spring or mill. She could not repeat seven figures, although this is done by 12-year-old children. She had no idea of what justice was, and could only say that goodness is 'to be good.' She could not put the three words into two sentences.

"No. 4 is 14 years, 11 months old; tests 10. Mother died of tuberculosis; was alcoholic and an opium fiend. Father was confirmed drunkard; several times in jail. Brother George, 9 years old, in Orphanage for Feeble-Minded. Father and mother and two children lived in one room. There were often other inmates. Child was nervous. Poor in school; about second grade. Fond of all kinds of children's play. Very irresponsible. Sent to store for two articles, will come back with one, sure to forget the other. Sent downstairs for potatoes, will be gone for fifteen minutes, and come back without them. When asked 'why?' will say she had forgotten. Can pick out airs on a piano. Reads in third reader with difficulty. Very stubborn, excitable, sensitive, cries easily. Fond of children, but cannot be trusted with them. Committed to Reformatory as delinquent child—had been on the street night and day for several months. Expelled from school one year before commitment, as her influence was considered bad for the other children. Mother sent her into the streets to beg for money from men to be used to buy drink. The child was unchaste with them and took the money gotten in this way to her mother. She has no idea of what charity is, says 'Board of Healthy.' Justice, has nothing to say, goodness, she defines. She could not give a word that rhymes with day, without assistance.

"No. 5 is 18 years old and tests 12. Father is a drinking man; mother, a low-grade woman, absolutely no sense or power to control her children, probably immoral. One brother out of Reformatory on probation; another, just out of truant school on probation. Girl's history: Hard to manage; was fairly good scholar, a great mischief-maker and terrible storyteller. Would call up strange people on telephone. Took a much-prized hand-woven towel belonging to the lady for whom she worked and cut it up to make a dressing sacque. Will do work well one day and the next not seem able to do anything. Will steal little things. So untruthful and such a trouble maker; tells stories about the people for whom she works, and is so crazy about the men (has been immoral) that she cannot keep a position.

"No. 5 is somewhat better. She is able to repeat seven figures and to give words that rhyme with day, etc., but she could not repeat a sentence of twenty-six syllables, although this comes in the 12-year tests. She did not know the difference between pleasure and honor, poverty and misery, pride and pretention, and the like.

"No. 6 is 20 years old tests 9. (Indian blood.) Mother immoral—living with man not her husband—keeping house of ill-fame, using her children for gain. Own father alcoholic—lives with a woman not his wife—attempted rape upon his own children. Two sisters immoral—one (been in

prison) now living a vicious life. A younger sister insane. A younger brother, an unruly boy. Girl's history: Committed at 15 as beyond control, immoral and a runaway. Responded to little training. Never worked without supervision. Fond of attracting attention. Would faint on street or in store to create scene. Paid \$10 for doll. Did not care to play with it, only that it was pretty. Had child; father unknown. Wholly incompetent to care for it. Some days wants to give baby away and next day would not part with it for the world. Very nervous and moody.

"She cannot make change out of a quarter. Having read a short selection, she cannot remember a half dozen things about it. She sees no absurdity in the painter's story or that of the brothers, nor in any of the others. She cannot put the three words into a sentence, cannot remember seven figures, nor repeat a sentence of twenty-six syllables, nor define goodness. She says justice is 'Doing right to people.'

"No. 7 is 19 years old, tests 9. Father and mother both heavy drinkers. At time child was committed, father was in House of Correction and mother in prison. Mother especially hard character, having been arrested no less than twenty-seven times. Father plainly below normal mentality. Girl's history: School work very poor; was a runaway. Would steal little things. Was immoral. Placed in good home. Very childish. Needs constant supervision in work and behavior. Extremely fond of boys. Could not be trusted to do an errand; would never go directly back. Once when told to cut only the end pieces from loaf of bread, she cut up whole loaf. When asked why she did it, said, 'Why, how could I get the end piece unless I did cut it all up?' Follows a beaten track, never remembering from one day to another what she is to do.

"She fails to pass the reading test, taking sixty-five minutes to do what should have been done in twenty-five minutes. She could not tell how much money it would take to buy three one and three two-cent stamps, and she could, of course, do none of the questions that are mentioned for the others.

"No. 8 is 19 years old, tests 9. Father intemperate, abusive. Never supported family. Mother intemperate, never kept house for family. One brother in City Orphanage. Two brothers intemperate and worthless. One sister married to worthless colored man. Girl's history: Immoral, often staying out all night. Smoking cigarettes, swearing, etc. Stubborn, wilful and thoughtless. Likes little children and is fond of playing with dolls. School work sometimes learned rather quickly, other times work was very poor and seemed to go backward, rather than forward. Careless about clothing. Was put in good family. Was very careless, untidy and dishonest.

"No. 9 is 17 years old, tests 13; is not feeble-minded. (This girl did the test with almost the rapidity and ease of a normal child; however, her personal appearance and manner were very childish.) Mother until last year had passed as girl's sister. Girl's history: Neglected and abused at home. Mysterious family. Committed to Reformatory as a stubborn child. Placed on probation. Was not truthful. Stole little things and was suspected of being immoral with small children. Would entertain men in the house every time left alone. Was lazy, and slack about her person and clothing. Placed in home. Was constantly attracting the attention of men. Painfully conceited and exaggerates her charms to an amusing extent. While at school she was detailed to care for the furnace. One day she found it almost out; she poured in some kerosene oil and then, when it failed to ignite, she put her head in the furnace door and blew it. The fire blazed up, burning her hair, eyebrows, face and arms. The lesson seemed to be sufficient for her. When first sent back to the school she was placed in one of the cottages where the better girls are sent. She was so ugly that she could not be tolerated. When given some sewing to do, she tore it into rags. When told to iron some of the officers' clothes, she deliberately burned them.

"No. 10 is 19 years old, and tests 11. Father is a drinking man; wood chopper; away from home most of time. Mother, very dangerous, immoral woman. Indifferent to children. Works in mill. Goes away at 6.30 A. M.;

locks the children out of the house. Sisters: one absolutely hopeless—depraved. Another has served a term in prison. Probation officer says she is the 'biggest rogue and devil' he ever saw. Another's behavior was pretty bad until put on probation, at which time she was married. Another who was in State Reformatory is now in State Hospital. Two younger sisters live with married sister. One brother—best in family—never goes home. No. 10 committed to Industrial School as delinquent child. Worked in mill. Been with young men a great deal. Noisy and profane. Willing, neat and quiet about her work. Sews very well. Can cook some and prepare a meal, but when her work was done, would never find anything else to do, but if told what to do is willing to do it. Improvement in disposition and temper. Can tell time, make change; can read fairly well. Went into family with four small children, who completely upset her and she would forget her work entirely. Is still very forgetful.

"No. 11 is 20 years old, and tests 13; is not feeble-minded. Father is a very respectable man. Mother immoral with a disreputable Italian; driven from home by husband. Sister sent to Industrial School—has been a good girl since. Girl's history: Had no one to advise her, got into bad company—committed immoralities with many men. Was out nights; arrested twice. Put on probation. No improvement. Sent to Industrial School. Can do general housework very well when she wishes to; is very slack and careless. Gave birth in 1909 to an illegitimate child, but because of her untruthfulness the guilty party was never followed up. No system about her work; no self-control. Has no idea how to care for her child. Lets it eat anything to keep it from crying. Will not wash clothing as long as she can help it and then will put it on while wet. Once took the baby for a walk; said she would return in an hour—was gone all the afternoon and evening. Said she got lost, but it was found she had gone several miles to visit an old employer.

"Apropos to the story of these reformatory girls, the following, Juvenile criminals (See Journal of Criminology, Sept. 1912) react to the Binet tests as follows; emphasizing from another department of inquiry the need for public appreciation of the fact that criminality is largely the outcome of mental and moral delinquency;

IMMORAL.

"*Mabel B.*

16 years old physically, 10 years old mentally.

Taken by her mother from a laundry where she and another girl had been spending the night with two Chinamen.

Mother living with a man to whom she is not married.

"*Nina N.*

15½ years old physically, 9³ years old mentally.

History—Father an alcoholic, degenerate; mother a prostitute; eldest sister a prostitute; sister and brother had gonorrhoea.

This girl absolutely incorrigible, steals, associates with commonest type of men, even yelling to them from House of Detention, absolutely immoral. Cannot associate her acts with punishment. Is a well developed girl, of unusual beauty.

"*Marjory J.*

15 years of age physically, 11² years of age mentally.

Taken by her brother from house of ill fame in New York, where she and another girl of the same age had been spending two weeks. Was in the public schools until she ran away. She is an accomplished prostitute.

STEALING.

"*Louis M.*

14 years old physically, 9 years old mentally.

Placed on probation for stealing at 12 years of age. Two weeks later stole fourteen dollars from his sister—ran away. Was finally brought home—sent to the State Home for Boys. Three months after his release, he was charged with the crime of burglary and has been sent back.

"Isabelle K.

15 years old physically, 10² years old mentally.

Answered an advertisement as a nurse girl. The woman who employed her was a widow with a child of four to be looked after during the day, as the woman was obliged to work for her living.

The girl reported to her older sister and a friend of the same age (where they lived away from their home in a furnished room) that she was alone with the boy all day. So the following morning, the three girls came to the house and with three suit cases carried away all the jewelry, underwear, clothes, etc., that the woman had and 'what do you think,' the girl said in the House of Detention, 'we got to give them things back.'

MENTALLY SLOW IN CRISES.

"James P.

11 years old physically, 8 years old mentally.

With crowd of boys who set fire to hay stack. All the boys escaped being caught but James. Said he was only watching the fire and did not know why the other boys ran.

"Tony A.

15 years old physically, 9² years old mentally.

Playing craps with six other boys; only boy caught—said 'didn't know why the other fellows ran—thought they were running to a fire.' Boy was arrested by officer on beat.

"Frank C.

16 years old physically, 9³ years old mentally.

Never taught to obey. Incurable—constantly breaking probation. Cannot hold position long—is lazy. After failing to report for six weeks at Probation Office, Probation Officer saw the boy driving a horse and carriage. The officer called to the boy. Upon seeing the officer, the boy jumped from the wagon and ran down the street, the chase created a commotion and the boy was caught. Had the boy stayed in the wagon and driven away, he would not have been caught.

It is safe to say that these children have been in the past entirely misunderstood both by their parents and their teachers and the criminal authorities. This is the material out of which we make our adult criminals, since there is no other course open to them."

BOOK REVIEWS

Textbook of Ophthalmology in the form of clinical lectures by Dr. Paul Roemer, Professor of Ophthalmology at Greifswald. Translated by Dr. Matthias Lanckton Foster, Member of the American Ophthalmological Society; Member of the American Academy of Ophthalmology and Oto-Laryngology. With One Hundred and Eighty-Six Illustrations in the Text and Thirteen Colored Plates. Volume III. New York. Rebnan Company 1123 Broadway.

Volume III completes the work with the consideration of the following subjects: The Pupil; Paresis of the Ocular Muscles; Neurology of the Eye; Diseases of the Chorioid; Diseases of the Optic Nerve; Diseases of the Retina; Functional Testing of the Eye.

Among the many commendable points the following subjects are very well handled: Discussion of behavior of pupil in health and disease; Correction of the common mistake of thinking the Argyll-Robertson pupil is a reaction to accommodation (it is due to convergence). Paresis of Ocular Muscles; Etiology and Diagnosis of Ophthalmoplegias; Facial Paralysis and Keratitis Lagophthalmus; Optic Neuritis with points of differentiation from the Pseudo-neuritis of high hypermetropia; Choked Disc.

Diseases of the Retina are divided into those of the inner layers and those of the Neuro-Epithelial layer, and the importance of this difference is shown in discussing pigment formation in Pigmentosa and Chorioiditis. The probability of Thrombosis and not Embolism of the Arteria Centralis Retinae is well presented.

SOCIETIES.**Massachusetts Homœopathic Medical Society.**

The Seventy-third Annual Meeting of the Massachusetts Homœopathic Medical Society was held on April 8 and 9, at the Massachusetts Homœopathic Hospital.

On the evening of April 8 Dr. Howard W. Nowell presented a paper at the Evans Memorial Building in which he gave a resume of some three years research work on carcinoma. This paper was well worth the attention of the large and enthusiastic audience which listened to it, some two hundred and sixty members and friends being present. Dr. Nowell seems to have traced the cause of carcinoma and proved it to be of chemical rather than bacterial origin. He also outlined some interesting experiments which had been performed in the line of immunization.

Wednesday morning was devoted to clinics in the Hospital amphitheatre which were largely attended.

After luncheon in the Medical School building the following papers were given:

Report of Necrologist, Frank A. Gardner, M.D., Salem.

The Treatment of Scarlet Fever, G. Forrest Martin, M.D., Lowell.

The Diagnosis and Treatment of Pneumonia in Children, Nelson M. Wood, M.D., Charlestown.

A Study of the Relation of Quinine to Malaria, based on Laboratory and Clinical Findings, Conrad Wesselhoeft, M.D., Boston.

Dr. Wesselhoeft's paper deserves especial mention, since it was the result of many hours spent on experimental work in attempting to determine the exact nature of the action of drugs upon living disease-producing organisms in the human body. Nothing can reveal the scientific basis upon which we know that Homœopathy stands so well as laboratory investigations of this nature, and much more work of this kind must be accomplished before we can ever hope to gain for Homœopathy its just deserts.

Following these papers a business meeting was held, at which the following officers were declared elected for the ensuing year: President—Plumb Brown, M.D., Springfield; First Vice-President—John H. Payne, M.D., Boston; Second Vice-President—Mary A. Leavitt, M.D., Boston; Recording Secretary—Edw. S. Calderwood, M.D., Boston; Corresponding Secretary—Benjamin T. Loring, M.D., Boston; Treasurer—Thomas M. Strong, M.D., Boston; Chairman of the Board of Censors—G. R. Southwick, M.D., Boston.

The banquet at Young's Hotel in the evening, which had the largest attendance of any dinner in the history of the Society, was a fitting close to one of the most prosperous years which the Society has known. The evening was devoted to raising money for the Endowment Fund for the Medical School. Dr. Wesley T. Lee acted as toastmaster, and speeches were made by Drs. G. R. Southwick, Plumb Brown, President Murlin of Boston University, Dr. N. Emmons Paine and Dr. John M. Coffin. Over five thousand dollars was pledged to the Fund in the course of the evening.

Discussion by Dr. F. A. Gardner.

"I must say that I was a bit disappointed at hearing from Dr. Wood, as I have heard from one or two others during the past few weeks, disparaging words concerning the treatment of pneumonia by the Pneumococcic serum. I have not had many cases, and you cannot tell much by a few cases, but I have had during the last few months an exceptionally remarkable case where I believe that the serum obtained through Dr. Watters saved life.

The patient, a man 85 years of age, was found at seven o'clock in the morning on the floor of his room. He was unconscious, with a bruise on his head. The people below told me that they heard a fall at midnight, so for seven hours this man, 85 years of age, lay in this condition on the floor of his room with the windows open. He was taken up and put to bed, and gradually regained consciousness, after a few hours remembering that he

had attempted to get up. He developed a typical pneumonia, and I did not think he could recover after such an exposure. I obtained the serum here and gave it to him, and all I have to say is that while the disease ran a typical course it was a day or two shorter than usual. Temperature was not as high as usual, and the man came out all right.

Now I cannot say how much the serum had to do with the recovery of the patient, but I believe it did a great deal."

Discussion by Dr. Sutherland.

"I intended to say something in the way of discussion of Dr. Martin's paper, but unfortunately I did not hear it. While he was reading his paper I was out at the Contagious Department of the Hospital. I was seeing some cases of scarlet fever.

It is my fortune and privilege to alternate with Dr. Moore at the Haynes Memorial Hospital, where scarlet fever and diphtheria cases are treated separately. I want to call attention to the statistics which can be presented covering the service for something over three years and a quarter, because they are exceptionally encouraging, and I think they are very interesting. For instance, during the years 1909-10-11 and the concluding part of '08, there were treated 835 cases of scarlet fever. Of these 835 cases, 22 died, a mortality of 2.6 per cent. This is just plain scarlet fever. There were treated complications of scarlet fever; that is, scarlet fever with diphtheria, measles, chicken pox, mumps, whooping cough, etc., as complications or sequelæ. Of scarlet fever and diphtheria there were 53 cases. I do not know that we could get a more serious combination than scarlet fever and diphtheria. There were 53 cases with a mortality of 10, that is, 18.8 per cent, which is not so very high.

There were treated of scarlet fever and measles 15 cases, one of which proved fatal.

Of scarlet fever and chicken pox there were 16 cases, none of which proved fatal.

Of scarlet fever and mumps there were 11 cases, none of them fatal.

Of scarlet fever, mumps, and chicken pox there were two cases. They both recovered, and were discharged as recovered cases.

Of scarlet fever and nephritis, a thing that used to be looked upon with great dread as a combination, there were six cases. I want to call attention to the very few cases that occurred during that period of over three years, when in all 981 cases of scarlet fever were treated, and only 6 of them were cases of nephritis. Of these 6 none proved fatal, which again is something to rejoice over.

There happened out there a peculiar combination; scarlet fever and erysipelas. It was sometimes difficult to tell just when one ended and the other began. There were 8 at one time. During the three years 12 cases occurred. There was a mortality of two of the 12, or 16.6 per cent.

There also happened scarlet fever with pneumonia. There were 22 cases in all. It is on the records that many of these cases were moribund when they reached the hospital. For a child to stand up under scarlet fever and pneumonia requires a good deal. Ten of the 22 died, though several of them died in less than 24 hours after reaching the hospital. This was a mortality of 45 per cent.

It so happened that there were four cases of scarlet fever and meningitis. Of these 50 per cent, or two, died. It is a wonder they did not all die, when we think of such a combination.

Of scarlet fever and mastoiditis there were two cases, which again is a small number considering the frequency of mastoiditis. Of these one proved fatal, or 50 per cent.

981 cases of scarlet fever with a mortality, including all these most serious combinations or sequelæ, of 48, or 4.9 per cent, and only about two years ago 20 per cent mortality in one of the largest of our hospitals, in the department devoted to contagious diseases, was considered a good record, and in the same hospital within two years 10 per cent with a number of al-

most 1000 cases. You see the mortality at the West Department is less than 5 per cent. It seemed to me it was worth while to present these statistics. It is only recently that I have been able to get them, and they certainly have interested me tremendously.

The treatment has been chiefly belladonna so far as my service is concerned. Belladonna has been prescribed more frequently than any other drug, and it probably covers the symptoms better than any other. One feature has been insisted upon, and that has been the very free use of water, the idea being that the toxins of the fever circulating in the body are tremendously diluted by water, and if the diluted toxins can be washed out of the system, as they can be through the kidneys, the patients are freed from the poisons which do so much damage.

Recollect we had during these three years and over only six cases (out of nearly 1000 cases) of nephritis, and I think the small number is due somewhat to the free use of water.

The diet has been very simple, because while the fever lasted and for at least 24 hours afterward the patients are kept on a liquid diet,—milk, cocoa, malted milk, orange juice, and sometimes ice cream and sherbet. Then for one week crackers and cereal foods are added to the liquids. After that week during the rest of the period, milk, soups, bread and butter, and simple desserts, custards, junket, etc., are added to the diet. At the end of three weeks patients are put on a full diet”

Massachusetts Homœopathic Medical Society.

BOSTON SECTION

The regular monthly meeting of the Boston Section of the Massachusetts Homœopathic Medical Society was held on Thursday evening, April 3, at the Evans Memorial Building.

The meeting was called to order by the President, Stephen H. Blodgett, M.D.

The records of the last meeting were read and approved.

PROGRAM

I. Stomach Surgery,

by J. Emmons Briggs, M.D.

Illustrated by stereopticon.

Discussion by W. F. Wesselhoeft, M.D.

II. Facts learned from Radiographs of the Gastro-Intestinal Tract,

by Gardner H. Osgood, M.D.

Meeting adjourned at 9.30. 51 members were present.

Discussion of Dr. Briggs's paper by Dr. W. F. Wesselhoeft.

Dr. Wesselhoeft—"I did not have the advantage of seeing this paper before coming here tonight, but it is a very timely presentation of a very interesting subject. It emphasizes one of the great advances that has been made, and of which we had an example last Spring, in the value of the X-Ray in diagnosis. Of course the X-Ray is usually taken after the patient has passed into the surgeon's hands, or at least when a consultation has been thought advisable. I feel that in these cases this condition ought to be spoken of by us, so that the practitioner will bring the cases to the surgeon earlier.

The history of gastric ulcer and gastric cancer ordinarily is very long. Christopher Graham writing in the *Male Clinic*, states that the average time of the disease before the surgeon gets the case is between twelve and thirteen years. Recently I saw a case that might have been relieved had I insisted upon an earlier operation.

The probability of cancer being grafted upon an ulcer, makes these cases very serious. When we understand they are so amenable to surgical treatment, it is very unfortunate not to have it done.

The history of ulcer is rarely the story of constant trouble. It is intermittent, and it is for that reason that most practitioners feel that the patient gets well from this attack, and will get well from another. Why the presence

of an ulcer gives us an intermittent disease, I have never been able to understand, but such is the fact. When we know the relief we can give these patients, it does seem too bad that anybody should suffer from a gastric ulcer, and all the dangers it brings."

Homœopathic Medical Society of Western Massachusetts.

The Homœopathic Medical Society of Western Massachusetts held its annual meeting, at the Cooley Hotel, Springfield, on Wednesday, March 19. Following the business meeting the scientific session reported its program under the chairmanship of Dr. T. J. Putnam of Springfield. Dr. William H. Watters spoke on "The Use of Vaccines, the Wassermann reaction, and the Treatment of Syphilis by Neo-Salvarsan." Dr. E. W. Capen of Monson was to have presented a paper upon Salvarsan but was unavoidably detained. Dr. George R. Southwick of Boston, spoke informally on the work of the State Homœopathic Medical Society and the Boston University School of Medicine. Dr. T. J. Putnam presented a paper entitled "A Few New Old Things in Medicine." The meeting was well attended. New members were voted in, and much interest and enthusiasm were manifested.

Homœopathic Medical Society of the County of Kings, New York.

The four hundred and sixty-fourth meeting of the Homœopathic Medical Society of the County of Kings was held at the Medical Library building, 1313 Bedford Avenue, Brooklyn, on March 11.

The meeting was called to order by the President, Dr. Roy Upham.

Under new business Dr. Schenck stated that he had received a letter from Dr. John L. Moffatt, which he read, referring to the present method of using the word guarantee on the preparations that bear the government label and suggesting that action be taken by the legislative committee to have some plan adopted by which it would not appear that the government guaranteed the contents of packages.

On motion the letter was referred to the legislative committee to report to the Society.

Dr. Schenck: "There is a bill before the present legislature offered by the Board of Regents of the Educational Department of this State, which has a very sweeping application in regard to the practice of medicine. It gives power to the Board of Regents to take away a physician's license on grounds which seem trivial when the expense that men must go to to obtain it is considered. For a man to be haled up for being impolite to a patient seems trivial. The bill was introduced February 23, referred to committee, and had a second reading, and is now up for public hearing. I have not been able to get a copy of the bill but it was shown to me. It seems as though it should be amended so as not to give such sweeping power to the Board of Regents. Moral turpitude of physicians is not greater nor more to be feared than that of other professions."

The President: "I saw an account in the papers and a number of the New York Societies have taken action against the bill."

Dr. Warner: "I move that the legislative committee be empowered to take such action as they in their wisdom see fit." The motion was seconded and carried.

The application of William Henry Abbott, M.D., 1242 Pacific Street, Brooklyn, for membership was read by the Secretary, and referred to the Executive Committee.

Dr. Ritch: "I should like to bring to the attention of the Society an old subject, that in relation to the disposition of the minutes. The minutes of this Society are valuable, containing very active discussion that is instructive. The meeting of last month was one of the best we ever had. I think some use should be made of them. In talking with Dr. Wilcox, one of the editors of the *New England Medical Gazette*, he said he would gladly cooperate with us and use such minutes and papers as this Society thought wise to send. I move that we accept the offer from the editor of the *New England Medical Gazette* and that reports of the meeting be sent to Dr. Wil-

cox. Should this motion prevail I think it would be wise to send to other magazines, provided the secretary can make manifold copies. The papers of last meeting were well worth publishing. Possibly it is going away from our own *North American Journal of Homœopathy*, but they are rather inclined to publish reports of the Philadelphia Society, and the *Hahnemannian Monthly* is inclined to publish the reports of the New York Societies."

Dr. Schenck: "As the man who advocated the employment of a stenographer for the meetings I feel that this is in the right line. The great trouble has been that matter has been sent to the magazines not thoroughly edited. Sometimes a man says many things that ought to be revised. Perhaps it would be better to publish in the *North American* rather than in the *New England Medical Gazette*."

After further discussion it was moved that the Secretary send reports of the meeting to the *North American Journal of Homœopathy* the *Hahnemannian Monthly* the *Homœopathic Recorder*, the *New England Medical Gazette*, and the *Chironian*. The motion was seconded and carried.

It was moved and seconded that Dr. Orando S. Ritch be appointed a committee to edit the reports to be sent to the magazines.

Dr. H. D. Schenck read the following paper on Phosphorus in Retinitis.

In 1904 at a meeting of the O. O. & L. Society the writer reported the use of phosphorus in central retinitis in an otherwise healthy man of 39. He had noticed after a ride in the sun that there was a cloud like "dust" before his left eye, and that the perpendicular lines of objects had rather sharp curves inward at several points and the horizontal lines curved downwards at the ends. He had some fatigue of the eyes, slight photophobia and occasional pain in the temples which was more fatigue of the head than actual pain. The external conditions and the right fundus were normal. In the left macular region there was a square spot of opaque retinal tissue with a few dots and dashes extending into the retina, elsewhere the left retina and optic disk were normal. O. D.-6 / 6 O. S.-6 / 12 with difficulty. O. S. with a plus Dc. Ax 90 V.-6 / 12.

Phosphorus was used four times a day from May 21 to June 27, and saccharum lactis was given three times a day for ten days, followed by phosphorus three times a day for a week. Nothing but saccharum lactis was given after July 17.

The symptoms in this case were the poorly defined central scotoma which later became a thin central veil which he called "dust" and the curves in the perpendicular and horizontal lines. These disappeared in the reverse order in which they originally appeared.

In this case the subjective symptoms upon which the prescriptions were based were: 1st, dust before the eyes; 2d, fatigue of the eyes and head even without much use of the eyes.

The clinical symptoms were the central retinitis with the symptoms described above.

March 14, 1912, I first saw a member of this Society who complained that he had difficulty in seeing in accommodation. His distance and reading glasses had been used without change since 1901. An examination in 1905 had shown no change possible from those prescribed in 1901. Reading had become increasingly difficult for six months past. Recently he had noticed that the columns on the printed page were not straight. After use in accommodation there was some pain in the left eye. There was a central scotoma causing him to look to the right or left about two inches to see objects. At that time his vision in the right was 5 / 60 with a x 2 Ds.= x 1.50 Dc. Ax. 180 V.=6 / 9 with difficulty and in the left 6 / 60 with a x 2.25 Ds.= x 1.51 Dc. Ax. 180 V.=6 / 12 with slight difficulty.

This case had suffered for many years from chronic left-sided rhinitis, and his sense of smell was lost and taste diminished on that side. He also suffered from cystitis and some chronic prostatitis, with varicose ulcers also of many years standing. Several times during the summer and fall he had taken intercurrent doses of ergot to relieve the prostatic condition. His temperature has been 1-1/2 degrees below normal for a long time. His appetite and digestion, however, are fairly good.

From March 20 to July 20 he was treated with suction and release on the left eye, twice a week for five minutes. On April 2 phosphorus 5th every three hours was prescribed. This was changed on April 25 to phosphorus 6 x and this to occasional doses of phosphorus 30 on June 24. On August 2 Merc. Corr. 3 x was given for a few days to relieve some urinary conditions.

He had symptoms of soreness of the left eyeball to the touch, with various hallucinations, as seeing a bouquet of flowers, with micropsia in the left eye. On dilating the pupil on July 29 the macula was found to have a faint red ring in the center. The perpendicular lines still remained curved. His vision with the same glass on September 14 was 6/12 with difficulty in the left eye.

After bryonia had failed to relieve the soreness to movement and the feeling as though the eye would fall to pieces, arnica 6x was prescribed, which relieved the soreness.

The pupil on being dilated on October 17 showed four or five yellowish dots in the macula region surrounding the red ring noted July 29. The vision at this time with his glasses was 6/15 with difficulty in the left eye.

On November 6, 1912, phosphorus was administered, one saturated cone being given four times a day. The curves in the perpendicular lines continued. His left vision at this time was 6/22.3. The phosphorus was continued until Jan. 15, 1913, when the pupil was again dilated and the dots found in November had almost entirely disappeared, leaving only the red crescent.

On March 5 after dilating the pupil there was nothing to be found in the left macular region save the red crescentic noted when the pupil was dilated first in July, 1912. The other symptoms have continued, and his vision has remained since November at 6/22.3 with his glasses.

This was apparently a case of senile retinal degeneration. Phosphorus was prescribed on the subjective symptoms of: 1st, fatigue and soreness after use; 2d, the clinical symptoms of yellowish dots covering the macular regions, together with the curved lines which were somewhat similar to those of the former case.

Dr. Warner: "I had an opportunity of seeing the second case and the retinal picture as described, and I agree with the prescription of phosphorus. I think Dr. Schenck is fortunate in getting such a result. Phosphorus is valuable for degenerative changes where the soreness and curved lines are seen in old people, and that also applies very frequently to cases of retinal hemorrhage, which it helps to assist in absorbing. It does clear up the vision in many cases of retinal trouble with lights, curved lines, and hallucinations of vision which are due to retinal conditions."

Dr. James W. Fox reported the following cases. *Nux Vomica in Chronic Malaria.*

Mrs. R., aged 51, consulted me on June 28, 1912. She had had malaria for twenty-six years and for the past two years has not been able to obtain much relief, the paroxysms recurring at least once a week. Prodromal symptoms: neuralgic pains in different parts, with languor, drowsiness and desire to be left alone. Chill, usually long lasting, generally at night, beginning before twelve o'clock, or it might commence in the afternoon about 4 o'clock; starts in chest and spreads over the body; continues for hours with inability to get warm, and chattering of teeth; no thirst during chill; severe frontal and temporal headaches; tearing pain in posterior muscles of thigh, as if the flesh were being pulled off the bones; drowsy; wants to be covered; increased chilliness with any motion. Fever; lasts two or three hours; with severe headache; stabbing pains in forehead and temples, worse latter; better cold applications; drowsy, no thirst; no pain in thigh; sticking, inward pains above eyeballs and heaviness of lids. Sweating stage: lasts about an hour; is warm; relieves headaches and is followed by sleep. She always has a paroxysm preceding menstrual period; during each attack herpes appear about the lips and on left thigh. The intervals between chills were never clear, more or less creeping chilliness being felt from the shoulders to the chest, most noticeable at

night when changing position in bed. In general she does not feel well, sleep is poor; is always constipated; little appetite; periods irregular and has hot flashes. At the first visit she received gelsemium 3x and on July 12 reported some improvement. In the mean time a study of the case had pointed to nux vomica as the remedy, and this was prescribed in the 30th centesimal, one powder at night. A week later she reported an almost entire absence of the chilly sensations and a marked improvement in her general health. Her last call was made July 19, up to which time there had been no more chills. I have not heard from her since then so I am not able to report a cure "tried by time," but would probably have heard had there been a relapse.

Case 2. *Cystitis*. (I am inclined to think this is not the proper diagnostic term; perhaps neuralgia of the bladder would be better.) Mrs. S., about twenty-four years of age, pregnant at the seventh month was suddenly attacked with severe paralyzing pains in the bladder, constant desire to urinate, with severe tenesmus, with passage of small amount of dark, scalding urine. The pains were stabbing, extending up the urethra into the bladder, one after another in regular and rapid succession, causing her to sit slightly bent forward with her hand pressing over the pubic region. She was quickly relieved with merc. corr. 6x. This case is reported because of the kind of pains suffered by the patient. I do not find them mentioned in Allen's "Handbook," nor in Kent's "Repertory," and would be glad to know if any other authority quotes them.

Dr. Freeman asked if there had been any verification of the presence of the malarial organism in the case mentioned.

Dr. Fox replied that there had not been.

Dr. Allen: The question asked by Dr. Freeman came into my mind when I read the paper. We get a long chain of symptoms in the paper that are diagnosed as malaria, then one dose of nux is given and the patient gets well. I should be more pleased if the Bureau of *Materia Medica* in the Society were more scientific. In Hahnemann's time there were no better ways of differentiation between remedies, and Hahnemann's methods are valuable now, but in our day we should have some absolute evidence of a proper diagnosis. Intermittent fevers and malaria are cured by the homœopathic remedies, but so far as prescribing on the conditions we should be able to analyze and absolutely establish the diagnosis. I should hesitate very much to prescribe a potency in a similar case even where I was able to examine the blood and isolate the plasmodium malaria. It may not be nonhomœopathic to give the remedy in the tincture, but to give the remedy in the 30 or 200, I haven't the courage. Maybe it is right, but it has not been my experience. The use of nux vomica in such a condition with those symptoms, will effect a cure, I believe, but I take exceptions to calling it malaria. In the case of cystitis it was undoubtedly the condition calling for the remedy. *Mercurius corrosivus* in bladder symptoms is very well recognized, where there is dark urine, stabbing pains, going up into the body, the pains are usually worse at night, and the perspiration that follows the act of urination is particularly distressing. If any member of the Society feels as I do I hope he will express himself. I think that we can be more advanced. I remember a case mentioned recently in this Society as pneumonia which was aborted. The rales were all over the chest. That is not the way pneumonia appears to me. That disease is rather rare and when present is strenuous until it either clears up or the patient dies. A long chain of symptoms with rales up and down the back does not constitute pneumonia.

Dr. Schenck moved that the courtesy of the floor be extended to the visitors.

Dr. Freeman: I will agree with Dr. Allen's criticism. The point is well taken and Dr. Fox has not demonstrated that he cured a case of malaria. After the microscope has made the test, then the case is proven. Regarding the courage to treat malaria with potencies, I have treated and cured that disease, and in cases where the microscope demonstrated the

presence of the plasmodium. I was born and brought up in a malarial district in the Mississippi valley where everybody took quinine and calomel, and I have had an abundance of experience in this disease. Since I have been in the practice of medicine I have seen only three cases in my practice that have not been cured. One was a case of tropical malaria very difficult to handle; a man who came up here in the middle of winter and had grippe with the malaria. I stayed with the patient four days and left. The two other cases were in my early experience. I have never used quinine since I learned a better way, and I usually use the 30th or 200th. I believe they can be cured with the 3d or 6th;—there is not much difference, if you have the correct remedy it will quickly cure.

Dr. Chapin asked if there were any particular remedies that Dr. Freeman would use.

Dr. Freeman: I am glad the doctor asked the question. There are no two or three remedies. Malaria is about the most difficult disease we have to prescribe for, and the man who tries a few remedies or even a dozen is going to fail, for the reason that it is one of the diseases that may call for any remedy in the materia medica, and each case must be studied. It may call for any remedy from aconite to zinc. Possibly the most frequently indicated remedies are quinine in a potency, nux, ignatia, ipecac, natrum mur., bryonia and sulphur. Almost any remedy in the materia medica may be called for by the symptoms.

Dr. Lloyd: "There are a few points that I think should be cleared up. We shall not have many reports of cases if we ask for bacteriological tests of the diagnosis. We have all had cases that by the symptoms demonstrated the character of the disease, and it is not at all times possible to get a complete verification. It is better to have cases reported on the symptoms than none at all."

Dr. Lutze: "It is possible to make a proper diagnosis by the bacteria of malaria, but I know that it is possible also without that diagnosis, and I know that the homœopathic remedy will cure quickly except in those cases that have been drugged by quinine, arsenic or other drugs. It is not difficult to cure if you can see the patient and get the symptoms, provided you have H. C. Allen's handbook on fevers. I have found as Dr. Freeman says that ipecac, natrum mur., nux vomica, rhus tox., as well as other remedies will quickly cure, unless patients have been long under allopathic treatment. I had one patient who was hollow-eyed, with sunken cheeks and emaciated to an extreme degree who had been sick fifteen years. It took me months to antidote the remedies he had taken, but after I got them antidoted the cure came quickly. That was twenty years ago. Rhus was prescribed chiefly on the restlessness and relief from motion; he had also visible contraction in the epigastric region, just as if the skin had been folded. Where are the bacteria of scarlet fever if you have to have a bacterial diagnosis? We can cure them all with the proper remedy and potency."

Dr. Chapin asked if in these cases the plasmodium had been tested for both before and after the treatment, and would the remedy kill the malarial plasmodium.

Dr. Freeman: "In all cases I examine the blood beforehand, and where I have examined subsequently I found all clear. It is a question of phagocytosis. In Prof. Brook's 'Pathology' the modus operandi of the malarial infection is shown in Africa, where the disease is endemic. The natives who have reached adult life do not show the plasmodium in their blood, but it is found in the blood of children. Either they die or they become immune to the disease. The blood becomes antiseptic, and it is impossible for the plasmodium to live in it, provided the patients live long enough: But in order to develop immunity it is necessary not to take quinine; it will not develop if quinine is used. If quinine is used then the antibodies are of a sexual form and are found in the bone marrow and spleen. The homœopathic remedy acts to induce natural immunity. Adult negroes do not show malaria because they have become immune."

Dr. Schenck: "In the Canal Zone the immunity exists in the Panamanians, as Dr. Freeman says. Outbreaks occur there because people who are not immune visit the zone. I should like to say something on the line of what Dr. Lloyd said regarding reports in this bureau. This bureau asks for verification of symptoms and *materia medica*, and the reports are not meant to be on the cure of disease. It is the condition that would be covered by the symptoms, and not disease by name.

Dr. Garrison: "I am very glad to hear Dr. Schenck speak in that way. We are not treating disease by name but by the symptoms."

Dr. Fox: "I was glad to hear Dr. Allen speak of the necessity for accurate diagnosis, but it is not always possible to get it in cases that are chronic. After a case has run twenty-six years with chill, fever and sweat it may be classed as chronic, and in such cases one may not even find the plasmodium. There was a case at the Volunteer Hospital where the specimen had been taken and verified, and the patient, a young man, was relieved in two days. He stayed two weeks only, so we could not get a further history. I want to thank Dr. Lloyd and Dr. Schenck for their remarks. The cases given by me are not given in expectation that they will be received as scientific. They are taken from my case reports, and when the records were made it was not thought that they would be used in this way.

Dr. Stewart suggested that it was glorious to have a paper bring out discussion as this paper had. He considered it more valuable than where a paper is given so deep that all the auditors sit without discussion, feeling that all had been said. More had been gotten out of Dr. Fox's paper than from any paper presented to the Society for a good while.

Homœopathic Medical Society of the County of Kings.

The April meeting of the Homœopathic Medical Society of the County of Kings was held at the Medical Library Building, Brooklyn, on April 8, Dr. Upham, president, in the chair.

The Legislative Committee, Dr. H. D. Schenck, chairman, reported that the Committee is taking steps to oppose the bill now before the State Legislature enlarging the powers of the Board of Regents so that they may revoke the licenses of physicians for seemingly insufficient causes, and giving them an arbitrary control over the physicians now in practice. It was resolved that the Secretary write to the chairman of the Public Health Committees of the Senate and Assembly in the name of the Society and placing the Society on record as opposing the bill. The Legislative Committee was authorized to prepare a circular to be sent to the members requesting them to write to their senators and assemblymen asking them to vote against the bill.

Dr. William Henry Abbott, a graduate of Hahnemann Medical College of Philadelphia 1911 was elected to membership.

The members of the Society and about one hundred friends were then entertained with a series of moving pictures representing the development of germ life under the microscope. Dr. Geo. P. Olcutt, Jr., of New York, who gave the exhibition, lectured upon the films, explaining the various processes. The pictures include The African Sleeping Sickness, illustrated by injecting the germ into a live rat, and showing the condition of the blood of the animal three, four and five days later, the round corpuscles and disease germs being shown upon the screen magnified 1,200 times by the microscope to the film and a total of about 30,000 times to the screen. Other films shown were the war on the mosquito, with the germination and development of the marauding denizen of swamp land from its first stage to its full growth, the evolution of the housefly and its disease-spreading habits, inhabitants of stagnant water, and the development of the frog.

The Homœopathic Medical Society of the County of Kings has arranged with the Homœopathic Society of New York for an interchange of meetings, and the Homœopathic Society of New York will visit and furnish the papers at the Kings County Society meeting of May 13, while the Kings County Society will furnish the papers at the meeting of the Homœopathic Society

of New York on June 12. An interesting rivalry is expected, and arrangements are being made in Brooklyn to give the visitors a hearty reception.

L. D. BROUGHTON, Secretary.

Dr. George H. Ding presented the following cases:

1. *Bryonia in Rheumatism*: W. S., aged 19., had rheumatism when 12 years old, which left him with mitral regurgitation. Present attack began April 22 with sharp pains in left ankle, then in right ankle and both knees, worse on touch or least motion; joints swollen, skin pale, patient anemic, very thirsty, tongue coated white; urine scanty and of dark color; temp. 102; Pulse 80. *Bryonia 3X* was prescribed with local applications, which caused gradual reduction of temperature, with amelioration of all symptoms within six days.

2. *Argentum Nitricum in Neuroses of the Stomach*. Mrs. S., aged 35, housewife; four children, no miscarriages. Dates stomach trouble from first pregnancy eleven years previous. On October 29, 1908, patient complains of a boring, pressing pain in the back under the right shoulder blade; feeling as if she would burst; pains spread to the region of the stomach. Accompanying these pains are repeated loud eructations of flatus lasting for one hour or more, almost choking her; seems as if unable to get rid of flatus; no flatus expelled by rectum; attacks brought on by mental or physical overexertion or by hurrying. Would be relieved by soda in some form; hot water at times relieved. Relief would last two or three hours; relief also somewhat by eating or by rest; at times can eat such foods as pork, cabbage, etc., at other times all foods cause distress; has bad dreams when asleep; thirsty after meals, especially at night, not during the day. Patient has tried various forms of treatment. *RX Argentum nitricum 3X*, with restricted diet. Nov. 23: Has had few bad attacks, which now come about one-half hour after eating. Stomach region very sensitive to touch; pain of gnawing character, but radiate. Eating does not now relieve as often as heretofore. *Argentum nitricum 200* was now given every other day, and gradually less often. Nov. 27 much improved, medicine continued. Feb. 1909, had only two mild attacks since November 23. Medicine continued with general improvement.

Dr. Wood: I have used *argentum nitricum* in patients who are neurotic; people who are always in a hurry; a sensation as though the head were enlarged or some other part enlarged, shoulder, or hand; patients in turning a corner feel as though they were going to run into the corner of the house. In such conditions I have used it successfully.

Dr. Freeman: Dr. Ding seems to have had good indications for the use of *argentum nitricum*. One great point in this remedy is the explosive belching, especially in neurotic patients, also when associated with the symptoms of fear and nervousness and anticipation. They are in a hurry and have also the sensation of fear. A patient is often ashamed of the fears and impulses and will not state them unless asked. A great deal of nervousness if going anywhere, fear beforehand. Another indication is crazy sort of impulse; seems to have an involuntary impulse; afraid to look out of high places for fear of falling; also an impulse to do irrational things; impulse to strike people, or to do some outlandish act. I have asked patients: "Do you have any peculiar mental impulses," and I have had them tell about these things, as though they were ashamed to mention them. Regarding the use of *bryonia* in rheumatism on the symptomatology it seems to cover every case, but I have not used it very frequently. I do not know of anything that tries my patience as much as inflammatory rheumatism.

Dr. Schenck said that *argentum nitricum* to be useful should be in a fresh preparation. When it begins to get dark it is inert, as that is an evidence that rapid oxidation has taken place.

Dr. Ding in closing the discussion said: "The patient had a very peculiar semilateral headache; at times could see just one-half of an object. I

found that symptom under *argentum nitricum*. As to Dr. Freeman's remarks, some of my friends say they never use *bryonia* in rheumatism, and I presented this paper for that reason.

Dr. George S. Ogden presented the following cases:

1. *Paris Quadrifolia in Eye conditions*. To show the value of one symptom prescribing at times I will give a personal verification of the symptom of this remedy—"Pulling a string from the eyes to the occiput." During a nervous breakdown a year and a half ago the most persistent symptoms were pulsating from head to foot; persistent nausea and vomiting; as general symptoms and special eye symptoms of inability to focus the left eye on print or nearby objects without pain, more or less intense, and the sensation as though the occiput was trying to pull the eye back into a deepseated telescope position. This continued for about six weeks, when Dr. Blackman brought me some tablets to take every two hours. Sometime afterward Dr. Warner telephoned asking how the eye was. When I told him the sensation was relieved in 48 hours he replied: "So the *Paris quadrifolia* worked." That was my introduction to a very good friend.

2. *Hepar Sulph. in Ptyalism*. The cause in the case in which this symptom was persistent was the continued use of "anti-bilious pills," which evidently caused mercurial poisoning. The water ran from the mouth for at least a month when I gave him some *hepar* and in three or four days it had practically stopped. The patient said he noticed a decided change within the first 24 hours after taking the remedy.

Dr. Warner: Dr. Ogden's experience interested me. When Dr. Blackman told me of the symptom I said that *Paris quadrifolia* would relieve right off. I do not think I have prescribed it in more than six or seven cases, but wherever that symptom occurs, a feeling of the eye pulled toward the back of the head it has never failed to stop it.

The meeting then adjourned, thirty-six members and visitors present.

L. D. BROUGHTON, Secretary.

The State Society Meeting.

The April meeting of the Massachusetts Homœopathic Medical Society has passed into history as one of its most notable gatherings. The paper of Dr. Nowell's gives promise of being epoch-making in that it forecasts the possible cause and cure of cancer. The medical and surgical clinics, as well as the pathological demonstrations, were well attended, and many interesting cases were shown. The three papers in the afternoon had been very carefully written and were listened to attentively by a large audience. The evening banquet was attended by two hundred and twenty-three members and guests, including President Murlin of Boston University. The music of the orchestra and the 'cello solos added to the enjoyment of the occasion. The President's address on the "Trend of Modern Medical Education" resolved itself into a plea for the Endowment Fund of Boston University School of Medicine. Dr. Wesley T. Lee delivered a fine sermonette, finding his inspiration in certain verses read from Hezekiah. The writer did not make note of the chapter, but suggests that those who listened to the address may be interested in looking up the book of Hezekiah in the Old Testament. Dr. Lee took a practical view of the situation, and called for pledges to the Endowment Fund. He was ably seconded by interesting speeches from Dr. N. Emmons Paine in a general view of the future of medical education, and by Dr. John L. Coffin in most interesting reminiscences of the early history of Boston University School of Medicine. Great interest was manifested in the Endowment Fund and over five thousand dollars was pledged. The retiring President expressed his thanks for the support given him during the year, and, as Chairman of the Finance Committee, for the funds pledged that evening. The President-elect, Dr. Plumb Brown of Springfield, spoke feelingly of his sense of appreciation and responsibility in being chosen the leader of the Bay State Homœopathic Society for the oncoming year. *The fund of \$100,000 lacks only \$12,000 of its completion.* Will you not help to make it possible to announce the completion of this fund at the Alumni dinner on June 3?

BOSTON UNIVERSITY NOTES.

On Friday, April twenty-fifth, President and Mrs. Murlin received the Trustees and Faculties of Boston University at Hotel Vendome. The Faculty of the School of Medicine was particularly well represented. Among those present were Ex-President Warren, Ex-President Huntington and wife, the Deans of the departments, including Dean John P. Sutherland, Hon. John L. Bates, President of the Corporation, Professors E. C. Black, Agnes K. Black, Dallas Lore Sharp, James Geddes, Jr., Marshall L. Perrin, Robert E. Bruce, Lyman C. Newell, of the College of Liberal Arts; Professor George C. Cell of the Theological School, and Professors H. P. Bellows, N. Emmons Paine, G. R. Southwick, G. H. Earl, J. Herbert Moore and J. Emmons Briggs, D. W. Wells, N. M. Wood, A. G. Howard, and Drs. A. H. Powers, Charles T. Howard, DeWitt G. Wilcox, D. F. Downing, W. A. Paul, W. F. Phillips of the School of Medicine. As many of the wives of Faculty and trustee members attended, the gathering was a great success from a social standpoint. During the reception solos of a high order were rendered by Mme. Wilhemina Wright Calvert, with Mlle. Gerhardt at the piano. Refreshments were served, and the second reception of President and Mrs. Murlin was a most enjoyable function.

Commencement Day at Boston University falls this year on June the fourth, Baccalaureate Sunday on June the first. It is highly desirable that every member of the Medical Faculty and as many alumni of the School of Medicine as can do so be present on both occasions. The School of Medicine has never before been held in as high esteem by the Trustees, the other Schools, and the general public as it is to-day, and it is to be hoped that each alumnus and Faculty member will feel personally responsible for the success of the 1913 Commencement Week. Gowns and hoods may be obtained as last year. The Marshal for the School of Medicine, Dr. D. F. Downing, will attend to the wants of the members in this regard, details of which will be mailed within a few days.

To the Members of the Homœopathic Profession.

Cleveland, Ohio, March 26, 1913.

My dear Doctors:—

The reports from the Council of Medical Education show that the efforts to secure pledges, *re* propagandistic work, have been encouraging. However, it appears to some of us that we must resort to more effective and strenuous methods to secure the pledges from a large number of our physicians who have not yet subscribed. As the originator of this method for securing the pledges from every homœopathic physician, namely, \$2 or more a year for five years, and among the early promoters of the propagandistic and evangelistic work, I am deeply interested in its ultimate success. The plan as presented has already awakened an interest all along the line, and the interest *must* be kept up. How shall it be done? It is very essential that all of the medical journals should lend a helping hand, through their editorials, thereby indicating the importance of the work, and should urge their readers to respond to the efforts being put forth for propagandizing and evangelizing. Would it not be well for the Council of Medical Education to give to the profession monthly reports of the results of the efforts obtained by the Director, publishing the names of those who have given pledges and the amounts subscribed, in all of the journals, and especially the official journal of the Institute?

Where the first appeal has failed to secure a pledge it should be followed by another more pronounced, and if necessary should be repeated until the pledge is obtained. The "Spread of the Gospel" and "Team Work"

Editorials in the February and March numbers of the official "Journal of the American Institute of Homœopathy" are timely editorials, and good results are sure to follow. Though I cannot endorse all of the suggestions of Dr. Casseday, as stated in his "Plan to Place Homœopathy on the Proper Basis" etc., the doctor has advanced some very good and practical suggestions, and even if not altogether approved by the entire profession, his suggestions and those from others show that there is an awakening all along the line for the advancing of homœopathic interests.

Much praise is due the Council of Medical Education for the vigorous efforts to secure pledges and especially to Dr. W. A. Dewey, the Secretary of the Medical Council and the Director of the propagandistic work.

We are certainly awakening from our lethargy, the result of a long period of successes and triumphs, and it is necessary for us all to keep ourselves aroused and wide awake to the importance of the cause, and thus working strenuously and unitedly with this aim in view the victory will surely be ours.

The business methods adopted by the Trustees of the American Institute of Homœopathy, the energetic President Hinsdale, ever on the alert for homœopathic interests, and the inauguration of the College Alliance of the American Institute of Homœopathy, all betoken a bright future for Homœopathy.

I feel confident that if this plan for securing pledges is vigorously pushed sufficient funds will be received to carry on the work and co-operation of the entire profession secured. It is endorsed by the Institute, and the Council of Medical Education is fully and duly authorized by the Board of Trustees to carry on the work. We must not forget that it is a work of love, that the Director and Sub-Directors are all working without any financial remuneration. The pledges and money collected by the Council of Medical Education are turned over to the Treasurer of the Institute and the Institute through the Board of Trustees are the advisors as to the distribution of the funds thus collected, and we have confidence and faith that the funds collected are thus safely guarded and that they will be economically and wisely distributed.

I think the efforts to stimulate us to greater activities and to spur us on in this important and vital propagandistic work, are most gratifying, and I am very optimistic as to the results, if we all put our shoulders to the wheel and work with a determined effort to advance the interests of Homœopathy.

Yours fraternally,
H. F. BIGGAR.

OBITUARY

Dr. Ernest P. Bixby.

Dr. Ernest P. Bixby of Barre, Massachusetts, died at Canon City, Colorado, on March 24, 1913. He was born at Frankestown, New Hampshire, June 3, 1873. His early education was obtained in his native town and at Cushing Academy, Ashburnham, Massachusetts, from which he was graduated in 1894. In the fall of the same year he entered the New York Homœopathic Medical College and Flower Hospital, graduating in 1897. He then served one year as interne in the Albany Homœopathic Hospital, and in 1898 he located in Barre, where he had a most successful practice. He was married on June 19, 1904, to Agnes G. Scott of Albany, who, with their little son, survives him. He also leaves a widowed mother, Mrs. Mary A. Bixby. Some five years ago Dr. Bixby developed tubercular trouble and went to the Massachusetts State Sanatorium, where he remained as patient and assistant physician for about one year. He then resumed his professional work at Barre and remained in active practice until 4th of last March, when he started to go to Colorado for a season of recuperation and rest. He hoped a change of climate might help him to recover fully his health, but it was not so to be. The location of his practice made it difficult for him to attend medical meetings, but he was interested in them all. Early in his practice he became a member of the Worcester County and Western Massachusetts Homœ. Medical Societies. In 1903 he joined the American Institute of Homœopathy; in 1907 the Massachusetts Homœopathic Medical Society, of which he remained an active member until his death. He was also a member of the Congregational Church and of the Masonic Fraternity.

He was of a modest, retiring disposition and made but few acquaintances, but those few were not slow to recognize the strength and nobility of his character. He lived a brave and earnest life and left a record true.

J. P. R.

James Tucker Cutler, M.D.

Dr. J. Tucker Cutler of Roxbury, Greater Boston, died at his home on March 15 of broncho-pneumonia, after a brief illness. Dr. Cutler was born in Conway, Massachusetts, in 1864, and had been in practice in Roxbury for nearly twenty years. He was a graduate of Harvard Medical School, class of 1893, and of Boston University School of Medicine, class of 1894. He was assistant demonstrator in anatomy in the School in 1895 and 1896, and assistant in materia medica in 1899, 1900, 1901 and 1902.

Dr. Cutler was a member of the Massachusetts Homœopathic Medical Society and of the Massachusetts Surgical and Gynæcological Society, and was medical inspector of Boston public schools. He leaves a widow and a young son.

PERSONAL AND GENERAL ITEMS

Dr. J. H. Hallock (N. Y. Homœ. Med. College, 1886) has been elected president of the newly organized Board of Health of Saranac Lake, New York.

Drs. Clarence and Stella Howard Crane (B. U. S. M., 1900) are rejoicing in the birth on March 31 of another daughter, Ethel Louise. As a mark of their esteem and appreciation of his course in Minor Surgery, the Freshman class of the Medical School of Boston University presented Dr. Crane with a silver cup, suitably inscribed, for the new baby.

Dr. J. Walter Schirmer, class of 1908, B. U. S. M., and lecturer on Sanitary Science in the School, has been appointed a member of the Board of Health of Needham, Massachusetts.

Dr. Herbert F. Gammons, class of 1909, B. U. S. M., has purchased the practice of the late Dr. Carleton R. Thomas of Neponset, whose tragical death, as the result of a gasoline explosion, occurred in March.

Dr. Harold F. Simon of Winchester, Mass., (class of 1904 B.U.S.M.), was married on April 17 to Miss Lilian Webster of Malden.

During Mrs. Knowles' absence from this country, from May to late August, the business management of the *N. E. Medical Gazette* will be in charge of Dr. Dana F. Downing; address 80 East Concord St., Boston.

The *Gazette* extends its sympathy to Dr. Laurence F. Keith, B.U.S.M., 1907, in the death of his wife, Mrs. Elsie Keith, which occurred on April 4 at their home in Wareham, Massachusetts.

Dr. Ralph C. Wiggin (B. U. S. M., 1900) was married in Braintree, Mass. on March 25 to Miss Marian Preston Clark. Their home is to be at 84 Prescott street, Cambridge.

Dr. Joseph K. Miller, class of 1912, B. U. S. M., has opened an office at 86 Chestnut street, Boston.

Dr. Arthur F. Sumner, class of 1888 B.U.S.M., has removed from Concord, New Hampshire, to 365 Edgecombe Ave., New York City.

Dr. Edward T. St. John, class of 1888, B. U. S. M., formerly located at St. Lucy, Barbadoes, West Indies, has removed to 60 West 139th St., New York City.

Owing to the recent death of Dr. Ernest P. Bixby, the town of Barre, Massachusetts, offers a good opening for a young homœopathic physician.

The Power Construction Company of Shelburne Falls, Mass., is desirous of obtaining the services of a physician, preferably a recent graduate, who is licensed to practise in Vermont, whose duties it shall be to attend to the medical and surgical needs of a construction camp of about three hundred men, and in a general way to see to the proper sanitation of the camp. He will be paid one hundred dollars a month and will be furnished with the necessary medicines and outfit. Address Mr. Geo. W. Bunnell, President, Power Construction Company, Shelburne Falls, Mass.

LESSONS IN THE ITALIAN LANGUAGE.

Signor Ettore Ciampolini of Siena, Italy, (class of 1916 B.U.S.M.) is desirous of obtaining pupils in the study of Italian or for Italian conversation. Signor Ciampolini is lecturer for "Circolo Italiano di Boston" and is endorsed and recommended by Prof. Geddes of Boston University and by Prof. Grandgent of Harvard College. Address Ettore Ciampolini, care of Boston University School of Medicine, 80 East Concord St., Boston.

DENVER IN JULY, THE PLACE FOR YOU.

The local Committee of arrangements meets and dines regularly every Thursday evening at the Albany Hotel, Denver, where the Institute is to hold its sessions in July. Each meeting is more largely attended and more interesting than the preceding.

If the happy, enthusiastic and concerted action of the members of this Committee is any indication of what may be anticipated by those who come to the Institute, the meeting will be a hummer, well worth the sacrifice in time and money necessary to attend.

The scientific sessions will be taken care of by those elected for that purpose; in this there promises to be no cause for misgivings. The local Committee is bending its energies toward giving you the kind of entertainment which will make you doubly thankful that you came, thankful that you live, and thankful you can see Denver and Colorado under such favorable circumstances; towards showing you scenery that can be excelled nowhere in the world; forms of entertainment which are distinctive and typical of Colorado on its gala occasions, and other things which you have never seen elsewhere and may never see again. In how far the Committee may succeed in its efforts remains to be seen by those who are fortunate enough to attend the A. I. H., in July. We who have heard the plans, which we are not at liberty to tell because some of the stunts are intended to surprise the seniors, et als., believe no one will be disappointed except the fellow who stays away. Whether you are in the habit of attending the sessions of the Institute or not, come to Denver; whether a member of the Institute or not, come. If a regular attendant keep it up,—pass it along. If “a stay-at-home,” break away. Come to Denver that you may have something pleasant to think and talk about in your later years; something to tell your children and your grandchildren. As for your wives and sweethearts, why of course you are expected to bring them with you. The ladies have plans for them which are sure to please.

PUBLICITY COMMITTEE.

Open Letter—the “Gazette Special.”

Dear Doctor:

You and your wife and your children and your wife’s children and your children’s children are all cordially invited to step aboard the “Gazette Special” as it passes through or near your town en route for Chicago, where it will join the special train bound for Denver and the American Institute of Homœopathy.

Nothing so adds to the pleasure of travelling as the delights of comradeship with congenial friends; your presence is needed to make that comradeship complete.

The management of the *New England Medical Gazette* has arranged with the Boston and Albany, New York Central and Lake Shore, North Western and Union Pacific for a through first class Pullman sleeping car from Boston to Chicago, and thence to Denver.

Like its namesake, the *New England Medical Gazette*, this “Gazette Special” will be dependable, well managed, good looking and first class from start to finish.

The schedule is as follows:

Leave South Station, Boston,	4.50	P.M.	July 3rd.	via B. & A.
Leave Worcester	6.	P.M.	July 3rd.	via B. & A.
Leave Springfield	7.25	P.M.	July 3rd.	via B. & A.
Leave Pittsfield	9.19	P.M.	July 3rd.	via B. & A.
Leave Albany	10.45	P.M.	July 3rd.	via B. & A.
Leave Utica				
Leave Syracuse				
Leave Rochester				

Arrive at Buffalo, 6.20 A.M. July 4th.

Here an opportunity will be given all those who wish to visit Niagara

Falls without extra charge (and without leaving the special car), returning to Buffalo and leaving via the Lake Shore at 12.28 P.M.

Leave Cleveland	July 4th.
Leave Toledo	July 4th.
Leave Detroit	July 4th.
Arrive Chicago	July 5th.

At Chicago a little breathing space will be given between the time of arrival and departure of the official train, which leaves the new Passenger Terminal at 11.30 A.M., July 5th. The "Gazette Special" will be attached to this official train, and thus the big family of Institute children will travel together in one splendid train for 24 hours, reaching Denver on July 6th.

The railroad fare round trip summer excursion tickets, Boston to Denver and return, good until October 31st, will be \$70.80; from Worcester, 69.90; from Springfield, \$67.50; from Albany, \$62.80. A lower berth in standard Pullman sleeping car from Boston to Denver would cost \$11.50; section, \$20.70 or drawing-room, \$41. Lower berth from Worcester same as from Boston; from Springfield, \$11.00; from Pittsfield same as from Springfield; from Albany, \$10.50.

Kindly notify the undersigned as early as possible if you can accept our invitation and become one of the "Gazetters" to Denver.

Yours very truly,

NEW ENGLAND MEDICAL GAZETTE,
Boston, Mass.

Fourth International Congress of Hygiene.

A meeting of no small importance will be held in Buffalo this coming summer wherein the subject of school hygiene will be studied in all its phases for a period of five days by some of the most eminent authorities upon the subject in this country. Beginning August 25th, and continuing to August 30th, inclusive, the Fourth International Congress of Hygiene will hold its deliberation, which will be the first of the kind ever held in America.

The object of this Congress is to study methods for improving the health and efficiency of the school child. There is now being arranged a comprehensive program of papers and discussions covering the entire field of school hygiene. There will be scientific exhibits, representing the best that is being done in school hygiene, as well as commercial exhibits of practical and educational value to school people. Delegates will attend from all the leading nations, from every college and university of note in the country, and from various other educational, scientific, medical and hygienic institutions and organizations. The Congress is further open to all persons interested in school hygiene. Membership may be secured on the payment of a five dollar fee. Applications should be sent to Dr. Thomas A. Storey, College of the City of New York, New York City.

The man of tomorrow depends upon the child of today, and the child of today, roughly speaking, spends half his waking hours under the influence of school conditions. Are you interested in making these conditions what they ought to be? If you are, give this Congress publicity. That is one way in which you can help.

THE NEW ENGLAND MEDICAL GAZETTE

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No. 6

ORIGINAL COMMUNICATIONS.

THE TREATMENT OF PUS WITHIN THE FEMALE PELVIS.*

BY JAMES C. WOOD, A.M., M.D., Cleveland, Ohio.

Any or all of the tissues within the female pelvis are subject to infection and inflammation. This is true also of the male pelvis, but inflammatory and suppurative processes are much more common, for obvious reasons, in the female than in the male. The urethra, the bladder, the vagina, the walls of the uterus and its lining membrane, the fallopian tubes, the ovaries, the cervix, the cellular tissue and the pelvic peritoneum are not infrequently attacked by various degrees of inflammation, varying from the mildest type of salpingitis to inflammatory processes involving all of the pelvic organs, with exudates either circumscribed, or filling the entire lower abdomen. Thus we may have a salpingitis with some round cell infiltration and a slight thickening of the tubes; or one with exudates—gluing together the uterus, ovaries and tubes; or we may have an accumulation of pus within the tube, causing abscess or pyosalpinx; or we may have a suppuration involving the entire pelvis; or we may have a diffuse peritonitis or a cellulitis with extensive involvement of the lymphatics. Again, not infrequently the pelvis is involved secondarily from suppuration higher up,—the appendix oftener than any other organ being responsible for such inflammation.

The older classification which I adopted in my textbook (a), of pelvic cellulitis and peritonitis, while useful for the purpose of studying the definite pathology and symptomatology of pelvic inflammation, is impractical at the bedside for the reason that never do we have one of these tissues involved without the involvement of

* Read before the Ohio Homœopathic Medical Society, May, 1913

(a) A Text-book of Gynecology, 2d Edition p. 427

the other. It is true that one or the other tissue may be the more extensively implicated, but the practical physician no longer undertakes to make the finer differentiations when dealing with pelvic inflammation and pelvic suppuration. Indeed, in the acute manifestations of pelvic inflammation, the very last thing that should be done is to manipulate the parts for the purpose of making such distinctions. It is, of course, always desirable to know the cause of the inflammation if possible, whether due to the streptococcus, the staphylococcus, the colon bacillus, or the gonococcus or to the retained products of conception. As a matter of fact, even when the cause is originally specific, rarely is the gonococcus alone responsible for the infection, there usually being found other varieties of infective organisms. All the forms of inflammation may end in resolution; if so, there are usually left behind adhesions and scar tissue, which may or may not give rise to subsequent trouble. One of the severest types is that of septic thrombosis, which so frequently occurs through the infection of the normal thrombi filling the uterine sinuses after labor. When infection takes place nature creates another thrombus, proximal to the infected one, in her effort to limit the infective and destructive process. If the infection continues, the new thrombus is likewise involved, this process continuing until the veins of the broad ligament become extensively thrombosed. Either the ovarian or the uterine veins may be chiefly affected, depending upon the location of the placenta.

Symptoms.—The subjective symptoms of acute pelvic inflammation vary from slight pain in the lower abdomen, increased by movements, with a moderate fever of 100 F. to the extreme cases with severe pain and a temperature of 105 F. There is usually a vaginal discharge with varying degrees of tenderness over the lower abdomen. The character of the vaginal discharge will depend in large measure upon the character of the infection. Following miscarriages and labor we have the characteristic lochial discharge which, in severe cases, is often almost completely suppressed. In specific cases we get the characteristic green discharge of gonorrhoea. If exudates form, they may be felt on one or both sides of the uterus or behind it. Usually there will be found a mass in the cul-de-sac of Douglas. If the exudate forms about a prolapsed ovary or tube, it can easily be felt back of the uterus. Very deep bi-manual palpation may be necessary to detect exudates high in the pelvis. If pus forms, fluctuation may sometimes be detected, but as a rule the infected walls are so thick that fluctuation is not a discernible symptom. In septic thrombosis the only subjective phenomena may be repeated chills and a high fever, without definite objective symptoms to account for the symptoms. There is, however, usually tenderness in the neighborhood of the veins affected, and in some instances distinct induration may be outlined.

Treatment.—Even in the literature of ten years ago there was no difference of opinion regarding the treatment of mild forms of pelvic inflammation. The recumbent posture, the emptying of the bowel, the use of hot vaginal douches, the use of heat or cold over the lower abdomen and the proper internal medication were the measures recommended by all. But the treatment of pus within the pelvis, as is the treatment of pus in any other part of the body, is to-day very different from that recommended twenty or even ten years ago. *The dictum of that time was to liberate the pus whenever discovered, no matter in what part of the body it might be found.* The dictum to-day in the treatment of suppurative processes within the abdomen and pelvis is, *do not open the abdomen until the pus has sterilized itself, as indicated by the lowered temperature and white blood count and the improved condition of the patient.*

The subject under discussion was suggested to me as chairman of this bureau because of the many calls I have as a specialist to operate in cases of acute pelvic inflammation. Indeed, I have been severely criticized more than once for not operating during the acute manifestations of the disease. In one or two instances I have regretted that I did not operate—one instance of appendicitis, which subsequently ruptured and I lost my case. I am thoroughly convinced, however, that many more cases of abscess within the pelvis, and appendiceal abscesses, are saved by the conservative treatment than was formerly possible under the early operative regime.

In the report which H. Machaughton-Jones, London, made to the Sixth International Congress of Obstetrics and Gynecology, Volume 9-13, page 73, the author reflects the teachings of nearly all of the prominent gynecologists and abdominal surgeons in the United Kingdom. He especially emphasizes the wisdom of postponing operative procedures in the face of local septic conditions, extreme anæmia and prolonged hemorrhage, except when it is possible to reach the pus extraperitoneally. In other words, nature if given a fair chance in the vast majority of instances so sterilizes the pus that a later intraperitoneal operation becomes a comparatively safe procedure. If the pus is accessible through the vagina, it is a most simple matter to make a vaginal puncture and drain the abscess cavity. This gives the patient an opportunity to rally from her general infection and later on, radical work if necessary, can be done with comparative safety. This is equally true of suppurating appendiceal cases. This statement does not mean that the early appendix operation should not be made before pus has formed and there is a localized abscess. The surgeon today does not try to remove the appendix in cases of suppurative appendicitis but waits after draining the abscess until the peritoneum can be invaded without danger of general infection. If the pus is confined to the cul-

de-sac of Douglas, it is a most simple matter, after thorough disinfection of the vagina, to make a vaginal puncture by means of long, sharp-pointed scissors thrust into the abscess cavity, expanded and withdrawn. A double rubber drain is left behind. If the discharge becomes offensive, it can be carefully irrigated with the normal salt, or some mild antiseptic solution. I much prefer the tube to the gauze because the gauze does not permit ready exit of the discharge. There are instances, however, where the gauze is necessary to control bleeding. When the abscess is due to a pus tube, both tubes are not infrequently involved. After evacuation careful bimanual palpation, with the gloved finger in the abscess cavity, should be made to determine whether or not other pockets of pus are present.

It is surprising how quickly the patient will rally after this treatment. In many instances this is all that is necessary, although in the larger number of cases, after extensive involvement of the pelvic organs, subsequent work from above is called for.

THE DIAGNOSIS AND TREATMENT OF PNEUMONIA IN CHILDHOOD.*

BY NELSON M. WOOD, M.D., Charlestown, Mass.

The prevalence of acute lung inflammation in children, commonly designated "pneumonia," in some of its varying types furnishes sufficient reason for a brief consideration of the subject at this time. The types well known, broncho-pneumonia and lobar pneumonia, will be the only ones studied in this paper. On account of the severity of the effects of the pathological changes encountered in these diseases during the tender years of childhood, they form a most formidable and dangerous enemy, giving the medical attendant many anxious hours and fond parents many more.

Pneumonia as a cause of death has a place of distinction with boards of health, both municipal and federal.

In Massachusetts in 1910 the number of deaths in children under 15 years from broncho-pneumonia was,—males 699, females 521,—total 1220. During the same year the deaths from lobar pneumonia were—males 732, females 597,—total, both sexes, 1329. Total from both diseases, 2549.

In 1911, deaths from broncho-pneumonia were 1237, and from lobar pneumonia, 1102,—total 2339 for both sexes, with the usual ratio of males to females as 5 to 4.

The City of Boston, with its more than one half million of total population, reports for the year of 1912, as follows:—

* Read before the Massachusetts Homœopathic Medical Society, April 9, 1913

Two hundred and seventy-nine children under 15 died of lobar pneumonia, 318 from broncho-pneumonia—a total of 597. When we remember that these figures represent only the fatal cases, and that the mortality rate varies with the climatic and seasonal conditions, environments, severity of infections, physical constitutions of the patients, skill of medical and nursing attendants, from 5 to 25 per cent in lobar pneumonia, and from 10 to 60 per cent in broncho-pneumonia, we realize how great is the number of cases treated annually, and how great is the possible potential value in human life that is entrusted to medical care.

Broncho-pneumonia or catarrhal pneumonia, on account of its large mortality, and because of its frequent appearance as a complication of almost all diseases of childhood, especially measles, scarlet fever, whooping-cough and diphtheria, when the vitality of the little patients has been already sapped by these primary diseases, it is an especially formidable disease, and we can easily understand the high death rate.

This disease is called primary or secondary according to previous conditions of health. During the first two years of life, more cases of the primary form are found than at any other period, and it frequently follows a simple bronchitis or cold, or begins as such, with restlessness, slight irregular fever and rapid breathing; usually a persistent, troublesome cough, more marked at night, is present. Rales of varying degrees of sound and intensity are found in any or all parts of the chest. These vary with the extension of the simple bronchial inflammation of the coarser tubes downward, and involving the air vesicles around the tubes, or the ones in which they terminate. As the disease progresses, small areas of congestion and bronchial breathing are found. These may remain scattered and small, or become confluent, and involve so much tissue as to render a positive differentiation from the lobar type very difficult.

A very large proportion of these primary cases do not begin with the mild bronchitis symptoms just described, but are ushered in by more severe symptoms—sometimes convulsions, more commonly by vomiting, high fever of remittent type, rapid respiration and great prostration. These cases may early become cyanotic. The main picture of this form is easily seen to be a distinctive lung condition, with less misleading side symptoms than other chest diseases. The respirations are frequent and labored. There is marked dyspnoea with active dilation of the alae nasi. The rate of respiration is usually from 60 to 80 per minute, and may go to 100 or over. When long continued at 80 to 100, respiratory failure is imminent.

The pulse rate is always rapid,—from 130 to 160 or 180,—but

does not seem to affect the patient as much as the rapid breathing. Often it is surprisingly strong when running continuously above 140, but as the consolidated areas increase and prostration becomes more marked, it becomes soft, weak, and compressible.

Pain in the chest is not a very prominent feature with broncho-pneumonia. The difficulty in locating the patches of consolidation is often very great, as the rales may be of all grades, and very numerous, the child fretful, crying and squirming, the mother trying to quiet it at the same time. Repeated and careful examinations may reveal areas of greater transmission of sound in any or all parts of the lungs, as it is almost always bilateral. Percussion often is of no service in determining their presence. I have seen many with right apex involvements at first, and then left base posteriorly, then more small areas all through the right lung. Sometimes I have not been able to definitely locate any consolidation, and have had all the other symptoms. Delirium may be present at any time during the attack, and is manifested by excitement and inability to recognize attendants.

Cyanosis is a frequent symptom, and is always a danger signal, especially if the chest is full of moist, bubbling rales, and the eyes showing collections of pus in the corners. Cold perspiration of the forehead and darkened fingers add great gravity to the clinical picture.

Another group of symptoms of much importance is the gastro-enteric. Frequent undigested stools, distention of the intestines with gas and nausea, indicate low power of assimilation, and often are the factors that cause death when added to the usual conditions.

The secondary form of broncho-pneumonia is much the same as just described, occurring with or following other acute diseases of childhood. On account of the original disease, it is liable to be more severe and dangerous, and more rapid in its course. Larger areas of dullness may be found, and the stage of exhaustion come sooner. The duration of broncho-pneumonia is from two to four weeks or more, and varies in the intensity of its symptoms with the activity and number of the congested areas, but not necessarily with their size. The virulence of the invading organisms having much to do with the seriousness of the case.

With whooping-cough and measles, much anxiety is experienced if the case drags on several weeks, as tubercular infection is often found. In these cases the patient is apt to be fretful, have an irregular temperature, some attacks of severe dyspnoea and cyanosis, and after weeks of suffering, die of exhaustion.

It is not uncommon in all varieties of broncho-pneumonia for the temperature to fall to normal, stay there a few days, and with an extension of infection to new areas in the lung, have a rise and

a continuation of the disease as before. It is not apt to be so severe as the period before quiescence of symptoms.

In my own experience, other complications have not often been found. Other physicians, however, report meningitis, stomatitis, and nephritis occasionally.

Lobar pneumonia differs from the symptoms given for bronchopneumonia by its sudden onset. It is seldom preceded by more than a few hours of lassitude or weakness. Vomiting is the most common initial symptom, but I have seen several cases beginning with severe convulsions in young children, and a very few that gave a history of a chill. The chill has, in my cases, been in children over seven years of age.

Following closely any of these first symptoms of invasion, is a flushed face, dry and separated lips, and rapid breathing. Respiration often runs quickly to 40 or 60 per minute, and has a short moan at the close of expiration. Sudden high fever appears, and is continuous. As any quick rise in temperature and acceleration of breathing renders the respiratory murmur harsh, it may be very difficult for the next 48 to 72 hours to determine what disease we have to deal with. Headache, backache, pains in the arms and legs, may all be present, often an earache and an acute attack of influenza can easily be imagined. If with the headache and vomiting, a stiffness and reaction of the neck occurs, cerebro-spinal meningitis suggests itself. We should always remember here in differentiating that the fever is higher and the respiration more rapid than in that disease, and the vomiting less persistent. These symptoms may last three or four days,—pupils vary in size, and delirium develop before the true lung conditions become apparent, or are discovered, if the observer has been misled by the marked cerebral symptoms.

Pleurisy is a quite constant symptom, but may be vaguely indicated by a young child, and, whether the pain is pleural or diaphragmatic, be referred to the abdomen. If the right lower lobe is involved, splinting of the right rectus muscle with marked tenderness in the region of the appendix has led more than one careful surgeon to remove a perfectly innocent appendix. Again, the high temperature and rapid breathing should suggest waiting for a clearer picture, and the probable consolidation in the chest adjacent. Cough is not usually marked during the first two days, but is a pretty constant symptom, though seldom a distressing one.

Expectoration has been very rare in my cases, except in a small number of older children.

Prostration is a noticeable feature of pneumonia, and develops early in its course.

After this period of indeterminate symptoms has passed, percussion will bring out a slightly higher note over the filling area,

and the respiratory murmur will be diminished, even at times to almost complete absence of breath sounds. Resonance in the unaffected lobes will be increased.

Any diminished respiratory murmur in the left lower lobe posteriorly, or diminution in resonance over the same area, even in the earliest stage of congestion, makes a diagnosis of pneumonia to an expert ear almost positive, before any gross changes appear. I have verified this many times. In cases presenting few signs this area can be watched to advantage, as a dullness equalling that over the hepatic area on the opposite side is significant.

As the disease progresses, the picture is completed. Herpes of the face and lips are common. Consolidation increases, dullness is marked, and bronchial breathing with exaggerated transmission of voice and vocal fremitus are easily demonstrated. The urine is scanty and high colored, high specific gravity, and loaded with urates. Chlorides are absent, as in adult cases.

There are still some cases that do not declare themselves until very late in the course of the disease, consolidation not being found before the close of the first week, and maybe not at all before the crisis. Such cases clear up quickly after the toxic stage is past, as there is but little lung impairment. Probably there are small areas in such cases, that are exceedingly difficult to locate. In searching for them it is always necessary to listen with great care in the axillae, as it is often possible to demonstrate bronchial breathing there when it cannot be at all easily done either on the posterior or anterior surfaces. This is valuable with adults as well as with children.

Occasionally there is seen an abortive type of pneumonia that does not get beyond the first stage. The onset is sudden, with the usual symptoms, and suddenly all the symptoms disappear about the third day. Just why this occurs is not known, but presumably it is because the individual resistance is strong enough to overcome the invasion.

A case illustrating. W. L., 12 years of age, was suddenly taken ill while selling papers, had a chill, and fell on the sidewalk, apparently overwhelmed with some poison. Was taken home by neighbors, and was seen an hour or more later. Temperature 103, pulse 130, aching all over, rapid respiration, and cough. No rales, great prostration. Next day herpes on face and lips, same conditions in general, but nothing demonstrable in chest. The third day a sudden change for the better came on, and in two days more, he was up and wanting to go on his paper route. It seemed to me an attack of pneumonia. If not, just what it was I am anxious to know.

All cases of lobar pneumonia do not end on the regulation

days, from the 5th to the 9th, but drag on. The longer the delay the more grave the prognosis, and the more we need to be on a sharp lookout for complications, as they may be more dangerous than the original disease. Many times, both in private and hospital practice, I have seen death follow from suppurate meningitis, which probably is a terminal infection. These cases are absolutely hopeless. Another common and at times confusing complication is empyema. This occurs frequently in children under five, and is seldom found with any other than true lobar pneumonia. Any fluid in the pleural cavity of a child is pretty sure to be pus, and should always be so diagnosed. Some older children have a serous effusion at first, but this is also more apt to become purulent than in an adult.

With a true empyema in childhood, the character of the breathing is not changed as in an adult. It is quite like the breathing of the pneumonia that preceded it, but the percussion note is more markedly dull. The temperature chart helps with its remissions, together with the leucocytosis, to establish the diagnosis.

In my experience, cardiac complications except gradual failure from toxemia, have been very rare. Some observer reports suppurative pericarditis and endocarditis. Suppurative otitis media often occurs, and demands careful treatment, or mastoiditis still further endangers the young life.

Bacteriological examinations of the sputum or throat may be of much value in some cases, and all fluid taken from the chests of children, if there is any doubt as to its character, should be examined microscopically.

Radiographic plates when available, are of great service in determining the number of small patches, and often their great number is proof of extensive tubercular involvement. This I think to be especially true of cases suffering from cyanotic attacks and prolonged course.

Fluid can often be differentiated from the lung involvement. This method of examination is, of course, practically limited to hospital practice, although many little patients can be taken to the radiographer and then taken home.

The treatment of pneumonia, whether broncho or lobar, needs to be begun and continued under a regime of good common sense, the comfort of the patient being the first consideration. The patient from a temperamental point of view, and previous bad disciplinary control, may make in all stages of the disease the treatment more difficult. Any efforts at this time to effect much disciplinary change is probably not advisable. Such cases especially need a trained nurse, one who loves children, to care for

them, with the mother only as a helper. The value of the trained nurse with the especial aptitude for the care of children cannot be overestimated.

The patient should be at once put to bed in a large, well-lighted and aired room, with the temperature from 60 to 70. Pure air at that temperature contains all the vital elements possible to get. The ventilation needs to be carefully studied, so that all excess of CO² or other wastes, either respiratory or from combustion, be eliminated completely. A young child should not be kept in a basket or crib, wrapped almost to suffocation near the kitchen stove, nor in a darkened closed bedroom. All persons except those caring for the child should be excluded from the room, and every effort possible be made to keep the patient at rest. A narrow, smooth bed is best. Many times the patient's body can be raised so as to bring ease in respiration. Frequent and careful changing of the position, especially with young children is necessary. It not only rests them by changing their areas of pressure, but prevents undue stasis from long continuance in one position.

The clothing should be light and comfortable, and arranged so that it may easily be changed by opening in the back. In my opinion, padded jackets, oiled silk, mud plasters and poultices are an abomination, and not to be used except in some cases of localized pain, when a hot application can be used intelligently until the symptoms are relieved,—then discontinued. Smearing the body with hot oils, or painting with iodine irritants interferes with the functional activity of the skin, and should be condemned, and the reasons explained for so doing to the anxious relatives. Oftentimes more opposition is met, and more explanation is necessary in regard to these points with the young mother,—who freely exposes the legs of her child to the weather, cold or hot, the bites of mosquitoes, flies and gnats, sunburn and stone bruises, without a single thought of cruelty to her child,—than to any other class of mothers. May the day speedily come when the helpless child will be protected from these deadly insects and cruel fashions, which are devoid of sense or beauty!

The diet should be varied to suit the patient as much as possible, and at the same time furnish sufficient calories, for the body needs milk, cream, broths, gruels, custards, lactose, egg in soft forms, stale bread, fruit juices, and an abundance of water; intervals of feeding from two to four hours, varying with the age of the patient and amount taken at a time.

The bowels should move at least once daily, either naturally, unaided, or by enema or glycerine suppository. Possibly some mild laxative, preferably a saline, may be needed.

Coming now more definitely to the medical treatment from

the drug standpoint, and the consideration of special symptoms, we believe honestly, after a somewhat extended experience of twenty years, that the medication which is of the most value is that administered in accordance with the law of similars.

During the first stage of these diseases, when the child is restless, has a rapid pulse and high fever, short respiration, dry lips, thirst, and is sensitive to touch, aconite proves to be a most valuable remedy.

Bryonia soon follows aconite, and is of great value when there is present the short, dry cough, grunting expiration, pains over the affected areas, and general soreness, which are somewhat relieved by pressure and warmth. Iodine has been another favorite remedy with me, particularly in apex involvement with croupy, hoarse cough without pain, but considerable fever. The cough softens under its use. Resolution seems to commence earlier in many cases.

Iodide of atimony is valuable when the mucus and filling of the air sacs begins to free up, and fills the chest with moist rales. In weak or tubercular subjects, it is especially useful. A fresh preparation of the 2nd or 3rd trituration tablets, or capsules, is most reliable.

Phosphorus has long been a favorite remedy especially in those cases showing intense congestion, some bloody, frothy mucus which is often salty in taste, persistent tickling in larynx and under sternum.

If pain and pleurisy are present with these symptoms, bryonia alternates with great benefit. A fresh solution of phosphorus should always be used, and given by drops mixed with water at each dose. Otherwise we may get some other chemical result—as phosphoric acid. This point was emphasized for my advantage by our colleague, Dr. Piper.

Belladonna is of service in cases of acute sensitive conditions generally, worse at night, with headache and tendency to delirium. Respiration deficient, rapid and oppressive.

Antimonium tartaricum is a remedy of great value in the cases of threatened pulmonary failure when the chest is full of bubbling, moist rales, cyanosis, with moist skin and much prostration, I prefer the 2nd or 3rd decimal trituration.

In young children spongia is of service where there is a persistent croupy cough. It may be used with other remedies intercurrently. Suffocative paroxysms of cough with panting respiration are benefited.

Ipecac, ferrum phos., hyoscyamus, and others, are valuable according to their pathogenetic indications.

The question of heart stimulants is always one to be consid-

ered, but not to be overdone, as is often the case. It is extremely interesting to notice that there is no general agreement as to the value of this class of drugs, yet the results of the treatment do not present so great a difference as the varying views would suggest.

When the pulse becomes weakened and compressible, or shows irregularity, and there is a weakened second sound, there is no doubt that some help is needed for the overworked myocardium. Simple hot drinks, flavored with good tea or coffee, often stimulate and rest the patient, following which a tepid sponge bath with alcohol and water will slow and steady the beat enough to rest the heart materially.

Alcohol as whisky or brandy I have used in small doses for some years, and with what seemed to be successful results, the doses being from five to sixty drops, as needed.

When actually in need of help, I use caffeine, citrated in doses from 1/10 gr. to 2 grs., and firmly believe it is of more value than any other medicine.

The use of digitalis and strychnia in these cases has been unsatisfactory in my hands as general remedies. Nitroglycerine has been of real service when the extremities have been cold, and with beginning cyanosis and weak pulse. Nitroglycerine in 3x tablet triturates is a convenient strength, as two or more tablets can be used safely, and as often as needed.

Tincture of cratægus is worthy of a trial for simple heart weakness. It does not upset the stomach nor have a cumulative action; five to twenty drop doses.

Strophanthus tincture is a good remedy, but exceedingly bitter. When it can be given without a struggle in one or two-drop doses, it is of more value than the other unpleasant remedies.

When digitalis is indicated by general heart muscle weakness, and the peripheral circulation is not tense, the powdered leaf in capsule from 1/10 to 1/2 grain doses is, to my mind, the only form of any dependable value. In adults whenever this is the remedy selected without regard to kind of disease, this form of administration is pleasingly efficient.

It is possible that many other remedies may be of value in failing heart conditions, but I am of the opinion that the constitution of the patient and the saving of his energy by the wise nurse or mother, is the main factor. When a child is overwhelmed by the poisons, weakened by lack of assimilated food, and the high fever, all efforts are alike unavailing.

Cyanosis, when due to extensive exudate in the air vesicles, may sometimes be relieved by continuous inhalation of oxygen, well mixed with air. It is of no value in cases without cyanosis.

For high temperatures, the sponge bath in some form is the

most feasible. The most obstinate do well and do not fear the fan bath advocated by Dr. John Lovett Morse. The patient is wrapped in gauze, and tepid water poured gently over him, and he is then fanned to hasten evaporation, which, of course, aids in heat abstraction. The water is gradually cooled without shock, and continued to desired temperatures of water and patient. Sudden cold baths I would not advise.

The ice bag is useful over painful pleuritic areas, with high fever, but needs, as do all special applications, intelligent supervision. Strapping the side with two inch strips of zinc oxide adhesive plaster, when expiration is complete, is very useful in severe pleurisy. The straps should be removed just as soon as pain is relieved, as all available air space is needed.

The value of vaccines and serums in pneumonia is a question that I am not able to determine, but am not at present satisfied that they have any influence whatever.

Do not give up a case of pneumonia of any type until the patient stops breathing, as the little sufferer may get well, and all cases are entitled to all that can be done for them.

No one realizes more than the writer the incompleteness of this paper on the treatment of this important subject. It leaves, however, a still larger opportunity in the field of its discussion..

OBSERVATIONS ON THE INTER-RELATION OF SYMPTOMATOLOGY AND TREATMENT.*

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The subject of this paper, as selected, "Symptomatology as related to the treatment of disease," obviously includes the whole range of therapeutics. As an excuse for using it as the title of an essay of this brevity, I have limited it to "Observations on the Inter-relation of Symptomatology and Treatment," whereby is obtained an elasticity much to be desired, because of the necessarily fragmentary discussion which follows. Additional limitation has been secured by referring chiefly to some of the principles which govern us as homœopaths, in applying symptomatology as the guiding therapeutic asset.

Since the object of medicine is to relieve and to assist in the "cure," the physician as a true healer should direct his efforts toward therapeutics. Did not our previous studies, investigation of symptoms, etiological conditions, pathological and physiological processes, enable us to favorably modify the morbid evolution of disease, they would be wholly sterile and illusory.

* Read before Prof. F. B. Percy's class in Clinical Medicine, 1913

Purely symptomatic therapeutics is used to combat certain disorders without reaching their cause or reascending to their point of departure. Though it be insufficient and often an acknowledgment of crass ignorance, it is at times the only possible or admissible method to which we may have recourse. In grave hemorrhage, or in asphyxia from laryngeal stenosis, we must not ridiculously permit a waste of time while we study their etiology or pathology, but we must forthwith arrest the bleeding or re-establish the course of the air. In cases of agonizing pain from nearly any source we must remember that our first duty is to relieve the sick, and, possessed of definite reasons, it is very possibly justifiable to employ symptomatic therapeutics as an auxiliary agent, in assuaging that pain. It is thus a rational measure when used to alleviate pressing disturbance or in aiding causal or truly remedial therapeutics employed, as it too often is, as an exclusive method, it is a candid confession of ignorance.

Without further reference to allopathy, or enantiopathy, because of their uncertainty, inadequacy, the actual harm and inevitable reaction which follow the use of drugs in these ways, I shall devote the remainder of this paper to homœopathic principles.

It is to be regretted that in our method of obtaining symptoms by drug provings, there are numerous sources of vagueness and discrepancy, numerous errors in the daybooks of the provers, in their censorship, and in personal interpretations and interjection of theory. Symptoms have been compositely recorded with little discrimination, and drug, disease, and personal symptoms have often been intermingled, resulting in a vast accumulation no small part of which is untrustworthy, trifling, and meaningless. Especially, to the student are made attractive those hand books of "materia medica" which, in the effort to make them condensedly exhaustive, contain symptom lists that are tinted and tainted by the many minds through which they have filtered before reaching his own. Nothing is adding more "babel" to his confusion than the pernicious copying of these inconsistencies and ambiguities, as well as the deliberate omission of acknowledged symptoms by the successive authors. Similar comment is applicable to the repertories. Taken as a symptom index alone it needs drastic and extremely painstaking revision, but when we regard that other function of the repertory, the coordination of the remedies, we behold a conglomerate mass quite incomprehensible to the beginner or investigator. The relative value of the drugs as stated, may be for general prescribing, for particular diseases, from the physiologico-pathological standpoint, or too often based on personal opinion merely. I may state here parenthetically that a complete illustration of these contentions, obviously, within the limits of this paper, cannot be appended with-

out undue prolixity. There must be a clear understanding of the process and significance of coordination, and since distinctions are so very numerous, and the vagueness so confusing it would seem almost a positive desideratum that there be a separate repertory of only the general or simple symptoms, at least for the beginner. Keeping in mind that coordination of the remedy and of the symptom are very distinct one from the other it can be well understood that it is the grouping of the grand characteristic symptoms which is of value in the learning of drug pathogenesis, while the peculiar symptoms serve us in differentiating and prescribing. These queer symptoms if rightly interpreted are of high value; they may be wholly irrelevant in pathology as now understood, but they are in subtle relation with the constitutional substratum, thus essential.

Though there be these thousands of innumerable discrepancies and ambiguities, we should not arraign the many faithful workers in drug pathogenesis, but we should realize that our materia medica as it now stands, unaugmented, affords one of the most wonderful mines of assured wealth ever offered to scientific physicians. To improve it and to obtain a purely scientific and unassailable basis for our "cornerstone," the urgent task which confronts us is that of authentication of "drug symptoms," a process involving genuine authorship, reproving in many instances, clinical and laboratory verification, the latter to explain when possible the physiologicopathological basis for the symptoms. True, verified symptoms are available in the encyclopædic works, but there is an insistent need for a handbook of pure drug pathogenesis free from all conjecture or gratuitous assertion, and embodying the results of careful, faithful research, expressed in unmistakably natural language. For reference, the anatomical schema of recording symptoms is of value; for study, it presents a mass of *dissecta membra* impressing on the mind a sense of utter confusion and discouragement. As has been said, in allusion to this schema, "it begins with vertigo and ends with rage."

The scientific materialists accept only those symptoms which are produced by the crude drug and lower attenuations, poisoning symptoms being immensely valuable when properly interpreted, although these latter cases are often slovenly detailed, and disturbed and deranged by administration of equally violent antidotes, thus making it impossible to arrive at anything better than an approximation to a certain choice of the specific remedy. They do suggest, however, the end results at which we could expect to arrive did not our consideration for human life preclude the carrying of experiments to such an extreme. To my mind every legitimate drug is a poison and can assist recovery only by means of its poisonous or disease producing qualities. In like manner I look upon provings

as no more than comparatively mild and graded poisonings effected chiefly through the dynamic sphere. This word dynamic as used is two edged, and to make myself clear I will flatly state that I give no credence to the theory of dynamization. This statement may be immature even impertinent as coming from me, but every man has a right to his own opinion, and is entitled to try to convince his neighbor. If he wishes, he has a right to flock by himself *if* said flocking does no harm to his neighbors. It may be that I personally am lacking in spiritual grasp or some other such elusive attribute, but assuredly I am not alone in being unable to reconcile this doctrine with modern science. It may be tomorrow that a demonstrable laboratory or philosophical basis for this theory will be discovered or formulated; if so, I am open to conviction, although confidence in the unity of nature should lead one to believe that what sound reasoning shows to be erroneous, accumulated facts will prove to be mischievous and unnecessary.

Mechanical subdivision by trituration or succussion is quite another question and is eminently reasonable. By enabling us to give a small dose, safety is obtained; effectiveness by providing as many points of contact as can possibly be secured between the medicinal particles and the living fibre or absorbent surface. The peculiar fact that in provings of some of our drugs, symptoms have not developed until the 5th or 6th decimal dilution has been administered, is explicable but possibly misleading. We must not be carried too high by this theory of ionization. One example will suffice. Assuming the average hypodermatic dose of apomorphia to be .1 grain, that there is no waste and no other distribution but the blood, it would be approximately as 1 to 900000 or closely corresponding to our 6th decimal dilution. If each red blood corpuscle were to receive its modicum of the .1 grain it would contain, if my calculations are correct, 1-250 000 000 000 of a grain,—beyond the 14th decimal. If allowance be made for elimination and distribution to other fluids, the small group of nerve cells for which it is ultimately destined must be bathed in a solution of the drug which we may safely say is in a fairly complete state of ionization. Chemists, who can boast a science of more exactitude than can physicians, postulate the non existence of matter in a solution raised to 10^{-21} , and admit of complete ionization in a dilution lying between our 5th and 6th decimal. It is practically accepted as axiomatic that energy and matter cannot be dissociated, and even were this possible, energy can only manifest itself by means of matter.

It is my opinion that in none of the so-called provings of *natrum muriaticum* or of similar drugs in the 30th or higher, have authentic symptoms ever been produced. It will be recalled that a charming and extensive list of symptoms was obtained some years

ago, from saccharum lactis administered to students of this school, who were under the impression that they were "proving" a drug. It appeared to be and doubtless is a remedy of as deep and powerful action is lac caninum. Is the theory of dynamization scientifically tenable? I refer you to the extremely informing article by Dr. J. P. Rand in a recent number of our *Gazette*. It is worthy of careful rereading, and on the physico-chemical basis seems unanswerable.

Is this theory philosophically tenable? Those of you who heard Dr. Close's lectures will recall that the trinity of nature, physics, chemistry, and biology are respectively governed by the law of gravitation, of chemical affinity and of life. We can postulate the basic explanations for none of these laws, but, although closely related, these laws are unchanging and *non transmutable*. Let us apply them to the doctrine of dynamization. A drug—a chemical substance and subject to chemical laws—is by the mechanical method of attenuation dematerialized when—we will say—we reach the 30th decimal. "High potentists" admit that in using these preparations they do not administer medicine, but medicated powders or fluids. We read in their writings of the "development of the *spiritual* power of medicine by trituration and succussion"; "a true astonishing unveiling and *vivifying* of the medicinal spirit"; "a *disembodiment* and *spiritualization* of medicinal powers" etcetera. [The italics are mine]. In other words a vital power is developed. Remembering then that the energy manifested, for example, in the radiant state is rather that of the forces of nature than of the properties of matter—and that drug action belongs to the latter category—this *quaestio vexata* is resolved into the following query: Can we conceive of a simple chemical substance *in an inert vehicle* being transformed into a state governed by vital principles when the laws governing chemical and vital conditions are fundamentally immutable and non-interchangeable?

Assuming that we accept these conclusions, here is yet another weakness in our materia medica, since some of the drugs have been proved only in high "potency," while records of others contain these pseudopathogenetic symptoms inextricably intermingled with symptoms of verified poisonings. I use the phrase "high potency" in reference only to dematerialized drug preparations.

I have taken up this question which relates to the dose, without any desire to be polemical, and with a full realization that it is the least vital of the subordinate principles of homœopathic practice; in point of fact it has not the slightest basic connection with homœopathy. But here's the rub, it is not so accepted by the laity or the other school. To them and to some of our students it is as the red rag of the familiar saying. Witness in a recent old school

journal the vituperative attack on homœopathy based almost wholly upon this theory of potentization. Although we may personally realize that "where judgment is weak, prejudice is strong" and that it is truly pitiable that so unscholarly and stupendously prejudicial a tirade should be allowed publication, nevertheless the journal has been circulated. Who doubts but that it will be gleefully presented and may unfavorably influence some wavering mind not yet imbued with that childlike faith which induces acceptance of precepts without first subjecting them to the analytic powers of reason. The young men of today are rightfully skeptical of such imaginary vagaries and these latter, failing of demonstrable proof or even necessity, should be discarded, since they are actually harmful in that they deflect many men of talent whom we need in the advancement of our studies.

The Scotch have a phrase "unco' guid" which expresses distaste for the harpingly ethical and corrective character, the persistently hortatory, the extreme of the schoolmaster or preacher tendency. "Comfortable tolerance" is another extreme which is aimed at in Chesterton's lines:

From lies of tongue and pen,
From all the easy speeches
That comfort cruel men

.
Deliver us good Lord.

My endeavor has been to attain a tolerance which is not comfortable and a sympathy which is not indignant; so to avoid the imputation of captious criticism of the advocates of high potencies, I will say that those whom I know, I believe to be representative of what is best in homœopathy and in medicine. Moreover, lest to verdancy of opinion there be added mediævalism, I must add that I do have confidence in the subtle agencies of legitimate psychotherapy, in the power of imponderable emanations of radio-active substances, etc.; so, my attitude is really not too coarsely materialistic.

In this connection I wish to digress a moment to protest against the introduction of emotionalism and sentiment into the art and science of medicine. In not a few of the medical journals the reader is struck by the loose and extravagant phraseology, and statements which smack more of theologic fervor than of critical analysis. Too often their very eloquence betrays their origin as being rather from the realms of sentiment and emotion than from those of judgment and reason. Neither Hahnemann nor his discoveries are veiled in the nebulous cloak of the divine. He was a man, and one to command respect, but need his utterance be accepted as an *ipse dixit*, need we fervidly refer to him as the "Master" and accept

without question his theories which fetich-like shall command our obeisance? Hahnemannianism is an unjust term, for there are very few of his theories which do not stand the tests of modern science. Opprobrium if necessary should be attached not to him but perhaps to some of his visionary followers. However, Hahnemannianism so-called, and his untenable hypotheses form no part of the truths implied in the comprehensive word Homœopathy. The rational physician while using *similia similibus curentur* as a guide, will also embrace, without being guilty of any inconsistency, other medicines or measures which have a genuinely *reasonable* foundation for their remedial value. In other words we accept Hahnemann's findings only so far as our experience and observation have proved them to be correct, and reject whatever investigation has found to be erroneous. The discrepancies of opinion which men entertain arise from ignorance of natural principles, from merely partial glimpses of them, or from misconceptions of their true meaning and extent.

The value of symptoms in enabling us to make a diagnosis is equal whatever be our method of practice. Likewise the diagnosis is of the same import to us as to the old school practitioner. Don't neglect it, for it is essential to prophylaxis, prognosis, and the keeping of instructive records. Its value in therapeutics can be easily illustrated. In the first stage of a malarial attack, a drug like aconite might reasonably cover the totality, but knowing the diagnosis we are led to remedies like arsenic and quinine, which in their pathogenesis develop the paroxysmal intermittent character of the malady. Let us then make diagnosis contributory to the totality of symptoms upon which we prescribe.

Our conception of the totality has been gradually but vastly revolutionized and we now recognize that it should contain every ascertainable fact, subjective and objective, aided by all diagnostic methods known to present day science. Our knowledge of anatomy, physiology and allied subjects, our use of the various instruments of precision, most of which were unknown in Hahnemann's time, furnish us with objective phenomena impossible for him to have obtained, and although then, subjective phenomena composed by far the greater part of the aggregate, no modern totality is complete, nor worthy of the name if any features are omitted. However, in our application of so rugged a principle as this same totality, may we always be guided by "clearly intelligible reasons." Is it not at least an apparent fact, that we may get a *relative* totality, one of quality rather than quantity which may and often does serve us better? We can easily picture a case in which an acute morbid process is superimposed upon a chronic one—an abrupt tonsillitis complicating a longstanding muscular rheumatism. In our treat-

ment of such a condition, is it not logical, is it not intelligently reasonable, to direct our efforts towards the abortion or the alleviation of the tonsillar inflammation alone, even though it be at the cost of temporarily neglecting the chronic complaint in such cases as may necessitate our changing the drug treatment? We know the accustomed brevity of this acute process, we can see the evidence of pathologic change, a valuable essential of our relative totality, and we are of the opinion that our eminently dependable remedies used in this condition have proven their powers of still further shortening the course, of mitigating the severity of the symptoms, and of increasing the resistance toward complications.

It is such a case wherein rests one of the tempting pitfalls which deviate men to the ranks of the "alternators." It is fitting that I should here utterly disclaim any disposition to dogmatize or to speak as with authority on any question of medical practice, still, I am entitled to my point of view, and shall endeavor to express it, without, however, announcing it as the centre of the universe. Inasmuch as language tinged with contumely adds neither strength to argument nor sweetness to persuasion, if earnestness of conviction betrays me into too positive warmth of expression, this is my misfortune and none can more decidedly disapprove than do I regret it.

The proverbial uncertainty of medicine and disparity of opinion is in a great measure due to these practices of alternation and combination which are incompatible with common sense and utterly at variance with the elementary rules of scientific investigation. We *must* give our drugs in the form in which they have been proved, else we plunge into a sea of speculation and hypothesis and forfeit that certainty which is the sole object of our science, as of every science, to attain. Our drug has been tested *singly* on the healthy human body, and in no other way can reliable information concerning its truly therapeutic use possibly be secured. Administered with remedial intent it meets with no impediment, at least not from other medicines, to the production of its full effect; and it will act with far greater precision and certainty than a combination of drugs fighting together in the dark. The single remedy at least has the merit of exactitude and one of its great advantages is that the physician learns through his own experience to use drugs with accuracy and apparent success. As physicians, if we are worthy of the name, we should be constantly striving to place medicine upon an unshakably scientific basis. This can largely be done by study and deductions from compilations of accurate records. If our work is to be of value to ourselves, our colleagues, or to those who follow, we must keep accurate records, and these are impossible where remedies are used combined or in alternation.

simply because there can be absolutely no knowledge of the effect that one drug may have in antidoting another; nor, be the result successful is there any method of ascertaining which drug aided in recovery. Consequently such records are rubbish, and such experience can in no way serve to establish or confirm any principle of medical science.

The argument is put forth by the physician who alternates that he wishes to obtain the peculiar mode of action of each of the two or several drugs which he administers. It is a manifest impossibility to be sure of obtaining such action unless the drugs have been similarly proved on the healthy human body. The chemistry of the body cells is very imperfectly understood but it is certain that reactions are far more complex in *corpore* than in *vitro*, yet how many physicians are familiar with the chemical or even physical properties of a mixture of aconite and bryonia in a test tube. With regard to the so-called selective affinity of drugs, that is, their peculiar modes of action, there is not the slightest evidence that the drug affects *only* those particular tissues or organs, and is absolutely without action upon the other body tissues yet it is necessary to assume such a fallacious hypothesis which is entirely unwarranted by the present possibilities of science, in order to justify the practice of alternation. It is for this reason that the phrase "tissue proclivity" appeals to me. It is merely a transposition of the concept, but it seems more reasonable to assume a peculiar idiosyncrasy of the part, a *locus minoræ resistantiæ* as it were, which permits of the undoubtedly more apparent action of the drug, than to assume that the drug upon entering the blood stream, ferret-like searches out the part weakened by the rodent disease. Hence let me repeat, who shall say that while our first drug is *manifesting* its action via the vasomotors alone, that it has in no wise entered into combination with other body cells, and being there present in however apparently inert a state, who can deny the possibility—nay—even high probability that its presence in the cell will impede, distort, or diametrically oppose the action of the second drug? There may be some interval between the respective times of the ingestion of the drugs but the action of the first is surely not instantaneous and no living man can confidently state what will be the result when the second drug enters the cell while the first is effecting complex protoplasmic reactions within the cellular economy. Furthermore, by what truly marvellous gift can the physician foresee, that having prescribed drug number one, the symptom aggregate shall change in an hour indicating number two as the choice, then at the third hour again calling for number one, and so on ad nauseam.

"Oh, wad some power that giftie gie us!"

It has been argued that remedies given in so-called dynamic doses, unless indicated by the symptoms, have no effect on disease. If this be so there can be but one indicated and but one can act beneficially; the giving of another is, therefore, not only useless, but it can even cause malevolent distortion or interference with the one which is indicated. No one who deals conscientiously with himself will deliberately approve of so simple a method of evading the difficulty of choice.

One of the most brilliant results of the establishment and growth of Homœopathy has been the gradual and almost complete suppression of the riotous polypharmacy formerly extant. The adoption by the old school of the single remedy is at least a tacit admission of its superior success. The very foundation of polypharmacy, the rationale of a compound prescription, rests upon the belief that the medicinal forces will so modify each other that none shall produce the effect it would if only one were acting. How else can we explain the efficacy claimed for the practice of alternation where arsenic and china together relieved a case in which neither alone had been efficacious? How else but by conceding that two or more drugs cannot act together within the economy without so modifying each other, that neither shall produce the effect it would if only one were acting. As Dudgeon says the rationale of the practice is as though a bad shot should put two or three bullets in his rifle, on the chance that if one missed, the other might hit, though it is obvious that a good shot would be much more certain to hit the mark with one bullet than more, as the presence of others might deflect the best directed bullet from its course, by their mutual concussions.

There is a disposition to regard the proximate cause of disease, *i. e.* the material change of tissue and product, as the essence of disease, forgetting that modification of vital force which must have preceded and been the occasion of this proximate cause. Always behind the static lies the dynamic condition. Pathology as an aid in the investigation of disease is of inestimable value, yet it cannot go beyond material changes—even its microscopic revelations are gross when compared with disease which begins in dynamic changes. Pathology cannot be made the sole basis of medical practice. Let us assume a case of dysentery in which the inflammation has extended through the coats of the bowel, *merc. corr.* may reasonably be prescribed for the condition of the mucous membrane; if the glands are affected should we give *rhus*? or the muscular coat likewise, shall we give *nux vomica* also? with *bryonia* for the serous coat? The vascular system is probably simultaneously affected,—would this call for *aconite* for the arteries and *hamamelis* for the veins? Here we should have six remedies to be alternated, the

selection of each being based upon its specific relation to the tissue. This is a revival of polypharmacy but is unquestionably as logical as the giving of aconite throughout the febrile stage of measles while some other remedy is given to cover (?) the remaining symptoms. Carried some steps further the most infallible method would be to make an universal medicine by combining all known and unknown drugs. In fact such a plan has been proposed and the name of *Omnium* given to this delectable compound. A far more appropriate name would be *Omnibus*.

If we examine this pernicious practice in the modern spirit and with modern methods, we find in its very absurdities, its own most conclusive refutation. The only possible plea that can be urged in its support is that some clinicians use remedies in this way with apparent success: a plea just as weighty and no more so, when urged in defence of this practice, as when urged in defence of the numberless "cure alls" whose "testimonials" flood the daily press. Aside from the warning fact that quackery always goes hand in hand with complex mixtures, no appreciative man will so abuse the tools of Homœopathy. At least let us not be unintelligent obstacles in the path of the onward march of scientific progress, and please remember that nothing so discourages an earnest student, and destroys his confidence in his teachers and what they teach, as conflicting opinions from these preceptors on *fundamental* subjects.

I have stated the opinion that pathology, per se, cannot be made the basis of therapeutics; yet it must be a most important instrument in the application of therapeutic science. For absolute exactitude it is clearly indispensable that the physician be able to trace the morbid agent through all its complex resultant phenomena, up to the original perversion of cell force from which the whole disorder springs. Such precision is at present impossible because we are dealing with the complex vagaries of the *genus homo*. There are no skeptics or heretics in mathematics or astronomy, but these sciences do not treat of protoplasm actuated by the spark of life. Hence it is inconceivable that one formula of "cure" can be all-embracing because, we are dealing with the vital principle, the varied manifestations of which are frequently incapable of human prediction. However in our studies of the basic medical sciences, the closer our approximation to the truth on any subject the more thoroughly we shall agree in opinion concerning other subjects, for one truth is promulgated by the correlation of other truths about it. Modern investigation leads us to expect structural changes as underlying all disordered sensations and functions. In so far as we can demonstrate these changes then possibly without the light of pathology, diagnosis becomes farcical, prognosis impossible, and therapeutics little better than a craft. However, in

many diseases and in the incipient stage of most diseases, it is impossible to ascertain the exact organ affected, consequently the only way of recognizing such maladies is to note and interpret the discoverable array of symptoms which makes the disease-complex. In like manner it is not necessary for therapeutic purposes that we ascertain in similar cases the precise organ or tissue upon which our remedial agent acts: it suffices that it is capable of developing a similar array of symptoms and we are enabled to logically predicate that it acts on the same organs as are affected in the disease. We must not lose sight of the fact that somewhat similar symptoms are often provoked by varied and remote causes, but an intelligent acquisition of the totality guards us from error.

The truly vital principles of Homœopathy as yet remain unshaken, in spite of the assertions of a certain number of men who are either totally or in a great measure unacquainted with its theory and practice as they daily prove in their conversation and writing; yet who, notwithstanding, never hesitate giving a final opinion on the subject. Homœopathy is only one of the departments of the art of healing, and claims to be of assistance only in those disorders in which similar symptom pictures have been produced in drug provings. For divers reasons it may be sometimes inadequate but if occasional failures should be the standard whereby to estimate the value of a system of pharmaco-therapeutics, in what position would the old school stand at the present moment. Indeed, when reduced to the last analysis, medical practice as a whole, with few exceptions, rests upon an entirely insufficient amount of unimpeachable clinical evidence, from which to draw inductive conclusions. Truth is based on the uniformity of human experience under identical conditions, and we can arrive at satisfactory results only through a lengthy experiment, the requisites of which have been excellently formulated by Dr. Krauss as follows: A public clinic in which the current practice of the two schools is, conjointly and simultaneously, exemplified by chosen representatives, and is to be compared with purely expectant treatment under modern nursing. Allow me to quote Dr. Conrad Wesselhoeft upon a similar proposition. "Some objections might arise from this course for fear of endangering the patient, and many might not have the courage to try it, so that it will soon be discovered that it requires more courage not to dose than to give medicine. Why? Because it has become a medical habit to give every patient a dose of some kind, be it great or infinitesimal, allopathic or homœopathic. But when calmly and dispassionately considered the wonder is that physicians have the courage to give medicine at all. By whom and how is it guaranteed that a certain dose of medicine, great or infinitesimal, will cure, or if not, that it is just the right one and safe one?"

As medical science stands today, what we know is immeasurably overbalanced by what we do not know, and any method which is on the side of absolute safety is the best. We may not cure but we were guilty of malpractice if the least harm resulted from prescribing medicine, while no harm can come from omitting it, not counting the few well known exceptions. Such tests, and such only, would allay contention, by such tests the schools, or rather the methods of practice, stand or fall. Otherwise partisanship, exclusion, and intrigue will go on forever." . . . "The differences are reconcilable only in this way, at any rate never by assertions of superiority and partisan segregation."

We are dealing with human nature and the human organism, therefore we are confronted with many difficulties in our efforts to prescribe accurately and in a strictly scientific manner, but it is axiomatic that the closer we keep to the ideal, the greater the measure of success which shall be meted to us. No disease, assuredly, can be relieved without the assistance of nature and it is by administering remedies which act in conformity with her restorative efforts that Homœopathy seems to be so eminently successful. Nature is commonly represented in the guise of a woman. Be this right or wrong it is certain that she will, in reaction, always have the last word. Let us simply concede this.

HOMŒOPATHY: WHY AND HOW TO STUDY IT.

BY BENJ. C. WOODBURY, JR., M.D., Portsmouth, N. H.

However much has been written upon Homœopathy and the study and teaching of the homœopathic materia medica from the standpoint of both student and teacher, the last word has not as yet been said,—and will not be said, until the student sees exemplified and verified in the clinic and the hospital ward, the application of an "indicated remedy" that is truly *the similimum*.

In order to better understand the student's instruction in this most difficult department of the curriculum, let us look a little backward to the day of the preceptor-tutored student. In the day of the preceptor, what were the student's preliminary materia medica studies, what his preparatory training? In most instances it was about as follows: The student had first of all to manifest his interest in the study of Medicine. In this preparatory training he was at liberty to form his own opinions, and arrived, likewise, at his own conclusions in regard to the practice of a profession in which he served a willing apprenticeship. In this apprenticeship, he became acquainted with the routine of the physician's life of worry and hardship; he acquired at least a general idea of the

collateral medical sciences of the time; and what was perhaps more valuable, an insight into the practical working basis of Medicine. Under this, the old regime, fewer students after the study of Medicine, became weary of its labors and forsook its precepts.

Contrast this order of things with present conditions. Many colleges require an academic degree for admission, or the equivalent of one or more college years. The reasons for these changes in preliminary training are obviously the more rigid requirements of scholarship, the increasing proficiency of collegiate instruction, and the greater general knowledge expected of the present graduate in Medicine. Again, the growth of the collateral sciences which have been additions of recent date, viz: bacteriology, histology, laboratory technic and expert diagnostic methods, demands, instead of the two sessions of lectures extending over a six months period at the shortest, *four terms of eight months*. Many medical schools are extending their courses to *five and six years*, including the now popular summer schools of post-graduate instruction. By these advanced courses, graduates are enabled to obtain the degrees of B.S., and M.D., or A.B. and M.D., etc. Likewise a higher general standard is possible to the older alumni.

Not only is more required of the medical student of to-day by the medical school, but he finds a better trained public, sympathetic in a measure, yet highly critical; impatient enough when well, even more intolerant when ill. There is no disputing the fact that the day of the old-time Family Physician is passed. Much as we lament the fact, we cannot bring him back. "What manner of man is to be the successor of such in another generation?" If we do not or cannot present the same attractive figure as that wonderful and much-eulogized type of physician we can and must stand for what has been found to be of truth in the past, enhanced by whatever of true advance we ourselves may gain.

In the past the family was not loath to place its confidence in the family physician with his saddle-bag and lancet, wherein can we hope to better justify that trust? Shall it be with the addition of the more modern hypodermic, serum or vaccine?

Or shall we, following the trend of certain of the many more modern methods of healing, abandon the use of drugs, and trust to the regenerative powers of Mind, and Soul? Formerly the family physician was the only appeal; but now have we not Mind Cure, Christian Science, Osteopathy, etc?

We contend that there must be an ebb-tide that will restore the old-time confidence in the educated, thinking physician, and when it comes we must be ready to meet it. What can better restore that confidence than a genuine faith in the curative power of drugs; for this lay lack of confidence has no doubt been influen-

tial in the loss of confidence in the family physician, since, if he has lost faith in the use of drugs himself, his ability to heal the sick must likewise have waned. How best prepare for that ebb-tide? Study the homœopathic materia medica, for therein rested the success of our fathers.

Surely traditional Medicine has little to offer in support of a faith in the efficacy of drugs. From the therapeutic Babel of the past gloomily depicted by Prof. H. C. Wood, and the nihilism of Dr. Osler, to what shall the younger practitioner, the student if you please, turn for guidance; when his Osler but quotes for him the Hippocratic dictum: "Experience is fallacious and judgment difficult"? We have but to turn, on the other hand to the writings of our earlier Homœopaths, the majority of whom were converts from Allopathy, to find their cases reported with painstaking care, Not, we admit, with so much discoursing upon the pathology and diagnosis, but carefully worked-out symptom-pictures, each with its indicated remedy and its almost unfailing cure.

We contend that there is no study in our whole medical curriculum so important as this one of drug pathogenesis which most students find so tedious, so difficult, and so dry. If not to the preceptor of old, let us at least return to some method of preliminary instruction whereby the prospective medical student may be brought into close touch with some one who shall advise him what to study and how.

Dr. Conrad Wesselhoeft advocated this method: a very brief, clear-cut and striking knowledge of drug action such as can be attained in no other way so well as by a testing of drugs on one's own body. Thus would be ascertained the action of *Atropa Belladonna* in the production of its characteristic dryness of the mucous membranes and mydriasis; the erratic peristalsis and irritability of *Nux Vomica*; the sadness of *Pulsatilla* and *Ignatia*; the throbbing headache of *Glonoin*; the coryza of *Cepa*; and the sudden diarrhea of *Croton*.

If the student has not the time, health, nor facilities for this brief drug-testing, let him begin by a study of some of the characteristic symptoms of the leading remedies. Much has been written to discourage the use of "Key Notes" in prescribing, but who has not been searching for a friend or an acquaintance in a crowded street and recognized him by some particular or even peculiar gait, perhaps, or carriage of the body.

The writer began the study of materia medica from Guernsey's Keynotes, supplemented by reading the principal remedies in Hull's *Jahr*; these may seem to be very out of date to the student, who is accustomed to buying the brightest-covered work on pathology for instance from an Old School bookstore, but we assure him that

we are referring to study begun comparatively recently. We have never regretted such study, although it was begun several years before having any definite idea of studying Medicine.

First let the student learn either by seeing drugs prescribed, or by studying a few of the principal characteristics of our common remedies, then, taking these as the nucleus for further study, he will have started the foundation of the mental picture of drugs as prescribed in every day practice. Then as he learns to the full extent the pathogenetic action developed in their provings, he can better apply his reasoning because of this *à priori* knowledge.

His provings of drugs though brief, will, as he later understands homœopathic philosophy teach him the *why* if not the *how*, and he will enter the great field of medical practice with first, a good working knowledge of the therapeutic measures he is privileged to employ; second, a comprehensive knowledge of medicine in general, diagnosis and pathology in particular; thirdly, an appreciation of what Hahnemann has told us is curable in disease and of the curative effects of drugs; in the fourth place, belief in this great Law of Similarity, and faith in its power to cure speedily and safely; and lastly, courage to stand for those principles, which he knows will enable him to become a true healer of the sick.

We have no fear that a young graduate in medicine to-day, with working knowledge such as can be obtained in any of our medical schools, by adequate study based upon a correct interpretation of the *cure of likes by likes*, or by individual provings, will drift helplessly upon the sea of mysticism. On the contrary, he will learn to match his disease picture with his remedy so carefully and accurately that his successes will outnumber his failures and prosperity will crown his efforts. What medical students need is some definite idea of what they are studying medicine for, particularly Homœopathy. It is not at all unusual to find students who come to our medical schools with absolutely no previous conception of Homœopathy, of its growth, and its influence on medicine. Few know or care that Homœopathy has banished to obscurity the heroic purging and bleeding, has diminished the size of dosage; brought about in a large measure the application of the single remedy prescription; that Homœopathy first advocated the humane treatment of the insane, was ever foremost in the advocacy of hygiene, hydrotherapy, and the removal of the exciting causes of disease. He must know the attitude of the old school to the new. He must know that if Homœopathy stands for anything at all, that principle is liberty in therapeutics. A liberty which comes to one who is willing to be guided in prescribing not by empiricism and chance, but by Law. He must know the official definition of a Homœopathic Physician. He should not be led to think that now

that our older Homœopathists have passed beyond, that the principles for which they contended have died with them; but that the "Spirit of the Homœopathic Doctrine" still remains a vital and enduring principle.

When beginning the study of *Materia Medica* what advice shall be given the student in regard to books? In answer, there are many which give briefly the leading remedies in an interesting way. Chief among which are *Keynotes of Leading Remedies*, by H. C. Allen, *Guernsey's Keynotes*, *Arndt's First Lessons in Symptomatology*, *Primer of the Materia Medica* by T. F. Allen, *Dewey's Essentials of Homœopathic Materia Medica and Homœopathic Pharmacy*, *Nash's Leaders in Homœopathic Therapeutics and Regional Leaders*, *Boericke's Manual of Homœopathic Materia Medica*, and for further study *Kent's Lectures*, or the lectures of Dr. Hughes in *Pharmacodynamics*. For instruction in Homœopathic Philosophy, the student may be given in addition to the *Organon*, such classic monographs as the *Grounds of a Homœopath's Faith*, by S. A. Jones, *Homœopathy Explained*, by John H. Clark, *Burnett's Fifty Reasons for Being a Homœopath*. For more exhaustive study *Kent's Lectures on Homœopathy* may be consulted.

Perhaps at the outset it may seem like asking too great a sacrifice of the student's busy hours to read so extensive a work as *Bradford's Life of Hahnemann*, yet it is the work of a Master Hand; surely well within his reach is *Dudgeon's Lectures* which will fortify him on theory and practice for many a day. Then too, there are *The Porcelain Painter's Son*, by Jones, *Dake's Therapeutic Methods* and many other sources of information upon the life of Hahnemann and the history of Medicine as he found it and as he left it; all of them mines of inspiration.

To the minds of many, too little attention is given in our modern teaching to these fundamental principles in the grounding of the student's faith. When we know that young men or women contemplate the study of Medicine, we should talk with them in a sound and practical way and interest them in the study of Homœopathy. Then our colleges will not be lacking in students. How often we hear that Homœopathy is no longer on the increase; that now the two schools are practically identical. If we try to determine the sources of this statement, we shall have to consider these facts; with the first movement toward the acceptance of Homœopathy, Old School physicians became interested, studied the new system and adopted it. As a natural consequence, these new homœopathists had before them the task of educating their loyal families in the new system, for as men of strong personality, they turned the majority of their patients over to this new school. Likewise, they worked long and faithfully in their instruction and by explanations, tracts and most conclusively of all by results, con-

vinced them of the truths of Homœopathy. Their families grew to place confidence in the small doses and the similar remedy. We who are in practice today are still reaping the benefits of their labors.

But the time has come for a revival. Propagandism is again the watchword, and to this end large movements are on foot in this country and in Great Britain to educate this later generation to champion our cause not simply because it was the belief of their ancestors but because proper investigation and adequate knowledge of its fundamental principles prove it scientific.

BOSTON UNIVERSITY NOTES.

Commencement, 1913.

SUNDAY, JUNE 1. BACCALAUREATE DAY.

3.30 P.M. Trustees, Faculties, Alumni, Candidates for degrees and diplomas, and Undergraduates, will assemble at 688 Boylston Street.

3.45 P.M. Procession to the Baccalaureate Service.

4.00 P.M. Old South Church, Copley Square. Baccalaureate Service for the Graduating Classes of all Departments. Address by the President of the University, Lemuel Herbert Murlin, LL.D. The public is invited. Reserved seats will be held until 3.55.

TUESDAY, JUNE 3. CLASS AND ALUMNI DAY.

10.30 A.M. Meeting of the Board of Trustees in their room at 688 Boylston Street. Luncheon at 12.30.

2.00 P.M. College of Liberal Arts Class Day Exercises, Jacob Sleeper Hall.

(Rooms for Class reunions will be assigned upon request to Dean Warren.)

3.00 P.M. School of Law, Isaac Rich Hall, 11 Ashburton Place, Class Day Exercises.

5.30 P. M. Business meeting, Epsilon Chapter (College of Liberal Arts), at College Building.

6.00 P. M. Tenth Anniversary Reunion of the Class of '03, College of Liberal Arts, at the College Building.

Reunions and dinners of the various chapters of the University Convocation:—

6.00 P.M. Epsilon Chapter College of Liberal Arts at 688 Boylston Street.

7.00 P.M. Alpha Chapter (School of Theology) Boston City Club, 9 Beacon Street.

7.00 P.M. Gamma Chapter (School of Medicine) Young's Hotel.

WEDNESDAY, JUNE 4. COMMENCEMENT DAY.

10.00 A. M. Trustees, Faculties, and Candidates for degrees and diplomas will meet in Gilbert Hall, Tremont Temple, to form the procession.

10.30 A.M. Commencement Exercises in Tremont Temple. Address by the Honorable Austin B. Fletcher, A.M., LL.D., of New York City.

Tickets for reserved seats valid until 10.25.

3.00 P.M. Annual meeting of the Boston University Alumni Association and of the Convocation, Jacob Sleeper Hall, 688 Boylston Street. Light refreshments served at close of meeting.

8.00 P.M. Reception to invited guests by the Graduating Class of the College of Liberal Arts in Jacob Sleeper Hall.

The July number of the "Gazette" will contain in full Dr. Howard W. Nowell's paper on the Serum Treatment for Cancer. This will be the first publication of the full details of Dr. Nowell's experiments and deductions.

CLINICAL DEPARTMENT.

CONDUCTED BY A. H. RING, M.D.

Case 5—D. Diagnosis: Infection Psychosis.

A physician being called to see a case of this kind might well hesitate to make a diagnosis. It was evident that the man had suffered a great shock in the manner of death of his father and that he had been evincing some irritability and other temperamental changes sufficiently marked to attract the attention of his family. He had eaten sausage which had an hour later been followed by vomiting and acute intestinal symptoms with rise of temperature, strongly suggesting ptomaine poisoning which was the tentative diagnosis. Then there was the history of exposure with severe chilling and the pharyngitis. But the enteritis with tympanitis, vomiting and persistent nausea were the leading symptoms until the fourth day, when mental clouding, hallucinations, and some restlessness appeared.

It is interesting to note that eugenically the patient is a regressive, *i. e.*, fair, with blue eyes. Bianchi, in discussing this subject of delirium due to endogenous and exogenous toxic substances says: "It will be noted that these diseases generally affect those who present a sufficient vulnerability usually hereditary—well developed brains, as well as those not properly developed are vulnerable." "In other words, some brains exercise a much less destructive and phagocytic power over the toxic substances which find their way into the blood: the histo-chemical structure of their nervous elements is less resistant or shows greater affinity for the toxic substance."

The hereditary predisposition to develop mental symptoms under stress and various toxines is now well recognized, for as Bianchi, Davenport and many others have pointed out, taking alcohol as a type, we may get exhilaration in one person, sullenness, melancholia and weeping in another one, motor incoordination in a third, and headache or delirium tremens in a fourth, while one not mentally predisposed may have no symptoms until sudden paralysis discloses a well marked multiple neuritis.

This patient evidently as a result of his severe wetting and chill, had very much lowered his resistance, especially his index to the pneumococcus, which forthwith gave him a severe infection of the gastro intestinal tract. Beginning with the pharynx, the organism must have soon loaded the blood with its toxine, for on the fourth day his vulnerable spot, the psychic, became disturbed and later there must have been an entrance into the blood stream of the organism itself, for on the sixth day there was an evident endocarditis and still later joint infections, a multiple arthritis. Any infection may have as part of its symptom-picture a mental phase, a

febrile delirium, the most common of which is that associated with typhoid fever. It is said that from two to three per cent of our asylum population has an infectious origin.

Diefendorf says "that the pathological anatomy exhibits mostly a disappearance of the cortical cells."

The symptoms are sometimes very misleading. I have under treatment now, a young man who, though quite delirious from a streptococcus infection of both heart and joints, exhibits so much control that his relatives can see no mental defect and accept his arbitrary demands for full meals and indigestible food as legitimate. He has run a four o'clock temperature of 102F. for over six weeks, which is now coming down gradually under very minute doses of autogenous vaccines. Kraepelin divides the symptoms according to their severity into four groups: 1. Those in which the coupling of consciousness is most marked, but in which strange organic sensations are present. There is motor restlessness, headache and various feelings of discomfort. Sleep is broken and dreams are unpleasant. 2. In addition, hallucinations and delusions of a dream-like character begin to appear. They are strange and grotesque and are both visual and auditory. 3. The foregoing increase; and there is some disorientation: patient no longer apperceives that he is ill. Restlessness is marked and emotional disturbances appear. There is much talking and a sensory flight of ideas. 4. In the severest cases, disorientation is complete, consciousness is markedly affected and external impressions produce practically no reaction. There is muttering, delirium, coma vigil and lethargy are of frequent occurrence. The mental symptoms may disappear with the fever as they did in the case cited, or they may persist for a considerable time, eventually clearing up, or pass over into a paranoid state. A most interesting case of this latter type developing on a markedly tainted hereditary soil, and now under care, has developed over the thirty years intervening since his very acute febrile delirium, a well systematized set of persecutory delusions centering about those responsible for him and about poisons. So convinced is he that nicotine is a cause of consumption that he has invented the term "tobacco-losis."

The diagnosis is usually not difficult and the prognosis always grave, especially if the mental symptoms persist after the fall in temperature.

Treatment is symptomatic but should become more accurate as our ability to determine the nature of the infection and our means of combating it specifically, increase. Hydrotherapathy is of the greatest use. The case cited received sodium salicylate, gr. 20 in a saline enema, three times a day as soon as his joint symptoms appeared, at the request of the referring physicians, but he had had

bryonia from the start, to which we attribute much of the very satisfactory results. He is now back at work.

I have been asked how a delirium of toxic origin might be distinguished from mania. It cannot always be done. But in the main, the fundamental disturbance—of the manic phase of manic depressive insanity is in the emotional sphere of the mind,—in the feelings; while toxic delirium is more essentially a disturbance of the sensorium or intellect. If fever appears with mania, it is superimposed and might for a time confuse the picture, but a little time will clear up the diagnosis.

Case 6—D. For Diagnosis:

This patient is a woman who comes of a neurotic but long lived family. Her father was vigorous, amiable and successful and was killed by accident at sixty. Her mother is living and well, and she has two healthy sisters and a brother who has been refused by an insurance company on account of his heart.

The patient is now about forty years of age, has brown hair and eyes, and a slight assymetry of the palpebral fissures. From a child she has been of most amiable temperament tending rather toward the domestic, social and æsthetic than the practical and philosophic. Her early history seems unimportant. She married at eighteen, and a year later had her first labor which was a hard one, and in which she sustained a bad laceration of the perineum. After that came several miscarriages at about three months. Later, two other children were born, all living and healthy. She had the usual share of trials which she always talked over freely with her physician. She has had a repair of the perineum and has been cured several times.

Six years ago she had a nervous breakdown for which she was at a sanatorium for three months, making a partial recovery. The physician then told her that she talked too much, thus overtiring herself, and made her refrain from talking a certain time every day. Since then she has been much away from home for her health, a little better each time for the rest, but never able to fulfill all her obligations and sometimes quite ill, having severe headaches and exhaustion.

A year ago she was persuaded to take up Christian Science "because the doctors had done nothing for her" and at first appeared some better though she now says it was "put on," to comply with the teachings. However, she did get some help in that she learned to disregard many of her symptoms. Last winter she reached a point where she "could go no further." She was having severe insomnia, palpitation, dyspnoea on the least exertion, and dizzy spells when she had to support herself with her hands. All this being disregarded by her "practitioner" she sought medical advice.

Examination at that time showed an over stout woman, five feet four inches tall, and weighing 167 pounds. Pulse 90. Aortic valves sound roughened, all valves clicky. Blood pressure 110 systolic, 80 diastolic. Chest and abdomen negative. Urine, 1,150 cc. in 24 hours; acid, 1,012; no sugar; albumen, a trace; urea, 16 grams, no sediment. Blood gives a negative Wassermann. On slight exertion, dyspnoea, palpitation, etc., appear, relieved only by prolonged rest. Sleep was very uncertain and approached with much fear because of possible attacks of palpitation. What would you do for such a patient, and what is the cause of her symptoms?

**Massachusetts Homœopathic Medical Society.
Boston Section.**

The regular monthly meeting of the Boston Section of the Massachusetts Homœopathic Medical Society was held on Thursday evening, May 1st, 1913, at the Evans Memorial Building, this being the last meeting until October.

Program

- I. THE RELATIVE VALUE OF HOMŒOPATHY IN A SERIES OF 156 HOSPITAL CASES EXHIBITING CONSTIPATION.
By Conrad Wesselhoeft, M.D.
- II. A METHOD OF TREATMENT OF CONSTIPATION.
By A. S. Briggs, M.D.
Discussion by F. B. Percy, M.D.
W. Wesselhoeft, M.D.
Maurice Turner, M. D.

Meeting adjourned at ten o'clock. 54 members were present.
A full report of this meeting will be given in the July number.

Congress on School Hygiene.

The Fourth International Congress on School Hygiene, and the first to be held in America, at Buffalo August 25-30th, according to an announcement of the executive committee, will be by far the most elaborate effort yet made in this country toward getting the problem of school hygiene before the world. The first International Congress was held at Nuremberg in 1904, the second at London in 1907, the third at Paris in 1910.

The objects of the Buffalo Congress are:

- (1) To bring together men and women interested in the health of school children.
- (2) To organize a program of papers and discussions covering the field of school hygiene.
- (3) To assemble a school exhibit representing the best that is being done in school hygiene.
- (4) To secure a commercial exhibit of practical and educational value to school people.
- (5) To publish the proceedings of this Congress and distribute them to each member.

In addition there is a plan on foot to effect a permanent organization for the purpose of carrying out school hygiene reforms in all the individual communities in this country, if not all over the world.

One of the interesting features of the Congress will be the presence of delegates representing the community interest in school hygiene, including those appointed by mayors and governors, by women's clubs, by school boards, boards of health, by mothers' congresses and charity organization societies and boards of trade. Their help is being solicited with a view of organizing the community in a campaign of school hygiene reform.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only and preferably to be typewritten—personal and news items should be sent to THE NEW ENGLAND MEDICAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business should be sent to the Business Manager 80 East Concord Street, Boston, Mass.

The GAZETTE does not hold itself responsible for the opinions expressed by its contributors. Reprints furnished at cost.

DEWITT G. WILCOX, M. D. Managing Editor
 ARTHUR H. RING, M. D., Editor Clinical Department
 MARA L. PRATT-CHADWICK, Editor Eugenics Department

THE DUTY WE OWE OUR AMERICAN INSTITUTE OF HOMŒOPATHY.

An unfilial child is the prototype of selfishness. The greater the parental sacrifice and the larger the benefits bestowed upon such a child the more glaring becomes his offense. The world forgives almost any kind of selfishness sooner than that of the unfilial type. Men of science ever recognize their duty and their obligations to their scientific forbears,—those who blazed the trail, making possible the broad highway.

Similarly we have our medical forefathers who have left as an inheritance those germs of truth which we, their children, have only amplified, not discarded. In the personnel of the American Institute we have a composite of those medical pioneers to whom we owe a debt of gratitude impossible to pay. Because of their unswerving belief in a new order of things medical they suffered ridicule, ostracism and personal deprivation such as few devotees of a new truth have endured. Like all martyrs to an unselfish cause, they developed a strength of character which made even the most ordinary of them stand out with striking vividness. But as it is “only three generations from shirt sleeves to shirt sleeves,” so it is only three generations from martyrs to misers.

The successful homœopathic physician who to-day continues to enjoy the substantial returns made possible by the sacrifice of his homœopathic forefathers but who contributes nothing himself is the miserly offspring of a martyred ancestor. The medical world is bettered by his living only because of the shekels which in his going he must leave behind.

In the arteries of the American Institute of to-day flows the transmitted red blood of those pioneers who made the practice of Homœopathy possible, respectable and profitable in the United States. But that red blood needs constant replenishing, and it is *you*, and *you* and *you* who must give of your blood in order that the supply may not fail. Instead, however, of the donor's becoming

weaker because of this giving, it has the magic effect of doubling his strength while it materially increases that of the recipient.

Homœopathy stands at this moment ready to receive its birth-right and its blessing, and we do not mean that any deceitful Jacob with the smell of mutton on his breath, or with imitation red hair on his hands shall become an Esau and cheat us of either blessing or birthright. The public may be as blind and undiscerning as was Isaac, but it is "up to" us to see that we are on hand with the savory venison when the blessing is handed out.

The old school has practically acknowledged its failure to find any law or reason for giving internal medicine. The hodge-podge of their therapeutics is as pitiable as it is ridiculous. Between nihilism and proprietary concoctions it has nearly come to a choice with them between Homœopathy and Christian Science. We need but be faithful to the representative of our medical ancestors, the American Institute of Homœopathy, and the victory will be ours. The law of similars must and shall be proclaimed the guiding law for the selection of an internal remedy for the cure of disease amenable to internal treatment.

The campaign of public education which the Institute has inaugurated and which will be endorsed at the Denver meeting is most illuminating. The program is as follows:

Can any real, live homœopathic physician read that program and remain at home during the days of July 6-12? Must he not feel it his bounden duty to make any reasonable sacrifice to be present at the Denver meeting and to have the honor to help set in motion a campaign which will ring the long-deferred victory—a world-wide acknowledgment of the law of similars?

FIRST.—THE PERIODICAL ISSUANCE OF A NEWS LETTER OR BULLETIN FOR PROPAGANDISTIC PURPOSES.

The items of this periodical shall be live matters on the doings of the homœopathic school throughout the land in its colleges, hospitals, dispensaries, asylums, societies, etc., together with matters pertaining to health, sanitation and diet. This shall also include statistics comparative and other, in short, such items as will inform the public that the homœopathic school is alive and active.

This News Letter or Bulletin shall upon its issuance be distributed to newspapers as the funds of the Council will permit, all over the country.

SECOND.—THE EMPLOYMENT OF A PUBLICITY AGENT.

The employment of a press or publicity agent is contemplated to secure the publication of the items above mentioned.

THIRD.—PUBLIC LECTURES.

The Council will stand ready to furnish lecturers on popular medical subjects, especially those appertaining to Homœopathy, provided physicians in given localities will secure audiences and determine place and date of same.

FOURTH.—INSTRUCTION OF COLLEGE STUDENTS AND GRADUATES IN THE POSSIBILITIES OF HOMŒOPATHIC MEDICINE AS A PROFESSION.

The Council asks physicians living in college towns, to secure information as to those graduates contemplating the study of Medicine and send their names to the Secretary of the Council who will furnish them literature upon homœopathic medicine.

FIFTH.—SOCIETY CO-OPERATION.

The Council will be glad to assist in every way in the work of arousing enthusiasm in all existing societies; in the creation of new ones or in the reorganizing of those that have been suspended.

SIXTH.—THE LEGISLATIVE FIELD.

If you live in a capital city or if you have in your clientele members of your state legislative bodies, you should see that the Council be informed of all adverse and suspicious Medical legislation that may appear. Great damage has been done to the homœopathic school by legislation passed while we have been asleep. Let us keep awake to this fact. Legislation favorable to our school should also be reported as an interesting item for the News Letter.

EIGHTH.—THE FINANCIAL QUESTION.

The Council on Medical Education is raising its own fund. The extent and permanency of the work depends upon the fund. We are asking every homœopathic physician in the United States to subscribe the small sum of \$2.00 a year for a period of 5 years. Many can afford more. Many can secure many times this amount from some appreciative patient.

Council on Medical Education,
W. A. DEWEY, M. D., *Secretary.*

Ho For Denver!

As the guests of the Denver profession we shall have a chance to visit Golden and ascend Mt. Morrison by the funicular railway (this a part of the Local Arrangements Committee's varied entertainment). Then after the meeting there will be one-day excursions, at from \$1.50 to \$3.50 per ticket, over the Switzerland Trail of America, the Georgetown Loop to Silver Plume, the Cripple Creek Short Line from Colorado Springs to Victor and Cripple Creek, up the Cog-Wheel Railway to the top of Pike's Peak, and various delightful auto trips among the clouds.

The Colorado Midland and Denver & Rio Grande, as also the Rio Grande Southern, have longer outings, covering hundreds of miles of scenic bewilderments, requiring two to ten days or more, according to urgency. A month should be given to the Rocky Mountain ranges. They are incomparably grand, gloriously majestic, magnificent in their vastnesses. The Knights Templars' Triennial Conclave, king of all American carnivals, occurs in August. Many Institute members are Sir Knights. These and their friends will do well to come to the Institute meeting in July, rusticate among the mountains until the conclave, and then attend it in Denver.

Special Institute Excursion.

While numerous parties are expected to be made up during Institute week for brief excursions out among the mountains, over the one-day lines named, all chaperoned by members of the local profession, a special Institute Excursion has been arranged over the famed Moffat Road, to Steamboat Springs and return. The Moffat line is to be the short line between Denver and Salt Lake when completed. Steamboat Springs is its present terminal, two hundred and fourteen miles from Denver. No road in the State possesses more of rugged wildness and majestic grandeur for the same mileage. It is a marvel of railway construction, the acme of railway delight. Short excursions are often made to Corona, the "Top of the World," at an altitude of eleven thousand six hundred and sixty feet, the highest point yet attained by a standard gauge railway, and to Arrow, a short distance beyond. But "Steamboat" wants us this time, and as many of the best scenic attractions are over the Backbone of the Continent, across the Great Divide, this is to be the objective. A barbecue, complimentary use of the medicinal baths, a genuine wild western cow-boy roping contest, and festivities at the Steamboat Cabin Hotel are on the programme.

This excursion will be \$8.50 per passenger. We shall have our own train. It will stop at all special scenic points for kodakery and non-alcoholic intoxications. Leaving Denver in the morning, Steamboat will be reached in time for supper, after a day among the grandeurs of canyon and gorge, mountain top and cloudland, by rushing streams and splendid cascades, a day of bewilderment and inconceivable delight. The night and next forenoon will be spent at "Steamboat" the train leaving for the return at noon, arriving at Denver for supper. Denver will send a generous delegation to chaperone the Institute on this journey. Every member is urged not to miss it. A ten or twelve dollar bill will compass all the expense. The Land of Opportunity will have been visited. The Great Unknown will have been penetrated. A future Empire will have been seen. The mountains are calling you. Heed the call and come to the Institute at Denver. If spared long enough, read the Institute Booklet, from cover to finis.

C. E. Fisher.

DEPARTMENT OF EUGENICS.

CONDUCTED BY MARA L. PRATT CHADWICK, M.D.

Dr. Chadwick will gladly receive communications, reports of cases etc., etc., pertaining in any wise to the matter of child culture and race improvement.

The last number of the organ of the Moral Prophylaxis Society of New York opens with the announcement of the sudden death of its President, Prince A. Morrow, M.D., who founded the Society and struggled against odds which few appreciate in his endeavor to keep it active during the period of criticism. Dr. Morrow lived, however, to see his Society successful, respected, and its objects recognized throughout the nation. Dr. Morrow was the author of "Marriage and the Social Diseases," a brave book in its day, which has had more influence in arousing intelligent interest and concern than any other book written, except perhaps, "Adolescence" by G. Stanley Hall.

The July number of the magazine will give a full account of Dr. Morrow's work of which the readers of the *New England Medical Gazette* will be interested to hear.

The programme for the April meeting was opened by Dr. Henry Cotton, Director of New Jersey State Hospital, who dealt with the subject of Practical Eugenics. He said:

"We have now in the State Hospital at Trenton some 20,000 individuals charted, and the work of analyzing these data is enormous. The charts I shall show you this evening are selected charts, as it would be impossible to show all the cases we have on our records. We summarize important data for demonstration. We cannot say that we have any definite laws yet regarding mental diseases, based upon our researches. The careful analysis of this information on the heredity of mental disease has yet made only a good beginning. The subject is quite complicated, for insanity is a name that has covered a whole list of mental defects of most dissimilar characters and types. As far as possible, we eliminate the word "insanity" and try to make a diagnosis of the mental condition. Feeble-mindedness, eccentricities, epilepsy and alcoholism are some of the conditions which seem to exert strong hereditary influences.

Mental defectives, classed as feeble-minded, form only one group of the larger class of mental diseases, and the same can be said of epilepsy. The causes occurring in these two conditions have a certain uniformity which, however, is lacking in the larger group of insanity, or, as we prefer to say, mental diseases. But even here, all cases of feeble-mindedness are not of the same type, and the cause producing these types may be quite different in individual cases. There can be no question but that feeble-minded parents will produce feeble-minded offspring, and that the hereditary transmission of such diseases as syphilis will produce idiots and other mental defectives. Hence, it appears that we should make a little closer examination of the types of feeble-mindedness, not so much from the degree of the defective which has been done by Dr. Goddard, but we should also consider more thoroughly the cause producing feeble-mindedness. Accidents at birth, arrested development through infectious diseases, such as scarlet fever, will frequently produce feeble-mindedness, and also, as has been mentioned, direct transmission of syphilis, etc. The largest proportion, however, are caused by direct hereditary influence of the mental type of parents who are both feeble-minded. In some cases where one of the parents is feeble-minded, the offspring will undoubtedly show some feeble-minded individuals.

The question of the inheritance of epilepsy is even more complicated than in the case of mental defectives, and here again, many factors are concerned in the causation of this disease. We have to consider accidents at birth, accidents in childhood, which result in head injuries, the inherited diseases, and then the direct inheritance of epilepsy, which has been shown by those engaged in this work.

When we come to consider the large group of mental diseases, of which each separate type must be treated by itself, it makes a very complicated problem. There is no question but that the majority of the cases of mental disease have a bad heredity to start with, but often this heredity is only one of several important causes. Thus, two sisters both inherit a taint from their parents. One of them marries and has a child. The effect of childbirth upon the mental condition is very pronounced, and the factors causing mental derangement may be considered both physical and mental, and frequently the woman develops mental disease following childbirth. Under this strain the married sister might become mentally disturbed, while the unmarried sister, with a similar tendency to mental weakness, without the exciting cause of childbirth, might escape, and live and die a rational human being.

Another type of cases which should receive consideration, is that known as dementia præcox. This is a chronic mental disease which occurs mainly in young people. In a great many cases they are unmarried. From the fact that they are unmarried, the progeny of that particular line or strain soon ceases, and as the families of these patients are peculiar, and many do not marry, the whole family will apparently end. Does this, then, lessen the number of dementia præcox in each succeeding generation? We are forced to say that it does not. Hence, we must look to some other factors than heredity in producing this disease. There is no doubt but that we do have very marked hereditary influences in these cases, but notwithstanding the fact that these peculiar lines die out, we have an increase in this disease. It may be possible that hereditary influences are not limited to a tendency to mental derangement, but that other peculiar traits occurring in the ancestors are more exaggerated in the offspring, and finally produce this disease.

In another type of mental disease, such as general paralysis, or softening of the brain, we feel confident in assuming that heredity plays very little part in their causation. The main point for consideration in these cases is the fact that they have previously been infected with syphilis, probably ten or fifteen years prior to the onset of the mental disease. This type is purely an acquired condition, and the question of heredity may play no part whatever in the causation of the disease. It has been a much discussed question whether syphilis had any connection with general paralysis, but today every one is convinced that it stands in direct relation to general paralysis. Without syphilis there would be no general paralysis. Recently, Noguchi and Moore have found the germs of syphilis, the *treponema pallidum*, in the brains of persons dying of general paralysis. This at once settles the question as to the relation of syphilis to general paralysis.

The question of eugenics is not limited merely to the study of heredity. It should cover a much broader field. If we are to stop the increase of mental diseases we should endeavor to adopt measures which would secure normal offspring; and where the offspring would probably be abnormal, the State should take measures which would prevent such offspring.

The inheritance of feeble-mindedness is so well proven, that in several states laws providing for the sterilization of such persons have been passed. We have such a law in New Jersey, which is now being tested for its constitutionality before the Supreme Court of the State. Recently, some States in the West have, through their Supreme Courts, decided that such a law was constitutional, and we hope that this will have a tendency to influence the decision of the courts of this State.

A measure so new and far-reaching should, of course, be put in operation only upon the best of grounds. We feel that we have such grounds. Feeble-mindedness is certainly hereditary. The law protects the rights of individuals in the most careful manner. Three commissioners—a surgeon, a neurologist, and the State Commissioner of Charities and Corrections—sit with the superintendent or medical director of the institution where the inmates are to be examined, as a committee of four to pass on each individual case. The patient is not only allowed counsel, but is provided with counsel by the State.

A considerable number of cases have been passed upon by the Commission, and they are now awaiting the decision of the Supreme Court, before the decree is carried out. If the decision should be favorable to the law, as we have every reason to hope that it will be, we shall be able to set free at least one hundred persons from the State Hospitals at Trenton alone, persons who are now confined merely because of the danger that they might transmit their mental defects to succeeding generations.

Perhaps I should explain that a rather large percentage of the inmates of our institution are what are called "moral imbeciles." They are not incapacitated from living in freedom and earning their living, but they simply lack moral power. They do not know what sexual morality is. At present we are forced to confine them in our crowded State Hospital, where we must keep the women throughout the period of their lives in which they may bear children. By submitting them to an operation, we can remove that danger, and they would then be much better off outside the institution.

The preventable causes of mental diseases include vices, as alcoholism, and such diseases as syphilis. Twenty-eight per cent of the male patients in the State Hospital come as the direct result of alcoholism; that is, these cases become mentally deranged and have to stay in the hospital for varying periods. This does not take into account a large number of cases in which alcohol plays an indirect part; and, according to some authorities, this indirect effect of alcohol is very large. Coupled with alcohol, is the question of syphilis, which is the direct cause of mental disease in 11 per cent of all admissions. These two factors are the ones which it seems to me directly concern this Society, and it also appears that if there were more education along these lines suggested there would be, perhaps, fewer cases. Especially is this true in the matter of syphilis. I think that the parents of boys are, to a large extent, responsible for the fact that they do contract syphilis. Most boys have been taught the moral side of the question, but we have found that this is of very little help in deciding their course in these matters. If they should have the physical side of these diseases emphasized, and were taught the consequences of immoral conduct, they would certainly pay more heed than they do at present. A large majority of the cases of syphilis are contracted through ignorance.

The important question of prostitution, its control, etc., will not be discussed here, although it is a very vital problem and is directly connected with this work."

Dr. Eugene Swan followed with a paper on Sex Instruction to Young Men.—

"The specific department of this subject assigned me for this meeting is that dealing with young men—particularly young working men and boys. I have spent considerable time investigating at close range the life lived by the working men and women, and largely that of men and women working in factories. I have been frequently asked if the conditions existing here were not most unfortunate and surrounded by vulgarity and foulness. In my experience such has *not* been the case. I have talked with a great many Y.M.C.A. workers who are near the working man's heart, and their experience coincides with my own. Particularly has this been so among the Y.M.C.A. workers who hold shop meetings during the noon hour. In this way, thousands of working men are met intimately each year. At the shop meetings which I have attended, we have had widely varied programs, from discussing a baseball game or track meet, to a straight talk on sex hygiene. No crowd of under-graduates at a university could listen with more profound or respectful attention than these men in overalls. During the noon hour around a factory where both sexes are employed, as the great shoe, glove, and garment manufactories, the girls will be seen strolling arm and arm up and down in the sunshine much as a crowd of misses at a girls' school; the men and boys, smoking, playing ball or cards. The young men occasionally shout some remark to their friends of the fairer sex, but it is usually only rough, good-natured bantering. Nothing vulgar except in very, very rare instances; and in these cases I have seen the offender roughly

handled and suppressed by his comrades. Some factories dismiss their girls fifteen minutes before the boys.

The conversation among the average working man during the leisure hours is frequently much cleaner than that of the average clerk. The very power demanded by the manual labor absorbs his superfluous vitality and is a natural safety valve. The working boy or girl *at work* is not in very much danger. It is the boy or girl out of work that is led, or accidentally falls into some devil's lair.

It is commonly agreed by settlement workers, social service workers, and others familiar with conditions, that the pretty girl of the factories is not subject to as much danger as that which menaces the pretty girl of the department stores. The former lives and works under plain, unvarnished, prosaic conditions, while the latter is surrounded by the dainty, lovely things which all women like, in an atmosphere of shaded lights, music, perfume and a constantly changing crowd across the counter. I am told that cadets or procurers frequent the big department stores, and in one instance, with which I am personally familiar, a girl was lured into a life of shame from one of the prominent candy stores, noted for the attractiveness of its sales girls. If a girl becomes an unmarried mother, while she is on the payroll of a certain New York department store, she is cared for during the accouchment at the store's expense, and without further question, is taken back when she is able to work. In the neighborhood of another great department store there are several "*studios*" which are frequented by the girls during the lunch hour. Surely here is a golden opportunity for some noblewoman to work great service.

To return to the factories for a moment—it must not be supposed that all factories are good, for in some the conditions are all but unbelievable. A Y.M.C.A. secretary informs me that in a factory near New York, every boy and every girl is, during his or her first two weeks, "initiated." This initiation involves the loss of his or her chastity.

Strikes are fruitful fields for the cadets or procurers, and during the recent garment workers' strike in New York, it is estimated that hundreds of girls were ruined. They were poor, perhaps hungry, and their old Jewish fathers and mothers were about to be dispossessed for overdue rent. The gilded easy path has many sign boards pointing to it. Another most unfortunate thing is the throwing into prison of the girls who are arrested while picketing. These young garment workers are often thrust into the same cell with a street walker. They are angry at society, feel that the world is against them, and the fallen woman opens the door to the easiest way, or at least sows seeds which result in a blunted, moral sensitiveness. An officer in the militia told me that in the last strike in Lawrence, Mass., the I. W. W. imported immoral women for the vice and disease they could sow among the young soldiers. In some of the companies they found fruitful soil. Should there not be some provision for sending social workers of both sexes to such places at such times? Ought not the State to stand ready to protect these young, ignorant, often innocent, citizen soldiers from such a peril?

I have had a good deal to do with the navy, and I have met a number of the young fellows that wear the blue-jacket uniform, and I have talked with them on the battleships. One night in the Brooklyn Navy Yard I was on one of the ships that had just returned from carrying the stars and stripes around the world, and they told me that out of nine hundred men on that ship seven hundred had venereal disease when the ship left the Mediterranean, and most of them did not know what it meant. It is a common understanding that the "Rookie,"—that is, a new sailor just enlisted, has not passed above the "Rookie" grade until he has acquired a venereal disease. There is a sentence in one of the publications issued by this society, which reads something like this: "The conditions are so wide spread and horrible as to call loudly for new and preventive measures." Surely this is true.

There is no use in blinding ourselves to the conditions and no use get-

ting excited about them. We must logically set about informing ourselves of the facts, and then logically set about seeking the remedies. When it is true that a boy in New York City has one chance in five of remaining uninfected, and a girl has one chance in five of giving herself in marriage to a man as pure as herself, is it not time that the light was turned on?

My subject is sex instruction to men and young boys. How shall it be given? Tell them the simple truth, the plain facts in the case, and you will have done your work. This is the one subject in all the world in which no one can deny interest. Some of you gentlemen here desire information that you may use to combat the antagonism or actual indifference of those with whom you are laboring. Some of you desire facts to present to fathers and mothers of the better class who are liable at times to say: "This sex instruction is all right for the masses—for the poor people, but it does not effect people of our class." Tell *them* of a public school in this city which has its rear windows opening on a house of illfame, occupied by colored girls who go into this school as pupils, to draw boys into danger. This school is on one of the best streets in the city. Tell them again, if they are unconvinced still, that a Brooklyn clergyman found within one block of his fashionable church, a small wooden house called the "Chicken coop" because of the youth of those who visited it—boys and girls. (It is not there now.) Such are some of the facts that may be used in this work of instruction. What are some of the remedies? One which seems to be the most important of all is to take the profit out of vice. This is a very good business, from a money point of view. I am told that there are six thousand men in New York City being supported by women, and that a cadet need employ only three girls in order to live comfortably. Another remedy should be the infliction of more severe penalties, longer sentences and not fines. Many believe that any man who forcibly violates the physical sanctity of a girl under sixteen years of age should pay for it with his life. In some states in this country the penalty is six months or a year in jail! It is a common belief among some ignorant classes that gonorrhœa can be cured by intercourse with a virgin. At my clinic the other day I saw a little Italian girl of six years whose chastity had been violated by a man of twenty, with this purpose in view. The poison had been transmitted to her eyes and there is now grave danger of the sight being permanently destroyed.

Another remedy, and an excellent one, would be the compulsory reporting of all cases of venereal diseases to the Board of Health. Among the general public, segregation is usually considered a wise procedure. Personally I do not think so, and I was much interested the other evening to hear William J. Burns, the famous detective, denounce the crib or segregation method. He said, in the course of his remarks, that it opened a wide door for many other evils, as drunkenness and robbery."

The next speakers were women. First, Miss N. M. Smith who has recently brought out a little gem of a book for girls, "The Three Gifts of Life."

Miss Smith said, "Sex Hygiene differs from all other departments of knowledge excepting religion by its personal subjective character..... I have been asked to speak particularly on the subject of instruction for the unprotected class of girls. Strictly speaking every girl is unprotected who is not fortified by knowledge.....With the exception of the few who have been able to attend the high school they seldom have—the unprotected class—correct biological knowledge; but on the other hand are familiar with ordinary facts and know much of evil.

I have been interested in finding out, among other things, where girls get their information regarding sex. So I have prepared questionnaires which I get the girls to fill out after the final lecture. One question reads, "who *first* told you where the baby comes from? Answer: Mother, Older woman, Companions, Reading, Talk overheard." Out of 700 papers that have been filled out so far, 295 answered "Companions; 164, Talk overheard; 132, Mother; 91, Older woman; 35, Reading; 3, From seeing births,"—one at the

age of 18, one at 12, and one saw her small brother arrive when she was 8. One answered that her small sister told her. The balance either left the question blank or answered. "From observation," "I can't remember," "I forgot," or "I don't know." A number of papers checked both "Companions" and "Talk overheard," which probably means that they listened whenever they could to the conversation of their elders, and then talked it over among themselves. In the case of both "Older person" and "Reading," the information may have been given in either a pure or a harmful way. It is unfortunately true that some young married women tell many things in a coarse and indelicate manner to the unmarried girls of their acquaintance. Also literature of an indecent kind is still passed from one child to another. Summing up the results of these 700 papers, the majority of which were filled out by girls of the unprotected class, we find that at least two-thirds received their first information from an unfortunate source. Those that did receive their information from a pure source in the beginning, undoubtedly, in the majority of cases, had other things told them later that were of a morbid or degrading character. Girls who work for their living are frank to admit that coarse talk, vulgar jokes, and discussions of a prurient nature are very common.

The goal to be worked for in teaching Sex Hygiene, is to gain a right attitude towards the subject in the minds of the hearers. The problem before the teacher, therefore, is two-fold; first to disassociate sex from its sordid aspects, and secondly to interpret life on its higher side. The first is biological, the second ethical. In other words, the old association of connecting sex with the coarse story, the vulgar joke, and the perversions from the normal must be displaced by a new association with the wonders of Nature, working in a wholesome natural way. Then this new association must be related to human life and conduct.

This is a large task, and to my mind, impossible of accomplishment in a single lecture. In the first place, what is absolutely essential, the teacher must win the confidence of her hearers. She can do this to a certain degree, in her first talk; but not so absolutely and completely as she can by meeting with them several times. Then it requires time to tell enough of the marvels of Nature to awaken an interest so strong that it will displace the bad associations, and make the pure side foremost in the thoughts. Also I consider it wise to allow a certain amount of time to elapse between the talks in order that the information already received may be assimilated.

I have found that these results can be accomplished in four talks. The first I devote to plants, the second to animals, the third and fourth to the human being. Another advantage of giving four talks is that the comparatively few girls who are inclined to act foolishly or be self-conscious, almost always get entirely over it during the course of the first lecture. It is very rare that a girl is anything but quiet and attentive during the last two talks.

Biology plays an important part in the teaching of Sex Hygiene, but it should be used as a means rather than an end; particularly by the lecturer who must discuss the subject in one, two, or four talks. The stories of the plants and of the animals should serve two purposes; first to arouse the interest, and secondly to open up a new channel of thought in the mind through which the pure and normal side of sex in the human being can be presented. This end can be secured more easily by the use of illustrations, models and specimens.

In the talk on the human being, I do not consider the use of either charts or models desirable. In the first place, I do not think it necessary. Knowledge of anatomy has no ethical and but little hygienic value. Seeing a picture or model of certain organs will not make a difference in conduct. In the second place, I am convinced that showing such models or charts sometimes tends to defeat the end in view. To some sensitive girls, human anatomy is very disconcerting, while to all girls, there is the danger of distracting the mind from the main issue, and of leaving the strongest im-

pression the visual one of models and charts, rather than the more abstract ethical concept the lecturer has in mind.

The interpretation of sex on its higher side, I take up from the very beginning. All through the four talks, I make my underlying thought an ethical one. Every story of plant, animal, or human being is told in the light of a great truth. In the introduction to the first talk, I tell my audience that all life must obey one great law, the law of evolution; or stated more simply, progress; and that it is only as individuals obey this law that they are able to get the best out of life, both for themselves and for others. The mating of the best individuals and the care of the mother for her young is one important way in which the different kinds of life have been obeying this law of progress. But the different forms of life have different methods of accomplishing this purpose, or to put it more simply, different gifts. The gift to the plants is *dependence*, for they must depend upon outside aid; the wind, the animals, the birds, man. The animals are given a second and a better gift, *instinct* by the aid of which they have progressed much farther than the plants. But to human beings has been given the best gift of all, *choice*. It is only as human beings use this gift that they can make any real progress either in their own lives, or in the race as a whole. Furthermore, the plants, having only one gift, are able to progress on only one side, the physical. The animals, being given a second gift, have progressed on two sides, the physical and the intellectual; but human beings have been given three gifts; therefore human progress is three-fold—physical, intellectual, and spiritual. Progress on all three sides is important; but most important of all is the progress on the spiritual side, or the side of character; for it is on that side that the gift of choice can do its finest work. With this as a basis, it is easy to show the relation between human conduct and progress."

Dr. Laura B. Garrett followed with Sex Education for children.

"There is much talk now-a-days about teaching Sex Hygiene to young people as though it were a separate subject and something children had never heard about. You must remember children have always been taught about sex, generally by the wrong teachers and in the wrong way, at least by untrained teachers and by unscientific methods. Some say, "Children are too curious about this subject;"—let us be thankful they are not feeble-minded, as all normal children are curious about everything, and we stimulate this curiosity by old-fashioned secrecy concerning sex subjects. Others say, "We are putting ideas into their heads,"—that is just what we wish to do, put correct ideas and ideals into their heads. Some say, "They will talk too much if we tell them;"—most children always have talked—to each other or to unwise older folk, and those who are capable of correcting their mistakes do not hear them. After they have been trained correctly, they will be less curious and do less talking than ever before. They will take no more interest in sex subjects than they do in all life problems around them. Anyhow, we don't intend to teach sex to children; what we wish to do is tell them stories of the reproduction of life, never over-emphasizing and always correlating them with other vital interests. How can our little folks come to us and ask questions intelligently when we have never given them a vocabulary, as we have connected the good Anglo-Saxon words which they know with the filthy knowledge of the street?"

We think the drawings and remarks made by them show there is filth in their minds. Let us remember that many times the filth we think is in their minds is in our own, and we have only to give them plainly and honestly the facts they are ready to understand. Any adult who is not ashamed of the creative power in his own body can talk to the children about it and give them better ideas and ideals than they get in any other way. There is an old teaching that we have been "created in sin." It is true that many children have been and are continuing to be created in sin; but we must get this idea into the mind of the present generation and teach with the eugenists that all children must be well conceived and then well bred."

Dr. Garrett's ideals for teaching children were through biology, accepted pretty generally by all. Her suggestions for greater recognition of fatherhood were extremely well taken:

"The beauty of motherhood and reverence for motherhood has been taught by poet and artist for many generations, but the dignity and beauty of fatherhood has generally been omitted. As we visit our schools we see pictures of the mother hen with her chickens, of the cow with her calf, of the lioness with her cubs, of the mother with her child. This is absolutely unscientific and unethical. Our picture must include the whole family; the rooster, hen, and chickens; the bull, cow, and calf; the lion, lioness, and cubs; the father, mother, and child.

For a long time the fertilization of plants has been freely talked about; but we have foolishly hesitated to talk about the father's part in animal life. Little Jim, a street urchin, after many weeks of teaching, said: "It takes two 'spots of life' to make anything grow, don't it, huh?" and then added, "and they'd better both be pretty good spots, too, hadn't they, huh?" If we could get this well understood by our young people, and the real message from Jim instilled into their minds, the need of further teaching would be eliminated.

In the gardens, children should have a pair of birds, pigeons, or chickens, and a pair of mammals, possibly rabbits; and if the father bird is distinctly different in some trait, and the young watched for three generations, they can get this information, that it makes a difference what kind of father and grandfather chickens have. For example, a bantam rooster and a Plymouth Rock hen were watched by some of my little folks, and when the chickens came out, "they were the craziest lot of little chickens you ever saw." This same lesson can be taught by having a difference between the father and mother rabbit. Thus, over and over again by plant and by animal, they get the lesson that the young show the kind of family they come from, that the traits of the father and mother, of the grandfather and grandmother, may crop out in the coming generations.

We teach the children that the stock breeder is very careful to have the best of animals from which to raise young, and instead of keeping quiet about the male in the foolish old-fashioned way, we teach them that the bull is a very valuable animal, that he was selected with great care, and that is the reason the calves are so good. We teach them that the pedigree of the stallion is kept for generations, and that the size, disposition, and family of the father is of great importance if we are to have good colts.

In the same way we must teach that great care be used in the selection of the human father, that he be fit, physically, mentally, and morally to reproduce his kind. Every boy should be taught that he has within his body "spots of life," which do not belong to himself alone, but to the coming generations; that he must run no risk of bringing little folks into the world until he is ready to protect and care for them; that he dare not introduce into his system any of the great racial poisons, and thus risk marring the strength of his descendants."

The programme closed with an appeal by Dr. Balliet of New York University for public funds for the extension of sex education. Because this topic has not been often touched upon and will sooner or later be of interest in our own state we quote Dr. Balliet in full:

"It is sound public policy that whatever is done for the public good, after its practicability has been demonstrated by private effort and at private expense, should be assumed by the public and be carried on at public expense.

Much that is now done by private effort in the way of social betterment will without doubt before many years be carried on at public expense and on a scale large enough to meet the public needs. It is proper that in its experimental stage every new movement of this kind should be carried on by private effort and by private means; but when it has passed the experimental stage, and has been demonstrated to be both necessary and prac-

licable, it should be assumed by the public and be supported out of the public treasury.

There was a time when all education was private and conducted at private expense. Later, it was realized that, in a free government at least, the safety and permanence of the state and the political liberty of all are dependent upon the intelligence of all, and education was provided at public expense. It was recognized that popular ignorance is a menace and popular intelligence a benefit to all, and that all should therefore bear the burden of popular education.

Likewise, medical practice, until comparatively recent years, was purely private. Each paid his own doctor's bills and health and sickness were regarded as private matters. Later, hospitals were established through the charity of individuals and free medical attendance through the charity of the medical profession for the poor who were unable to pay for medical care. Today we recognize that health and disease, like intelligence and ignorance, are not merely private concerns; and we have enacted laws in regard to public health, and established boards of public health, both state and local, with large authority, to enforce such laws. Furthermore, hygiene is taught in the public schools, and in some communities even lectures on health are provided at public expense. It is recognized that the health of the individual is largely dependent on the health of the community, and that the latter is dependent on popular knowledge of the laws of hygiene.

While it has always been recognized that morality is a public concern, and criminal laws are among the earliest efforts of the race to control individual conduct in the interest of the public welfare, certain types of conduct, like drunkenness, have not been placed under public legal control until comparatively recent years in history. Although religious and moral reformers had condemned it even in ancient times, it was not until the nineteenth century that drunkenness began to be regarded by the public as a discredit to a man, and the drink evil as a menace to morality which must be placed under public control.

What are known as the social diseases were, likewise, until recent years regarded as affecting only a certain class of persons who contracted them by their own voluntary acts; they were popularly thought to be only a natural and just retribution for a certain form of private immorality. What the medical profession has known for a long time, but through a mistaken professional ethics kept from the laity, has within the last seven or eight years been made known to the public in this country through The Society of Sanitary and Moral Prophylaxis, and through similar societies formed in at least twenty different states of the Union;—namely, that these diseases do not affect merely those who seek the haunts of vice but invade the sacredness of the home and inflict sickness and death upon the innocent, and that they belong to the sins of the fathers which are visited upon their children. Accurate information upon high medical authority has reached a wide public in the last few years and has aroused a deep interest among the most thoughtful people throughout the country. The revelations in regard to the white slave traffic and commercialized vice, have simply deepened the popular conviction that vice can no longer be treated as private immorality, but that it must be dealt with as a public evil affecting public morality and public health.

But as in the case of public education and public health, there is needed in this crusade not only public legal control, but above all things popular intelligence. The fight against vice is chiefly a campaign of education. It is an evil against which organized society in its collective capacity must take steps to protect itself; and this is possible only through a judicious enlightenment of the people. How this can best be done is a question so recently raised in a serious way that it still presents some unsolved difficulties. A far-reaching educational work, of unquestioned effectiveness, has been carried on in the colleges and universities of the country, through the various societies in different states known under the names of Society of Sanitary and Moral Prophylaxis, Society for Sex Education, Social Hygiene Society, Society for Sex Hygiene, etc.

Lectures before selected groups of people have been provided by these societies and by several other organizations. Successful attempts have been made to give instruction in sex hygiene and sex morality in certain high schools in connection with the instruction in biology; and in a few communities attempts have been made to give it in the elementary schools. While ultimately such instruction will, without doubt, be provided in the public schools, it is beset with certain difficulties which must be removed before it passes the experimental stage, one of which is the lack of teachers who are fitted by personality and training to undertake such instruction. Likewise, instruction by public lectures to groups of young people of the same sex, while in general it has proved exceedingly effective, still presents some unsolved problems and must be given by very judicious and competent persons. Until these problems, involving questions both of matter and of method, are solved, it is well that such lecturers should be selected and authorized by the various societies above mentioned and the work be carried on at private expense. The immense value of this educational work is realized by a good many philanthropic men and women of means who are glad to give it financial support.

But there is one feature of such instruction about the necessity and practicability of which there can be no doubt whatever, and concerning the character and method of which there is little difference of opinion among thoughtful people. I refer to the instruction of fathers and mothers in regard to the hygiene of sex; the dangers of the social diseases to the innocent; the early development of the sex life of children; the sex life of the adolescent boy and girl; the care of their physical health and the temptations and moral dangers to which children are exposed during adolescence; the necessity of providing wholesome entertainment; of throwing around them the protection of the home and exercising over them a wise oversight and tactful, judicious control. Parents should, theoretically speaking, assume the responsibility of giving the necessary sex instruction to their children, but many of them are not competent at present to do so. They do not know the facts to be taught and they do not know how to present them to the child. One phase of sex instruction to parents must therefore be to teach them how to give such instruction to their own children, especially how to prevent the child from forming injurious habits even before he enters school and can be reached by other agencies than the home.

As this phase of sex education is universally recognized as feasible, and as there is little difference of opinion as to its character and method; and, furthermore, as it is entirely in the interest of the public, it should be carried on at public expense, through the agency of responsible public bodies, in most communities probably through the agency of the Board of Education. Free lectures, restricted to parents and mature men and women, should be given at suitable hours in public school buildings after the school session, and at other suitable places. Lecturers should be selected with care and appointed by the responsible authorities in charge. It seems to me lectures to parents ought to be given at public expense and the various societies above referred to which are now giving them should make every effort to relieve themselves of this financial burden, use their influence to induce the public to assume it, and then employ their resources to carry on the educational work which may be said to be still in a more or less experimental stage.

In like manner, there can be no doubt about the feasibility of giving instruction in sex hygiene to soldiers and sailors. Such instruction should therefore be given at the expense of the Government; and instead of burdening themselves with it, the societies should exert their efforts to induce the Government to assume it.

Whatever needs to be done for the public good, and does not violate private conscience, should be done at public expense. This is sound public policy."

BOOK REVIEWS.

Safe Guarding the Special Senses, by Henry O. Reik, M.D., Published by the F. A. Davis Co., Philadelphia. Price \$0.75.

At a time when the subject of preventive medicine is being brought so forcibly to the attention of the public, this work by Dr. Reik seems particularly apropos, in that it takes up the causes of many common complaints and tells how they may be avoided. It should prove interesting to laymen and surely would be of great value in guarding against future derangement of the special senses. It is only by the high maintenance of the special senses that the high standard of mental and physical efficiency can be attained. We can heartily recommend this little volume to all our readers, not only for the practical knowledge contained therein but for the interesting and instructive way in which it is presented.

Heredity in Relation to Eugenics, by Charles Benedict Davenport. Carnegie Institute of Washington. Department of Experimental Evolution, Cold Spring Harbor, Long Island, N. Y., Secretary of the Eugenics Section American Breeders' Association.

Published by Henry Holt and Company, N. Y., 1913.

All who have followed the most interesting papers of our Eugenics Editor since January, will be glad to know of this book. In the April number Dr. Chadwick presented some eugenic charts of the kind which abound in Dr. Davenport's book. He presents a large mass of material in such a concise and live manner that one wants to read it through at the first sitting. To our thinking, it is one of the most important books of the year, bringing together facts of far reaching medical and sociological significance and placing them in a form that he who runs may read.

The type is large, the cuts many, and the general workmanship of the book pleasing.

Papers on Psycho-Analysis, by Ernest Jones, M.D., (London) M.R.C.P. (London) Associate Professor of Psychiatry, University of Toronto. Secretary of the American Psycho-Analysis Association. Published by William Wood & Company, 51 Fifth Ave., New York. \$2.00.

This book is composed of a collection of papers that have appeared for the most part in psychological journals. They are dedicated to Professor Freud whose teachings they expound. Though rather technical, they are pleasantly written and will well repay reading. Whatever may be one's feeling about the Freudian theories, all must admit that Freud has sounded a new note in the study of the emotions of which no student of nervous and mental disease and indeed no psychologist or jurist can afford to remain in ignorance. He has penetrated further into the main springs of action and given us a more practical scheme for discovering the real causes behind acts and conditions than has any other man.

Dr. Jones is a scholarly thinker and writer, and has presented Freud's psychology in a concise and satisfactory manner. The mechanical work of the book is good.

Golden Rules of Gynecology. By George B. Norberg, M.D., Professor of Diseases of Women and Clinical Gynecology, University Medical College, Kansas City, Mo., Gynecologist to Kansas City General Hospital, Fellow and Ex-President Kansas City Academy of Medicine. 250 pages. 8vo. Price, \$2.25. C. V. Mosby Co., St. Louis, U. S. A.

A very instructive and useful little book of ready reference for either student or practitioner. It is particularly helpful to the busy general practitioner who needs condensed, practical information upon certain specific phases of gynecological treatment. The chapter upon gonorrhoea in young married women is right to the point and should not only be in the possession but in the mind of every physician who treats women patients. The print is large, the paper excellent, and all in all it makes a very readable book.

"Starving America." By Alfred W. McCann, member of the Vigilance Committee, the Associated Advertising Clubs of America. Copyright 1913. By F. M. Boston, Cleveland & New York—270 Pages—price \$1.60.

In this day of food study no thoughtful person can be indifferent to the kind of food which he asks his alimentary tract to negotiate for him. If such persons be a father or a mother he or she is even more deeply concerned for the helpless, ignorant ones depending upon his or her judgment for bodily sustenance. If he be a physician upon whom rests the physical welfare of many people he will be deeply conscious of the great responsibility resting upon him, not so much in determining *what* is the right kind of food to prescribe but rather to ascertain what are the ingredients of the supposed form of food advised.

It is a very simple matter to prescribe either a nitrogenous or carbohydrate diet—or a mixture of either—but how can we be sure that the patients will get either even though they partake of substances supposedly rich in both? It is the present day fraud in the manufacture of food stuffs which makes the problem so vast. Mr. McCann has done a benefactor's work in the publication of an exposition on food supplies. He has made a life study of the subject and he has had a life's practical experience in handling food stuffs. His "Starving America" is an "eye opener." No physician can quarrel with his statement that our children of the present generation are slowly but surely starving because of a lack of the mineral substances in the food supplies especially the lack of phosphate of lime.

Physicians are just beginning to awaken to this threatened evil. Our great army of children with defective teeth, our great army of dyspeptics—neurasthenics—cancerous, and premature death victims may all have as a prime factor in their ailments the lack of mineral salts in their diet. This book should be read by every father, mother, physician, grocer and food manufacturer in the land, then each and all should coöperate to the end that we may get "back to nature" in food supplies.

MEDICAL JOURNAL REVIEW'S

Medical Century, May.

1. *Pernicious Vomiting of Pregnancy Due to Acetonuria, and its Treatment with Large Doses of Sodium Bicarbonate*; Wood, J. C.
2. *The Faradic Current*. Burnett, J. A.
3. *The Autobiography of a Splinter*; Walton, C. E.
4. *Graves Disease—A Review*; Halbert, H. V.
5. *Pharmacodynamics and Therapeutics*; Hinsdale, A. E.

The Pacific Coast Journal of Homœopathy, April.

1. *Therapeutic values in Radio-Active Solutions*. Bailey, E. S.

When a given amount of radium is placed in a given amount of water, the solution becomes radio-active. The water retains the radium gas. When a given amount of pitchblende ore is covered with a given amount of water, the solution is radio-active. These solutions become fixed remedial agents only as their strength, so called, is measured. This form of radio-active solution is measured by the Marchè unit meter or by the Fontactoscope. It is possible to detect the presence of radium in solution to the point of one two hundred and fifty thousandth part of a grain. Clinicians vary as to the relative value of the size of the dose. The sixth tablet trituration measures in Machè units often twice as much radio-activity as the German gelatine preparations. Cases:—1 advanced epithelioma of the nose—greatly improved; 1 lupus—recovered; 1 carcinoma of the stomach—improved; 3 ulcers of the stomach, recovered. The author has also found it valuable in fistulæ, chronic discharging sinuses, and in surgical wounds which are slow in healing. Radio-active water was used either locally or given by the glassfull by mouth. This water was made up from the IX trituration tablet.

2. *Gestational Neuroses*. Wright, H. J.

The University Homœopathic Observer. (Ann Arbor.) April.1. *Cirrhosis of the Liver and Hard Cider.* Edit.

Large quantities are used by the farmers during the winter months in this country. Six to fifteen barrels are frequently consumed on one farm, and it is not unusual to obtain a history of a single consumer having emptied from three to ten barrels himself from corn husking to corn planting. Cirrhosis of the liver is common among these farmers. Hard cider has all the poisonous elements, it would seem intensified, that can produce "gin-drinkers' liver."

2. *Chorioepithelioma;* Kinyon, C. B.

Pathological aspects, etiology and treatment, with a review of 2 cases.

Iowa Homœopathic Journal, April.1. *Increased Resistance.* Staads, S. W.2. *Gastro-Enterostomy as a Cure for Gastric and Duodenal Ulcers with Comparisons Relative to Medical.* Allen, F.3. *Factors that Modify Health.* Marble, R. E.**The Medical Advance. April.**1. *A Case of Tuberculosis.* Turner, M. W.

The report of this case which was by letter from a physician contained one and one-half lines on the findings from a physical examination, and eleven lines of symptoms with modalities. From this report 46 drugs were considered in the repertory, and silicea selected as the indicated remedy. After one month a report from the physician declared an apparent recovery, thus "confirming the choice of Silicea." The dose is not given.

[Reviewer's note: The selection of the indicated remedy from such a meagre report although worked out with mathematical accuracy from its contents would appear to be less accurate than a selection made without the repertory from a full report. What else was done for the patient besides the giving of silicea? An answer to this might give us a better idea of the actual value of silicea in this case.]

3. *The Holocaust of the Open Window.* Gilman, J. E.

"There has been no other one cause so productive of disease and death in Chicago during the cold weather as the advice, 'Keep your window open at night.'" The author considers that more people cannot stand the window open at night than those who can. His arguments from history are far from conclusive evidence in favor of his theory. [Reviewer's note.—This in the *Medical Advance!*]

Hahnemannian Monthly. April.1. *Clinical Analysis to Pathologic Findings of an Unusual Case.* Fox, C. D.

A case showing at autopsy in the left optic thalamus a small hemorrhagic lesion that appeared to be at least several months old, and resting on the anterior surface of the crura and anterior border of the pons, a recent subpial blood clot about one inch wide by $\frac{7}{8}$ of an inch in length and $\frac{1}{2}$ inch in thickness. A careful study and analysis of the signs and symptoms indicated a moderately rapidly growing brain tumor.

2. *The Homœopathicity of Vaccines.* Beason, J.3. *Belladonna in Diseases of Children.* Rane, C. S.4. *Belladonna in Diseases of the Female Genitalia.* Miller, Z. T.5. *The Value of Belladonna in Diseases of the Stomach.* Eberhard, H. M.6. *The Education of the Public in Sanitation.* Sloan, M. W.7. *The Relation of Food to Certain Bodily Ailments.* Tomlin, R. E.8. *Infection of Fallopian Tubes.* Calhoun, J. C.9. *Caesarian Section. A Clinical Case.* Wendt, C. I.10. *Arterio-sclerosis of the Uterine Vessels.* Frosch, J. F.11. *Some Problems in Gynecological Diagnosis.* Betts, N. S.

The Clinique. April.

1. *Ten Years Experience with Diphtheria in Cook County Contagious Hospital.* Cameron, A.
The author is strongly in favor of anti-toxin. In "carriers" he advises swabbing the throat with a fresh culture of staphylococcus pyogenes aureus.
2. *Homœopathy versus Bacteriology.* Smith, A. E.
3. *The Bottle Fed Baby.* Hingston, J. W.
4. *Mal-Positions of the Presenting Head.* Cliver, P. M.

The British Homœopathic Journal, April.

1. *Recent Research in Rheumatoid Arthritis and Gout.* Hall-Smith, P.
2. *Isotonic Sea Water Injections with Special Reference to Rheumatoid Arthritis.* Sandberg, A. G.
3. *Mucous Colitis Treated with Isotonic Sea-Water.* Hawkes, A. E.
4. *Case of Poisoning by Bismuth.* Stonham, T. G.

The Homœopathic World, (London.)

1. *An Experiment in Prophylaxis.* Wheeler, C. E.
The experience of the author with homœopathic remedies in recurring acute nasal catarrh, and their inefficacy as compared to antogenous vaccines prepared from broth cultures.

QUININE AND UREA HYDROCHLORIDE

OSCAR NORTHWAY MEYER, M.D., Middletown, New York.

The Journal of Ophthalmology, Otology and Laryngology, May 1913.

The alarming systemic manifestations of cocain when an idiosyncrasy for this drug exists led me to investigate the merits of quinine and urea hydrochloride, for the manufacturers of this product claim it is nontoxic as a local anesthetic.

As the surgery of the nose, throat and eye is largely conducted (where possible) under local anesthesia, a safe as well as effective agent would prove of prime importance to us.

Therefore when quinine-urea hydrochloride was brought to my attention some time ago, I decided to try it as a substitute for cocain. I have found that for safety and efficiency it is all that is claimed for it. I secured complete and lasting anesthesia in every case I have operated under its influence. There have been no disagreeable symptoms which could be traced to its use, and the apprehension so typical with cocain is chiefly thought of because of its entire absence (both in patient and surgeon).

I have used this anesthetic in various strengths, from $\frac{1}{4}$ per cent, up to 5 per cent., hypodermatically and with entire success. The weaker solutions have a less profound effect and are more transitory in action. Above 1 per cent the anesthesia is complete, and in from 10 to 30 minutes after injection operative procedures can be inaugurated and conducted deliberately because we can be confident there will be no pain nor poisoning. As the effects last in my experience over three-fourths of an hour (the makers claim several hours), undue haste is unnecessary.

The success of this combination led me to experiment in an endeavor to secure painlessness as well as bloodlessness; the quinine-uræa hydrochloride in combination with adrenalin chloride produces a solution which will provide anesthesia and nearly perfect ischemia. I am using equal parts of quinine-urea hydrochloride (4 per cent solution) and of adrenalin chloride 1-1,000, and I have no doubt this can be further reduced and the good effects of both drugs maintained. I have removed tonsils (enucleation), turbinates and polypi, exenterated ethmoid cells, resected septa, and, in fact, conducted all operations on the nose and throat which I have been called upon to do in my office (under the influence of this mixture), and have yet to record any failures. The numbness is fully as great as with cocain and lasts longer,—the combination seems to enhance the value of the adrenalin as a hæmostatic; what bleeding there is is oozing only and very slight;—I have had no secondary hemorrhages.

Healing seems to progress about as with other local agents. The main "don't" to bear in mind is about commencing operation too soon—better wait twenty minutes at least rather than make a premature and unsuccessful start.

In the nose inject under the mucous membrane along the line of proposed incision when possible.

In tonsil work inject into the pillars rather than the tonsil itself. There seems to be no limit as to the amount we can use, and therefore I try to be sure to use enough.

PERSONAL AND GENERAL ITEMS.

Drs. Ernest M. and Grace A. Jordan (B. U. S. M., class of '99) have removed from 93 Newbury St. to 502 Beacon St., Boston.

Dr. Joseph P. Cobb of Chicago, late Dean of Hahnemann Medical College of Chicago, spent two days in Boston in April, visiting B.U.S.M.

Dr. Elizabeth Wiltshire Wright (B.U.S.M. 1909,) has removed from Yonkers to 609 West 137th St., New York City.

Dr. George W. Worcester of Newburyport, Massachusetts, has recently returned from a two-weeks vacation in Tuscaloosa, Alabama.

Dr. J. Herbert Moore will spend the summer at Swampscott where he will act as hotel physician at the new Ocean House. He will be at his Brookline office a part of each day, Sundays excepted, during the summer months.

Dr. Mary Parker formerly located at 17 Henry Street, South Framingham announces the removal of her office to The Annex, 4 Lexington Street, in the same town.

Dr. Herbert F. Gammons formerly of 683 North Main St., Brockton, Mass., has removed to 14 Minot St., Neponset, Mass.

For Sale.—An unusual opportunity to secure the country home of a physician recently deceased. It is located between Springfield and Worcester on the Boston & Albany R. R., a stately Southern colonial mansion, two hundred feet from highway, enclosed by attractive stone wall five feet high; garage, stable, bungalow, twenty-three acres of land; 1100 feet elevation. A rare summer home or private sanatorium, with room for tents for out-of-door-patients. Fine views and drives. Property must be sold to settle estate. Address "Colonial," 6 Charlotte St., Worcester, Mass.

LESSONS IN THE ITALIAN LANGUAGE.

Signor Ettore Ciampolini of Siena, Italy, (class of 1916 B.U.S.M.) is desirous of obtaining pupils in the study of Italian or for Italian conversation. Signor Ciampolini is lecturer for "Circolo Italiano di Boston" and is endorsed and recommended by Prof. Geddes of Boston University and by Prof. Grandgent of Harvard College. Address Ettore Ciampolini, care of Boston University School of Medicine, 80 East Concord St., Boston.

A meeting of the Students' Council, composed of the men of the several departments of the University, was held at the Medical School on March 11, from 4 to 6 o'clock. This afforded an opportunity for the visiting men to inspect the Medical School, the laboratories and museum, and the laboratories of the adjoining Evans Memorial for Clinical Research and Preventive Medicine. Short speeches were made by Dean Sutherland, Registrar Frank C. Richardson, and Dr. DeWitt G. Wilcox, Lecturer on Surgery. Following the speeches a collation was served in the Biological Laboratory of the school. About one hundred men attended this meeting; and while the Council feels that every man in the University should have been present if possible, the occasion was a success and brought the members of the different departments into closer relation with each other. That every student in it should know something of the University as a whole is a matter of great importance, and these meetings of the Council are valuable aids.

ITEMS OF INTEREST.

Dr. Wesley T. Lee's sermonette given at the annual banquet of the State Society, April 9th, at Young's Hotel, was too good to pass into oblivion. It should be incorporated into the "Bound Volumes of Notable Sermons." With our recent experiences with the Board of Regents of New York and their action concerning Boston University, Dr. Lee drew a parallel to the trials of the Children of Israel under King Hezekiah. So cleverly did he drop into the Mosaic style of literature that not a few of his audience were deceived into the belief that they were getting real biblical history and that they were getting it straight from the "Book of Hezekiah." Dr. Lee has kindly translated it from the original Hebrew and given us the essentials of the sermon.

1. Introduction

2. Scripture reading.

Hezekiah XXVI, verses 11 to 23 inclusive

11. And it came to pass in the thirty-ninth year of the reign of King Hezekiah that the Philistines sent unto Israel, saying:

12. If ye fail to properly fulfil that which we require of you, we will utterly destroy you.

13. And the Philistines encamped against Israel, and they smote the army of Israel sorely and caused a great fear to come upon it.

14. And when Hezekiah saw what was done, and that the Philistines were purposed to destroy Israel, he took counsel with his mighty men to repair the breach which had been made.

15. And he sent unto the Philistines, saying: This will we do; if ye will withdraw from the land, and will repair the damage which ye have done, we will with all haste do that which ye have demanded of us.

16. So the Philistines went up out of the land of Israel and returned unto their own country.

17. And it came to pass that the princes and the mighty men of Israel took counsel together, and they said:

18. What shall we do? We be few and they be many, and we are not able to do this thing which is required of us.

19. Then rose up Hezekiah, the king, and said, be strong and very courageous and be not dismayed by the Philistines. For they which are for us are stronger than they which are against us.

20. Let everyone strengthen his arms for this great work, for that which we have undertaken shall be accomplished.

21. And he set captains of war over the people and gathered them together to him in the gate of the city.

22. And all the men of Israel rose up and worked mightily together, and they gave of their substance freely unto the king, and they strengthened his hands. And the work was accomplished.

23. So the Philistines came no more against Israel, and peace dwelt in the land.

3. Hymn No. 218. "America."

Congregation standing.

4. Sermon.

Text. And all the men of Israel rose up and worked mightily together, and they gave of their substance freely to the king, and they strengthened his hands. And the work was accomplished. Hezekiah XXVI: 22. The response to the appeal of the king for help.

(1) The unanimity of the response.

"All the men of Israel." Everybody responded, men, women and children.

(2) The activity of the response.

"Rose up":—Rose to the occasion.

"Worked":—blessings of work.

"Together":—strength and inspiration in numbers.

"Mightily":—*hustled*.

- (3) The liberality of the response.
"Gave freely of their substance,"—not only talked and worked, but gave liberally of their money.
- (4) Loyalty of the response.
"Strengthened his hands,"—Forgot individual jealousies and interests; worked for living and country.
- (5) Result of the response.
"And the work was accomplished";—successful outcome assured with such a unanimous, active, liberal and loyal response.

Application.

Israel is represented by the homœopathic physicians and friends of Homœopathy. The Philistines are represented by the New York Board of Regents. The king and his mighty men are the Dean and Faculty of Boston University School of Medicine.

The attack by the Philistines; the promise of the king; the appeal to Israel.

The need: funds,—\$100,000 endowment. Boston University will give \$50,000 if the Medical School will raise an equal sum. \$22,000 already pledged, \$25,000 needed.

The International Hahnemannian Association.

The attacks and encroachments that have been and are now being made upon Homœopathy make it very necessary that more attention should be paid to the annual meetings of our international, national and state societies than ever before and that they should be better attended and more active interest awakened. Unless homœopathic physicians wake themselves up out of the "sleeping sickness" and apathy that seems to affect them, they will be rudely awakened by the loss of most of the privileges and rights that they now enjoy. There are fifteen thousand homœopathic physicians in the United States, only a small per cent of whom belong to or take any interest in their associations and societies. Opportunities for showing some interest are now offered plentifully. The International Hahnemannian Association that has ever been an active fighter for Homœopathy and has never in its thirty-six years of existence had a dull or unprofitable meeting holds its next meeting in Chicago at the Chicago Beach Hotel on June 23, 24, 25. Come, Doctor, get out of your rut, break into your routine, make the slight sacrifice of time and expenditure necessary, and attend this important meeting. Its last meeting was pronounced by a competent judge to be as good as a month's post-graduate course. Do not forget it; it will pay heavily.

J. B. S. King, M.D., President.

Colorado's Attractions.

For the information of the profession in New England, New York, New Jersey, Pennsylvania, and other Eastern States, the Transportation Committee takes no little pleasure in stating that for the Institute this year there will be such a number and variety of side-trip attractions as have not before been within the reach of the members at any session, not even excepting the meeting held in California three years ago.

The Rockies are at once the Alps, Pyrenees and Himalayas of America. From Denver eight lines of railway penetrate the vastnesses of their ranges, climbing into cloudland amid such a maze of scenic grandeurs as to defy description. During Institute week the body will attend to business, except as its sessions may be limitedly broken in upon by the arrangements of the local committee for the proper local entertainment and pleasure of the visitors. But the week ended, the real pleasure will begin. Every line leading out into the interior, and those running skyward from Colorado Springs, have been invited and have pledged to have their very best attractions presented to the Institute by their own representatives at the Albany Hotel during the week of the sessions. The Transportation Committee has sedulously avoided involvement with any favorites. Every scenic line in the State will

have ample opportunity, upon equal footing, of laying before the members its own scenic beauties and grandeurs. The magnificent Triennial Conclave of the Knights Templars of America is to convene a month following the Institute. It is expected a full hundred thousand Knights will attend. The selection of Denver for this conclave, king among American pageants, tells a story of Denver's climate in the sizzling month of the year in the East. Never over warm, Denver is always delightfully cool in the evening, and her nights are glorious. Snow-capped peaks and great saddle backs are in sight all the time, cooling breezes from the range making Denver an exceptionally pleasant convention city.

Following the Institute meeting there will be excursions out on the Moffat Line, over the backbone of the continent, to Steamboat Springs, and entertainment at that charming point; outings on the Switzerland Trail of America, whose soubriquet speaks its scenic charms; up to Silver Plume, Idaho Springs and Georgetown through Clear Creek Canon and over the famous Georgetown Loop; out to South Park and the very Heart of the Rockies; down to Royal Gorge and over Marshall Pass to the Black Canon of the Gunnison; from Colorado Springs up the cog wheel railway to the top of Pike's Peak, 14,107 feet above the sea; from the same beautiful city to Cripple Creek and Victor by way of the scenic Short Line, where "Heaven and earth are bound together by bands of steel;" over the top of the world on the Colorado Midland, with its splendid mountain views, its beautiful mountain lakes and splendid fishing streams, its Buena Vista, and Glenwood Springs; out to Crystal Park over the most perfect mountain automobile pike in the world; "Around the circle from Montrose to Telluride, Durango, Tolt's Gorge, La Vita Pass and Cumbre; from Montrose up to Ouray, the most charming spot in the Rockies if there is one entitled to the distinction, thence by the old Mears stage road to Silverton amid beauties and grandeurs that challenge description; then on down the incomparable Las Animas Canon to Durango.

For members who love valleys and glades and dells and splendid orchards and fine berry patches and great alfalfa fields and luxuriant meadows and gardens, Canon City, Montrose, Grand Junction, Palisades and many other sections have wondrous pleasures in store. And if it is mines the members "are after seeing," Cripple Creek, Victor, Leadville, Silverton, Creede, Central City, Silver Plume and scores of other "camps" are ours for the going. Particularly of interest just now should be the carnotite mines of Gilpin, Montrose, Mesa and San Miguel Counties, from which nearly four millions in uranium oxide and kindred radio-active metals were extracted last year. So valuable are growing the radium interests of Colorado that it is becoming known as the Radium State. It now exceeds Austria in annual out-put of radium-bearing pitchblende, and the United States Government has recently instituted a Radium Bureau in the offices of its Geological Survey corps in Denver.

Briefly, these are a few of the attractions offered the Institute this summer. The Transportation Committee has in the hands of the railway printer at this time a very complete Institute Booklet which will interest and please the members, it is believed, in which are set forth at greater length and more in detail the special features of each particular side-trip route and each particular section of the State. Come to Colorado this summer, Institute Members, not only to aid in the resuscitation of a quiescent Homœopathy in the great West, but also to spend a fortnight or month in our glorious Rockies. It will repay you in enjoyment, exhilaration, recuperation and education.

C. E. Fisher, M.D.

Tickets to the Denver meeting of the Institute are good returning by any route which the purchaser may select. But he must notify the agent at time of purchase of his intention.

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ORIGINAL COMMUNICATIONS.

EXPERIMENTAL CANCER STUDIES, I. *

By HOWARD W. NOWELL, M.D., Associate Professor of Pathology, Boston University School of Medicine

In spite of the numerous extensive investigations of recent years, positive knowledge of the causative factor or factors of malignant tumors is wholly lacking. The many existing theories, each adducing a measure of clinical and statistical evidence for its support, offer eloquent testimony to the paucity of definitive facts. The present research, the preliminary results of which are here presented, has been undertaken in the hope of securing additional information which might contribute toward the solution of this most important problem.

Among the etiological factors derived from and supported by extensive statistical study, that of old age offers the most confirming evidence. That is to say, the appearance of malignant growths is synchronous with the marked metabolic changes associated with the other retrogressions of advancing years. It is conceivable that the decay of the metabolic is paralleled by that of the excretory functions. Should the latter suffer a more rapid impairment, an accumulation of waste products would inevitably result, which could operate only unfavorably upon the general organism, and not impossibly, by influencing the centers of growth inhibition, might produce a morbid activity in given groups of cells. Furthermore, the development of such a condition would not necessarily be confined to any one period of life, although it would presumably be more manifest in the stages of waning activity of bodily functions.

* Special Pathological Research Laboratory, Robert Dawson Evans Memorial for Clinical Research, Boston, Mass., April, 1913.

As a corollary to the foregoing, the possible influence of trauma may be considered. It is generally conceded that many malignant growths are primarily of traumatic origin, trauma being considered in its broadest sense as any agent tending toward irritation. With injury a stimulation of cellular production ensues with a consequent increase in the formation of waste products. Should these wastes influence the control of such production the increase might become excessive, causing pressure and thus an extension of the trauma. This would again result in more waste formation, and thus cellular production be subject to a constantly decreasing control. Thus directly through the impaired elimination of normal, or indirectly by the formulation through exogenous causes of abnormal wastes, groups of cells might become the seat of a pernicious activity. The effects of this latter not improbably would show progressive characteristics, as the influence would propagate its own cause.

The ultimate causative principle, then, would lie in the substance or substances resulting from the cell katabolism, and the tissues undergoing these pernicious changes should contain the toxic substances responsible for their continued growth and propagation. While the poisons might be present in such small quantities as to escape isolation and detection by chemical means, an investigation of the chemical theory thus outlined must find its starting point in an attempt to demonstrate the presence of such compounds in the substance of malignant growths. Repeated experiment led to the following method of procedure.⁽¹⁾ Freshly extirpated growths of proven malignant character were freed from fat and extraneous tissue, minced and exhaustively extracted with boiling water. The watery extract was concentrated, freed from protein and fat, and the residue acidified and extracted with ether. The ethereal extracts were collected, freed from the solvent, the residue dissolved in water, neutralized and allowed to crystallize on spontaneous evaporation. The long, white, needle-shaped crystals were purified by repeated recrystallization, and a sterile saturated aqueous solution (of about 4 per cent strength) made up for the subsequent determinations.

Rabbits were selected for the initial experiments as these animals are not normally subject to tumor growths. Four healthy adults were injected under aseptic conditions, each with 10 milligrams of the toxic substance in sterile solution, while 4 controls received the same amount of normal saline. One of the animals developed a septic condition, due probably to faulty technique—and died on the third day. The others, after several days of apparent good health, gradually lost weight and suffered a progressive dimi-

¹ The detailed statement of the chemical procedure will be given in a subsequent Communication.

nution in activity and bodily strength. A general cachexia developed, terminating fatally inside of three months. In all cases the site of injection showed induration with continuous increase in area. In one case there was marked breaking down, attended by complete destruction of tissue. In each case the rabbit presented the clinical picture of malignant disease. The post-mortem showed extensive glandular involvement outside of the primary focus, and all the growths presented the characteristic histological features of carcinoma. In a subsequent experiment the effects were still more strikingly illustrated. Five rabbits were injected with sublethal doses at 10-day intervals. Although the abdomen was the site of the injections, the primary lesions developed severally as follows:—one in the thyroid, one on the right cheek, involving nose and orbit, one on the left foot and the remaining two in the head: one on the left side of the lower jaw, the other involving the left eye. All of these showed the characteristic progress of a general cachexia, in every instance terminating fatally. The post-mortem disclosed numerous metastatic foci, the picture being that of a general miliary carcinomatosis. The histological findings were equally definitive.

Beside the studies on the specific action of the tumor extract, its general toxicity was investigated. Doses of 20 milligrams injected into guinea pigs caused intoxications of a tetanic character, fatal in less than two hours, while with rabbits a similar dose produced an analogous condition with death in from 12 to 15 hours. Further, from the peritoneal cavity of the poisoned guinea pigs could be secured an exudate, 0.2 c. c. of which would kill a guinea pig in 20 minutes and 0.5 c. c. a rabbit in two hours, the symptoms being those of the original intoxication. This marked increase in toxicity would seem to bear upon the possible stimulation of cell groups to a pernicious activity.

To prove that the results observed were referable to the specific effect of the tumor substance, control determinations were carried out (a) with the lactic acid salt of the base used in the separation, (b) with the substance prepared from benign tumors by the same procedure as that used for the chemical treatment of the carcinomata. Neither with amount ten times that of the lethal dose of the malignant extract nor with the repeated injections over a long period of time, has it been possible to produce local or constitutional symptoms. The conclusion is thus warranted: that carcinomata contain some substance or substances which are susceptible of isolation and which when injected into healthy tissue produce results which are dependent upon the inherent chemical nature of the material itself.

A series of immunization experiments were now undertaken,

and 53 healthy adult rabbits were injected under carefully maintained conditions at 10-day intervals according to the following scheme. The site of the injections was, in every instance, the abdomen.

TABLE I.

No.	Volume of 4% solution (in c.c)	Active Principle (in milligrams)
I.	0.1	4
II.	0.25	10
III.	0.50	20 (note)
IV. V. & VI.	0.25 each	30 in all

Total 64

Five of these animals developed carcinoma (already described in an earlier section) while 10 more have shown signs of a general constitutional disturbance. The remaining 38 are in excellent health and have increased somewhat in size and weight, and only these have been used in the later experiments. At the end of the immunizing period, blood was drawn from these rabbits by plunging the needle of a sterile syringe directly into the heart. No fatalities have resulted from this operation. From the blood thus drawn the serum was prepared and stored, following the familiar technique for the preparation of immune sera.

Two sets of experiments have been carried out on guinea pigs with this serum. In the first a pig was injected with 1. c. c. of the serum and two days later with 1. c. c. of the tumor extract. The control animal, similarly injected with the poison, died in 30 minutes, while the experimental guinea pig did not show the slightest effect at the time or in the weeks that have since elapsed. The second set can be presented to the best advantage in the following table.

TABLE II.

No.	4% solution of poison (in c.c)	Serum (in c.c.)	Result :
1.*	1.00	0.00	Death in 22 minutes.
2.*	1.00	0.00	Death in 24 minutes.
3.	.99	.01	Slight temporary constitutional disturbance; no other effect.
4.	.99	.01	
5.	.98	.02	No initial effect. Later both animals died.
6.	.98	.02	Post-mortem showed that injection puncture had pierced liver, causing general peritonitis.

Note: It will be noticed that in non-immunized rabbits this dose would kill in 12 hours. In the present instance some of the animals showed transitory evidence of intoxication, and the subsequent doses were reduced to that of the second injection which had been shown to be readily tolerated.

*Controls.

TABLE II. (CONTINUED)

7.	.95	.05	Same as 3 and 4.
8.	.95	.05	Same as 3 and 4.
9.	.90	.10	Same as 3 and 4.
10.	.90	.10	Same as 3 and 4.
11.	.98	.02	Repetition of 5 and 6. Same as 3 and 4.
12.	.98	.02	The minimum constitutional effect shown with this proportion.

With the exceptions noted above, the animals are all in excellent health.

Parallel experiments upon rabbits have been even more successful, no deaths having occurred with the immunized animals.

S U M M A R Y.

1. A highly toxic substance has been isolated from carcinomata by a method precluding the presence of organic life.
2. This substance has been shown to be characteristic of carcinomata.
3. The tumor substance will produce well-defined carcinomata on injection into healthy rabbits.
4. The appearance of the primary lesion is followed by the development of numerous metastatic foci while the characteristic cachexia manifests itself.
5. The substance possesses marked general toxicity.
6. The peritoneal exudate produced during a fatal intoxication is far more toxic than the original substance.
7. Rabbits have been immunized by the repeated injection of sub-lethal doses.
8. The serum of the immunized animals antagonizes the toxic action of the tumor substance both when injected previously to or simultaneously with the latter.

INTERNAL SECRETIONS FROM THE SEX GLANDS AND THEIR RELATION TO PHYSICAL AND PSYCHICAL DEVELOPMENT.

By WINFIELD SCOTT HALL, Ph.D., M.D., Professor of Physiology, Northwestern University Medical School, Chicago.

Secretions are classified into two groups, the external secretions being those that are poured out upon the cutaneous or mucous surface. Examples of external secretions are the saliva, poured into the mouth; perspiration, poured out upon the surface of the skin; gastric juice, poured into the stomach; bile from the liver, poured out into the intestines, etc. Examples of internal secretions are the secretion from the thyroid gland, the secretion from the

suprarenal bodies, which are two little glands just above the kidneys. Some glands make only external secretions, as the salivary glands and the sweat glands. Other glands make only internal secretions, as the thyroid gland and the suprarenal glands. But some glands make both external and internal secretions. For example, the pancreas prepares the well-known pancreatic juice, which is an external secretion poured into the intestines, there to exert an important influence on digestion. The pancreas also prepares an internal secretion, which is absorbed back into the blood, there to exert an important influence on the use of sugars and starches in the body. The liver prepares an external secretion, the bile, which is poured out into the intestine, to exert an important influence on digestion. It also prepares several substances that are absorbed back into the blood. These substances are internal secretions.

The sex glands belong to this third group of glands, namely, to those glands that prepare both external and internal secretions. With the external secretions of the sex glands, men have been acquainted for thousands of years. The oldest writings make occasional reference to the "seed of the man." While this term "seed of the man" applies frequently to the progeny of man, in other cases it is evident from the context that it refers to the *semen* of the man. In fact the word *semen* means seed. In a similar way, men have for a long time known about the products from the ovaries,—the external secretion,—the eggs;—but it is comparatively recently that we have come to know about the internal secretion; in fact the whole subject of internal secretions is a distinctly modern subject. There was no thought of any such thing existing before the epoch-making work of *Brown-Sequard*, (1) whose principal publication on this subject appeared in the *Archives of Physiology* in 1889. Two years later *Poehl*, (2) of Germany, writing in the *Berlin Medical Weekly*, refers to this internal secretion from the testicles as "*spermin*," a term which has frequently been applied to it since, though not universally used to designate it. In 1896 *Zoth* (3) made some important contributions on this subject, which were published in *Pflueger's Archives of Physiology*. *Zoth* showed that this substance immensely increased the working power of muscles when injected into them before experiment. Since that time more than a score of important communications have been published regarding researches in the laboratories of Europe. Most of these have been within the last ten years; and, practically, without exception, they have confirmed the earlier findings; so that the proof is now positive and final that the testicles, as well as the ovaries, prepare this internal secretion from the beginning of adolescence throughout adolescence and middle life and until the beginning of the senile period. The best summary of these recent in-

vestigations on the internal secretions from the testicles and ovaries has come recently from the pen of Prof. Francis H. A. Marshall, and is entitled "The Physiology of Reproduction." Chapter IX. P. 303. (Longmans-Green & Co. London, 1910 (4).

The more important contributions in this field have been from those named above and from Shatlock and Seligman (5), Nussbaum (6), Knauer (7), Halban (8), Essen-Moeller (9), Kleinhaus & Shenk (10), Ancel & Bouin (11), Paton (12), Fichera (13), Starling (14).

Summing up the evidence from all sources, including those just above stated, Marshall says: (4)

"The fact that the testis is an organ of internal secretion seems now to be definitely proved. This secretion is probably formed throughout the entire reproductive period of an animal's life." (Page 353)

The internal secretions in general have been found to exert a most profound influence on nutrition and development, as well as on several other physiological functions. For example, the internal secretion from the thyroid gland determines and controls the development of the normal infant into the normal youth; while the internal secretion from the testicles or ovary determines the development of the normal youth into the normal man or woman. If the thyroid glands were removed from the throats of two puppies, out of a litter of four, these two puppies, instead of growing up into perfectly normal, active, alert, playful young dogs, as would the two unmutilated puppies, would grow into drooling idiots, unable to walk, unable to feed themselves, having a vacant stare, slobbering and drooling from the mouth, and wallowing in their own filth,—objects of the most abject idiocy conceivable. A similar thing would occur in the development of a human child who, through some misfortune, might lose the thyroid gland, or whose thyroid gland might be wholly incapacitated through disease or failure to develop. There are many cases of this kind known and described in medical literature, as cases of *cretinism*.

Once the animal has passed through the stages of its development into normal youth, then we come to the period, noticed heretofore, at the threshold of its adult life, when the internal secretion from the sex glands exercises upon its development an influence no less profound and far-reaching than that which is exerted by the secretion from the thyroid gland on the development of the infant.

One of the best examples that can be cited of the effect of the internal secretion from the testicle, is that which it exerts upon the development of the horse. Most young men have seen, either at horse shows or upon farms or ranches, pedigreed stallions. No person can see one of these splendid animals without admiring, if

not actually standing in awe of, its splendid physical force, beauty of outline and grace and power of action. He is the physical ideal of the horse kind. What is the source of his strength and beauty?

The physical features that one notes peculiar to a stallion are, 1st., the great breadth and depth of chest, the great mass of shoulder and hip muscles, and the high, arched neck, fiery eye and luxurious mane and tail, 2nd., the functional features next noticeable are the greater alertness and constant physical exuberance, as manifested especially in the gait and the frequent whinnying. The thoughtful observer at the horse show or on the ranch cannot but compare these animals with the gelding. Two colts on a ranch may be full brothers, from the same pedigreed stallion and the same pedigreed dam. At the age of two years these two young horses may be as alike as two peas in a pod. One of these promising young animals is chosen, because of some commendable peculiarity of temperament or action, to remain unutilized as a progenitor of his kind upon the ranch. The other is subjected to the veterinarian's knife and ecraseur, and deprived of the testicles,—the male sex glands. From the day of this operation these two animals, (in every respect alike except that one is unutilized while the other is deprived of the glands mentioned above), develop along radically different lines. The stallion develops during his third year and fourth, into the noble animal described above. These two years form his period of adolescence, and the changes which he undergoes, physically and temperamentally, are closely parallel to those which the human subject undergoes during his adolescence. In two years the stallion develops into the great, fiery-eyed, hard-muscled war horse, such an animal as the general delights to trust himself to as he leads his battalions into battle, confident that his horse will carry him up to the belching mouth of a cannon if he wishes to go there. The stallion is absolutely fearless and absolutely tireless.

The gelding, on the other hand, develops into an animal that is in every respect a neuter. Physically, this animal develops a body almost identical with that of the female of the same species. Temperamentally, the gelding is a patient, plodding beast of burden; and though under good grooming he may show considerable life while under the control of his driver, who gives him an occasional touch of the whip, he seldom shows any interest in other members of the horse family, either male or female; and in the pasture or stable his neuter sex is very apparent. While he may contend mildly for a place at the feeding trough, he never essays the defense of any weaker members of the herd, and one stallion would put a hundred like him to flight.

The thoughtful observer of these phenomena cannot help wor-

dering what has made this radical difference in the development of these two animals. The solution of the problem is not far to seek. From the beginning of puberty to the beginning of senile decay the stallion derives from the testicles what is referred to above as the internal secretion—(Spermin). Physiologists agree that the internal secretion formed by the testicles is absorbed by the blood and lymph, is carried to brain and spinal cord, to the muscles and glands, and there produces this profound influence indicated above.

So we have discovered the source of the stallion's strength and beauty. What is true of horse is true of man. The young man at puberty begins to receive from his testicles the internal secretion which leads to development of his full manly powers. The sum total of the qualities peculiar to manhood has been called *Virility*. For want of a better word, this term has been applied to the sum total of the male qualities of any animal whatsoever, so that the male qualities of the stallion are also compassed in the term, virility.

One will naturally wish to know at this point, if this lesson from the beast of the field can be applied in all its details to the human subject. The unqualified answer to this question, in the light of these recent researches, is in the affirmative.

An exact parallel to the conditions described above can be found in the eunuch of the Orient. Two thousand years ago in human history it was a common thing in Western Asia for boys who were born in bondage, or sold into bondage, to be castrated. Such boys were sometimes brought in by the hundreds as a part of the spoils of an aggressive war, and sold into slavery. As a rule these boys were castrated before they entered the age of puberty. The men who had bought them knew from experience that if they were not unsexed, they would, when they reached their young manhood, rise up and demand liberty; and they would fight to the death to regain liberty; but such slaves are neither profitable nor safe to own. So the men who owned these boys as mere chattels simply had them castrated, well knowing that when they grew up they would be just as docile beasts of burden as are the geldings. These eunuchs of the Orient who were castrated before puberty may be described as flabby-muscled, squeaky-voiced, beardless, namby-pamby molly-coddles, whose temperament manifests qualities of cringing servitude and lack of initiative. There is a curious tendency on the part of these creatures to lay on festoons of fat on chest and hips, presenting a pitiable similitude to the general outlines of the woman's body. These creatures are as different from a virile man as the gelding is different from the stallion. The secret of this difference is easily to be found in the fact that they have been deprived of the influence of spermin from the testicles.

The application of all this to the adolescent young man must be very evident. From the time the youth passes into his adolescence, from the time that he begins his rapid growth in stature, from the time that his testicles begin their rapid growth, increasing, as they do, several fold in volume in the space of three years,—from this time on the youth receives every day of his life, perhaps every hour of the day, three hundred and sixty-five days in the year, the internal secretion into his blood. It is carried to the heart and sent out in a thrilling, throbbing stream through the arteries to every growing tissue of his body. His red blood is carried into his muscles by his strong young heart, and as the months go by his muscles grow in volume and in tonicity. They lose the flabbiness typical of a boy in his ugly duckling stage of puberty, and assume the tonicity and hardness typical of the muscles of the virile man. The trained foot-ball or basket-ball player, the trained wrestler or boxer can receive terrific blows on any part of this muscular system, without showing any evidence of pain or of injury to the tissues.

This same substance, the spermin, is carried to his central nervous system, to his spinal cord, his medulla oblongata, and his brain, and hammered into these by his strong young heart; and straightway his nervous system shows new functional attributes. He begins to act like a man, he begins to think like a man, he begins to do big things in a man's way; he begins to make ambitious plans in a man's way, and *he is a man, every inch of him man*; he has put away boyish things; there is a new light in his eye. This light is nothing more or less than light from the kindling fire of manhood. He begins to see visions, visions of great things out in the world to be done, and he is ambitious to get out and do them.

In this connection it must be noted that some boys and young men seriously interfere with this natural process of developing from youth into manhood by the act of masturbation or self-abuse. If this act is begun before puberty, and continued at comparatively frequent intervals, say, three or four times a week, or daily, the youth might almost as well have no testicles during such period of self-abuse; and if persisted in during the years of puberty, he will, instead of developing into the hard-muscled, fiery-eyed, ambitious young man described above, develop into a flabby-muscled namby-pamby, cowardly mollycoddle, lacking in initiative and will power.

Those who know conditions among boys are conscious of the fact that a very large proportion of boys, in some stage of their development get into this habit. Some boys acquire this habit of masturbation or self-abuse because of a long, tight foreskin, under which irritating secretions collect. These little boys, in their innocent attempt to allay the itching, put their hands upon their organs. It is easy to understand how readily they may learn in this way the

act of self-abuse. Other boys come under the malevolent influence of older, low-minded boys, who deliberately teach them the act of self-abuse. In any case, once the act is learned, whether accidentally or otherwise, if repeated frequently, it seriously interferes with the plan of nature for the young man's development, and he fails to grow into the splendid type of manhood that was his birth-right. The degree to which he falls short of reaching the full stature of manhood will be in direct proportion to his departure from nature's laws of clean, right living.

It cannot be assumed that the condition of virility, once attained, will always continue. It must be maintained. To be maintained, this vital substance produced by the testicles must be continuously absorbed into the blood. When once the man or boy understands this, it must be evident to him that he has, to a certain extent, the making or marring of his own virility; that it is not simply an inexhaustible source of power provided by nature, but, like such a natural resource as a forest or a coal mine, it may be exhausted, and, if not husbanded carefully, will be exhausted. On the other hand, clean right-living and clean right-thinking will give mother Nature a free hand. The young man will easily attain and easily maintain the highest quality of virile manhood.

It is a well-known fact in the medical profession, that the ovaries of the female exert upon her development an influence analogous to that which the testicles exert on the development of the male. The ovaries of the female form a substance which, getting into the blood, is carried by that fluid to all parts of the body, where it exerts a magical influence on the development of the adolescent individual.

If of two males of the cattle kind, one were castrated at the age of ten months, the natural one would grow into a great strong, hard muscled, fiery-eyed, alert, belligerent bull while the castrated one would grow into a patient, meek beast of burden,—an ox.

If of two females of the cattle kind, one were to be subjected to a surgical operation in which the ovaries were removed, that one would grow up into a patient, meek beast of burden, an ox, while the natural one would grow up into the typical female of its kind, the cow, possessed of all the fine qualities which mark typical femininity.

In order that a female of any kind shall develop those splendid qualities of femininity which all the world admires, it is necessary that she receive from her ovaries during all the years of her development this magical something—the *internal secretion* which passes from the ovaries through the blood to the developing of the body.

If a girl of eight or ten years were to lose her ovaries, she

would fail to develop those qualities of radiant young womanhood that the whole world admires. She would fail to develop that beautiful symmetry of body and graceful rotundity of arm, neck and limb typical of this period of her development. She would fail to develop that beautiful coloring of brow, cheek and throat that is her birthright. She would fail to develop that wealth of glossy hair that is her crowning glory. She would fail to acquire that lustrous light in the eyes that marks her entrance into womanhood. On the other hand her development would take a turn toward the masculine. As the castrated male develops form toward femaleness, so the castrated female develops form toward maleness; and we need not be surprised to see her at twenty-five with a heavy voice, bewhiskered chin, square shoulders, and a long stride, a being who, in trousers, would pass anywhere for a man. Such is the working of nature when defeated in her plan. If a woman of twenty-five to thirty-five were to suffer the loss of both ovaries, she would probably go very early into a condition of senile decay, and, in a few years after the operation, might easily pass for a woman of fifty-five to sixty-five.

THE DOCTOR IN POLITICS.*

By GILBERT FITZPATRICK, M.D., Chicago, Ill.

Three years ago in an address delivered before the Buffalo Alumni Chapter, Phi Alpha Gamma, I called attention to the importance of the situation confronting us in relation to our societies, colleges, hospitals and institutions; the concerted, insidious well organized machine that was being directed for our destruction.—Not that our destruction as individuals was the motive but that the discrediting and the destroying of our organizations and institutions would remove the principal barrier to their personal ambition—the control of medicine in the United States. Let us review the means by which this is being accomplished.

MAJORITY RULE

Known as the Dominant School. The registrar of one of our Homeopathic schools complied with the request of the A. M. A. Council of Medical Education and forwarded the names and addresses of the graduating class; fifteen days after graduation every member had been solicited for membership in the American Medical Association. What is the result? Numerical strength in asking for legislation, numerical strength in dictating policies, numerical strength in appointments and the assumption of all prerogatives. The advantage is plainly obvious.

* Read before the Chicago Homœopathic Medical Society, April, 17, 1913.

STATE BOARDS OF HEALTH

By a process of "weak knees" "honey" and "gentlemanly agreements" we have allowed ourselves to be reduced to the very lowest ebb of representation.

STANDARDIZATION

Otherwise known as Carnegie-Flexnerization. We were so anxious to be approved of by our enemy that with open arms we welcomed this self-appointed investigator who prints A, B and C ratings broadcast, well knowing that no amount of "small print" and "later reports" will undo the damage: To be a party unwittingly to the crime he well knew would prevent our taking legal action.

SECRETARY OF HEALTH.

With State Boards, Insane and Charity Hospitals and Insurance appointments; and the army and navy regulations under the control of the A. M. A., it would indeed be suicidal to agree to the creation of a Secretaryship of Health.

THE NATIONAL ASSOCIATION OF EXAMINING AND LICENSING BOARDS.

Controlled I am told by the A. M. A., is so operating, that the destruction of any college is only a matter of orders from the "inner circle." By the systematic failure of certain applicants, the said college is discredited and its business ruined; forcing it out of existence, reducing competition, centralizing power. If this is not conspiracy in restraint of trade and amenable to action under the statutes what is it? To illustrate. An assistant teacher in pathology in a university where the materia medica of both schools of medicine is taught graduated from the homœopathic department and presenting himself for examination and licensure in a Western Coast State was plucked in pathology. Is it obvious?

If the destruction of our institutions would assure medical enlightenment, freedom and a more universal standard of practice, I would do all in my power to assist in destroying the alleged darkness; but when every scientific fact adduced only goes to prove the soundness of the law of similars, I am not willing to stand idly by and see these rapacious appetites feed upon our efforts; confiscate a heritage, earned by hard, faithful service in the righteousness of a cause which dates into the antiquity of medical learning for its promulgation.

The handwriting on the wall is becoming more distinct every day, and in a few years the individuality of our institutions and affiliations will be obliterated unless we give concerted effort and recognition to the impending situation. Not alone, is the truth of a principle being stifled by this monstrous medical hierarchy, but the

cohesiveness of our existence is being appropriated, our rightful possessions are being confiscated,—i. e. St. Louis, Iowa City, Minneapolis, Cleveland, etc.

Now I suppose you are all thinking, what has this to do with "The Doctor in Politics"? There is just one answer:—Get into politics. The first law of nature is just as potent today as it was upon its inception, *Self preservation*. The second law is the *survival of the fittest*. How is this to be accomplished?

1st. *Awake* to the real situation; note that there are more openings in both hospital and private practice that we can fill, and the demand for scientific homœopathic physicians was never so great as it is today.

The somnambulism of Homœopathy will be its downfall. The success of the individual practitioner has been a lullaby of most magnificent proportions, and especially has this been true of the non-affiliated college man who in so many instances believes his obligations all paid when a receipt in full and a diploma are placed in his hands.

2nd. *Organization*. A carpenter in the union contributes a small portion from his weekly pay, that he may work and support his family next week. The Christian Scientists contribute, so I am told, twenty-five cents a month to a "defense fund."

Our local, state, and national societies scarcely keep running expenses within the dues, while labor organizations hoard thousands for contingencies, growth, and the maintenance and defense of their rights—so does the A. M. A.—a Trust-y Labor organization. Do you realize its strength?

3rd. *Incorporate*. Incorporate your local and state societies, for immediately they become a working part of your great Commonwealth. If an occasion arises to go before a Court or State legislative body with a petition or bill, it is done by a regularly constituted state coporation and not by a collection of individuals.

4th. *Politics*. Every man owes a responsibility to his country. Point out to me any body of men and women who so thoroughly neglect their citizenship as does the Doctor, Why should we expect the legislative ear to hear us?

Take an interest in your ward politics; see if the candidate is rightly inclined; find out who is the man higher up, or to whom he is reporting, and then *Fight*.

For we as Homœopaths, composed of the finest flower in medicine, stand as a unit for medical advance, the scientific application of our law, the preservation of our institutions, and our rights before men. I beseech you—arise—and standing I offer you a toast: Ladies and Gentlemen—LOYALTY so loyal to the cause that you pledge yourselves ever ready with heart and hand to work and fight faithfully now and forever—*Similia Similibus Curentur*.

TREATMENT OF SCARLET FEVER.*

By G. FORREST MARTIN, M.D., Lowell, Mass.

I am asked to discuss the treatment of scarlet fever. The task would be a short one, were all cases typical. But the management of our cases of this disease during a stiff epidemic, is likely to bring out all our best efforts because of the frequency and the variety of the complications that arise. We do not, as a rule, expect a high death rate from scarlet fever proper. We do, however, dread the possible sequellæ, from even mild cases. We have recently had, in Lowell, an epidemic of over 800 cases of scarlet fever

Fortunately, most of it was of a rather mild form, though the writer confesses that several of the over 40 cases for which he personally cared, gave him considerable anxiety.

Although my theme is "treatment," prophylaxis must not be entirely overlooked, for when we are treating one case of scarlet fever in a family, there is a duty to the family and the public, which we must not neglect. We do not, I believe, know the specific causative germ of scarlet fever; we are reasonably certain that it is a germ borne disease.

Hence protection of others involves the laying down of strict rules to prevent the transfer of this factor, either mediately, or immediately, from our patient to others.

I believe, from careful observation of many cases, that we are safe in assuming, that scarlet fever is a *contact disease*, and that there is little or no danger of transfer atmospherically, or by what we might call "volatile" methods.

In this, as in all germ or filth conditions, more good can be accomplished by frequent hand scrubbing and sterilizing, on the part of attendants, than by all the drugs on earth. Medical men can well *copy the methods of surgeons* in handling and avoiding septic cases, in managing scarlet fever.

Prophylaxis should also involve a careful inspection of the *milk* especially, because more often than any other factor will the cause of the trouble be found right here. Some of the worst recorded epidemics of this disease have been milk epidemics, and strangely enough, in countries that feed little or no milk to infants, as in Japan, scarlet fever epidemics are rare; and again, in such countries as India, where milk is used more, but rarely given to children under 5 yrs. of age, the same holds true. So I have all cow's milk used in the family, sterilized during the run of the case.

The administration of medicines to the other members of the family, as a prophylactic measure, is a practice in which our opinions are bound to differ.

* Rear before the Massachusetts Homœopathic Medical Society, April 9, 1913.

The well-known claims of Hahnemann of the prophylactic value of belladonna in this disease, are not to be sneered at too quickly. I have given it for years, and to hundreds of children, when other cases existed in their families, and I have yet to see the second case develop where it has been given, unless the other children had been subjected to the same contagion that caused the first. Of course all other precautions were also taken in these cases, and in this practice, as in drawing conclusions about the effects of medicines which we give to our sick ones, we should carefully distinguish (if possible) between "recoveries" and "cures." And right here is where our large hospitals should be doing some valuable work for us, and for Homœopathy, by using their laboratory facilities to determine such questions.

We know that a low state of the system increases the liability to contract contagious diseases; we know the calming effect of potentized belladonna upon capillaries that are congested, and upon membranes that suffer in consequence. Why cannot an index-raising influence be established for belladonna, which will exert a preventative action, counteracting the effect of exposure. Some such study is possible only in large and well equipped hospitals; and is needed, to establish our *Materia Medica* on a firm and true basis.

The trend of pathological investigation seems to point to some form of the streptococcus as the cause of scarlet fever. I have administered strepto-bacterin to four nurses recently, who were caring for scarlet fever cases, and who had never had the fever. All of these escaped the infection. I mention this simply as a fact, not as a claim. Of course they were not of the most susceptible age, (1 to 5 yrs.). (One case 84 yrs. old, had a typical case of scarlet fever.)

I have all my patients use a non-toxic, antiseptic spray or gargle during the sore throat stage, as I believe it soothes the throat and also limits the multiplication of germ life therein. It certainly comforts the child, almost invariably.

Having in mind the worst of the possible sequellæ of scarlet fever, nephritis, I begin early, in every case to give careful attention to the skin. Hot, or tepid baths, daily given under a blanket, are my preference. I have never been able to convince myself that the cold sponging advocated by many authorities, to reduce the temperature in the eruptive stage, was logical treatment.

The temperature is a *result* only; a result of oxidation of septic material in the system:—the suppression of this temperature, especially if *in* that suppression you drive to internal parts a process (eruption) which can be better handled on the surface, can do much harm. Especially would such treatment, to my mind, predispose to nephritic complications later.

The free use of warm drinks and of water in the early stage, helps both skin and kidneys to do their work well, and should be encouraged. As soon as the rash is well established, I have my patient rubbed all over, each night, after the hot bath, with coconut or olive oil. This soothes itching, nourishes and softens the dry skin, promotes earlier and more complete desquamation, and at the same time prevents the same from scattering throughout the house.

Every patient is kept warm in bed until the fever is over, the rash cleared up, and the kidneys and digestive organs well at work.

Diet is selected with care; a light but nutritious type is best. I forbid meat and eggs in the early stages of all cases, and until analysis has shown freedom from albumen in the urine and urea well up to standard.

The ears are carefully watched and if earache develops, the drums are carefully inspected. Early puncture and drainage may prevent intractable post-scarlatinal deafness.

Glandular swellings have been very common in my cases this year and have been quite the most troublesome feature. They have frequently been accompanied or followed by joint affections and quite troublesome rheumatism.

Cases are not considered safe to release if still peeling, or if pus is discharging through the ears.

A study of the blood, if facilities are at hand, will probably help us to diagnose and prognose doubtful cases. All cases show leucocytosis, and scarlet fever is said to be one of the few acute infectious diseases where one finds an increase of the eosinophiles early in the disease, and a persistence of the same for some time.

It should not be forgotten that the heart is hard hit in this disease, probably by the septic character of the stream through it, and it should receive good care.

Naso-pharyngeal discharges should be *carefully disinfected* and *destroyed*.

When we come to the medical treatment, I have almost never found any occasion to step outside of homœopathically indicated remedies. In the flushed skin, congested eyes, high fever, throbbing head, stupor, hot dry throat, and gastro-intestinal disturbance, with vomiting, especially if delirium is present, we find clear indications for *belladonna*. Very seldom is any other remedy needed, if we see the case early.

Goodno recommends *merc. et kali iod.* as a remedy for all stages, especially of value for the sore throat and glandular symptoms. Bartlett's suggestion, "that its effect may be largely due to its germicidal influence," seems to me reasonable.

Chloral hydrate and *quinine* seem to be sheet anchors in the old school. I have had no occasion to use them.

If the type is malignant and hemorrhagic, *lachesis* or *crotalus* may come in to good advantage.

If nephritis supervenes, especially if the urine becomes smoky (indicating blood), tongue dry and glossy, and marked dyspnoea is present, *terebinth* is of great value. *Apis*, *arsenicum*, and *digitalis* have helped me in this class of cases.

Where the discharges from nose and throat are acrid and ex-coriating, tongue greatly swollen and papillæ enlarged, throat very painful, and even ulcerated, rash dark and patchy, *arum triphillum*, is a valuable remedy.

Should otitis media supervene, *mercury*, *pulsatilla*, *silica*, or *rhus* may help us.

The arthritic complications will probably call for *bryonia* or *colchicum*; hot applications to restore circulation, and if chills and redness indicate septic infection to the extent of pus formation, surgical intervention may be promptly needed.

Should uremic complications threaten, especially with twitching and other signs of convulsions, *cuprum arsenate* and *belladonna* should be studied.

Of course there are many interesting sidelights on a disease so thoroughly systemic as scarlet fever, but time forbids me from touching on these, in a paper aimed only at treatment.

DIET IN OLD AGE.*

By SARAH M. HOBSON, M.D., Chicago.

More than twenty years ago, in a little city down in Maine a club of enterprising women interested themselves in establishing a home for old ladies. They were meeting some discouragement because of the dissenting opinion among the old ladies themselves relative to the inevitable curtailment of their individual privileges particularly in the matter of food. In the practical working out of the problem in five institutions in Chicago, I find the problem of diet remains the most obstinate one.

The question is one quite apart from that of diet in midlife when the problem is to prevent an unsightly excess of adipose. Neither is it for such as are recuperating from the overeating and dissipation of early adult life. But it is the need of those who are undeniably old, presenting that symptom-complex of old age: impaired digestion, intestinal gas, freakish appetite, impaired function and concomitant impaired mentality, the irritability and unreasonableness of arteriosclerosis, and a loss of the zest for life. Post mortem we find the irregularly distended colon, sclerotic tissue and

* Read before the Riverview Homœopathic Medical Association, Aurora, Ill., April 24, 1913.

atrophied glands, or more grave organic lesion. The limitations lie in the fact that there is little hope for renewal of function, so that fixing the diet is largely a matter of making the best of a bad job.

It would seem that the care of old people in the home would be simpler than in the institution. But the long waiting lists and the number of men and women with relatives willing to pay the money necessary to secure entrance indicates that the task is not easy in the private home. Whatever may be the cause of the situation, the difficulty of taking care of old people in the family circle where there are children is a more stubborn one to deal with in the city than in country life.

Allowance must be made for the chronic faultfinder and the idle trouble maker. But an accumulation of chance remarks such as these quoted set me thinking: "eggs for breakfast only twice this winter;" "never bacon unless we buy it ourselves;" "always fried potatoes and sausage for breakfast;" "spinach only once this whole summer;" "almost never have lettuce;" "canned things? yes, of course;" "fresh peas? never! too much work to shell." On the other hand one complaint that there had been "nothing for dinner fit to eat, except the soup" was painstakingly followed up for facts. The dinner had been soup, boiled mutton, stewed tomatoes, and bread pudding. The spirited retort of the old lady was "I never learned to eat mutton and I am too old to begin. I won't eat canned goods. And puddings disagree." One member of the household who in a gentle, deprecating manner wished for better food, related her experience when a good natured nephew had taken her out to dinner and told her to have "anything she wanted for a square meal." The square meal was roast veal, "so tender it fell apart," baked potatoes, fresh lima beans, baked tomatoes and ice cream. That wasn't an extravagant order for a little old lady of eighty with the menu of a Chicago eating place before her.

It is sometimes a thankless task and always a difficult one. But the test of our civilization is the humane care of the worn-out old, the helpless young and the worthless intermediate. The remedy lies largely with the physician who recognizes the physiology and the pathology of the case, and whose opinion therefore has some degree of influence with those that pay the bills.

There are four difficulties in the way of securing an adequate diet in institutions for old people: the bugbear of a financial report; ignorance of a balanced ration, selected with reference to the impaired function; lack of variety; and failure to cater to the individual taste.

The financial report. It is astonishing how heartless a governing board can be in the boast of a good financial showing. The

pride of an excellent business manager seems to be to present a financial report which maintains life at a minimum cost. This is a wrong principle in philanthropy. A philanthropic institution has no business to boast of a financial management which runs a table on the minimum expense.

A balanced ration. The purpose of food is threefold, as ordinarily considered: growth, repair and work. This metabolism resolves itself into eating for tissue making and eating for energy production. In old age we might add entertainment. Life holds so little that eating becomes rather the most interesting thing of the day. And this is a factor of no little importance in adjusting food values.

Obviously the proportion of proteids, sugars, fats and minerals are quite different from middle life and even more diverse from the diet of childhood, except in matter of quality and simplicity. Foods must be chosen for their nutritive value with reference to the condition of the teeth for mastication and the digestive glandular activity. There is so little tissue building that the amount of proteids and minerals is much reduced. And yet the intestinal digestion is often so impaired that many carbohydrates are ruled out. Intestinal fermentation is so common that coarse vegetables, such as turnips, parsnips and cabbage often irritate. The impaired liver and pancreas limit the digestion of fats, except when given in small measure. Sugars in the simplest forms and concentrated proteids, such as meat juice and egg albumen are usually well taken. Hot drinks are always appreciated. And this is the time of life when alcoholic drinks are quite permissible. The shipboard rule of little and often holds good for the impaired assimilation of the aged.

Variety. Even though the food be well selected by a trained dietitian or a careful housekeeper, it is impossible to suit all tastes with three or four dishes. And it is too late to change the habits of a lifetime, so if an institution assumes to provide a home for aged people it is but reasonable there should be a fairly wide range of choice. A good housekeeper can arrange some such dietary as this without extravagant expenditure.

Breakfast: Cooked and raw cereal; with good cream; bacon, fish, a small portion of finely chopped meat or an egg; toast, toasted crackers, crisp muffins; rye, graham or white bread sliced thin so as to increase the butter; sugar cookies or doughnuts; hot milk, chocolate, tea or coffee; hot toddy for those accustomed to alcoholic drinks or who improve on an early morning stimulant.

10.30 A.M. Cup of hot malted milk, beef tea or grape juice.

Dinner: Soup, toasted crackers;

Choice of two kinds of meat or fish; it is more important that the meat be tender than that it be nutritious;

Potatoes, macaroni or rice; one fresh green vegetable or cooked fruit;

Salad or sweet dessert with cheese and wafers.

4. P.M. Tea with permission to bring their own delicacies.

Supper: Cup of hot broth, bread and butter, cooked fruit, cookies or plain cake.

9 P.M. Some hot drink, as milk, cambric tea, Mellin's food. For individual cases there should always be the possibility of toasted crackers, hot broth, any of the prepared infants' foods, jelly and eggs instead of the usual diet.

Feed them little and often. Drinks which are meant to be served hot should not be delivered lukewarm. The individual teapot and the covered soup bowl are tokens of good housekeeping. If it is worth while taking care of old people, it is worth doing well; else euthanasia were happier fate.

Exercise in a sunny porch is a good appetizer. And a reasonably late bed time induces to a comfortable rising hour. The four o'clock tea and the bedtime hot drink can easily be turned to social usage that counts as much as your card club or theatre party.

Cater to the idiosyncrasy. Such food as the system has been habituated to for many years will be tolerated even though it is not particularly nutritious or digestible. So long as their pork and pancakes, doughnuts, fried eggs and cabbage do not make them sick let them continue an occasional indulgence. Frequently the only way of getting a sufficient amount of water into the dietary is to prescribe "a tablet in a full glass of water, to be sipped slowly."

In the private home or in the institution it is a question of brains in the kitchen. In the institution there is the additional need of a small governing board of big hearted human beings, a superintendent of the same caliber, and abolition of red tape. Feed the old people generously and give them sun porches to exercise in, well ventilated and warm enough to be comfortable without heavy clothing.

A CASE OF ENNUI.

By SHELDON LEAVITT, M.D., Chicago.

Two years ago I received a call from Prof.———, of the University of Chicago, a man of about 45 years, with a closely-knit frame and an aristocratic look and demeanor. There were no evidences of sagging spirits, though I searched for them on learning the nature of his complaint, unless a pensiveness which shaded into seriousness should be regarded as indicative of them. His complaint was of a burdensome *ennui*.

"I find myself unable to do the literary work which I ought

now to be engaged upon," he went on to say. "This is a season of the year in which I have a respite from school duties, and I ought to be writing. But I find myself spiritless. There is almost utter lack of initiative. I am compelled to drive myself to the little work that I actually do, and the product of my labors is most unsatisfying. I shall suffer a great loss if I do not succeed in rallying my forces to consistent effort. A few years ago I fell into a similar condition and was greatly aided by mental therapy. I am hoping that you can give me the needed stimulation."

I found him in a good enough physical state. The root of his nervous depression and lack of ardor was traceable in large part to domestic infelicity. The organism was a good machine still, but it had lost much of its motive power. It was plain enough to me that relief was to be found in means which would quicken the emotional centers and furnish what his mind would regard as a sufficient motive or impulse to energetic and sustained action. My treatment had to be psychical, rather than physical, and I bent myself to the task with confidence of speedy success.

Altogether he visited me not more than six or seven times before he recovered his energies, and then he went on with his work to unprecedented success, turning out during the year two of his best books.

In a case of this kind it is my custom to depend wholly on psychotherapy. The patient in this instance was put into a recumbent posture on a couch, with my hand over his eyes. After asking him to relax and to become as nearly indifferent as possible, I proceeded with my treatment, which consisted of mere instruction and suggestion. There is never any attempt at hypnotism. I never use studied phrases nor set speeches, but let the circumstances of each treatment and my estimate of special needs suggest my ideas as I proceed. My chief endeavors are to correct wrong mental attitudes and to create in the patient constructive states of consciousness. I instruct the patient not to attempt to follow the suggested thoughts with close attention during treatment, but to aim mainly to be passive, with as decided mental inhibition as, without special effort, he can establish. Such patients usually have obsessing trains of thought which the peculiar conditions of the moment and the strangeness of the situation aid them at the moment, in controlling. The suggestions themselves are as full of warmth and personal interest as I am able to make them. The more harmonious the mental harmony the better the effect; but I never aim to force it by loud tones or stage effects, often going to the extreme of whispering my suggestions. Slow, deliberate speech is most impressive.

In the case now being related I spoke substantially as follows:—
"There is a broad rhythm running through our conscious and

subconscious mental and physical lives, just as there is throughout nature. There is light and darkness, rise and fall, action and reaction, joy and sorrow. We are sensible of these waves in all life's relations. There is fluctuation of light and darkness, there is rise and fall of temperature and atmospheric pressure, and there is increase and diminution of our mental powers. These things enter into my experience as well as yours, but I am not distressed by them because I take an optimistic view of them and hold a positive attitude towards them. My resistance is thus kept at a high level. You profoundly feel the present decline because you have not held a strong attitude towards the annoying things in your life experiences. Your sensitiveness is now plus normal. Your trials have occupied too much thought room; you have been giving yourself a weakening sympathy. You have thought it a pity that your mind has not been left to pursue a happy quest after the things that it loves. Your forces have become more or less demoralized. The chemical poisons created by depression have also done their disturbing work. Worst of all, fear has been engendered. A sense of inability to do your necessary work has startled and discouraged you. It is not any wonder that you are unable to do your best work, and that you shrink from doing any work at all under such conditions.

Now as to the way out. In general terms it is by the route of *self-control*. One cannot long be well, and happy and efficient who lacks power over his own thought and action. Self-control is not at all times self-denial; it oftens means self-indulgence. It means that one is at all times to have himself in hand. *We should always control our actions, for it is only thus that we shall become masters of our emotions and feelings.* To fight mere emotion is futile. It dignifies the emotion and develops it. To ignore it, and go on as though we felt the most energizing emotions, is the true course. You have made a few attempts at your literary labors, and, because your preoccupied and hesitant mind did not at once come under the authority of your will and perform its functions well, you were plunged into doubt and depression. That was the signal for the entrance of *fear*, which is always paralyzing. Now begin to tell yourself good things, and then, ignoring your fears, plunge boldly into your work. At first you may have to affect a spirit of strength and courage, but the ideal which you seek thus to express will soon be succeeded by the real. It is to the support of the "going" man that all the strong forces spontaneously rally. Spend no more time in merely getting ready to act. Cease to analyze your feelings and study their etiology. The *way* to resume successful operations is to *resume*. Get busy in earnestness, courage and determination. Put your will to work—your hand to the task—and then refuse to look backwards. If you keep your eyes towards the

light you will never see your shadow. Be strong! Be strong! Be strong! Command yourself! *Do the sensible thing whether you feel like it or not.* Command your actions—your expression—and the *feelings* which now so persistently get between you and usefulness will soon get out of the way.”

This is simple treatment. I don't know just *why* it should be adequate; but it usually is. I do not mean that a single treatment will commonly be sufficient to set a patient going right; for the human mind loves to run in beaten paths and is slow to adopt other ways than those made easy by constitutional tendency or long-established custom. Our modes of reaction to stimuli are as various as our handwritings, and pedagogy is an important factor in re-education. This proved to be an easy case. I have had some hard ones. Where there is little to build upon, the task is most uninviting; and, where the spirit of the patient cannot be aroused to reasonable effort, the task is well-nigh hopeless. Ennui sometimes settles down upon one who at his best was never enthusiastic and energetic, with ponderous weight, though such cases are relatively rare. I had one fellow of good enough mind who was held down in spite of all I could do by the conviction that a righteous retribution was being meted out to him. He refused to be persuaded to rise to the “I Will” level. I could make no impression on him; he seemed to be bound to believe a lie because it gave him more satisfaction than the truth which lay at his hand.

It is all according to law, and I confess myself a student in the School of Life.

Editor's Note:—To those unfamiliar with practical psychotherapy, Dr. Leavitt's paper will sound most fantastic and unscientific. But to those who have used suggestion with patient in a passive state, it can only offer further confirmation of their own successes. There is nothing occult or unusual here and we can heartily endorse the method. As the author says, there is no need to induce hypnosis—a comfortable easy chair or couch, and relaxation with closed eyes, are all that is required.

In another paper “The Problem of Cure,” Dr. Leavitt has attempted to show that suggestive therapeutics is a legitimate application of the law of similars to the psychic field, and he makes a plea for the teaching of this subject in our schools. This too, we heartily endorse if applied in its broadest sense, to include the whole field of psychopathology. Our friends “the enemy” are hot on this trail and are making an active effort in the same direction. Less than a year ago, at a meeting of the Psychopathic Hospital in Boston Dr. Adolph Meyer urged the point and outlined what should be included in such a course. Again this May at the Washington meeting of the American Society of Psychiatry, Dr. E. E. Southard and other influential men urged the point at length.

We sincerely hope that ere another year has passed, the subject of psychopathology will find a place in our School curriculum.

CLINICAL DEPARTMENT.

Conducted by A. H. RING, M.D.

Case 6—D Diagnosis:—Obesity.

At first reading one finds little in the patient's case on which to hang a diagnosis beyond symptoms of an over-taxed heart. But why was the heart over-taxed? There was no vascular disease, no obstruction of the kidneys, no hepatic, splenic or pulmonic engorgement. Yet here was a sleepless, restless, mildly hysterical woman much in need of treatment for her neurasthenic state. It has been said by Blumer and many others, that neurasthenia is passing away because on ultimate analysis, some definite treatable cause is now found to explain the hyper-fatiguability, insomnia, and somatic and psychic disturbances which used to pass as neurasthenia. Indeed, if we are to retain the term at all, it would seem wiser in the light of our present knowledge, to do away with the old classification, (vascular, sexual, etc.,) and speak of infectious (toxic) and metabolic neurasthenia for practically all cases can be traced to one of these sources.

Certainly the present patient owed her over-ready nervous exhaustion and all the other symptoms to a lack of nutritional equilibrium as a result of which for the past ten years, she has been accumulating an excess of fat. To properly nourish this, the heart had had to assume an amount of work much in excess of its normal physiological requirement. For some time it did this kindly, but its limit of elasticity was being rapidly reached. True, there was no evidence of failing compensation as œdema of the shins or puffed ankles but these would have doubtless come next.

The patient was 5 ft., 4 in., and according to the table, should have weighed 135 pounds.

Height		Weight	Height		Weight
Ft.	In.	Pounds	Ft.	In.	Pounds
5	—	115	5	8	148
5	1	120	5	9	155
5	2	125	5	10	160
5	3	130	5	11	165
5	4	135	6	—	170
5	5	140	6	1	175
5	6	143	6	2	180
5	7	145			

This would make her 37 pounds above her normal weight.

It has often been said that "it is normal to put on weight after 35 years of age:" also "that some families run to fat." Granting a

modicum of truth in these statements, may it not be quite as much our methods of life which conduce to an excessive deposit of fat in the tissues? However this may be, this is one of the most satisfactory types of "nervousness" to treat, as these patients all do well under dietetic regime, with hydro-therapy and carefully graded massage and other exercise. The object then in this case was to reduce the patient's weight, and thus take the excess of work off the heart. To do this, the following schedule was arranged:

- 7.00 A.M. Rise, glass of cold water, cold sponge bath.
- 8.00 A.M. Breakfast: Fruit, raw or stewed, omitting all sugar, egg cooked in any way preferred, or fish, (except the richer kinds) meat or hash, one cup of coffee or tea, with skimmed milk and saccharine.
- 9:30 A.M. Resistive exercises, 20 minutes. Rest half hour.
- 10:30 A.M. Dress, out-of-doors on cot, and a 20 minute walk. Glass of skimmed milk or buttermilk.
- 1:00 P.M. Dinner: Raw oysters or clams, fish, roast beef, lamb, veal, chicken or turkey, beefsteak or chop, corned beef, vegetables, potatoes, lettuce, spinach, celery, onions, string beans, cauliflower, cucumbers (cut thin) tomatoes, cabbage (cut thin, boiled 6 minutes) asparagus, greens: fruit or vegetable salad with French dressing: Dessert, crackers and cheese. Fruit, cup of tea or glass of water.
- 1:30 P.M. Rest an hour.
- 2:30 P.M. Out-of-doors.
- 3:30 P.M. Glass of skimmed milk, buttermilk or water.
- 4:00 P.M. Massage (for fat reduction) 3-4 hours. Rest an hour.
- 6:00 P.M. Supper: Fish or meat as above, baked potato, salad, fruit, tea or water.
- 9:00 P.M. Retire. Glass of hot milk.

It will be observed that bread and cane sugar are the foods that are omitted from this dietary list. They are two of the most concentrated fat forming carbohydrates, and both are artificial products. Just sufficient liquid (7 glasses) were allowed to balance the liquid elimination.

On this regime, our patient has lost in two months, 18 pounds and is still losing gradually. The amount of open air walking is being increased and she is feeling "like a new woman."

The only drugs she has had are a few tablets of thyroid extract extending over one week, and occasionally doses of strychnia 1-60 gr. Her heart action has improved and slowed, giving the coronary arteries a better chance to nourish the myocardium.

It's a simple case, but very gratifying in its results.

Case 7—D. For Diagnosis.

The patient is a man of 50 years, of dark complexion and iron gray hair. He is 5 ft. 6 in. tall, and weighs 123 pounds; a carpenter by occupation; of Irish-Canadian parentage.

Family History:—Father died of paralysis at 82: mother of liver trouble at 26. Three brothers and one sister are alive and well. One brother died of pneumonia at 30 and two sisters died of tuberculosis. No insanity known in family. Patient was a healthy boy, had little schooling, and went early to work as a carpenter. He was steady and ambitious and of exemplary habits, very saving and prudent. Never married and has lived alone in one bedroom for years. At 21 had inflammation of bowels. Has always been a little nervous about himself.

Two years ago had much thirst and excessive appetite, but no sugar in urine. In August, 1912, he found he could not tie his shoes and that his right hand was clumsy. Gait and speech all right at this time; no headache or dizziness. Was told he had Bright's disease. Eight weeks later, had "spasm;" fell and bruised himself. At first was dizzy and dazed; looked queer; later lost consciousness. Twitched and foamed at mouth, turned head to right and left; both sides were affected. Has had five such attacks.

For past two months has been notional having temporary obsessions, gave money away foolishly, necessitating the appointment of a guardian. Speech has been affected now for some time and he has had fits of great anger.

Examination: The patient looks emaciated and his arteries are palpable and tortuous. He has symmetrical and well shaped features. Heart apex an inch outside nipple line; sounds are clear except an occasional whiff at apex and the second aortic sound is very loud and snappy. Lungs and abdomen negative.

Nervous system: Walk stiff and awkward; and very weak, but he stands and turns normally. The left side of mouth droops and on opening mouth, the right side is elevated more than left. Tongue protrudes slightly to right. He drools somewhat. Pupils: right larger but both react to light and accommodation. Vision and visual fields apparently normal. Recognizes sound of watch and names it "time;" difficulty in finding the word "watch." Reflexes are lively. Left abductor responds to contralateral stimulation of right patella. Babinski present on right, not on left. Pain sense generally blunted. With both hands extended, patient is asked to close the (right) fist; he closes left. Asked to shake hands, patient puts out right hand looking in right direction; it sways and feels about, but cannot find the examiner's hand. When he does grasp, it is with excessive strength. Some athetoid movements of right

hand. Speech is thick and he cannot find his words and names, but uses symbols, as when asked what is this (pointing to a face) says "shaving." . . . Shown a lighted match, says "dark." Ideas penetrate very slowly, and he answers questions correctly after two or three minutes.

Mentally, patient is orientated somewhat for place, fairly accurate as to time and person. His grasp of situation is poor—he does not realize the nature of his surroundings. His memory can not be very well ascertained because he is extremely emotional. It seems to be impaired, for recent events practically, and the past cannot be definitely ascertained, since he often refuses to answer questions. There is aphasia, alexia and agraphia. He has no apparent hallucinations. He asks frequently "Don't kill me, don't be cross with me, don't do these dreadful things," from which may be inferred that he had delusions of a persecutory nature, or an emotional state of extreme apprehension. Emotional state—markedly apprehensive, suspicious, self-deprecatory. In conduct—he is restless at night, has on several occasions groped around the room and injured himself by falling. No flow of thought—Patient is not accessible, he cannot express himself and has apparent difficulty in understanding, both of which may be due to aphasia. There is no flight, no retardation.

Insight is partial. He realizes that he is sick and that his head is wrong.

His urine shows a large amount of albumen and is somewhat decreased in quantity. Urea over 2 per cent. Sugar absent. Wassermann reaction and spinal fluid negative.

What sort of a lesion has this patient, where is it, what treatment?

The United States Treasury Department has ordered the Public Health Service to inspect all railroad trains and passenger vessels in order to protect the traveling public against danger from insanitary accommodations. This movement is the result of a conference of transportation and health authorities at the Hygiene Congress. It was pointed out that vessels and trains constantly carry a population equal to a large city. These people eat and sleep in transit just as if at a hotel. Yet no precautions are taken to insure cleanliness and proper sanitation such as are now demanded by the State of its hotels. Nor is any attempt made to protect employees from the constant risk of disease. These men, leading a particularly unstable and exposed life, are in contact daily with the sources of infection. It is but reasonable to demand that railroad managers take the same care of the public and their servants as do inn-keepers.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only and preferably to be typewritten—personal and news items should be sent to THE NEW ENGLAND MEDICAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business should be sent to the Business Manager 80 East Concord Street, Boston, Mass.

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CANCER RESEARCH.

The mind of man is so constituted that it must perforce explore the unknown and drop a plummet into the bottomless abyss. Once declare a region inaccessible or a subject inexplicable and immediately the human mind pits its wits against the forces of nature to conquer them. Were it not so civilization had not advanced beyond barbarism. The disease of cancer has been known from the earliest time, and all ages and generations of men have sought the solution of its cause and cure. But like that ice-encircled spot in the Land of the Midnight Sun, it has resisted and defied, up until the present, the invasion of the boldest and most astute. Peary's reaching the Pole was only the completed evolution of centuries of that blazing wherein he had been the boldest. In like manner have the majority of our great scientific truths been discovered, each pioneer has blazed a little in advance of his predecessors. Until lo! one comes whose axe finds no tree trunk for before him lies the clearing.

Dr. Howard W. Nowell, in his cancer research in the Robert Dawson Evans Memorial Research Hospital, has advanced a few leagues beyond the "blazed trail," and given us a glimpse of the clearing wherein possibly lies the cure of this most dread disease. It remained for some investigator to show what was *not* the cause of cancer before anyone could find what was the cause. The research from the time since the microscope came into use, was an effort to find a bacterium or a parasite which was assumed to be the cause. Many experimenters heralded from time to time the announcement that they had found the true parasite of cancer. Gaylord of the Gratwick Laboratory made the announcement twice, only to retract it. The first progress on the line of a chemical substance being the cause was the work of H. C. Ross, E. H. Ross and J. W. Cropper of England, published in 1910. These investigators were able to produce cell proliferation and cell development by chemical agents set free by cell death. But in their experiments (on mice) the tumors formed remained only so long as the toxic substance.

auxetics (so called) was continuously given. As soon as the injections were discontinued the tumors disappeared. Nor did they succeed at any time in transmitting the tumor from one infected animal to another, nor could they by making a serum from the infected animal render other animals immune to the original toxic substance. All of these things Dr. Nowell has so conclusively demonstrated on so large a number of rabbits (which have a very high resistance to tumor formation) that his findings are wellnigh conclusive evidence that so far as animal experiment goes he has reached bed rock truth. Moreover, his clinical evidence is daily gaining strength. Since his paper was read he has used his serum in one hundred and fifty cases with very gratifying results.

To be sure there have been failures, had there not been we would not be writing in the subjunctive mood, but the successes outnumber the failures. Dr. Nowell is very much averse and rightly so toward making a positive claim for his cancer treatment, most of all he and his friends deprecate the press notices, many of which have so glowingly magnified his most hopeful expectations. But such publicity is unavoidable in a subject so fraught with human interest. Time and patience will demonstrate the amount of confidence which can be placed in this treatment. One thing is worthy of emphasis; The splendid clinical work done by Dr. Nowell has been made possible to a great degree by the equipment of the Robert Dawson Evans Memorial Hospital.

Can philanthropists do a greater work for their fellow beings than by providing and endowing such institutions as will make possible discoveries which mean the elimination of untold suffering?

OUR COLLEGES AND THE STATE MEDICAL LICENSING BOARDS.

There is much food for thought in the published statistics of the state Licensing Boards for 1912 as appears in the "Journal of the American Medical Association." In fact such a quantity of "food" that one must "chew" it long and hard if he wishes to digest it, and even then it may not agree with him. One is first impressed with the evidence of a steady decline in the number of candidates examined for each of the five successive years.

In 1908 there were 7770 candidates examined.

In 1909 there were 7287 candidates examined.

In 1910 there were 7004 candidates examined.

In 1911 there were 6960 candidates examined.

In 1912 there were 6353 candidates examined.

There were, therefore, 1417 fewer examined in the United States for medical practice in 1912 than 1908. But as 21.7 per cent failed to pass their examination in 1908, as against 17.8 per cent in 1912,

there was only an actual decrease of 861 physicians admitted to practice.

From these figures it would appear that not only are there fewer persons taking up the study of medicine now than in 1908, but those who are doing so are either of a better quality or are receiving better instruction, or both.

Another exceedingly interesting fact becomes rather evident from these statistics: The largest colleges, that is those which had the greatest number of graduates examined before the several boards, have as great or greater percentage of failures than the smaller colleges. As the "Journal" remarks—"The larger the college from the standpoint of numbers of students and graduates, the more serious is inferior teaching ability, indicated by a high failure percentage." On the surface of these findings one might conclude that the Pritchett-Flexner contention that only the largest colleges had a right to live was not entirely sustained. But there are other things to consider. From one viewpoint, it would be reasonable to conclude that a college secured large classes because of its excellent equipment and its unsurpassed teaching facilities.

From another viewpoint one might conclude that a college secured large classes because of its low standard of admission requirements. As a matter of fact both of these are true but the class of students turned out is vastly different. To judge the case one must study the individual colleges which have turned out large classes and had high failure percentage. For instance,

The Memphis Medical College furnished 163 candidates with 36.2 per cent failures.

Meharry Medical College, Tenn., furnished 132 candidates with 38.6 per cent failures.

Long Island Medical College furnished 83 candidates with 19 per cent failures.

Maryland Medical College furnished 81 candidates with 56 per cent failures.

Hahnemann Medical College, Chicago, furnished 63 candidates with 30.1 per cent failures.

Turning now to the colleges which had zero failure percentage, we find that all with two exceptions were smaller colleges, that is, none of them, with these exceptions, presented more than 37 candidates for examination.

University of California	Candidates 34 failure 0
Drake University, Iowa	Candidates 19 failure 0
State University, Iowa (Homœopathic)	Candidates 4 failure 0
Kansas Medical College	Candidates 12 failure 0
Medical School Maine	Candidates 15 failure 0
Detroit College of Medicine	Candidates 39 failure 0

Ann Arbor University (old school)	Candidates	93	failure	0
Ann Arbor University (Homœopathic)	Candidates	19	failure	0
Eclectic Medical University, Mo.	Candidates	13	failure	0
University Texas	Candidates	48	failure	0
Cornell University	Candidates	31	failure	0
Cleveland College Physicians and Surgeons	Candidates	37	failure	0
Western Reserve Medical College	Candidates	37	failure	0
Temple University, Pennsylvania	Candidates	4	failure	0

The foregoing becomes presumptive evidence that the smaller colleges are doing rather better work than the larger ones.

It should also be noted here that none of these colleges whose graduates had no failures, belonged to the list of colleges with high salaried teachers, while on the contrary, those colleges which pay salaries sufficiently large to enable all or nearly all of their instructors to devote all their time to college work, made a much poorer showing, as instanced in the following ;

Columbia University, New York	Candidates	88	Failures	9	per cent.
Harvard Medical School	Candidates	73	Failures	9	per cent.
Johns Hopkins University	Candidates	86	Failures	5.8	per cent.
University of Pennsylvania	Candidates	59	Failures	5.1	per cent.
Northwestern University, Chicago	Candidates	59	Failures	5.1	per cent.

Manifestly it is not fair to judge a college by the standing of one set of graduates nor of one year nor of the test of one particular state. But taking the graduates of a number of successive years and scatter them around in various states, then their standings become something of an index of the teaching ability of that college. Table "A" gives us that information and here we learn how our homœopathic graduates compare with their old school brethren.

From this table we learn there were examined in 1912 (regardless of the date of graduation) 6353 candidates, of this number 218 were from the 11 Homœopathic Colleges which now exist in the United States.

The average failure percentage of candidates from all colleges was 17.8. The average failure percentage of candidates from the Homœopathic Colleges was 18.8, showing that our graduates fell below the general average. As an offset to that failure, we find that under the list of colleges having a failure percentage of less than 10 per cent that 36.3 per cent of our Homœopathic Colleges are in that list while only 33.3 per cent of the Old School Colleges are in that list, showing that a larger per cent of our Colleges are in the high class than are the Old School Colleges. We also find that the candidates from our colleges which had less than 10 per

cent of failures obtained a higher mark uniformly than did those of the old school, ours having but 2.6 per cent of failures while the old school had 5.8 per cent failure.

It is fair to assume therefore that comparing our best colleges with the old school best colleges, we are doing rather the better work.

Turning now to the list of colleges which had the *highest* percentage of failures, we find here 54 per cent of our colleges as compared with 34 per cent of the old school; of this we shall speak later.

The average per cent of failures by all candidates from the colleges having the greatest percentage of failures was 34.8 while the average failure percentage from the Homœopathic Colleges was but 30.4 per cent.

Summing up the report as a whole we must conclude, First, that a greater effort is being made by every college to improve both its teaching and the quality of its students. Second, that these published reports are decidedly beneficial to all the colleges. Publicity educates. Third, that the poorer colleges must improve in every particular or go out of business. Fourth, that a large class of students is no sign of a high class college. Fifth, that the better class of Homœopathic Colleges are doing better work than the better class of Old School Colleges.

We should, however, scrutinize every one of our colleges most carefully, and if it is found impossible to bring a weak one up to the standard required, it should be dropped from the approved list and made to surrender.

Our cause is no stronger than our weakest link. If we have colleges which insist on turning out half-baked men then we will be judged by those colleges rather than by the best. A college which had but 9 candidates and 6 of them failed in six different state examinations, has a pretty poor excuse to continue, or a college which had but 5 candidates and 2 of them failed right in their own state examinations is no benefit to our cause. We are stronger without such. Were it not for these two colleges, our failure percentage would have been very low. We were pained to see old Hahnemann of Chicago with a failure percentage of 30.1, Kansas City Hahnemann with 33.3 per cent, Cleveland—Pulte 23.1 per cent, Hahnemann of California 25 per cent.

New York with its splendid equipment should have done better than 15 per cent failure. Hahnemann of Philadelphia has a record to be proud of, having a failure percentage of but 6.7. Boston University has done still better having the lowest failure percentage of any of the four Massachusetts Colleges, 3.3 per cent while Harvard had 11.8 per cent.

The Homœopathic departments of Michigan and Iowa lead the list by having no failures. A study of the statistics makes evident

again the nonsensical legislative requirement by which each state must conduct its own examinations. There should be one Federal Examination, fair and equitable for all colleges and candidates, and a certificate from that Federal Board should entitle the recipient to practice medicine in any place that Uncle Sam owns a piece of land big enough to plant the flag.

“THE DOCTOR IN A NEW ROLE.”

In a little town of Central New York, Norwich by name and numbering some eight thousand inhabitants, there is a physicians' club. That in itself denotes enterprise and good sense, because it savors of unification, harmony and team work—essentials to medical progress in every community. At a recent meeting of this medical club, Dr. Paul B. Brooks presented a paper before the members on the “Relation of the General Practitioner to the Prevalence of Venereal Diseases.” In that paper he made the statement that the doctors more than any other class of citizens are responsible for the prevalence of venereal diseases. The discussion which followed took a decidedly practical turn, the doctors fell to comparing notes on “cases” with the startling discovery that every one of them had on his hands for treatment a “bunch” of venereal diseases out of all proportion to a community of that size. This led to the further discovery that there were some seven houses of prostitution in that town, running wide open and unmolested.

It became evident that these dens were turning out dozens of men and even boys of high school age as spreaders of gonorrhœa and syphilis. Here note that had these physicians discovered a similar prevalence of diphtheria or smallpox, the town crier would have been out ringing the alarm and quarantining every diseased victim. But with gonorrhœa and syphilis, diseases more deadly in their end results and productive of far more physical and economic loss, the law forbade them to make public the name of a single victim. But note further; this little club of physicians did not “lay down” and say we can do nothing, they called a special meeting of the club to consider this one subject and invited thereto the town authorities. Here the physicians advised and demanded that the town be cleaned up and every house of prostitution closed on the ground that it was a menace to the public health.

Notice now the outcropping of human nature. The authorities agreed that the situation was serious and demanded action. Yet many were skeptical that anything could be done, others said “some of the places have been here for twenty years and are fixtures, *they make business for the town.*” Same old plea of Demetrius, “If the people worship the true God what will the silversmiths, who manufacture the little tin gods, do for a business?” Others said, “Public

sentiment will not support so radical a move,"—fellows who must always be on the popular side. But the physicians who benefited most directly by this "business" were obdurate and demanded action. Fortunately the village attorney was a man who had a real spinal column and he said, "Gentlemen, if the fathers of this town were to hear this evidence, put before them by these physicians, they would mob these places and discredit every one of us." That brought them to their senses just as a determined public opinion will bring every politician to his senses, and they voted unanimously to clean out the red light district, and it was done.

These same physicians later reported that the number of new cases of venereal diseases had dropped off 75 per cent since the clean-up. What that little Spartan Band of physicians did in Norwich can be done in every community great and small, and it is "up to" us physicians to do it and do it quickly.

With the prevalence of venereal diseases menacing as it does the health and happiness of the human race, are we as physicians, the public guardians of the health of the people, to keep quiet longer and let this rotten nastiness which smells to Heaven go on without our united protest?

We should make a determined stand for the reporting of these diseases and then wipe out the source of the contagion. It can be done, now is the time to do it, we are the men to inaugurate it.

OBITUARY.

Allen Mott Ring, M.D.

Dr. Allen Mott Ring, who died at his residence at Arlington Heights, June 3, 1913, in the sixty-ninth year, was the second son of Zebedee and Mary Ann (Hartt) Ring, of St. John, N. B., where he was born October 27, 1844. At sixteen he went to Edinburgh, Scotland, where he attended high school, winning two medals. After this he spent a year at the University of Edinburgh. Returning to America, he studied medicine at the University of the City of New York, and was graduated in 1867. He was a physician at the Five Points Hospital.

In 1867, Dr. Ring married Miss Wilhemina F. Hammond, and established himself in St. John. His father had become a convert to homœopathy and to please him Dr. Ring studied it and was its standard-bearer for fifteen years in the teeth of great criticism from his professional brethren. He established a homœopathic pharmacy and dispensary and was an occasional correspondent of the *Gazette*. At this period he was interested in the Academy of Music and was its president. In 1876 the great fire destroyed all his property.

Five years later he removed to Arlington Heights and bought the sanatorium which he conducted up to the time of his death. At this time he gave up his homœopathic affiliations, having reached the belief that it was a mistake to have two schools and that truth would live regardless of a name. He never gave up, however, the use of the indicated remedy.

For over fifteen years ill health has made necessary a circumscribed life and his withdrawal from all essential duties.

He was a member of the Massachusetts Medical Society and the American Medical Association. Dr. Ring is survived by a widow and three children.

AMPUTATION FOLLOWING TRAUMATIC TRANSVERSE MYELITIS.

By ORLANDO S. RITCH, M.D., Brooklyn, N. Y.

During the last five years it has been my fortune or opportunity to have had three adult male patients upon whom I have amputated both legs simultaneously, or at the same sitting, at the middle upper third and the high upper third.

All three cases made uneventful convalescence.

Case No. 1 has long since become accustomed to his artificial legs. It was no small matter for this patient to learn to walk. We stretched a rope across his room and, after strapping on his papier-maches, stood him on them and put his hands on the rope so he might at first help himself in that way. After a time he ventured without the rope, subsequently becoming more and more expert, until now he gets around everywhere very well with the aid of a cane. He has long since become a useful citizen and is able to attend to his vocation.

Case No. 2 has not fared so well as No. 1 up to the present time, although he makes very good progress with his artificial limbs.

In *Case No. 3* there has been no attempt to use false appendages, nor is it the intention of the writer to recommend them.

It is to this third case I wish more particularly and directly to call your attention.

The patient was a young man sixteen years of age who, while out in the country, climbed an apple tree for the purpose of securing some of the fruit. He was found there by the farmer who owned the property and ordered out of the tree. This authority was augmented by the throwing of stones. Between the boy's anxiety to come down out of the tree and to avoid being hit by the stones, he fell and sustained a fracture of the lower lumbar vertebra. He was taken to a hospital, where a laminectomy was performed without any appreciable results. There evidently must have been softening of the cord from hemorrhage, producing hyperæmia, followed by extravasation of blood, changing its nature from an acute to a chronic condition.

It was found, as a result of the injury, that he had sustained paralysis of the lower extremities, both of motion and sensation; there was incontinence of urine and stool. Constipation and retention are often conditions in an acute form, but in this case it was the reverse. He became emaciated, anæmic and weak. Four years later I was called in consultation. I found his thighs everted; his legs extended; his feet large, swollen and atrophic, or dried, in character.

At the consultation his father, who had grown tired of having the boy around the house so utterly helpless, said that he was a

nuisance and ought to be dead. But the mother, like all good mothers, stuck close to the "lame duck."

I told the parents that I could not give an opinion at that time, but that I would take the young man to the hospital and render a decision at the end of a month.

While in the hospital the patient was given strong nutritive tonics and nourishing food, and his general physical condition, aside from the disease present, greatly improved. At the end of the month I told the parents that I was willing to undertake the amputation of both legs as near the hip as possible, leaving only sufficient stumps for him to sit upon, in case of recovery. I told them I had had no experience in amputating paralyzed tissue with the loss of both sensation or motility, that I had no knowledge as to the reparative process of such tissue, that I had no experience regarding the character or nature of shock which might follow so radical a procedure in dividing the tissues or cutting through the bone marrow, that I could not prognosticate the results, but that, if, under these conditions, they were willing to take the risk, I was perfectly willing to perform the operation. The patient and all other interested parties expressed themselves as being agreeable.

The day previous to the operation the patient sustained a fracture of the right femur, due to a lurch which while sudden was not severe, showing the frail, weak, anæmic condition of the body.

Some thirty-five of my confreres were present at the operation which was performed in three and three quarters minutes, my assistants taking up the toilet immediately following amputation. I found the blood vessels in the right thigh of normal consistency, while those in the left thigh were hypermatous, breaking away at each attempt to tie them, which necessitated ligating them en masse with large, heavy, braided black silk, the ends remaining long enough to extend beyond the line of flap. Both wounds were closed, with the exception of the left where the ligature was exposed.

Two hours after the operation the young man had reacted and stated he felt "bully." There was no shock of any type; convalescence was uneventful; there was primary union of the right stump, also of the left except at the point of the ligature which came away about three weeks subsequently. The small sinus then healed over promptly. He immediately took on flesh, strength and color. He has since been able to control the functions of the bladder and rectum to a reasonable degree. Prior to the operation he could, by the use of opium suppositories, dry bread and fish and some articles of diet which were not relaxing in character, control the rectum to the extent of feeling uncomfortable in the pelvic cavity when he was conscious of a desire for stool.

This operation was performed three and one-half years ago.

During the interim the patient has become expert in the process of filing metals; also in the use of the needle, particularly in silk embroidery. He has also become more or less adept in the use of the typewriter and is, at this time, a strong, healthy young man of twenty-four; able to get out of bed, sometimes without assistance; goes out riding in his carriage; enjoys life immensely, is self-supporting, and is apparently the idol of his father.

It was my intention to present to you a rather exhaustive dissertation not only upon traumatic myelitis but also on some of the idiopathic types such as ataxic, descending, disseminated, diffuse and chronic, but upon reflection I decided you could read from the text books with more satisfaction than from the result of my culling.

The question I wish to propound has a sentimental and a practical consideration. I can understand an argument that could be adduced from the sentimental standpoint which might easily negative my proposition; but, over against it, is the practical side of the subject to be thought of.

If a commission of neurologists should examine a patient suffering from either motor or sensory paralysis, or both, the origin of which might be traumatic or idiopathic; and should as a result of this consultation conclude that the patient was absolutely incurable or with amelioration improbable; that the patient was hopelessly bedridden for life, that although the remaining portion of the anatomy was in a healthy condition except as it was reduced by the burden of the useless appendages, would it not be humane, practical and logical to remove those useless appendages, thereby allowing the rest of the body to become perfectly normal, strong and healthy? Would not this conclusion be justified in the light of the experience obtained in the double amputations just reported, and the marked benefit which followed in the third case, whereby the patient was able to leave his bed in comparative comfort and ease as against his former bedridden state?

I feel my suggestion is a bold and radical one; and yet I believe our neurologists have cases, as we all have from time to time, no doubt, which are apparently tied and anchored on account of extremities devoid of motion and sensation, which would be practically given a new lease of life if my proposition were followed.

As a final suggestion, I found as a result of my work upon the third case no shock, quick reaction, primary union, rapid convalescence, renewed health and vigor and release from bed; some little control of the functions; self-support; also the mental relief of the patient gained by the knowledge that the useless appendages were no longer anchors chaining the body to the bed. All of this appealed to me as being a pretty fair compensation for the work undertaken.

SOME POINTERS

The *Gazette* Editorial, "The Quintessence of Arrogance," has called forth considerable comment from our various friends and subscribers. The general tone is one of hearty endorsement, backed with the statement that we have not done enough of this kind of fighting during the past decade. Here are some of the comments which are well worth considering.

Chicago, Ill., June 3rd, 1913.

"Dear Gazette: Your Editorial, "The Quintessence of Arrogance," is strong.

1. The great trouble with homœopathy is that it has not recently been doing enough scrapping. There was a time, ending near the beginning of my practice, when its colors were kept flying, a band of stalwarts marched behind it to the tune of the Marseillaise, and the regulars were kept on the defensive. But the spirit of the early days subsided under the conciliatory tactics of the enemy. Homœopaths were smiled upon, were granted consultation privileges when the call came from the side of the smaller number, were now and then even allowed to see a patient still under old-school treatment, were conceded a few rights when the strong clientele of the homœopaths demanded them, and were treated as sane doctors so long as they seemed to regard the dominant school as *condescending* in their concessions.

2. This change of attitude on the part of the regulars accomplished its deadly work in making the homœopath feel flattered. The poor victim soon began to cry, "See what a victory we have wrought!" when in fact he was being "worked" all the time. Both sides began to tell their patients that there was but little practical difference between the two schools; the homœopaths used the coarser drugs on much the same indications as the others, and seemed to feel it an honor to do so. I confess that I had acquired much of this sentiment myself before I ceased to be active in homœopathic councils, ten years ago. During the last decade I've been watching the game from the side lines and the bleachers, I want you to know, and have been looking for that very effect which it is now plainly seen the politicians of the old-school were seeking.

3. But first one and then another member of our school caught onto the trick and began to cry "thief," until, now, the rank and file of homœopathy are waking up in good earnest. But homœopathy must purge itself. On one hand there must be closer conformity to our principle of cure, in both teaching and practice. We must begin to rebuild the walls of Jerusalem, every man "over against his own house;" but it will have to be done with the trowel in one hand and the sword in the other. It would be a pity for us to let the only great law of cure in the material field become obscured through the machinations of a designing body of medical politicians.

4. We will make better progress by a campaign of enlightenment from which is excluded any uncalled-for attacks on the old methods. It ought not to be a campaign of denunciation. Our best success in overcoming the phobia-blight now upon the people and creating a strong sentiment in our own favor, will be found in *ignoring* the old-school as far as we can and pushing our own ideas to the front.

I have given you my convictions at some length so that you may see just where I stand, and how earnest is the coöperation into which I seek to be drawn. I BELIEVE WITH ALL MY HEART THAT THE LAW OF SIMILIA IS THE GREAT LAW OF CURE, NO MATTER WHAT METHOD OF PROCEDURE OUTSIDE OF SURGERY WE MAY PURSUE.

I am with you and the rest of my old friends and new, to put Homœopathy to the front. WE CAN DO IT IF WE WILL."

This is from an ex-president of the American Institute.

"I want to congratulate you upon your splendid editorial in *The New England Medical Gazette* of April, 1913, entitled, "The Quintessence of Arrogance." You certainly have handled our friend, Nichols, in great shape, and it is just exactly what he deserves. It seems too bad that men of this stripe must spoil the apparent desire on the part of many of the broad, liberally educated men of that school to bring about medical unity. The spirit which Dr. Nichols manifests is so at variance with the spirit of the American Association of Surgeons that it leads one to believe, (and I have been informed that it is a fact) that the American Medical Association is exceedingly jealous of the surgical association. We had, as you know, a state meeting of that association here in Cleveland very recently. It was rather interesting to me in the committee work to note the antagonism between the supporters of the American Medical Association, and the supporters of the American Congress of Physicians and Surgeons."

The following is from a prominent old school physician who has been a professor in the Polyclinic of New York for thirty years.

New York, Apr. 22, 1913.

"Dear Gazette:

Why do you waste your energy in replying to such articles? It is indeed a waste. I taught more than eleven thousand physicians at the Post Graduate and my Homœopathic brethren were about the usual percentage of the total medical population in the United States and Canada, probably somewhat more. Many of you people call me in consultation. I often attend your physicians professionally. If you hadn't worked loyally with us we would never have secured a decent medical practice act in New York, I have spoken before your societies. I know and everyone in my position knows, that you are scientific, sincere and capable.

What more can anyone claim? There is plenty of work for any one of us who is competent no matter what designation he may assume. If we are busy in trying to help suffering humanity and in endeavoring to keep abreast or a trifle ahead of the medical times we have no time to criticise."

This from an old War Horse of Homœopathy whom everybody knows and loves.

Fredonia, N. Y. Apr. 20, 1913,

"My Dear Gazette:

Thank you very much for a copy of the Gazette with your leader on the "Arrogance of the A. M. A." If our brethren would fortify against and make vigorous sorties on this line there would be fewer exhibitions of the kind by the howling dervishes.

"The Kowtowing" of our school to the old relic of barbarism has been and is to me unaccountable. We want more self-respect, dignity, and aggressiveness. Probably they will be wanting until the self-dubbed scientists take their appropriate place behind the band wagon.

You and I know that Homœopathy will live until medicines are no longer needed among men.

I have read your Editorial aloud to my family and some friends and it brought prolonged applause. Keep your gun hot with rapid firing of the same character."

This from the Dean of the Western College:

"Dear Gazette:—I have received a copy of the April issue of the "Gazette" and have enjoyed very much the reading of the Editorial, "The Quintessence of Arrogance."

"The more we can answer that sort of criticism and drive its point home and get it into print in such shape that it will be seen, the better it will be for our cause. I want to compliment you on the very forceful way in which you have taken up the cudgels."

SOCIETIES.

Connecticut Homœopathic Medical Society, 63rd Annual Meeting, New Haven, May 20th, 1913

The sixty-third annual meeting of the Connecticut Homœopathic Medical Society was held at the Hotel Taft, New Haven, on Tuesday, May 20, 1913, about forty-five being present.

The meeting was called to order at 10.30 by the President, Dr. Henry M. Pollock of Norwich.

Drs. H. A. Roberts and Wm. Pitt Baldwin were appointed to audit the Treasurer's accounts.

Minutes of the semi-annual meeting were approved as printed.

Annual report of the Secretary was read and accepted. This showed that during the past year one member, Dr. Henry M. Hitchcock of Greenwich had died; two had resigned, one on account of removal from the State, and one had been transferred to list of corresponding members.

Drs. Sanford, Hall and Sage were appointed to fill vacancies on Board of Censors, and the following applications were received for membership.

Dr. Frank M. Wright of Stamford, Dr. W. B. Gillespie of Rockville, Dr. John D. Milburn of New Haven, Dr. DeWitt Smith of Guilford. Favorable report being made on these names they were balloted on and elected.

Resignations were read from Dr. W. F. Hinckley of Waterbury, Dr. Harry F. Hoffman of Allentown, Pa., removed from the State, Dr. W. C. Tillotson of Rockville, removed from the State. Resignations were accepted.

Treasurer's report was read showing balance of \$123.71, and it was accepted.

Verbal reports were made from the following institutions under homœopathic control,

Grace Hospital, New Haven, by Dr. Wm. Pitt Baldwin. Norwich State Hospital for the Insane, by Dr. H. M. Pollock, Supt. Dr. Wadsworth Sanitarium, Woodscourt, So. Norwalk, by Dr. Samuel Worcester, Associate Sup't. Attention was also called to Dr. Givens' Sanitarium and that of Dr. Barnes, both in Stamford.

The Committee on death of Dr. Henry M. Hitchcock of Greenwich made a written report which was accepted.

The election of officers resulted as follows. President, Dr. Royal E. S. Hayes of Waterbury, Vice-Pres., Dr. Frederick E. Wilcox of Willimantic, Treasurer, Dr. Henry P. Sage of New Haven, Secretary, Dr. Samuel Worcester, Woodscourt, So. Norwalk, Conn. Censor for five years, Dr. Royal E. S. Hayes, of Waterbury.

Voted to hold the semi-annual meeting in Meriden, on Oct 21st, 1913.

Dr. Edward B. Hooker made an interesting report from the Committee on Legislation, setting forth the various bills that had been introduced in the present Legislature that affected the profession or the general welfare of the public health. By request he spoke on the subject of the proposed National Board of Health, and outlined the conditions under which it would be acceptable to our branch of the profession. He also made an appeal in behalf of the American Institute and obtained eight applications for membership.

Dr. Pollock then read his annual address as President, entitled "The Cause of Insanity and its Prevention" which was an able and interesting setting forth of the subject and listened to with close attention.

MEDICAL SESSION.

The following papers were read and discussed as far as time permitted. All were interesting and valuable and will appear in the Transactions.

1. Some Modern and Obsolete Methods in the Treatment of Diseases of the Rectum, Dr. Orlando Von Bonnewitz of New York City.

2. Poliomyelitis, Infantile Paralysis, Dr. Frederick E. Wilcox, of Wil-
limantic.
3. Border Line Cases, Dr. Harry O. Spalding, Westboro, Mass.
4. The Reflexes in Diagnosis and Treatment, Dr. Edward S. Smith,
Bridgeport.
5. The Modern Treatment of Syphilis, Dr. Edward Everett Rowell,
Stamford.
6. Case of Adeno-carcinoma of the Bladder, Dr. Stella Q. Root, Stam-
ford.
7. Clinical Cases, Dr. Harrison G. Sloat, Glen Cove, Long Island.
8. Clinical Cases, Dr. S. Mary Ives, Middletown.

Personal items,—The following have recently settled in the State,
Dr. F. DeWitt Smith, Hahn, of Phil. 1910, at Guilford. Dr. John D. Mil-
burn, Hahn, of Chicago, 1910, at 177 Lawrence St. New Haven. Dr. Frank
M. Wright, N. Y. Hom. Coll. 1910, 208 Summer St., Stamford. Dr. Wm.
B. Gillespie, Albany Med. Coll. 1909, at Rockville.

Left the State,—Dr. Tillotson, from Rockville. Dr. Carl A. Williams
from New London to 61 Passaic St., Passaic, N. J.

Homœopathic Medical Society of the County of Kings.

The 466th regular meeting of the Homœopathic Medical Society of
the County of Kings was held at the Medical Library Building, Brooklyn,
May 13, 1913. Dr. Roy Upham, president in the chair.

Dr. Cornelia C. Brant of Brooklyn spoke on the advisability of form-
ing another hospital in Brooklyn. A paid worker had canvassed the hos-
pitals of the two cities and visited physicians to ascertain the feeling re-
garding the plan and it seemed to be commended by all. The need was
for a hospital where women could send patients and retain control over
their treatment and this applied to women of the allopathic as well as the
homœopathic schools of medicine, and to many men who were not con-
nected with the hospitals.

Dr. George F. Laidlaw said that there is a need in New York for an
institution where women can have access to treat patients. Women now
hold subordinate positions in hospital work and they need opportunity to
develop under responsibility and if they had a hospital it would be of
value to them, it is one of the elements in higher education. The hospital
worker is the better physician and every physician should try to obtain
that means of education.

Dr. John F. Ranken of Brooklyn spoke in favor of the plan and moved
that the Homœopathic Medical Society of the County of Kings endorse
the plan and pledge itself to render it moral and financial support. The
motion was carried.

The program included "Some Experiences with Blood Pressure,"
by Dr. Egbert Guernsey Rankin. "Historical Charts. The Origin and
Growth of Modern Therapeutics," by Dr. George F. Laidlaw. "Later
Experiences Regarding Intra-venous Anæsthesia," by Dr. Charles Francis
Honan. "Report of Cases Citing Unusual Results Following Tonsil Re-
moval," by Dr. Harold A. Foster.

About forty members of the New York Society made the trip to Brook-
lyn and with a large gathering of the Kings County Society made a very
interesting evening, the discussion being active and instructive. The papers
were discussed by Dr. W. L. Love, Dr. A. J. Stewart, Dr. Harold A. Sanders,
Dr. J. W. Dowling, Dr. Francis T. Brennan, Dr. W. H. Freeman, Dr. T.
Drysdale Buchanan, Dr. W. B. Winchell, Dr. Egbert Guernsey Rankin,
Dr. Storer, and others.

The Kings County Society will furnish the papers for the next meeting
of the New York Society which will be held at the Academy of Medicine
June 12, the second Thursday, at 8:30.

L. D. Broughton, Secretary.

COLLEGE OF SURGEONS.

An American College of Surgeons was organized at a meeting in Washington on Monday evening, May 5th, 1913. Four hundred and fifty prominent surgeons of the continent of North America came together at the invitation of an Organization Committee which was appointed by the Clinical Congress of Surgeons of North America at its meeting in November, 1912. This committee consisted of Edward Martin of Philadelphia, Emmet Rixford of San Francisco, John B. Murphy of Chicago, Rudolph Matas of New Orleans, Albert J. Ochsner of Chicago, Charles H. Mayo of Rochester, Minn., Frederic J. Cotton of Boston, George Emerson Brewer of New York City, J. M. T. Finney of Baltimore, W. W. Chipman of Montreal, George W. Crile of Cleveland and Franklin H. Martin of Chicago.

The invitations, which resulted in this large gathering of surgeons in Washington, were extended by the Organization Committee after a carefully prepared campaign in which each large university city on the continent was visited by a member of the committee who met, in person, a group of selected men brought together by a committee of three in each locality, which committee had been authorized by the Organization Committee to extend an invitation to the surgeons in their locality to meet the representative of the Organization Committee. These five hundred men who were invited to the meeting in Washington, four hundred and fifty of whom responded, represented all branches of surgery and surgical specialties. The surgeons responding to the invitation were designated the Founders of the College.

FOUNDERS MEETING.

At this meeting in Washington, called for the purpose of effecting an organization, the Committee on Organization presented a definite tentative plan which plan included a call of the meeting, the presentation of by-laws, the presentation of resolutions, a plan for the completion of the organization by the election of governing bodies and executive officers.

CALL OF THE MEETING.

The men were called together by Edward Martin, Chairman of the Organization Committee, who called for the reading of the Call of the Meeting.

The Call of the Meeting was read by Franklin H. Martin, Secretary of the Committee. This call, which is herein quoted in part, summarizes the work for which the Committee was authorized:

"First, It should formulate a minimum standard of requirements which should be possessed by any authorized graduate in medicine, who is allowed to perform independently surgical operations in general surgery or any of its specialties.

"Second, It should consider the desirability of listing the names of those men who desire to practice surgery and who come under the authorized requirements.

"Third, It should seek the means of legalizing under national, colonial, state or provincial laws, a distinct degree supplementing the medical degree, which shall be conferred upon physicians possessing the requirements recognized by this law as necessary to be possessed by operating surgeons.

"Fourth, It should seek co-operation with the medical schools of the continent which have the right to confer the degree of M. D., under the present recognized standards, and urge these colleges to confer a supplementary degree on each of its graduates who have, in addition to their medical course, fulfilled the necessary apprenticeship in surgical hospitals, operative laboratories and actual operative surgery.

"Fifth, It should authorize and popularize the use of this title by men upon whom it is conferred, and its use should especially be urged in all directories of physicians in order that the laity as well as medical men

can distinguish between the men who have been authorized to practice surgery, and those who have not."

"The net result of the Committee's efforts is that five hundred surgeons of all specialties, representing every large center of population, every important university city with a teaching faculty of medicine, every special and general society representing a specialty of surgery, all the important surgical clinics and hospitals, besides many independent surgeons from all portions of the North American continent have consented to become founders of the organization under contemplation, and of this five hundred fully four hundred and fifty are here at this hour ready to fulfill their obligation."

The Founders Organization was then completed by the election of Edward Martin as Chairman and Franklin H. Martin as Secretary and the authorization of an order of business.

BY-LAWS.

The interest in the By-Laws centered in: 1. The name. 2. The object. 3. The forming of the organization. 4. Its administrative plans. 5. The meaning of the fellowships. 6. Fees. 7. Directory. 8. Expulsion. 9. Standing committees.

I. NAME. The name of the corporation is the College of Surgeons.

II. OBJECT. The object of the College shall be to elevate the standard of surgery, to provide a method of granting fellowships in the organization and to formulate a plan which will indicate to the public and the profession that the surgeon possessing such a fellowship is especially qualified to practice surgery as a specialty.

III. ORGANIZATION. The corporation is to be known as the College. The College shall consist of all members of the corporation, to be known as Fellows, and shall vest the general management of the corporation in a Board of Governors, and the Board of Governors shall in turn vest the details of the management in a board of trustees, to be known as the Board of Regents.

IV. ADMINISTRATIVE PLANS. 1. The Board of Governors shall consist of the five hundred surgeons invited by the Organization Committee to serve as founders of the College and who have signified their willingness to act in that capacity. The individuals of the first Board of Governors shall also be known as the founders of the College of Surgeons.

This original Board of Governors shall be divided into three classes to serve one, two and three years. At the annual meeting in 1914 and at each succeeding annual meeting, the Fellows of the College shall elect fifty surgeons to membership in the Board of Governors, each for a term of three years. Thirty of these are to be elected from a list of nominations consisting of two members each nominated by the following surgical societies and associations of North America:

American Surgical Association. Section on Surgery of the American Medical Association. Section on Obstetrics, Gynecology and Abdominal Surgery of the American Medical Association. General Surgical Division of the Clinical Congress of Surgeons of North America. Division of Surgical Specialties of the Clinical Congress of Surgeons of North America. American Gynecological Society. Southern Surgical and Gynecological Association. Western Surgical Association. Section on Surgery of the Canadian Medical Association. American Association of Obstetricians and Gynecologists. American Orthopedic Association. American Association of Genito Urinary Surgeons. American Laryngological Society. American Ophthalmological Society. American Otological Society.

Twenty members shall be elected at large to represent surgeons of North America not affiliated with the above societies or associations.

The Board of Regents shall consist of twelve surgeons, members of the Board of Governors, elected by the Governors, these to be divided

into three classes whose terms of service shall expire in one, two and three years. Their successors shall be elected each for a term of three years. Not more than three of each class of four shall be elected from one country. The Board of Regents is increased to fifteen in number by three officers of the Corporation, the President, Treasurer and General Secretary. The two Vice-Presidents are ex-officio members of the Board. The Board of Regents is the administrative body of the corporation, corresponding to a board of trustees in other corporations.

V. FELLOWSHIPS. The Fellows of the College shall be graduates in medicine, who are legalized to practice medicine in their states and provinces, who have made an application for fellowship, such application to be endorsed by three Fellows of the College, one of whom shall be a member of the Board of Governors, and who meets the qualification requirements that shall, from this time to time, be established by the Board of Regents, and who shall be elected to fellowship by the Board of Regents on recommendation of the Committee on Credentials.

All Fellows of the College shall be designated a Fellow of the College of Surgeons and shall be authorized and encouraged to use the letters F. C. S. after his name on professional cards, in professional directories and in scientific articles published in surgical literature.

VI. FEES. An initial fee of Twenty-five Dollars shall be required of each member of the College on his election to fellowship by the Board of Regents. The annual dues will be Five Dollars.

VII. DIRECTORY. The Board of Regents shall issue each year a directory containing the names and addresses of the Fellows of the College of Surgeons, arranged by states, provinces and colonies.

VIII. EXPULSION. Any member of the College may be expelled for unprofessional or other conduct inconsistent with the rules and regulations of this Corporation by a majority vote of the Board of Regents.

IX. STANDING COMMITTEES. The Board of Regents shall elect the following standing committees: 1. Credentials. 2. Legislation. 3. Graduate Schools and Hospitals.

These by-laws were unanimously adopted with the provision that the Board of Regents should make any minor corrections deemed desirable and present such corrections for adoption at the next meeting of the Board of Governors.

OFFICERS ELECTED.

President, J. M. T. Finney, Maryland; First Vice-President, W. W. Chipman, Quebec; Second Vice-President, Rudolph Matas, Louisiana; Treasurer, A. J. Ochsner, Illinois; General Secretary, Franklin H. Martin, Illinois.

BOARD OF REGENTS.

J. M. T. Finney, Maryland; A. J. Ochsner, Illinois; Franklin H. Martin, Illinois; George E. Brewer, New York; George E. Armstrong, Quebec; John B. Murphy, Illinois; Edward Martin, Pennsylvania; F. J. Cotton, Massachusetts; Herbert A. Bruce, Ontario; C. F. Stokes, Washington, D. C.; William D. Haggard, Tennessee; George W. Crile, Ohio; Robert E. McKechnie, British Columbia; Charles H. Mayo, Minnesota; Harry M. Sherman, California.

SELECTION OF FELLOWS.

Much interest was manifested in the method to be pursued in the selection of the members of the Corporation and in the method of conferring fellowships. A series of resolutions covering this subject were offered by the Secretary and adopted.

The prospective Fellows are to be divided into four classes, A, B, C, and D. Classes A, B, and C are by resolution to be admitted without the formality of submitting to an examination under the following resolution:

“RESOLVED, That the A class shall consist of founders of the College.

“The B class shall consist of the members of the special surgical societies constituting the Congress of American Physicians and Surgeons and one hundred each, nominated by accredited committees, from the Surgical Section of the American Medical Association, from the section on Obstetrics, Gynecology and Adominal Surgery of the American Medical Association, from the General Surgical Section of the Clinical Congress of Surgeons of North America, from the Division of Surgical Specialties of the Clinical Congress of Surgeons of North America, from the American Association of Obstetricians and Gynecologists, from the Surgical Section of the Canadian Medical Association, from the Southern Surgical and Gynecological Association and from the Western Surgical Association.

“The C class shall consist of surgeons of prominence of five years in the practice of surgery or a surgical specialty and who, in the opinion of the Committee on Credentials, are eligible for fellowship in the College without formal examination.

For all others, coming under Class D, the following resolution was passed:

“BE IT FURTHER RESOLVED, that the Board of Regents, through the Committee on Credentials, limit the admission of the Fellows to classes A, B, and C, until the Board of Regents formulates a standard of requirements for class D and reports the recommendations back to the Board of Governors for approval at the meeting to be called by the Board of Regents in Chicago, November, 1913.”

APPLICATIONS FOR FELLOWSHIPS.

It will be the spirit of this Association to open the fellowship to all competitors in surgery without favor. Scientific attainments surgical ability, unquestioned moral character, measured by the College's standards, shall constitute the measure for fellowship.

There are many hundreds of surgeons on the continent, who are not included in classes A and B, who fall into the C class. Applications from these men will be welcome and their names will have the most careful consideration by the Committee on Credentials.

All applications for membership should be forwarded to the Secretary of the corporation. It would add to the ease of the work of the Committee on Credentials if references in the way of vouchers or recommendations from one or more well known surgeons accompany each application for fellowship.

FORMAL CONFERRING OF FELLOWSHIPS.

The first convocation for the formal conferring of fellowships will occur in November, 1913, at a time and place that will be designated later. The first directory of Fellows will be distributed at that meeting. For that reason the applications for fellowships on the part of A, B and C Classes should be filed as promptly as possible in order to facilitate the correcting of lists for publication.

CORRESPONDENCE.

The following letter is the culmination of the efforts of a special committee of the American Institute of Homœopathy to induce the old school to investigate the merits of Homœopathy.

To the President and Secretary of the American Medical Association,
535 Dearborn Avenue,
Chicago, Illinois.

Gentlemen:—

In 1908 the undersigned were appointed a committee by the American Institute of Homœopathy to present to the American Medical Association

on behalf of the Homœopathic profession of the United States a proposition for a *joint* investigation of the scientific merits of the method of drug selection expressed by the formula "Similia Similibus Curentur."

The committee has presented the matter to individual members of the House of Delegates, but we believe the matter has never been regularly presented to the House or to the Association itself, as a whole. We request that you bring the matter up for consideration and early action by both of these bodies. For the following reasons it seems to us a subject worthy of your serious thought:

This rule has governed the selection of drugs in the treatment of disease by a considerable number of medical practitioners for over a century. We feel that the time has come when this formula should be brought before the whole medical profession, carefully investigated by modern scientific methods and a determination made of the exact value of this method in the practice of medicine. We seek this

First, Because the voluntary testimony of a large number of physicians who do not understand the correct application of this method indicates their desire to make use of it.

Second, Because a large number of men who attempt its use ought to be able to get a better understanding of its true significance.

Third, Because we believe a large majority of the Medical profession would have their usefulness and their power to benefit the sick largely enhanced by a thorough knowledge of this method.

Fourth, Because we believe that suffering is lessened and sickness more speedily and comfortably terminated through drugs administered according to the rule of similars.

Fifth, Because we feel that a careful investigation of this subject belongs to the whole medical profession and not to any single branch of it.

Sixth, We feel that such research regarding the formula of similars is desirable because the exactness of modern science with the present means of investigation, together with the accurate observation of the subjective as well as the objective symptoms, make it expedient to investigate the action of many drugs coming into use at the present time, as well as to re-examine those long proven.

For the above various reasons we pray that your organization appoint a committee of five to meet a like committee from the American Institute of Homœopathy to discuss this subject with a view of attempting a demonstration of the accuracy of the theory of similars, or of proving its falsity.

It seems to us that its joint investigation should be made under the auspices of some research laboratory like the Rockefeller Institute of New York or the McCormick Institute of Chicago. These Institutions have the experts necessary for such a test; with trained eyes they could follow its course from start to finish. Whether the result of the particular investigation should prove satisfactory or not, the effort would not be wasted because a list of drugs in common use among the members of your Association as well as ours can be selected for this study of their physiological action. These accurate observations would be of permanent value to both schools.

After careful investigation of the effects of these drugs in different strengths upon the human body, as well as observing their poisonous effects in animals, an extensive trial of their therapeutic efficacy should be made in some of the large public hospitals to test the action of these remedies in exemplifying this theory of drug administration.

In recent years every effort has been made to unite the Medical profession. A large number of legal practitioners is kept from affiliation because of its belief in a method of drug selection, the truth of which is questioned by the majority. Let us make a thorough test of this hypothesis. If it be proven true, humanity will be benefited by the enlarged and improved armamentarium of all physicians; if it be disproven, the last obstacle to medical union will have been removed.

To the end, therefore, that the truth be established, let us put this

theory to the test proposed. Naturally we feel confident that this principle will be established, but in the interest of mankind we request that you join with us in a scientific demonstration of the truth or falsity of the theory of cure promulgated by Samuel Hahnemann.

Respectfully submitted,

(Signed) Herbert D. Schenck, M.D., Brooklyn,
Chairman.
W. B. Gregg Custis, M.D., Washington,
William Rufus King, M.D., Washington,
Royal S. Copeland, M.D., New York City,
Frank C. Richardson, M.D., Boston,
Alonzo C. Tenney, M.D., Chicago,
Fred W. Wood, M.D., Chicago,
Benj. F. Bailey, M.D., Lincoln, Neb.

Pennsylvania Notes.

HOUSE VOTES TO REQUIRE ONE YEAR'S SERVICE AS HOSPITAL INTERNE. The amendment to the Medical Licensure Act, providing that all graduates must serve one year as internes in hospitals before taking state examination, was passed on April, 1st, 1913, at Harrisburg, Pa., in the House 127 to 47. Doctor Newbaker Montour said the idea was to protect the State from Medical Colleges which have less stringent requirements than Pennsylvania institutions.

FIVE-YEAR COURSES FOR MEDICAL STUDENTS. Hereafter students in schools belonging to the Association of American Medical Colleges will be forced to take a five-year instead of a four-year course as at present. A resolution to this effect was adopted at the closing session of the Association at Chicago, on Feb. 26.

There are now thirty colleges which enforce a two years collegiate course preparatory to admittance to a medical college, and five others have adopted the same rule, effective January, 1st, 1914. The resolution as adopted raised the entrance standard for all the colleges in the Association, after January, 1st, 1914, to include a year of college work in Physics, Chemistry, Animal Biology and a modern language.

NEW COURSE AT HAHNEMANN. The Hahnemann Medical College has inaugurated a new system which will require students at the institution to complete a six years' course of instruction before they are graduated.

The new regulation will require a preliminary year's course in Biology, Physical Chemistry, both organic and inorganic, Physics, and modern languages before the student is permitted to begin a four years course in medicine. This must be supplemented by a compulsory course of one year in hospital work.

The preliminary year's work, it was explained, was made necessary because so many of the preparatory schools are unable to keep pace with the advance in pre-medical education.

Five city hospitals will be open to Hahnemann graduates for the year of interne work required under the new regulations. They are Hahnemann, St. Luke's, Children's Homœopathic, Women's Homœopathic and West Philadelphia Homœopathic Hospitals.

HAHNEMANN FISCAL REPORT. The twenty-seventh annual meeting of the Hahnemann Hospital Association was held at the Bellevue-Stratford, on March 12th, 1913. Miss I. Semple acted as president pro tem. The report of the general treasurer, Charles Perkins, showed returns from patients treated in the wards of the Hospital during the past year amounting to \$6,000.00, and from those occupying private rooms \$49,000.00. The corresponding secretary reported several donations from private individuals. Addresses were delivered by Bishop Garland, Dr. W. W. Speakman and Dr. Gilbert J. Palen.

THE INTERNATIONAL HOMŒOPATHIC COUNCIL:—ITS BEING AND DOING.

By GEORGE BURFORD, M.B., President of the London International Congress.

President McClelland, addressing himself at the Zurich meeting to that consciousness which like a ghost haunts all our meetings—the consciousness of the halting progress of Homœopathy—asked, To what is this arrested development due? Are we uncertain of our scientific foundations? We are more certain than the sponsors for any other department of Medicine. Is our clinical work sterile and unreliable? Competent clinicians the world over may verify the fertility of our method and the statistical constancy of our results. We must go farther afield to find the embargo on our ascendancy. Our history, and not our science, discloses the defect in our equipment. Since quite early in our history we were ostracised into becoming a Cause, the instinct of self-preservation decides that our organization is for us of the same importance as our science. It is not only necessary to enable the truth to be seen, it is requisite also to make it prevail. The compelling power of organization is the armament of a minority cause. Homœopathy wants a place in the sun and Homœopaths intend to get it.

The President accordingly spoke with insight when to his question "What is amiss with our organization" he answered that our Cause, the cause of Homœopathy, had not been organized as one and indivisible, but as a series of sub-causes, each hedged round by its geographical limitations. And he urged with insistent warning that we should not jeopardize the success of this Cause by remaining as independent chieftains on a wide field of battle taken by the dominant force and beaten in detail.

This intellectual outlook was the one accepted and endorsed at the last Pan-Homœopathic Congress in London: and an International sub-Committee was then instructed to arrange for representatives of each Country to meet in Council in 1912. The Meeting, as you know, was held in Zurich in August last: it was a two-day conference of representatives specially attending from the United States, Great Britain, France, Germany, Austria, Sweden, Belgium. The Constitution and sphere of action of an International Homœopathic Council were debated, and provisional rules were adopted for the election of delegates to the next meeting of Council, to be held at Ghent in August of this year. A proportional number of Delegates at the Council Board was allotted to each country: the United States were to be invited to send seven: and communications were ordered to be opened up in due course with the recognized Homœopathic Bodies in various countries inviting their sympathetic co-operation, and asking for a nomination of Delegates.

That International Meeting was impressive, and likely to be momentous in the history of Homœopathy. There were gathered in quiet Council men from all parts of the globe—of various race, expressing themselves in different language—but all drawn by one inspiring spirit—to import Union and Progress into Homœopathy. It was the Missionary spirit pure and fervent. How to bring the help of the strong to the aid of the weak: how to protect against legal encroachment here, against active professional antagonism there: on this side to give the counsel of experience to inexperience reaching forth a hand, on that side to bring stimulus to a community whom isolation had compelled into inaction: these were the grave topics of debate. At this meeting it was obvious that we had come down to bed-rock. Here were the forces and ferments of Homœopathy exposed to view: and the pressing requirements of country by country were disclosed, not as *couleur de rose* reports, but as the vital necessities of men daily engaged in the effort to make Homœopathy prevail. So numerous and various were the requirements of different countries as voiced by their representatives present, that an Executive Committee was formed, to study the matter more intimately: and this Executive Committee being President McClelland, Dr. Mende of Zurich, Dr. Wheeler, Dr. Hoyle and the reader of this paper—these deputed one of their number, Dr. Petrie Hoyle, to act as Envoy or traveling Secretary of the Executive, and investigate matters at first hand for its behoof. A thousand francs were subscribed there and then as a first instalment to cover traveling expenses.

We had not long to wait for the cry from Macedonia—in this case Sweden. A violent anti-Homœopathic movement was being conducted by the dominant school, and Swedish Homœopathy was in danger of being swept out of existence. After extensive correspondence Dr. Hoyle went over, demonstrated from his large American experience the Official Status of Homœopathy in America, added proof positive of its value in the shape of statistical results published by Government Institutions, and all this before an audience in which the two first rows of seats were closely filled by members of the Swedish Parliament. Suffice it to say that the Council received the warmest thanks of the Swedish Colleagues for its timely response to their call, a response which left Homœopathy in Sweden on a much higher plane than it found it.

Hard on the heels of this came an urgent request from Russia. You will recall that Hahnemann was expatriated from Leipsic because the law forbade physicians to dispense their medicines themselves, and no Chemists were forthcoming. A somewhat similar fate threatened, and in fact threatens, our brethren in Russia, but engineered on slightly different lines. No chemist, according to a bill before the Duma, is to be allowed to keep or dispense medicines except of a character and in a form prescribed by the official pharmacopœia. In this official work, needless to say, Homœopathy and its preparations find no place, and the right of dispensing is to be as strictly forbidden to physicians in Russia as to their panel colleagues in England. At once our Homœopathic colleagues saw themselves prospectively frozen out: and Dr. Brasol, whom all here will remember, immediately applied to the International Council for copies of the legal enactments by which Homœopathic dispensing was protected in other countries. These documents were to be laid before the Duma as part of the Homœopathic plea for toleration in Russia. The International Council opened up communication with Homœopathic authorities all over the civilized world. From America, through the active management of President McClelland, came a huge batch of the laws affecting Dispensing in various States of the Republic. The Pharmacy Acts of England, with a digest written for the occasion by a barrister: the French dispensing code: the varied legal enactments of the German States, which were numerous as well as various: the Austrian Regulations: these and others, were all procured as copies of the laws in force bearing on this same point, of legalized dispensing as including the Homœopathic variety. These documents were submitted to the Duma Committee, and were received with such appreciation by our Russian Colleagues that voluntary donations of considerable sums of money have been subscribed by the Russian Homœopathic Societies to the exchequer of the International Homœopathic Council. The final decision of the Duma is to be given later in the year, our Russian colleagues express themselves as having their defence regenerated by the Council's action: and had the operations of the Council been limited to this issue—the probable salvation of Homœopathy in Russia—the result would have fully justified their being and doing.

But the action of the Executive of this Pan-Homœopathic Council has not been limited to these achievements: Germany, the birthplace of Homœopathy, has from the first taken the keenest interest in the idea that the Council represents, and the methods at its disposal to express it. The illustrations of homœopathic power in its strongest fortress, the United States, and the statistical results certified in Government publications in that country, had well served our Swedish colleagues at a time of crisis: and the Germans were not slow in praying the same force in aid of Homœopathy in Germanv. The Berlin Homœopathic Society invited the Traveling Secretary to address a mixed audience, lay and professional, just such a type of audience as the British Homœopathic Society caters to at its evening lectures. It was estimated that the auditory numbered some 1,500 interested hearers.

Before Berlin, the Traveling Secretary visited Magdeburg, addressing an audience there, at the request of the local physicians. After Berlin, by special invitation, Darmstadt. Next, at the request of our colleague Dr. Kranz Busch, Frankfurt, where topical interest drew a lengthy report in

that representative journal, the *Frankfurter Zeitung*, but last and best was the great meeting held at Stuttgart, under the auspices of that renowned Homœopath, Dr. Richard Haehl. Over a thousand people, attended: the audience was fit but by no means few, and this was the copingstone to the whole lecture series. By desire, the address was repeated the following evening, before an audience of 800. Elsewhere there had been interest and appreciation, here were massed weight and enthusiasm, and the Envoy returned secure in the knowledge that he had fulfilled his instructions—to aid and further the interests of our Cause as the local colleagues might desire, and to leave Homœopathy in each instance with a permanent impetus to further progress.

Fame spreads, and Dresden, that city of culture, sent a request a little too late for fulfilment at this time. St. Petersburg, where, as I have narrated, Homœopathy has been concerned with the doings of the Duma, has asked and obtained the sanction of the Executive of the City for a similar visit in November next, and so interested are our Russian confrères in this new departure, that they have asked and obtained the necessary official permission for this expectably large meeting to be held under Government protection.

The American Institute of Homœopathy, animated by the American spirit of recognizing a go-ahead thing, have already elected their delegates to the next Ghent meeting: and have fortified and emphasized their action in a practical way, which I will allude to immediately.

The older heads among us will have considered these but as the "few preliminary remarks" attributed to the Scotch Minister, and waited for the magic word *finance*. Well, the Council is a solvent body: it has spent money during the year, but it has paid its way, and has a balance running into three figures. I have said that Fifty Pounds was privately subscribed in the room when the first Executive Committee met.

From America, we have received £10 from the Pennsylvania State Homœopathic Society: and in addition to his initial subscription of £10, another personal contribution from President McClelland of £10: while the American Institute of Homœopathy has remitted a grant of 100 dollars as a unanimous expression of their good-will.

The contributions from Germany, as a mark of the appreciation of the work done by the Traveling Secretary, amounted to £30, over and above the expenses incident to his visit.

The British Homœopathic Society has directed its Secretary to receive special subscriptions to the International Council's exchequer: and some Twenty-five Pounds has already been received from the British Society.

But the Russian subvention has been the greatest. Our work hitherto for Russia has been limited to the documentary preparations I have already described. In September, Dr. Brasol remitted £10 as a personal subscription: again in December, another £10 as another personal donation. In addition, the Russian Society of Homœopathic Physicians promises an annual subscription of £30 up to the date of the meeting of the next International Congress—that is 1916. Their subscriptions for last year, and for this year have been received, and finally, another Russian Homœopathic Society, of a kind, we gather, like our own British Homœopathic Association, has also subscribed £30 to the exchequer of the International Council.

Lastly, from far off New Zealand we have received a donation of a guinea, and their best wishes.

Expenses have been heavy too, and the detailed Balance Sheet will be submitted to the Ghent Meeting.

Few men in the galaxy of Homœopathic Physicians of the first order are more widely honored than Dr. John Preston Sutherland, Secretary of the International Congress. Dr. Sutherland writes respecting the work of the Traveling Secretary, "Although we are rather effectively organized here in New England, we need occasional stimulation: and the stimulation that comes from without is productive of a much more robust progeny than anything that can originate within. An appreciative audience and a hearty reception can be promised Dr. Hoyle, should he visit Boston." Dr. Sutherland concludes:

"Your call on behalf of World-wide Homœopathy ought to be heard through-out the length and breadth of Christendom."

Here then in the fulness of time is being evolved a synthesis of the interests of Homœopathy great and small the world over. The inspiring spirit is each for all and all for each. There needs be the best brains, the widest experience, the acutest intelligences in our body to supply the dynamic which shall run the International Machine at its greatest values.

Homœopathy can no longer be continued with any prospect of success on the water-tight compartment system. Isolation is mordant enough in our own experience, without the introduction of its separatism between the national units which constitute Homœopathy. For these national units actually make up a Homœopathic World—bound by the same science, chastened by the same experiences, animated by the same aspirations. Where would the cause of Peace be to-day without the careful nurturing of International affinities? Would the horrors of war have known any sensible mitigation but for the amalgamation of world interests in the Geneva Red Cross Convention? This Internationalism brings us power to assist weak and struggling sentiments: to re-animate old-time establishments that threaten to fall too clearly into the sere and yellow leaf: and to encourage tardy movement to be taken up with the stride of Homœopathy where it walks with confidence and power.

For we have all put our hands to the enlargement of medical science: we have seen the vision of this enlargement through the rich increase of Homœopathy. It is the working out of this increase that brings us together in International Council: the compact whole is always greater than the constituent parts in a state of separatism, and the *genius loci* of the Great Republic will sustain our dominant note—*Union*.

BOOK REVIEWS,

An International System of Ophthalmic Practice, Edited by Walter L. Pyle, A.M., M.D., Philadelphia Member of the American Ophthalmological Society

Ophthalmic Semiology and Diagnosis by Charles H. Beard, M.D., Surgeon to the Illinois Charitable Eye and Ear Infirmary (Eye Department), Oculist to the Passavant Memorial Hospital and the North Star Dispensary (Chicago), Member and Ex-President of the Chicago Ophthalmological Society, Member of the American Ophthalmological Society, Etc.

With Thirteen Colored Plates and Seventy-One Figures in the Text. Philadelphia, P. Blakiston's Son & Co. 1012 Walnut Street, 1913. Price \$4.00.

The reviewer confesses to being obliged to resort to a dictionary for the meaning of "Semiology," and in only one of a large number was the spelling given as above, with "see semeiology." This is derived from the Greek root Semeion, a mark, and therefore means, when applied to medicine, symptomatology. The omission of the "e" cannot be justified as phonetic spelling as the authorized pronunciation is se mai ol o ji (Standard). The word symptomatology would have been more generally understood.

Part one treats of the following subjects: The Lids, or the Palpebral Region; The Lacrimal Apparatus; The Conjunctiva; The Globe; The Cornea; The Iris; The Anterior Chamber; The Pupil; The Crystalline Lens; Cataract.

The chapters dealing with Pupillary reflex, Crystalline Lens and Cataract are full of helpful suggestions. Under Lacrimal Apparatus only two subjects are discussed; Hypersecretion and Hyposecretion.

The chapter on the Iris might well have included more of the difficult problems in diagnosis such as Gumma and Miliary Tubercles, Iridodialysis, and Anterior Synechia are certainly of sufficient importance to merit mention.

Under Conjunctivitis the reviewer would have welcomed a discussion of Trachoma and Follicular Conjunctivitis.

Part two treats of the Fundus Oculi under the following headings: The Pupillary Region; Modifications and Alterations Referable to the Blood-Vessels of the Papilla and Retina; Topic Modifications of Calibre in the Retinal Vessels; The Macular and Posterior Polar Regions; The Median and Peripheral Regions of the Fundus; Light and Dark Spots in the Fundus; Hemorrhages in the Fundus; Detachment of the Retina.

The subjects are illustrated by the author's original drawings, which are very truthful reproductions.

The preface states that "There is no other separate volume in any language devoted exclusively to differential ocular semiology" and one closes the book with the sense of having been given a new point of view. The black type in the text will greatly enhance its value as a ready reference.

Every ophthalmologist will discover what to him are important omissions. These should be called to the attention of the Author, so that a subsequent edition may be still more comprehensive.

D. W. W.

A Practical Guide to Homœopathic Treatment. Designed and arranged for the use of families, prescribers of limited experience and students of homœopathy. By Myron H. Adams, M.D., consulting physician to the Rochester Homœopathic Hospital, Member of the New York State Homœopathic Medical Society, etc. 455 pages. Price, \$2.00. Postage, 14 cents. Philadelphia. Boericke & Tafel. 1913.

This "hand-book for ready reference" as it is called by the author is all that the term implies. In his introduction Dr. Adams writes that he is interested only in recording facts and has entered into no controversy with any one or anything.

The chapter on "The Principles of Homœopathy" is an exceptionally clear and concise exposition of the fundamentals. In the next chapter entitled "Practical Application of the Principles of Homœopathy" will be found much good sense which will be appreciated by the student. Following this is a chapter on the Directions for the Preparation, Administration and Care of Homœopathic Medicines, an exceedingly profitable chapter.

Part II. Diseases and their Treatment includes general consideration of diagnosis and its importance, the clinical thermometer, use and misuse, blood pressure and diagnosis, specialists and diagnosis, the trained nurse, diet, consideration of palliative treatment. The sections on Fever, Bacteria, Vaccination are especially well written.

The various diseases are then taken up, etiology, symptomatology, and treatment, in a very readable and instructive fashion.

Part III. Homœopathic Materia Medica and How to Use It. In this section remedies, well-tried and proven are to be found alphabetically, under each we find the general outline of action and uses, followed by the guiding symptoms according to the Hahnemannian Schema; then comes the comparison and the results of clinical use.

Considered as a whole this book should fill a long-felt want in the case of the student, serving as a beginner's practice and materia medica for him; in the case of the busy physician it should serve as a ready-reference book of much value; and as a book for selected patients who desire a working knowledge of Homœopathy it is one we can strongly recommend.

Medical Union Number Six. By William Harvey King, Author of My Smoking Room Companion. 60 pages. Cloth. Philadelphia. Boericke & Tafel. 1913. 50 cents.

This small volume is at once amusing, and calculated to induce thought. It is a clever exhibit of labor union and trust methods as applied to medical practice. It depicts specialism carried to an extreme, heartlessness and general inconsiderateness for everything but the principles of the union. Every physician should read this monograph if he is not thoroughly awake to the undesirability of unionized and State medicine. Eminently satirical in its subject matter as it is yet it sounds a warning for us all.

Suggestive Therapeutics. A Handbook of Suggestive Therapeutics, Applied Hypnotism, Psychic Science. A Manual of Practical Psychotherapy designed especially for the general practitioner of medicine and surgery: by Henry S. Monroe, M.D., (third edition). Published by C. V. Mosby Company, St. Louis.

This is the third time we have had the pleasure of reviewing Dr. Monroe's excellent book. It is the best single volume on the subject with which we are acquainted. Without unnecessary technical psychological discussion, the author presents the essence of the subject in a sane and practical manner, in twenty-eight brief and interesting chapters, with a total of four hundred pages.

Unlike the previous editions, the subject matter is not broken by frequent black faced type, which we think an improvement, since different minds would emphasize different parts of the subject. We could wish that there were more illustrations, as many visualizers learn best from pictures. The book is well indexed and attractively gotten up, and we can highly recommend it to our readers who desire to know the practical side of psychotherapy.

Muscle Spasm and Degeneration in Intrathoracic Inflammations, by Francis Marion Pottenger, A.M., M.D., L.L.D., Medical Director of the Pottenger Sanatorium for Diseases of the Lungs and Throat: C. V. Mosby Company, St. Louis, Publishers.

The purpose of the book is to emphasize the importance of Muscle Spasm and Degeneration in diseases of the lungs as diagnostic aids and their influence in producing and altering the well established physical signs; also to consider their part in the causation of changes in the bony thorax. The author also discusses the practicability of light touch palpation in delimiting normal organs and diagnosing disease conditions within the chest and abdomen, and comes to the conclusion that light touch is of great value.

The book is interestingly written in the first person and contains many personal observations and scientific explanations which show the author's wide reading. There are sixteen good illustrations and an excellent bibliography. It should be read by every physician interested in diseases of the chest.

Progressive Medicine: A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart A. Hare, M.D., assisted by Leighton F. Appleman, M.D. June 1, 1913. Lea & Febiger, Philadelphia and New York.

These quarterly volumes of 381 pages each comprise a series of papers on the advanced work done in certain lines of medicine and surgery. Edited by men of the highest standing, together with the collaboration of such authorities as John Clark, Bloodgood, Gerster, Coley, Crundell, Bonney and others, it is sure to be a "meaty" work. For instance, Vol. II has an exhaustive paper on Hernia by Wm. B. Coley; Surgery of the Abdomen, by John C. A. Gerster; Gynecology, by John G. Clark; Diseases of the Blood, by Alfred Stengel, and Ophthalmology, by Edward Jackson. The volume is generously illustrated, the paper and print excellent. With such a variety of subjects treated by able men it must of necessity prove a work of practical value. The volumes are issued every three months, and are \$6.00 for the set of four.

Golden Rules of Diagnosis And Treatment. By Henry A. Cables, B.S., M.D. Professor of Medicine and Clinical Medicine of the College of Physicians and Surgeons; Consultant at Jefferson Hospital; formerly House Physician at Alexian Brothers' Hospital; St. Louis. Second Edition. Published by C. V. Mosby Company, St. Louis, Mo. 1913.

This little book takes up the salient points of medical diagnosis and old school treatment. The author's style is clear and forceful. For a book of quick reference which is reliable and up to date, this work can be most highly recommended to both students and physicians.

Narcotic Drug Diseases and Allied Ailments, Including the Pathology, Pathogeneses and Treatment: by Geo. E. Pettee, M.D., Memphis, Tenn. Published by F. A. Davis Co., Philadelphia, Pa., Price \$5.00.

This volume of five hundred pages of large, well-spaced type, is the most comprehensive, sane and sensible book yet published on this interesting subject. The matter is so clearly and simply presented that even a layman can read and understand. For all those addicted to drugs, Dr. Pettee has sounded the note of the 20th century, science and humanism; he ascribes the habit of continued drug taking not to vice, but to disease due to toxine generated by the sluggish bowel and portal engorgement.

The essential principle in treatment is the elimination of the toxines. The method is presented in detail and furnishes a basis for scientific medication. Of interest to the general practitioner as well as the specialist, is a detailed account of acute ailments occurring in narcotics and alcoholic habits; the management of infants born of drug using mothers, the treatment of delirium tremens, and "sobering up" of the victims of acute alcoholism.

The volume is a valuable addition to the literature on this subject.

PERSONAL AND GENERAL ITEMS.

Dr. Mary Mulliner has removed from 803 Boylston Street to 520 Beacon Street, hours 1.30 to 3 P.M. Back Bay 6220.

Drs. F. B. Percy of Brookline, G. L. Martin of Lowell and H. A. Whitmarsh of Providence sail for Europe the last of June.

Drs. Frances M. Morris and Alice H. Bassett have removed from 803 Boylston St., to 520 Beacon Street.

One of the subscribers to the *Gazette* is willing to pass along, directly after reading, the following medical journals; Journal of the American Medical Association, New England Medical Gazette, Journal of the American Institute of Homœopathy and the Medical Review of Reviews. Make application to the *Gazette* office 80 East Concord Street.

Dr. A. B. Norton, 30 East 55th Street, New York, the well known oculist, left on June 19th. for a trip to Australia, New Zealand and the South Sea Islands. He will return on October 5th. During Dr. Norton's absence, his associate, Dr. Calvin E. Williams, will be in the office.

Dr. Charles A. Eaton, B. U. S. M. 1908 has been elected recently to the office of Bacteriologist for the Board of Health of Portland, Maine. The readers of the *Gazette* will remember the interesting experience of Drs. Eaton, Brown and Ferguson with this same Board.

Dr. Clara E. Gary of Marlborough Street, Boston, will sail July the twelfth for Northern Germany.

Dr. Everett W. Coates, after the first of July, will be located at Trull Hospital, Biddeford, Maine.

At the last meeting of the Faculty, Dr. DeWitt G. Wilcox was elected Professor of Gynecology in Boston University School of Medicine.

Dr. Seth A. Lewis of Springfield (Class of 1900, Boston University) who was operated on May 4th for appendicitis is able to be about again.

Dr. Clarence E. Crane, who has been ill at the Massachusetts Homœopathic Hospital for some weeks, has recovered and is attending to his professional duties.

LESSONS IN THE ITALIAN LANGUAGE.

Signor Ettore Ciampolini of Siena, Italy, (class of 1916 B.U.S.M.) is desirous of obtaining pupils in the study of Italian or for Italian conversation. Signor Ciampolini is lecturer for "Circolo Italiano di Boston" and is endorsed and recommended by Prof. Geddes of Boston University and by Prof. Grandgent of Harvard College. Address Ettore Ciampolini, care of Boston University School of Medicine, 80 East Concord St., Boston.

For Sale.—An unusual opportunity to secure the country home of a physician recently deceased. It is located between Springfield and Worcester on the Boston & Albany R. R., a stately Southern colonial mansion, two hundred feet from highway, enclosed by attractive stone wall five feet high; garage, stable, bungalow, twenty-three acres of land; 1100 feet elevation. A rare summer home or private sanatorium, with room for tents for out-of-door-patients. Fine views and drives. Property must be sold to settle estate. Address "Colonial," 6 Charlotte St., Worcester, Mass.

Denver Busy Boosting.

Denver is known as the mile high city. She is up and doing. If there chance to be among our guests at the Institute in July any who are not satisfied with our elevation they are cordially invited to go with us two miles higher where the beautiful snow is ever present. This may not be near heaven, but it is heavenly on a hot day in July, and is the best we can do towards boosting you in the direction of the desired haven. From this elevation, amidst the snow capped peaks, you may look down upon the sweltering masses of other sections and congratulate yourselves upon your elevated station in life. If perchance you have a grievance against the fellow who trampled your corns you may swat him one with a good hard snow ball of your own making.

For those who are less ambitious to be on top of everything, we are sure the Queen City of the Plains will have much of interest. It is designated, and we believe justly, "The City Beautiful,"—the cleanest City in the United States, located in the "Land of Sunshine." Surely this should appeal to you and lead you to wend your way hitherward. We may, if you so desire it, have a change in program and let you see what Colorado can do when it decides to rain, but this must be ordered in advance. Our Chairman, Dr. Peck, insists that orders for rain must be in early, otherwise he will not stand sponsor.

We wish we might tell you what we are going to do to you when you come, but this is prohibited by the code. The fellow who does not come is not entitled to know and the other fellow will find out when we are doing it, but we invite you all to come.

Come with the assurance that the nights will be cool enough to sleep with blankets over you. We do not guarantee, however, that you will have any time to sleep. The sleepy ones stay at home.

Committee.

While the Albany Hotel is the Institute's Headquarters, still if you cannot get accommodations there, you will find a hotel of equal excellence at the corner of 14th and Stout Streets. This is the Denver Auditorium, only three minutes' walk from Headquarters. Beautiful outlook toward the mountains, new, modern and quiet.

A beautiful bird is the pelican,
His bill will hold more than his belican.
He can load in his beak
Enough for a week,
But we don't see how in helican.

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ORIGINAL COMMUNICATIONS.

THE RELATIVE VALUE OF HOMŒOPATHY IN A SERIES OF 156 HOSPITAL CASES EXHIBITING CONSTIPATION.*

BY CONRAD WESSELHOEFT, 2ND, M.D., Assistant Physician to the Massachusetts
Homœopathic Hospital.

(From the Pharmacological Department of the Robert Dawson Memorial, Boston, 1913)

During the past sixteen months I have kept statistics of those cases exhibiting symptoms of constipation which came under my care at the Out-Patient Department of the Massachusetts Homœopathic Hospital. I have expressly avoided describing these cases as simply cases of constipation, because in the majority of instances constipation was only a part of the abnormal condition present in the patient. The term as used in this paper does not merely imply insufficient frequency of defecation, insufficient or abnormally hard and dry stools, but a reliance on cathartic drugs for defecation on the part of the patient. This series only includes those cases which had suffered with constipation for over six weeks, thus excluding those conditions of transient inertia of the rectum so frequently met with in everyday life. Moreover, this series deals only with cases which habitually took laxatives at least twice a week or more often. Consequently we are not here concerned with those individuals who consider it essential to their health to indulge in a weekly purge.

The majority of the patients which comprise these statistics were American born, of varying intelligence. Less than one-third were foreigners, consisting mostly of Irish, Jews, Italians and Poles. Comparatively few patients come to this clinic for the purpose of getting Homœopathic treatment in contradistinction

*Read before the Boston District, Massachusetts Homœopathic Medical Society, May, 1913.

to the drug treatment received in the other medical clinics in this city. Most of them come on the good recommendation of friends, and at their first visit are disappointed at the "little white pills" which they get instead of the expected "tonic" or laxative. Homœopathic conveys no more to their minds than psychopathic. They are consequently devoid of that confidence in Homœopathy so frequently observed in the higher classes of society.

Of the 166 cases exhibiting constipation, 42 were under the age of 25* and 18 were over 60. Only 33, or 11 per cent, of the total number were males.

The most striking feature of these cases is that they rarely complain voluntarily of constipation. They come to the hospital for indigestion, "biliousness," malaise or abdominal pains which, to their minds, have nothing to do with the constipation; or they come in for some acute or subacute condition which, so far as diagnosis is concerned, actually is quite apart from the condition of their bowels. They all look upon the constipation as something of little consequence, and a condition which they feel they are capable of taking care of in their own way.

By far the most common underlying cause of the constipation and the symptoms complained of by the patient,—except in those cases with a superimposed diagnosis—was the carthartic habit. One hundred and twenty-nine had used carthartics of one kind or another at intervals varying from twice a week to three times a day, over periods ranging from six weeks to fifty years. Sixteen had been dependent on carthartics since infancy or childhood, thirty-nine (not included in the above 16) for over 5 years; 44 between one and five years; and 30 between 6 weeks and one year. Of this total of 129, only 14 were free from gastric disturbances. Among these lucky fourteen, 2 had been using cathartics for 6 weeks and the rest had employed them longer. Three sturdy housewives had depended on pills and salts for over five years without exhibiting any signs or symptoms of gastric indigestion.

The onset of the cathartic habit was often insidious, but too frequently it began after a surgical operation or childbirth. It is unfortunate that so many house cases are discharged from the wards of our hospital before regular, natural movements are established. These patients come into my clinic reporting that they had been put on daily 5-grain doses of cascara during convalescence. Others are given enemata up to the time of discharge, and after getting home resort to the simpler method of taking salts or pills recommended by a druggist or a willing friend. While in charge of the out-patient or district obstetrical cases I frequently

*The children's clinic takes all cases under 14 years of age.

found that the students who were being taught the value of homœopathic therapeutics generally left their convalescing mothers a handfull of cascara tablets to be taken *ad libitum*. It is my humble opinion that too little attention is paid to surgical patients in this respect; and that much could be done in the prophylaxis of chronic constipation by giving the bowels a chance to operate naturally after the patient is out of bed.

A word as to cathartics,—This class of drugs was undoubtedly among the earliest employed. Primitive man saw in the effects of catharsis the coincident casting out of devils with the casting out of foul humors. The removal of foul-smelling excrement by this means was the purification of the body and soul. Various modifications of this idea continue to exist in the minds of most physicians and laymen. The retention of feces excites a sense of disgust and even horror in the esthetic mind. Consequently, when anyone advances a theory which offers an explanation of this detriment to health, he wins the admiration of most civilized people. Metchnikoff would have us remove our colons and thereby assure a natural death at the age of 104. A feat of imagination comparable to that of the primitive man just alluded to. Auto-intoxication from the bowel* is the dread of countless thousands who hark to the echoes of the words of Metchnikoff in the lay and medical press. They ignore the records of cases which display scepticism of the all importance of a daily evacuation at any cost. Nevertheless, authorities continue to furnish us with evidence which suggests that auto-intoxication from retention of feces is overestimated. Goodhart⁴ cites a man 77 years old, who had had only one evacuation every 14 days for 19 years. Morton⁵ tells of a number of old women in Edinburgh who had movements only once every four or five weeks, and were vexed if their bowels acted more frequently. §

It is usually the mind and not the body which is relieved by what Dr. Frederick Shattuck so fittingly terms "the soothing oil of the castor bush." Some people revel in the joys of excessive catharsis, with the inevitable results accruing to drug fiends. They get to crave a loose or even watery discharge. One of my patients at the clinic described the pleasure so derived by saying that she had "had a lovely movement." The therapeutic nihilist of today clings to this ancient weapon, the cathartic, his pillar of allopathy.

*Dillon maintains that the toxins which have been shown to exist in the intestines by Bouchard would be more readily absorbed from a liquid stool. Nothnagel also holds this opinion.⁵

§Goodhart⁴ also tells of a lady who looked the picture of health, but whose bowels moved once every eight days. Heberdent⁶ relates a case of a man who "never went but once a month." My late uncle⁶ and namesake reports a man who went forty-five days without exhibiting symptoms of toxæmia. Strong⁷ records the case of a laborer who went eight months and sixteen days, at the end of which time he expelled 40 lbs. of feces.

Purgatives are commonly divided into drugs which irritate the intestinal mucosa and thereby increase the secretions and peristalsis, and into those mineral drugs, or salts, which are thought to draw water from the tissues of the intestine into the lumen of the intestinal canal. This is an entirely erroneous classification which is being tardily dislodged from the text books of pharmacology, and consequently continues to be instilled into the minds of medical students. Vegetable purgatives irritate the intestinal mucous membrane, thereby locally stimulating motor activity. This irritant action produces a reflex through Auerbach's plexus which gives a general increased peristalsis. Although their selective action varies with the different drugs employed, they all act to a greater or less degree as irritants throughout the gastro-intestinal canal. Consequently the stomach is affected after the administration of any cathartic. It is frequently stated that castor oil has no effect on the stomach, since the ricinoleic acid is not split off until the oil is acted upon by steapsin in the ilium. This theory does not account for the frequently observed intolerance on the part of the stomach to pure castor oil as exhibited by the immediate vomiting of the dose.

As to the theory that saline laxatives, including sodium sulphate, sodium phosphate, magnesium sulphate and the various saline waters, such as Marienbad, Karlsbad and Hunyadi-Janos, which depend on their content of these salts, act by drawing water from the intestine, I need merely cite the experiments of Hertz.⁵ This author found by skiagraphic examination with bismuth oxychloride that when a saline purgative was taken in water before breakfast, a watery stool was passed two and one-half hours before the salt reached the caecum. Half of the salt administered was recovered in the urine within eight hours after being taken, and the greater part of that excreted in the feces was found in the stool of the following day. Moreover, Otto⁸ has shown that solutions of salts are rendered almost isotonic with the body fluids before passing into the duodenum. Consequently, the action of saline purgatives depends on a reflex through Auerbach's plexus originating from a local irritant action, or to the selective action of these salts on the muscular coat of the intestines after their rapid absorption by the blood in the stomach. There can be no doubt that salines in sufficiently large doses exert a local irritant action, and reasoning from this we may infer that therapeutic doses injure the stomach to a certain extent, varying as with all drugs, according to the susceptibility of the patient. Whichever way they may act it is difficult to reason out any plausible justification of the theory that salts draw toxines circulating in the blood into the intestines and thus favor their elimination from the body. The idea

that toxins can be drawn from the blood by purgation lacks any scientific foundation, and continues as a pure speculation in medicine.

Mercury acts by its local irritant action—especially in the case of calomel—and also to a great extent by its selective action on the mucous membranes. The theories that mercury acts by increasing the bile, or as an intestinal antiseptic, have fallen at the hands of scientific research, which has demonstrated that calomel does not increase the flow of bile from the liver,⁹ and that it actually increases the number of bacteria in the stool.¹⁰ A dose of calomel has about the same cleansing effect on the intestinal tract above the sigmoid flexure as a heavy rain has on a barnyard.

The following chart shows the relation of the establishment of natural movements to the duration of the cathartic habit:—

Duration of Cathartic Habit	Regular Natural Evacuations after withdrawal of Cathartics			Failures	Total
	Within 2 days	Within 3 to 14 days	Over 2 weeks		
Since infancy or childbirth	10	4	2	0	16
20 years or over	5	4	3	1	13
5 - 20 years	15	5	4	2	26
1 - 5 “	16	20	6	2	44
6 weeks to one year	17	6	4	3	30
Total	63	39	19	8*	129

Five patients relied upon enemata. In accordance with the teachings of Dr. Roger I. Lee, these cases were the most difficult to treat. Of these five, one established regular, natural movements in 10 days, one in 6 weeks, one in 3 months and 2 were failures. The explanation probably lies in the stretching of the circular muscle fibres in the rectum by the injection. It is possible to demonstrate in a nerve-muscle preparation that stretching weakens the contractile power of a muscle. Nurses are usually taught to give two quarts of soapsuds, and the nurse who can make a patient take a much larger amount enjoys an envied reputation. A satisfactory result can almost invariably be obtained with the

*One died of inoperable gastric carcinoma. Two had large herniæ, refusing operation. Two continued taking cathartics during treatment. Two went without cathartics faithfully for 3 weeks without relief. One remains under treatment after three months without relief.

first enema by four ounces. If this amount is given, the subsequent enemata of equal amounts will be successful, and the patient will be much more apt to have a natural movement after getting out of bed. From a physiological viewpoint a small enema of irritating quality would be better than a large bland enema. When the so-called "high enema" is given, the rectal tube usually curls upon itself within the rectal ampulla.

In half the cases where the cathartic habit exists the cathartic has merely a mental effect, which is sufficient to accomplish an evacuation; in other words, it works entirely by suggestion. The drug continues to irritate the mucous membrane of the stomach and intestine, but in the course of time the reflex does not take place. Sixty-three out of the 129 cases dependent on cathartics had natural movements within two days of the withdrawal of the cathartic. These people almost invariably attributed this movement to the action of the homœopathic trituration or the milk-sugar tablet prescribed. Several returned to the pharmacy at the end of a week to get another bottle of the indispensable placebo without which they again became "constipated." In other words, one-half the patients had an "error of the mind," and not of the bowels.

The first step in the treatment instituted at the clinic conformed with the principles laid down by Hahnemann in the fourth paragraph of the *Organon*; namely, ascertaining the cause and then doing all in our power to remove it. This may seem the natural thing to do, and most physicians think they do this, especially homœopathic physicians. But it is fitting to remark at this point that this principle of homœopathic therapeutics is sorely neglected by many who prescribe cascara or some other laxative pill with the idea of "toning up" the bowel. Working upon this fallacy they gradually decrease the dose until the patient gets only the "indicated remedy," which had been given together with the laxative. The single remedy is necessary and vital to the logic of homœopathic therapeutics. Moreover, "toning up" the bowel by means of a laxative is contrary to most authorities of the other school, who distinctly remark that cathartics "never cure constipation; they merely remove for a few hours one of its symptoms." To give cascara and the "indicated remedy" is therefore contrary to the best therapeutics of both schools. By pharmacological reasoning we may deduce that patients so treated recover only by the withdrawal of the cascara, and the "toning up" process merely prolongs a recovery which would have been more prompt under "Christian Science."

Another prescription which is given freely by some of my colleagues is a tablet composed of *nux vomica*, *carbo. veg.* and

capsicum. While admitting that I have seen patients relieved by this degenerate homœopathy, it offers no satisfaction to scientific medicine which is not merely satisfied with a cure but seeks the manner in which a cure is effected. The old school is now preaching the single remedy. In a homœopathic hospital we should not slide backwards into those darkest realms of empiricism from which Hahnemann rescued pharmaco-therapeutics.

In removing the cause the first step taken was to absolutely insist on the patient taking no physic or enemata and no other medicine except that prescribed. To remove the cathartic habit I use two methods. One is to intimidate the patient by telling her she is killing herself with purgatives, that they are eating the lining off her stomach, that she is ruining her complexion, etc., and that the medicine, or placebo I give her will make the bowels move. The other method is to reason with patients and try to show them the evil of their ways. This method is laborious, becomes tedious in a large clinic, is ineffectual nine times out of ten, but is quite worth while in those sufficiently intelligent to realize that you are not airing an absurd notion or plotting against their lives.

The second step was to correct any over-indulgence in any beverage, foodstuff or condiment. The patient was ordered to take six glasses of water daily, some fruit (except bananas), rye or graham bread, and vegetables according to the condition of the stomach. All patients were refused meat and fats until the bowels were moving at least every two days. By avoiding these I felt that less discomfort was experienced during the retention of feces. My theory was that the retained feces would thus contain less proteid decomposition products and volatile fatty acids.¹² Moreover, since the stomach usually exhibited some form of gastritis, the elimination of meats and fats would throw less work on the stomach. Furthermore since Voight⁵ has shown that under a vegetable diet the fecal masses are more bulky than under an animal one, it was hoped that by restricting meat and encouraging farinaceous foods and vegetables, we would thus supply the most natural stimulation to the bowel.* The patient was also instructed to get as much fresh air as possible and a reasonable amount of exercise.

Besides the cathartic habit, poor diet and other perverted habits of living, we found as other causes of constipation, obstruc-

*To one patient recorded in this series as a failure I have since given agar-agar. This patient was in a position where she could not get vegetables, living chiefly on milk, eggs and cereals, which did not give her sufficient fecal material for a movement, and the slow accumulation of the feces caused them to become dry and impacted. So far as we know, agar-agar is not acted on by the digestive juices, nor does it irritate the mucous membrane. One dram takes up 100 c. c. of water, thus giving bulk to the stool and keeping it soft. She is now having comfortable daily evacuations, but is still taking one dram of agar-agar daily.

tion from carcinoma in one case, from scrotal hernia in one case, and from umbilical hernia in one case. The first refused operation and died. The two cases of hernia were transferred to the surgical service but returned after refusing operation. All three are included in this series as homœopathic failures. When constipation existed from childbirth, with the history of perineal laceration, or any uterine complication was present, the patient was examined vaginally in the Women's clinic, and if the findings warranted, was transferred. Here I will mention that while on duty in the obstetrical department I treated 12 cases of self-termed constipation who were in the last three months of pregnancy. These are not included in this series. They had been keeping their bowels open by physician's advice. Eleven of these resumed natural daily movements under the indicated remedy. One preferred to stick to her cascara against advice.

The third step in the treatment employed in the clinic was one which is of great importance, namely suggestion. The patient was instructed to go to stool at a given time every day, preferably after breakfast. A guarantee was given that the indicated remedy or placebo would cause the bowels to move naturally if they followed our directions implicitly. This condition of the guarantee always gave us a chance to free ourselves when the desired effect was not prompt, and to encourage the patient to persevere more conscientiously. They were informed that if they had followed the directions implicitly without having a movement it simply meant there was nothing to come away. This part of the treatment was by far the most difficult to carry out.

I have said that suggestion was used in every case. Therefore, when I announce that the same proportion established natural movements within 2 days under the indicated remedy, as under the placebo, it must be admitted that in one-half of the cases the homœopathic medicine contained in the tablet was unnecessary so far as alleviating the constipation was concerned.

In the selection of the so-called indicated remedy two classes of cases must be distinguished. In the first class the remedy was directed primarily at the constipation and those symptoms directly associated with it. In prescriptions of this order we included the manifestations of the various forms of gastritis, headache, backache, menstrual disorders, anæmia, arterio-sclerosis, mentality, etc. Here we got the best indications for our drug by covering more closely the totality of the symptoms. The most frequent prescriptions were *nux vomica*, or one of the salts of *strychnia*, *plumbum*, *bryonia*, *lycopodium*, *argentum nitricum*, *sulphur*, *arsenicum*, *cimicifuga*, *opium*, *zincum*, *ignatia*, *aurum mur.* and *pulsatilla*, the potency varying from the third to the sixth.

In the second class we were confronted with one or more conditions which from a pathological standpoint were independent of the constipation, such as acute coryza, sore throat, bronchitis, asthma, acute and subacute arthritis, neuralgia, etc. Here the constipation was of secondary importance as a symptom, and frequently neglected in choosing the remedy. The reason for so doing lay in our insufficient knowledge of the materia medica, and the lack of time for the use of a repertory. The drugs used in these cases were so varied as to preclude our mentioning any of them.

In justice to Homœopathy I must say that neither Dr. Polsey, who is associated with me in the Wednesday and Saturday clinic, nor myself claim any superior knowledge of the homœopathic materia medica, but we strove to select the remedy by the characteristic symptoms in each case; and by discussing remedies for cases we frequently arrived at a more accurate prescription. I maintain that it is impossible to prescribe with any degree of accuracy in most cases at our clinic in which we have seen as many as 34 in one day. In some patients it is very difficult to get any more than a few symptoms. This is especially true of foreigners who speak little English or come with an interpreter. Other patients are so prolific in their narrative that it is difficult to make out the important symptoms. Almost all of them on cross questioning make contradictory statements. The following table shows the relative value of our homœopathic prescriptions to placebos in cases exhibiting constipation:—

TABLE II

Regular* natural movements established within:	Homœopathic medicine triturated or medicated tablets.	Placebo, Milk-sugar tablets	No medicine and no placebo.	Total
2 days	52	11	2	65
2-10 days	21	4		25
10-14 days	12	3		15
2-6 weeks	14	3		17
6-16 weeks	4	0		4
Total recoveries	103	21	2	126
Failures	6	4		10
Total number remaining under observation	109	25	2	136
Did not return after first visit	15	5		20
Referred to another dept.	8	2		10
Total number of cases	132	32	2	166

I will say here that previous to making out this table I was distinctly under the impression that the cases under homœopathic

*Regular implies a movement every day or every other day. Frequently patients began by having movements every other day, and then after a week or ten days would establish daily evacuations.

medicine had established natural movements more promptly. In this I find myself decidedly mistaken and sorely disappointed. It shows how easily we may get mistaken impressions as to the value of our therapeutics. It is interesting to recall one case of an Italian woman who had taken pills, salts and finally a bottle of castor oil without obtaining the desired result. Twenty-four hours after this last dose she presented herself at the clinic in a state of despair. She was given milk sugar tablets, one to be taken 3 times a day with a full glass of water before meals. Besides this she was given encouragement and the usual guarantee. The next day she had diarrhœa. Had we prescribed lycopodium how easy it would have been to see in this case an aggravation of the remedy. In spite of all this it is difficult for me to give up the impression that nux vomica in the third and lycopodium in the sixth were especially efficacious in this series, and a review of the cases in which they were prescribed seems to warrant this impression to a certain extent although tables to show this would be too complicated. Consequently I have nothing to prove the correctness of this impression. All that our table here does show is that the percentage of failures is greatest under placebo.

It must be remembered that constipation was only a symptom in these cases, and that it was treated as such. That the other symptoms were relieved more effectually by Homœopathy than by the milk sugar cannot be ascertained from the statistics kept. Here again my impression is that they were, but I can no longer give my impression any weight. My hope is that others will make use of our medical clinics and hospital cases to gather further statistics, which are more useful than individual impressions. This small experience with cases of constipation has far from led me to a state of therapeutic nihilism. With six failures out of 109 cases treated by Homœopathy, and three of these accounted for by definite obstruction, I do not dread treating cases which exhibit constipation providing they are uncomplicated by definite obstruction or dilation. I shall still console myself with the idea that the patients do better in other respects under Homœopathy until this is proved to the contrary, even if the constipation effectually takes care of itself.

I wish to express my indebtedness to Dr. Polsey, whose co-operation at the out-patient medical department has enabled me to compile these meagre statistics.

REFERENCES.

1. Overlock, S. B., *New York Med. Jour.*, March 22, 1913, p. 599.
2. Metchnikoff, E., *The Nature of Man*, London, 1904, pp. 72-73.
3. Pick and Hecht, *Clinical Symptomatology*, trans. by Koesler, N. Y.,

4. Goodhart, J. F., *Lancet*, Nov. 8, 1902, p. 1241.
5. Hertz, A. F., "Constipation and Allied Intestinal Disorders," London, 1909.
6. Wesselhoeft, C., *North Am. Jour. of Homœop.*, Aug., 1895.
7. Strong, T. D., *Am. Jour. of Med. Sc.*, Oct., 1874, p. 440.
8. Otto, E., *Arch. fur Exp. Path. u. Pharm.*, Mar. 9, 1905, p. 370.
9. Cushny, A. R., *Pharmacology and Therapeutics*, N. Y., 1911, p. 647.
10. Harris, N. M., *Jour. Am. Med. Assn.*, Oct. 12, 1912, p. 1347.
11. Sawyer, Sir J., *Lancet*, Sept. 16, 1911, p. 810.
12. Boas, I., *Diseases of the Intestines*, trans. by Basch, S., N. Y., 1901.

A STUDY OF THE DETERIORATION ACCOMPANYING HUNTINGTON'S CHOREA, WITH THE PRESENTATION OF THREE CASES.

BY WALTER G. RYON, M.D., Medical Inspector for the State Hospital Commission, Albany, N. Y.

The object of this paper is to present the nature of the deterioration which we find accompanying Huntington's chorea. We all recognize that in senile dementia, arterio-sclerotic dementia, and general paralysis, we deal with a pronounced memory defect, which apparently goes hand in hand with the progress of the disorder. The question which confronts us is, do we find this same condition in Huntington's chorea? Judging from the varying opinions given in the literature of this disease, this is evidently not the case, and therefore a preliminary review of some of the views of recent writers upon the subject, before proceeding with a description of the cases I wish to report, will not be out of place.

Frotscher (¹) recites three cases in one of which a "progressive intelligence defect" was prominent; another in which the dementia was only moderate, although accompanied with very marked choreic movements, while the third case showed only slight chorea, but was unkempt and slovenly, without comprehension of his situation; and finally there was a profound dementia. According to him, therefore, the dementia may be very deep or only slight, and the intensity of the dementia and the choreic movements do not go hand in hand. Curshman reports a family in which pronounced dementia is rare, while the chorea is marked. Ziehen in the fourth edition of his text-book says that there is a progressive intelligence defect, with which may be associated states of insanity. Bechterew (²) states that these patients show an intellectual deterioration which consists in memory and judgment defect, indifference or a certain irritability. Sometimes hallucinations or delusions, especially those of persecution, may be present, in some instances depression or excitement. The deterioration increases as time goes on, until the patients finally become demented.

Arthur S. Hamilton (³) in a review of twenty-seven cases

comes to the conclusion that, in the majority of the cases, the mental deterioration is apt to appear before the onset of the chorea, and that the form of the disturbance varies considerably. In those of early life he thinks it shows a higher degree of dementia, while those cases appearing at a later period present less loss of thought power, but more irritability and a greater tendency to imagine intentional affronts. The mental disturbances in both forms, however, include delusions of persecution, a gradually increasing dementia, weakness of judgment and initiative, absentmindedness, a general dissatisfaction with the surroundings, together with a growing selfishness and irritability. Ladame (⁴) thinks that loss of intellectual power is the fundamental and essential feature in every case of the disease and often the first symptom; that the affected individuals are somewhat reserved in speech, except in those instances where an overwhelming sense of injury leads them to tell of their condition and wrongs. They rarely become totally disoriented as to time, place and persons, and the degree of dementia, though very considerable in some, especially towards the last, is never nearly so great as in general paralysis or senile dementia.

A. Ross Diefendorf (⁵) in a recent monograph reviewing the mental symptoms of this disease, in a study of twenty-eight cases, lays particular stress upon the fact that these cases show a simple progressive dementia, embodying increased emotional irritability, evinced in passionate outbreaks, abuse and even violence and destruction of articles in the environment. In connection with these periods of irritability there may develop transitory attacks of despondency lasting from a few hours to a few days. There is also, in addition to the above, a gradually increasing emotional deterioration which was shown in a variety of ways, but was most often evident in connection with the patient's interests, his work, his home and his associates, some patients becoming intemperate and others immoral; a number giving up their regular occupation and following for a long period the life of a tramp. This emotional deterioration progressed more or less rapidly, depending in a measure upon the severity of the choreic movements and the extent to which the patients were prevented from employing themselves and enjoying social intercourse. In some of his cases, the emotional deterioration was very moderate until the later stages of the disease, when, within a few months, it increased rapidly and the patients presented extreme emotional apathy. The emotional indifference, he states, appears as in dementia præcox, out of proportion to the evidences of dementia in other fields, thus offering a striking contrast to the dementia of general paralysis, which by some has been considered as analogous to that

of Huntington's chorea. The evidence of dementia, in other fields, was chiefly observed in the matter of memory; the impressibility of memory usually suffered first, and later retentiveness. The defects of memory in most of the cases progressed slowly, and it was often surprising to observe how well his patients remembered even when speech had become almost unintelligible and when emotional deterioration was profound. He further states that in only three of the twenty-eight cases did the defect ever become so pronounced that the patients could not remember such well known events as the names of their parents or children, dates of births, &c. He notes that difficulties of apprehension occurred only during the late stages of the disease, the patients continuing capable of securing a pretty good grasp upon what took place about them until other evidences of dementia were far advanced. In the field of thought there regularly developed an increasing limitation of the association of ideas. The patients read and conversed but little, and even during conversation had comparatively little to say. It was also noted that even in advanced cases the patient never showed incoherence of thought similar to the desultoriness encountered in dementia præcox. Whatever knowledge they retained they were able to render coherently. These cases also showed a defect of judgment such as the lack of insight into their disease, and their incapacity. This became more striking as the disease advanced so that frequently in the end stages even though bedridden and unable to feed themselves, they still maintained that they were able to earn their living by manual labor, sewing, and house and farm work. He found that though the dementia progressed slowly in some cases, it advanced rapidly in the last few months, coincident with the rapid extension and increase of the choreic movements.

Leri and Vurpas (⁶) claim that these cases are very much less demented than they seemed to be at first. They state that in studying the memory, which other writers claim to be poor, they were struck by the fact that these patients, when asked to give the data of their lives, remember things quite well, both old and recent events, if one is able to get the patients sufficiently to give their attention. They also claim that these patients have difficulty in visually representing objects to themselves. This they judge from the fact that it is difficult for them to describe these objects from memory.

It is seen, then, that—1. The mental deterioration and the chorea do not go necessarily hand in hand. 2. Many speak of intelligence defect and some even of the complete deterioration, but this is not very definite. And the memory defect for recent and old events, while mentioned, is often said to be relatively

slight in comparison with the rest of the defect. It is, moreover, stated that a grave memory defect is rarely found. Indeed, Leri and Vurpas almost deny it. It is also stated that even in marked dementia the orientation suffers comparatively little. Therefore, Diefendorf lays much stress chiefly upon the emotional deterioration; Hamilton on the defect of judgment and initiative; Leri and Vurpas on the defect of initiative and attention. According to this the mental deterioration of Huntington's chorea presents, evidently, features which are rather different from that seen in other organic reactions in which the memory defect is distinctly in the lead.

It seemed worth while to observe some cases which are in this hospital, with a view to studying the form of mental deterioration.

The three cases that I wish to bring to your attention were selected from a series of six cases which have been admitted to this hospital. The three cases rejected were ones who had died and were excluded for the reason that the diagnosis of the disorder was questioned in two of the cases, on account of the lack of any family history, and the third because of the meagreness of the history and the inaccessibility of the patient for examination. The cases to be presented show varying degrees of chorea, the first being slight, the second more advanced, and the third quite intense and severe choreic movements.

CASE I. A woman, aged 48, married. Admitted October, 1910. Maternal grandfather, uncle and five among six brothers and sisters had chorea.

Nothing definite is known about the patient's makeup except that she was always of a nervous temperament.

The onset of the chorea took place at 42, and five years later, that is, five months before admission, mental symptoms appeared in the form of despondency, inability to do her house work, and also ideas of infidelity about her husband, and she finally went to the police to have him arrested.

On admission chorea of moderate degree was noticed, also increase of deep reflexes. She co-operated pretty well in the examination, knew where she was, understood the situation, knew the day of the week but not the month or year. She gave her personal history fairly well, but gave rather poor answers to questions of general knowledge. Calculation was good only for the simplest problems. She gave a very fair account of recent events. Her retention was quite good for the daily occurrences but rather poor for definite tests.

As to her insight, she said herself that she was forgetful but she rather stuck to her ideas about the infidelity of her husband.

At *recent interviews* she showed moderate chorea.

Her orientation was, throughout, good, even for time and she knew most of the names of the persons about her.

Her memory for old and recent events, as well as for ordinary school knowledge, so far as her education goes, is quite good, but she shows marked difficulty in fixing dates, or length of periods, and often says, in this connection, that she is "nervous" or that her "memory is bad." But aside from this difficulty in fixing dates one gets the impression, even in long interviews, that most facts of her life, even details, are preserved. On the other hand she has marked difficulty in calculation. She cannot repeat more than six figures

accurately. Ordinary retention tests give poor results, although the daily occurrences are well remembered. A short, simple story told her in simple language with considerable emphasis, she is quite unable to grasp in spite of the fact that it was told her again and again. Other tests in which she was asked to touch the table upon hearing the number six, which was read in a series with other numbers, gave also poor results. In other words, so far as we can see, that which is most marked in this patient, is the difficulty in mental exertion which is noticeable in the tapping test, calculation, fixing dates, keeping her attention on the story, whereas the actual data of her life seem to be reproduced without difficulty.

CASE 2. A man, 61; married. Admitted March, 1906. The maternal grandmother, two maternal aunts, the mother and two brothers had chorea.

Not much is known about the patient's makeup except that he was of a mild disposition. When 9 he is said to have had chorea for a year after diphtheria.

His present chorea commenced at about 42. At about the same time mental symptoms appeared. He suddenly ran away from his son, and thought the latter wanted to murder him. He had such ideas for a week, and similar spells, as well as short attacks of despondency recurred at regular intervals. He himself also said that he heard, at times, voices swearing at him and had occasional dizzy spells. Towards the end of his stay at home, he also began to have compulsive thoughts in regard to killing his little granddaughter. This frightened him and he sought admission on that account.

During the first part of his stay in the hospital he showed fairly marked chorea, was decidedly irritable and faultfinding, and at times somewhat assaultive. His orientation was quite good for time and place. As to memory for old events he was able to give the year of his marriage, that of the birth of his son, but not the year of his birth or of his school years. He gave historical and geographical facts, such as towns, rivers and wars, also the presidents very fairly. He was, however, quite slow in calculating and had considerable difficulty, and in the alphabet left out a letter. Rather more disordered was his memory for recent events. He thought he had been here a week instead of four days; could not recall the events of his admission, or that he had seen the examiner at that time; gave only fair replies to retention tests.

As to his insight, it was rather striking that he tried to hide his chorea. In regard to his mental condition, he said he was forgetful. He also spoke of his compulsive thinking, said it had worried him, and of his ideas that some one might injure him, and thought the voices might have been in his head.

The patient was paroled, walks around and keeps himself clean.

At recent interviews his chorea was found to be markedly advanced. He answers fairly promptly but it is always difficult to force him along mental exertion, and he is apt to get out of it by saying, "I guess I won't tell you that;"—"I guess I can't tell you, my memory is poor," or simply "I don't know." It is therefore difficult to study his memory extensively.

He is well oriented as to place and persons, and so far as time is concerned he knows the month after being urged to think it out, and even the year.

As to his memory, he is able to give many details, such as names of persons he worked for, their places and addresses, but he is quite unreliable in time relations. He might say something happened at 12 or 20, but he gives the year of his marriage, even the time this hospital was built (he lived near), but says he was first admitted ten years ago instead of six years. The presidents, rivers, wars, he gives quite well, though in all these answers he has to be urged and is apt to say at first that he does not know.

He knows that he returned to this hospital the last time two years ago, that his wife was here in the fall (correct); his daughter he says came here three weeks ago (incorrect as to time). At first he had reversed these visits. Nevertheless he gives considerable details of these visits. He evidently has much difficulty in fixing time limits generally. Thus he thinks

that his present physician has been on his ward for two years instead of two months. He says that two former interviews took place three and two weeks instead of eight and six weeks ago. He thinks that they lasted ten minutes each, instead of over an hour. Yet, he knew where they took place and who was present. The most pronounced defect is again shown in his answers to calculation, when even simple tasks give rise to very poor results, and he has considerable difficulty in getting the gist of a simple story, though somewhat less than case No. 1.

An especial feature of this case is his lack of insight in regard to his chorea. He said, when asked how he was, that he was "very well"; that he had had chorea but that he was free from it at present. When his very marked jerking motions were pointed out to him he said, "I didn't think I jerked enough to notice it. I had not noticed it."

CASE 3. A man, 51. Admitted for the third time, November, 1907. Mother had chorea. Otherwise family history is unknown.

Patient is said to have been neurotic and reserved but not irritable.

The onset of the chorea is not definitely known in this case, but it is clear that towards the end of his thirties he began to act very irascibly, quarreled readily and finally was threatening toward his father.

First admission: At that time, some fourteen years ago, he is said to have been confused and simple, but he improved and was sent home. Choreia is not mentioned.

Four years later he was readmitted (February, 1902), having again become irascible and violent and having developed a marked antagonism against his father and some delusions about him. At that admission it is plain that he had chorea. He remained here only two months and was then taken home. His father was unable to get along with him, left him and he gradually got into a very bad, dilapidated condition; finally he did a number of queer things, such as sawing off the legs of tables and beds and exchanging them, painting the furniture and dishes in a queer way, and neglecting himself very much.

On his third admission, 1907, his chorea was very marked; his reflexes were exaggerated. He was oriented as to persons, place and year; recognized some people, but in giving an account of his life or school knowledge and answers to calculation questions he was very defective.

As to his general behavior he was, on the ward, at times, irritable and assaultive.

For the past half year patient has become worse, more choreic, more untidy and needing much more care.

At recent examinations he presented very marked chorea. The most striking feature about his mental condition is, that many questions are not answered and none without urging, nor has he made any spontaneous statements during the examinations. Complicated questions were not answered at all, and to even such simple ones as, what are 2 + 2? or, is it morning or afternoon? is it summer or winter? it was impossible to get answers, in spite of persistent efforts. His reactions were somewhat better when asked to name objects, although even here the request has to be repeated again and again. He named the objects correctly for the most part, but called a five cent piece a quarter, and in reading the watch he transposed the hands, saying it was ten minutes of five, when it was twenty-five minutes past nine. Not infrequently his reactions showed perseveration. Thus he at first pronounced his name which he gave correctly, to which he added, "I was born in West Almond." After this, more especially in the first part of the interview, this answer was frequently given to a series of questions and quite irrelevantly.

With the scarcity of reaction it was difficult to judge of his memory. However, he said on one occasion, he was 43 instead of 50; that he was born in 1895 instead of 1861. In rather striking contrast to all this is that he knows what place this is and some of the persons. Also the fact that he has been here three times. Yet, on the other hand, he called the examiner

an attendant in spite of the fact that the examiner had interviewed him a number of times and once in the superintendent's office.

It is, therefore, almost impossible to judge how grave a memory defect this patient has, since the difficulty in attracting and holding his attention, or in forcing him to any mental exertion, overshadows everything else. But that the memory defect cannot be a very intense one, is shown in the first place by the evidence of very orientation and by the simple fact that he knows he has been here three times.

In summarizing these cases the main feature seems to be a marked disinclination toward mental exertion, which is so pronounced that the examination becomes very difficult. In the marked cases, it interferes even with such simple reactions, as to stating whether it is summer or winter, and seems to give rise to the fact that the patient does not respond at all, or responds in a perseveratory manner. In the milder cases, it shows itself in calculation, in giving time relations, and in giving the substance of a simple story read to them, leading to the excuse that the memory is bad, that they are unable to tell it, etc. Whereas, on the other hand, in the orientation, even in the worst cases, there is remarkably little interference. The memory of actual facts, if sufficiently insisted upon, is found to be quite good. The whole deterioration seems to differ from that of the usual organic reactions, by the fact that the disinclination to mental exertion is of very much greater intensity than the actual memory defect, although this very likely exists, but is difficult to define. It is, evidently, for this reason that other writers have spoken of apathy, or of the deterioration of the initiative. The following points should also be mentioned in this connection: 1. The fact that the deterioration goes hand in hand with the chorea is true in our cases, but this, evidently, is not so with others. 2. In all of these cases there is marked irritability, which, however, seems to depend upon the environment to quite an extent. 3. It is of some interest that all of our cases had ideas of a persecutory nature, which, however, disappeared with a change of environment.

In two of the cases the claim of Leri and Vurpas regarding the inability of these patients to visually represent objects, was investigated with about the same result as they obtained. This, to my mind, is not so much due to the fact of their inability to describe them from memory, as to the extreme difficulty of mental exertion which is present.

In conclusion I desire to thank Dr. August Hoch, Director of the Psychiatric Institute, for his helpful suggestions in preparing this paper.

REFERENCES.

- ¹ R. Frotscher. *Achiv für Psychiatrie*; Vol. 47, pp. 790-805, 1910.
- ² *Traité International de Psychologie Pathologie*, Vol. 2, p. 139.
- ³ A. S. Hamilton. *American Journal of Insanity*, Vol. 64, p. 469.
- ⁴ P. Ladame. *Archiv de Neurol.*, Vol. 9, No. 50, Dec., 1900.
- ⁵ A. R. Diefendorf. *Neurographs*, Vol. 1, No. 2, May, 1908.
- ⁶ A. Leri and Cl. Varpus. *L'Encephal.*, 1909, pp. 524-610.

THE ESSENCE OF INSANITY.

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It has been a good many years since the conception of insanity involved a belief in humoral pathology, and it has been long since the time when people who were not considered right by their neighbors were said to be possessed with the devil. Even up to the present day, however, disease of the mind has always been regarded as something beyond the ken of the ordinary physician, and as soon as he determines that a patient is mentally afflicted he throws up his hands and wonders what to do. If he is called to a patient who has a disease of the lungs or liver or kidneys, he asks no such question but settles down to do something and there you have the difference.

We have made an advance from the old acceptance of the meaning of the disease in the fact that we do recognize the presence in these cases, not of the influence of some supernatural power from without, but the actual disease within. And we have determined that certain symptoms presenting in a patient mean that there is an actual disease of the brain with which we have to combat. This necessarily means the establishment of treatment and treatment which under the present day must be on a certain plane of efficiency and effectiveness in order to meet requirements demanded. Thus, we have the general prevalence of the "Hospital Idea" in this disease, as we have in the physical disease. It is not necessary to tell the homœopathic physician that mental symptoms should occupy a large part in his consideration of a diseased condition and that they should never be neglected in summing up the case with a view toward prescription.

It would take too long and too much space to go into the reason why in considering diseases of the mind we should not dwell too much on that which is material. For instance, when we speak of memory we speak of that which no one has seen, which cannot be demonstrated under the microscope, which has no separate entity. Yet it is a factor. We speak of the will, the intellect, and these are in the same class. Nor can we demonstrate what it is that gets into the body and causes a mania. There is no disease entity which can be seen or felt or heard which can be said to be responsible for a mental disease like mania.

It has always been difficult to draw a hard and fast line between metaphysics and psychology. We like to think of the latter as being a truly scientific study and that metaphysics merely supplements it or perhaps steps in and completes with hypothesis what psychology is unable to present as actual demonstrated facts.

*Read before Ohio State Homœopathic Medical Society, May, 1913.

But the day of the hypothetical noumenon is passing. It is being used only when it cannot be avoided and is being cast aside just as soon as it is no longer of any use or when some other tool can be used to advantage.

Today the advanced conception of disease is that it is the expression of unusual relations in structure or unusual relations between the individual and his environment at some point or points.

We do not often take fully into cognizance the fact that we are born into the world absolutely without minds and that this organ or faculty, as you may wish to term it, is made up of the numerous sensory experiences streaming into the brain. It goes without saying that it would be impossible for any two minds to receive exactly the same impressions and to classify and store them in exactly the same way and it therefore follows that no two human beings are exactly alike and that they cannot be expected to react in exactly the same way to impressions received. It is just as much a fact and fortunately so, that we do get classes of human beings who in a general way do react similarly so that we are justified in creating what may be termed a normal or to put it in a general language a usual type. Then when we come to a person who is doing or saying things which are not usual and which cannot be accounted for by the fact that he is in a strict technical sense not the exact counterpart of those with whom he is compared, we can come to the conclusion that there is some disarrangement of the component parts of his mind.

This brings us to a consideration of the probable actual condition of the mind which permits these mental conditions to occur.

Let us first consider what may be called a quantitative mental defect in which a patient cannot think, act, or remember efficiently, a condition which is known as imbecility or dementia. In the former the patient is born without the capacity for full mental development. In the latter he acquires the defect. In another form the condition is qualitative as in manic-depressive insanity. In addition to these there are a vast number of individual symptoms which we can do no more than mention in brief. Among these are somnambulism, hallucinations, delusions, obsessions, etc.

We must further consider what has been called "Dissociation of Consciousness," a term expressing the ability of the mind to divert itself from the consideration of one subject to the consideration of another. In the normal mind this is entirely under the control of the will and we are able to come back, as it were to a subject after having been diverted through some intervening train of thought to another. In the more marked degrees of dissociation found in our patients this control no longer exists. Automatic writing is an example.

Thought it really a continuity. However abruptly the change from one subject of thought to another, there can always be demonstrated in the normal mind some train of association. It is, however, entirely possible to imagine a condition in which that train of association cannot be found, as in cases of somnambulism, for instance. The two conditions are absolutely independent of each other. The patient is ignorant of the happenings of the second state. Double personality is another form of this dissociation and is only a more pronounced state of somnambulism in which the entire life of the individual is involved. Numerous cases of this condition have been placed on record. In both of these there is an exemption from the control of the personality and the patient is not conscious of this existence.

In obsessions, however, there is a perfect knowledge of actions but an inability to prevent the doing of them. Herein is a difference but both are states of dissociation.

Of another type are hallucinations. A patient hears voices which to him are intensely real but are not so to the bystander. They exist as a part of the patient's consciousness but are not a part of his personality. Hence they must be regarded as dissociated parts of the patient's own consciousness.

Similarly we may explain a delusion. A patient believes himself to be a king. He knows all the facts concerning himself and his family but he does not consider the incompatibility of these facts with his claims. He will tell you that he is a king and in the next breath ask you for a small sum of money or that he be release from the asylum. This seems incomprehensible; but when we recognize the possibility of dissociation we realize also that there is in that patient's mind a compartment in which mental action is going on but which is logic proof and absolutely independent of the other portions. The two are not allowed to come in contact with each other and no connecting thought can pass between them.

Very naturally now comes the question, why? Before taking up an attempt to answer, we must ask you to admit that in the psychical world as well as in the physical, we have a right to claim that every event must have a cause. Chance has no more part in psychology than it has in physics. What these causes are is the ultimate aim of psychology to demonstrate.

The man who possesses a hobby possesses that which to a large extent has an influence over the flow of his thought, his consciousness. Wherever in his daily life he comes across anything that can possibly be related to his hobby, his mind is turned toward it. This entire mental state has been called a "complex." Thus a man has a photography complex, a dog complex, etc.

It is a system of connected ideas, with a strong emotional tone, each one tending to produce actions of a certain definite character. A lover has a hobby—a complex—and all his mental energy is centered in weaving trains of thought centered in his beloved one. A complex in psychology is the same as a force in physics. It becomes active under a stimulus.

It is easy to see that having a complex we naturally bend our efforts to uphold it. A man has a political complex and his actions are governed not so much by the right or wrong of say a proposed enactment of law, as by the effect it may have on his party. Thus his arguments are from that standpoint, endeavoring to prove the correctness of the position he has taken. This is termed "rationalization." This may be observed every day and as a matter of fact it is not often either recognized or acknowledged. It is a fictitious logical process. Coming down to actual facts, it is thieving to ride on a street car without paying fare and yet there are plenty of people who will not hesitate to slip their ticket back into their pocket if the conductor passes them, and they will argue that it is all right. A merchant may charge more than an article is worth who would not take or steal the difference from a patron. It is "business." His arguments as to why he does this are his means for rationalizing his action. Here we have a direct explanation of the process.

Sometimes the process is indirect. A man denounces the tones of a chime of bells as being atrocious when they really are acknowledged to be beautiful and full of harmony. Analyzed, the facts are that the rector of the church writes poetry, as does the critic of the bells. Further the poetry of the rector has been reviewed and compared favorably to that written by the critic of the bells. The resentment of the critic takes the form of decrying that in which the rector is directly concerned. A former intensely religious man suddenly becomes an affirmed atheist. Analyzed, it is found that a man with whom he has been closely connected in this religious work has eloped with a young lady to whom the newly developed atheist has been engaged and with whom also his religious work has been done. His resentment takes the form of abuse of that in which all three have been so closely related.

The newer school of psychology claims to be able to demonstrate that the thoughts and actions of the insane mind are not the meaningless and inscrutable medley they are thought generally to be but the result of definite causes and effects just as are those of the sane mind, and merely required an analysis to bring out the correlated facts.

Suppose a complex is out of harmony with the mind as a

whole. At once arises a conflict between the complex and the personality, the latter comprising all the mental processes,—ideas, emotions, memories, desires—which do not belong to the complex in question. The deliberate adoption of the one or the other is one method of solution of the situation. Another is the avoidance of the conflict by not attempting to make this decision. Here we have the establishment of the logic-tight apartment of which we have already spoken. The lover will not permit discussion of the imperfections of his beloved. He simply puts his knowledge of them in a compartment of his mind and ignores it. The woman who says she is a queen and has the daily duty of scrubbing the floors of the ward, simply puts the latter into a compartment in her mind and does not allow the fact to interfere with her claim to royalty. The mind loses its homogeneity and is composed of more or less isolated mental processes each independent of the other.

So we may conclude that in some cases the dissociation is a result of conflict. It is rare, however, that such complete dissociation is possible. The opposing systems do come into conflict but only through a medium which distorts the connecting processes—the process of rationalization. The insane person who believes his wife is trying to murder him interprets her actions as evidence of the fact, the food she gives him is poisoned. If she does not give him food, she is trying to starve him. If we argue with him he regards us as her accomplices.

A repressed reflex finds its expression in an indirect method. The jilted woman whose mind has been wrecked by the shock finds the expression in stereotyped motions of a shoemaker engaged in sewing boots. Her lover was a shoemaker. The old maid finds the expression of the repressed sexual instinct in an abnormal interest in births, marriages and scandals. The disappointed girl whose lover accepted a coin from her with the declaration that he would never part with it develops the obsession of an examination of the number of every piece of money which passes through her hands. Here the disagreeable or unattained episodes are covered up, repressed.

Projection is another reaction of the mind to the presence of a repressed complex, in which the complex is disowned and fixed upon some other person, either imaginary or actual. The man with a low grade of morality concealed, sharply criticizes faults of others. The muddleheaded man cannot stand a lack of clearness in others. He conceals the defect in himself by making much of the same defect in others. Oftentimes delusions of persecution can be thus explained. In a mild form we will see it in the way a patient will blame his moral lapse on some one

else. It began with, "The woman tempted me," and has continued up to date. In Old Maid's Insanity we see it in its full strength. The woman of unblemished character charges a man with undesirable attentions. She makes complaint, the charges are unproven and she is shown to be possessed of delusions of persecution. The whole condition may be explained when we consider the complete repression of her sex reflex.

The attitude of the insane patient is said to be irrational. The reasoning powers seem to be diseased. The mind is capable of thinking any thought no matter how absurd. But when we come down to an analysis we find that the reasoning powers are really not at fault but the premise upon which such reasoning is founded is wrong. To a certain extent we see this in an average man who will take up the most abstruse problems and settle them to his own satisfaction in spite of the fact that he is in no sense qualified to do this.

How then can we distinguish the average man from the lunatic? The answer to this question varies with the age in which it is asked. If certain men lived today who lived a thousand years ago they would be locked up because of their beliefs and it is probable that a thousand years from now men having our beliefs would be considered dangerous and worthy of restraint. So it is possible for us only to speak of certain distinctions which taken as a whole constitute the difference.

First, we note the degree to which the thought is carried out. The man who complains of his tools being poor and his treatment unfair is sane while the man who complains of an organized boycott upon him has delusions of persecution.

Second, in how far does his thought make him "dangerous to himself and others," as the law puts it?

Third, how far are his beliefs incompatible with existing facts?

In conclusion we may say that the most important of all the conceptions we have been considering are those of dissociation and conflict. A vast proportion of the hallucinations we meet are examples of dissociation. A part of the mind has been cut off and is acting independently. This is the result of a conflict between two incompatible elements. So we find conflict as the fundamental factor in the causation of insanity. The precise significance of this factor is the riddle to be solved by psychology and science.

Bibliography.

Psychology of Insanity—BERNARD HART.
The Rationalization of Mental Medicine. WILLIAM A. WHITE, M.D.

CLINICAL DEPARTMENT.

Conducted by A. H. RING, M.D.

Case 7-D. Diagnosis: Arteriosclerosis, Apoplexy.

In the presentation of the case last month I omitted to include the fact that the patient's blood pressure was over 200 m. Hg., yet you could scarcely have missed the first part of the diagnosis by inference from the state of the arteries.

Taking up first the evident physical manifestations it is clear that the heart is enlarged and has temporary periods of dilatation. The kidneys are clearly much diseased, though the fact that the urea and twenty-four hour amount were normal while albumin and casts were plentiful, throws the burden of disease rather upon the parenchyma than the fibrous structure.

The brain arteries evidently bore the brunt of the process. In August, 1912, some sort of an irritation occurred in the left hemisphere causing temporary weakness of the right arm and hand. This may have been a slight thrombotic process in the cortex with anæmia in the area of distribution. Two months later a more severe thrombus or hemorrhage occurred accompanied by an epileptiform seizure, and since then four similar attacks have occurred. The motor centers have evidently not suffered except by impingement, since there is no marked disability in the right leg or arm except as the latter is disturbed in its power of co-ordination. This latter fact, together with the typical tearfulness and emotional instability, suggests that some damage has occurred in the cerebellar fibers and optic thalamus. The Babinski on the right shows that there is some degeneration of the right pyramidal tract. As a result of these arterial disturbances in the left hemisphere, there must be some small necrotic areas which interfere with several of the higher associative mechanisms. When first seen and the notes made which constituted the record as reported, there was evidently some unresolved edema from recent lesions, which accounted for much of the mental state. I should like to suggest here as an hypothesis for the psycho-pathologist that apart from the emotional state which we now know pretty surely comes from thalamic disease, the apprehension and sense of helplessness are also evidence of disturbance of the thalamo-cortical arcs, since these symptoms are evidently due to disturbed personality which Head places in these arcs. It is most regrettable that it is so difficult to secure autopsies upon such interesting cases to clear up these problems. Perhaps the most intricate problem presented by this patient is the varieties of aphasia which he presented.

In the examination of this problem the following scheme of Beevor quoted in Purves Stewart's *Diagnosis of Nervous Diseases*

and the latter's illustration are here reproduced: The capital letters in parenthesis indicate the parts of the brain involved in each case.

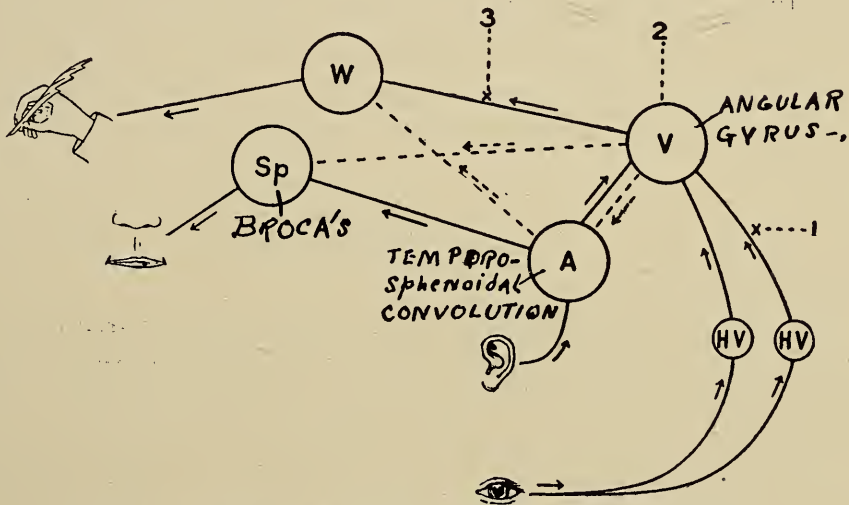


FIG. 35.—Diagram of Speech-Centres (after Bramwell).

A. Auditory word-centre. V. Visual word-centre.
Sp. Motor vocal centre. W. Motor centre for writing.
HV. Half-vision centre.

The interrupted lines indicate possible but less habitual routes for transmission of impulses.

1. Can the patient spontaneously utter intelligible words? Note the extent of his vocabulary. Can he pronounce all words or only a few? Get the patient to talk spontaneously, and observe whether he talks fluently or misplaces words or syllables, whether he talks in disjointed phrases, ("telegraphic" type of speech,) or whether he talks unintelligible jargon.

2. Can he understand words which he hears? (A) Ask him to touch his nose, ear, eye, chin, &c., in turn, thus testing his interpretation of nouns. Then ask him to smile, whistle, shut his eyes, &c., thus testing his comprehension of verbs. Sometimes we find that the patient executes the first command correctly, but continues to repeat the same act in response to different commands. A patient can sometimes sing the words and air of a song, when he is unable to repeat the words in a speaking voice.

3. Can he understand written questions or commands which he sees? (V) Write down and show him simple sentences, such as "How old are you?" "Put out your tongue." "Give me your left hand."

4. Can he write spontaneously? (W) If his right hand is paralyzed, let him try with the left. Observe whether he writes intelligibly, whether he misplaces words or syllables, or whether he scribbles meaningless signs.

5. Can he copy from printed to written letters? (V-W)

Print some word such as "Hospital" or "Monday," and get him to copy this.

6. Can he write to dictation words which he hears? (A-V-W.)

7. Can he pick out objects of which he hears the name? (A-V) Place in front of him a heap of objects, such as a key, a shilling, a match, a pencil, and ask him to pick out each in turn.

8. Can he repeat words heard? (A-SP) Try him first with simple words and phrases, "cat," "dog," "nurse," "good morning," &c.

9. Can he name objects seen, and can he read aloud from words shown him? (V-A-Sp) Point to different objects and ask him what they are.

10. Does he understand gestures and pantomimic movements? Without speaking to him, get him to imitate you when touching the nose, spreading out the fingers, protruding the tongue, &c.

Comparing these tests one at a time with the symptoms we get the following result:

1. Our patient could utter intelligible words though his vocabulary was extremely limited; he did not misplace syllables or words. The motor-vocal word centre (Broca's Convolution) is then intact.

2. He appeared to understand what he heard at times, and at others misinterpreted. There is a question whether the auditory word center in the first tempora-sphenoidal convolution is involved.

3. He could not read written language. Involvement of angular gyrus.

4. He could not write—merely scratched unintelligible circles. Involvement of fibers between visual and writing center.

5. He could not copy.

6. Nor write from dictation.

7. This was not tried.

8. He could repeat words—showing connection between Temporo-sphenoidal and Broca's convolution intact.

9. He could not name objects seen (match—dark, face—shave) again showing involvement of angular gyrus to Broca's fibers. Reading aloud was not tried.

10. Gestures and pantomimic movements were not tried, but when extending the hand to shake he had difficulty in finding it. This apparent inco-ordination may well have been due to the involvement of his sensory-visual centre—angular gyrus.

Of a separate writing (W) centre Stewart says, "Earlier writers used to describe a separate centre for writing, a lesion of which would produce loss of the faculty of writing, agraphia. But

no case has been verified pathologically in which a focal lesion has produced agraphia without affection of the vocal speech, so that the writing centre, although it must be represented diagrammatically in any scheme of cortical speech centres is probably merely a part of the ordinary psycho-motor centre for the upper extremity.

From this analysis it would seem that the sensory-visual centre is the one most impaired and that the thalamic fibers also suffer because this would account for the peculiar contra-lateral reflexes, the slight athetoid movements and the emotional state.

All this could occur as the result of disease of the left posterior cerebral artery, and this is the probable seat of the lesions which have produced this interesting series of symptoms.

Upon a bread and milk diet the kidneys greatly improved, and with time the edema, incident upon the immediate cerebral accidents, absorbed so that after six weeks there had been sufficient amelioration to permit of the patient being cared for at his home. The only remedies prescribed were iodide of potash five grains t. i. d. and small doses of strychnia.

Case 8-D. For Diagnosis:

The patient is a stocky well built man aged 59 years. He has alert, keen gray eyes, gray hair. Family history:—His father, a cool-headed prosperous farmer died at 79 of apoplexy. His mother, whom the patient most resembles, died at 69 of unknown cause. She had an attack of depression while carrying the patient and was known about the neighborhood as the local doctor, had a power of discerning things and was a believer in spiritism, especially in her latter days.

The patient was a shrewd, bright boy who knew how to get work out of the other fellow. He never drank or smoked, worked on the farm as a youth, and was very thin. Always had diarrhoea in summer and then lost much weight, sometimes thirty pounds, which he gained again in the winter.

He married at twenty-three and had five healthy children. He was always very domestic and devoted to his family but dictatorial. Had a violent temper and if crossed became very unreasonable, but says he has outgrown this. Twenty years ago he had a severe attack of arthritis affecting especially his right knee, following exposure to severe cold. Since then, has had more or less rheumatism and at times sciatica, and periods of insomnia.

Seven years ago he had what the doctor called neuritis. It was a very severe attack about the shoulders for which he had to have morphia. Then the doctor tapered off on chloral. This he liked because it helped him to sleep, so the doctor told him it was harmless and showed him how to mix it by putting one ounce

in four ounces of water. He had used from two to four teaspoonfuls of this mixture each night since with but few intervals of a week or so. Over this period he has had no disturbances which he could attribute to the chloral and other physicians have told him it was harmless so he "naturally kept taking it."

But for several months he has been run down and last winter went south without benefit. This spring found he had a tape worm the removal of which ran him down still more. He has been subject to sudden stabbing pains, anywhere. About two months ago he began to complain of burning in the epigastrium, lost twenty pounds and again began to have brachial "neuritis." For some time he had been forgetful and lacking in his usual volition and alertness, but now he became more childish—cried easily and was at times confused.

Examination showed,—a very flabby muscular state and a dusky skin with blue lips and nails. The heart sounds were very feeble and barely audible, pulse about 90. Blood pressure 105 Systolic and a constant temperature of 97 plus.

He was terrified for fear he would not get to sleep at night—this amounted to an obsession. Said he did not care whether he had chloral or not but he must be promised sleep. He was intensely fearful and worrying; however he was oriented and logical though very exacting, and did not want to be left alone day or night. He believed himself to have great powers of discernment and judgment. The Wasserman was negative as was also the urine.

What was the matter with this man and how would you treat him?

The City of Buffalo is making great preparations for entertaining the Fourth International Congress of School Hygiene which convenes there August 25-30. Already \$40,000 has been raised for the needs of this world-wide Congress.

Physicians, scientists, engineers, educators, sanitarians, and public-spirited citizens generally from all parts of the world will be in attendance. Dr. Charles W. Eliot will preside and it is expected that President Woodrow Wilson will be present.

The physicians from Boston who will present papers are Dr. Joel Goldthwait on "The Relation of Posture to the General Efficiency of the Human Being." Dr. Leonard Nice, "The Disinfection of School Books." Dr. Robert T. Osgood, "The Treatment of Foot Strain and Weak Arches among School Children." Dr. DeWitt G. Wilcox, "The Effects of Written Examinations upon Young School Children."

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only and preferably to be typewritten—personal and news items should be sent to THE NEW ENGLAND MEDICAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business should be sent to the Business Manager 80 East Concord Street, Boston, Mass.

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PRESENT DAY HOMŒOPATHY.

Under the title "The Progressive Modern Homœopathic Practitioner the Prototype of the Medical Practitioner of the Future" which appeared in the July number of The Iowa Homœopathic Journal, Dr. Eldridge C. Price of Baltimore, Maryland, has to our thinking sounded a very sane note and well summed up the present relation of Homœopathy to the broad field of medicine as it exists to-day.

Dr. Price condemns the tendency of some among us to continue to advocate the acceptance of Hahnemann's teachings *in toto* where modern research has proved them moribund, "I refer to such tenets as the totality of symptoms, and olfactions of dilutions, the condemnation of anodynes, the absolute *proscription* of alternation of drugs, the insistence upon the idea of a diseased vital force as a basis of pathology, etc., etc. The insistence upon the acceptance of these ideas has been a positive bar to the spread or homœopathy,—to the acceptance of the fundamental truth of the law of similars."

If this attitude continues he thinks that the days of our School are numbered. In spite of our schools, journals, etc., to instruct the medical world we have fallen far short of general acceptance. "We have failed because we have worked to secure conformity to form, and in securing conviction to a central truth have exacted compliance to things not essential." "At the same time we do not realize that in the essentials we have succeeded overwhelmingly." The writer points out that "The place of Homœopathy as a scientific system of medicine is already firmly established through the exhaustive works of practical scientists;—notably—Pasteur, Koch, Calmette, Wright, Simon, Flexner, etc."

Possibly, he says, the name of Homœopathy may be lost in the effort to demonstrate the principle to be but a part of the results of the great evolution of modern vital science, but he is by no means sure that after the smoke of the great battle shall have blown over, that even the original name may not be accorded its merited restitution.

"We have a remarkable situation in which we find the friends of a named-truth retarding its general acceptance, while the enemies of this truth are zealously proclaiming it and at the same time denying its name."

Regarding our propagandistic methods he says, "To some the idea of endeavoring to preach facts after the manner of theological proselytism is not in accord with the methods of the thorough acquisition of a great truth, or the necessities of science; to say nothing of the question of the dignity of such a proceeding."

In this we heartily concur. No scientific truth needs such a prop and such methods are both unbecoming and repugnant. There has lately come to our desk a new weekly, supposedly published in the interest of Homœopathy. Its glaring headline across the front page reads "Why not make Homœopathy the Dominant School of Medicine?" Nothing, we believe could do more to hurt our ethical position or to retard the acceptance of the principle for which Dr. Price makes his plea than this sort of yellow journalism.

Let us submit our evidence honestly pro and con in our societies and journals and teach whatever experience has proven good in our therapeutics; but let us be equally ready to weed out what the hundred years of research since the *Organon* appeared has proven fallacious and to lay hold of all it has found good.

And let us do all this in a manner becoming the dignity of the greatest of all professions. Only in this way can we best do honor to him who first expounded the great principle that like cures like, and took for his banner motto "The first and sole duty of the physician is to restore health to the sick."

A. H. R.

THE PRESENT STATUS OF ANESTHESIA.

Anesthesia as conducted at the present time is as great an improvement over former things as was that made when etherization replaced the lack of anesthesia. The time when any anesthetic in the hands of any administrator was all that was demanded by the patient and the surgeon has long since passed.

The latter, for a long time, has felt the desirability of greater expertness in the administration of anesthetics, but he was unable to insist upon the point because of the fact that his patients were slower in recognizing the need of such expert administration. In these days, however, the call for the experienced anesthetist is made by the patient as well as the surgeon. Both feel that the anesthetist ranks equally in importance with the surgeon. In fact anesthesia to-day is not to be judged solely by the fact that the patient lived through it or in spite of it, but how comfortable and safe the patient was during the anesthesia and afterwards. Anesthesia has become a specialty in surgery; men and women

physicians are to be found in all our large cities who do nothing else. The expertness of the anesthetist depends not only on his acuteness of sense perception, his conservatism, but also upon his experience in administering anesthetics.

To obtain the keenness of sense-perception long experience is necessary, although the fundamentals may be learned in a reasonably short time.

The choice of the anesthetic has become somewhat simplified by the advent of nitrous oxide gas-oxygen anesthesia. Formerly the choice lay in selected cases between chloroform and ether or mixtures of the two. This, in many cases, involved a choice of the lesser of two evils. With the advent of gas-oxygen methods, chloroform anesthesia, condemned absolutely by many because of its recognized deleterious effects upon important internal organs, passed out as far as major surgery was concerned except in rare instances. In cases where chloroform was formerly indicated gas-oxygen or gas-oxygen-ether is now to be had at greater safety to the patient.

There has developed a rather voluminous literature on the subject of gas-oxygen anesthesia. From this we learn that there are few contraindications to its use. On the other hand in view of its greater expense both of gas and administering apparatus it is hard to believe that gas-oxygen will ever become as universally used as is ether.

The chief valid objection to gas-oxygen anesthesia is said to be its narrow zone of anesthesia with consequent uncertainty of muscular relaxation and freedom from reflex movements. From many sources we learn that it is difficult to keep the patient sufficiently relaxed under gas-oxygen anesthesia. Except as this is a hindrance to the surgeon, which is the case in all abdominal work, the anesthesia is a success inasmuch as patients in spite of active reflex movements under such anesthesia report having felt no pain. Many anesthetists use ether to supplement the gas-oxygen. In this way very little ether is used consequently little or no ether reaction is met with. So that, on the whole, gas-oxygen-ether sequence as used by Cotton and Boothby would seem to be an ideal anesthetic in many cases.

The need of an expert anesthetist to administer the anesthetic is not a valid objection.

The cost of the gases, from eight to ten times as great per hour as ether, will of necessity prohibit the use of this anesthetic in many instances. The expense of apparatus will also confine the use of this anesthetic to the larger hospitals and the expert anesthetist.

Considering gas-oxygen or gas-oxygen-ether in its advan-

tages over older methods it would seem to be a most valuable addition in the anesthetic field.

Ether, for many reasons, is still the most generally used of any of the anesthetics. In the hands of the tyro ether anesthesia is relatively safe. Otherwise the death rate of etherization would be very great in view of the fact that it is used in multitudes of cases by the inexperienced administrator.

Patients, however, dread ether anesthesia more than any other because of the after effects such as nausea and vomiting. Anesthetists dislike the struggling of the second stage. Undoubtedly both of these are great disadvantages. Investigation of the effects of struggling upon the patient has resulted in discovering permanent injuries to the heart such as acute dilatation brought about by such struggling. It is found also that the long continuance of the Trendelenburg position or undue pressure upon the thorax or abdomen during operation also affects the heart badly.

The elimination of these disadvantages of etherization marks the difference between the expert and non-expert administration of the anesthetic. If given cautiously with an open inhaler by an expert, post-operative nausea and vomiting and struggling during the second stage will be absent. Unfortunately this statement cannot be made absolutely because of idiosyncrasy on the part of some patients as well as faulty preparation. The dangers of ether pneumonia are slight provided the patient experiences no chilling during or after the operation.

Having had no experience with the various mixtures of ether and chloroform we cannot judge of them. On purely theoretical grounds they are to be condemned as in the same class as the compound prescription.

The requirements of an expert anesthesia demand that one gives the anesthetic, knowing just how much he is giving, and administering only as much as is necessary to keep the patient properly relaxed. When this is done, an inhaler used where these requirements can be met, ether fulfills the demands in most cases, gas-oxygen or gas-oxygen-ether in the remainder.

D. F. D.

EUGENIC MARRIAGES.

The frequent reference in the lay press of late to eugenic marriages is evidence of an awakening conscience on the part of the public which should gladden the hearts of all those who have worked so hard for the moral betterment of the race. It is doubtless the outcome of many factors. Certainly the medical profession can only claim a share of the honors, for the facts of venereal disease and the transmission of defective mental traits has been

known to us for very many years with but slight effect upon the community interests. Perhaps the two most potent factors have been the works of the Society of Moral Hygiene in New York and that of the Eugenic Laboratories and Breeders Association. Through these various agencies such a mass of conclusive facts has been amassed and made public that the evidence could no longer be neglected.

Another most potent factor has doubtless been the ever increasing number of women taking the higher education and entering into medicine and public affairs. She can no longer be turned off with "Business detained me, my dear," and as a prospective mother she is beginning to realize the importance of heredity and breeding. The proverbial "heart ruling head" is fast passing, and the American girl of the future is going to demand of her prospective consort a standard of lineage and right living which may well tax the self restraint of our male population.

Idealistic and desirous as the situation is, it is bound to cause many a heart pang and present many an embarrassing situation. It will be no respecter of class, and many a callow youth will find himself deeply regretting the "wild oats" of his college days with but little sympathy and much publicity. This regret he doubtless always felt in his maturer life, but he has been able to do it in private.

There is still another phase which is bound to present itself in the social readjustment that must come. Will it not increase prostitution, and will this not thwart the very end we seek by swelling the venereal statistics. Man is an impulsive animal and the law of supply and demand is well nigh inexorable.

The social shake-up that is going to come before this millennium is reached is bound to tax alike the ingenuity of the physician, the clergy and the jurist.

A. H. R.

A SHORT AFTERMATH OF THE DENVER MEETING.

When the oldest National medical society in America adjourned July 11, 1913, it had the proud distinction of having received as new members a greater number than had ever been received at any previous meeting of the Institute, there being just 400. This fact coupled with an attendance of 419 physicians and visitors made the Denver meeting a big success from the standpoint of interest and enthusiasm. But while the latter was evinced in abundance, the character of the business transacted and the quality of the papers presented put the session far to the front as a splendid success. While the attendance from the East was small, yet the West and Middle West fully made up for it. It is regrettable that so few Eastern men attend a Western meeting.

President Hinsdale demonstrated his right to be called an ideal presiding officer. Business was transacted with a dispatch and parliamentary exactness that was refreshing. His address, printed in full in the July number of the Journal, merits a careful reading. It is a masterful presentation of present day medicine.

The attendance at the business session from 9-11 each morning was

good, showing a keen interest in the business transacted. The balloting for officers, which usually takes place on the second day from 10-12 was rendered unnecessary because there was but one set of officers nominated.

But twice before has it happened in the history of the Institute that a president has been elected without contest. The courtesy to Dr. Wilcox in giving him a free field was due to the voluntary withdrawing of one or two eligible candidates. The following were elected officers for the ensuing year:

President, Dr. DeWitt G. Wilcox, Boston.
 First Vice-president, Dr. Grant S. Peck, Denver.
 Second Vice-president, Dr. Anna D. Varner, Pittsburgh, Pa.
 Secretary, Dr. J. Richey Horner, Cleveland, Ohio.
 Treasurer, Dr. T. Franklin Smith, New York.
 Registrar, Dr. W. O. Forbes, Hot Springs, Ark.
 Censor, Dr. Walter E. Reily, Fulton, Mo.
 Trustees, Dr. W. B. Hinsdale, Ann Arbor, Mich.
 Dr. James W. Ward, San Francisco, Cal.
 Dr. John F. Sutherland, Boston, Mass.

Atlantic City will be the next place of meeting but the objectionable features which were noticeable there at the last meeting will be avoided, particularly the noisy Pier as an auditorium. Most of the meetings will be held in the quiet rooms of the Chalfonte. Atlantic City has always brought the largest attendance and the meeting of 1914 should be a record-breaker. While not officially announced, it is understood that the 1915 meeting will be in Portland, Oregon. Already plans are under way on the part of the active men in that locality for a great meeting when "Everybody" will be attending the Panama Exposition in San Francisco.

Dr. H. R. Chislett of Chicago was elected President of the Surgical and Gynecological Association, and Dr. Scott Parsons of St. Louis Secretary-Treasurer, Dr. S. F. Barnard of Los Angeles was chosen First Vice-president and Dr. J. E. Briggs of Boston, Second Vice-president.

Among the many important items of business transacted by the Institute was the appointment of the following Committee to confer with the Regents of the newly formed American College of Surgeons to secure a fair representation of homœopathic surgeons on said Board of Regents:

Drs. James C. Wood, Cleveland; DeWitt G. Wilcox, Boston; James W. Ward, San Francisco; Walter Gray Crump, N. Y.; Herbert Dana Schenck, Brooklyn, Howard R. Chislett, Chicago; Gilbert Fitz-Patrick, Chicago.

The resolution accompanying the appointment of the Committee was as follows:

"Resolved that the American Institute of Homœopathy, with a view to protecting the interest of its members, hereby appoints a Committee of seven, of which Dr. DeWitt G. Wilcox, the President-elect, shall be a member. Such Committee shall contain representatives of the following allied societies: the Surgical and Gynecological Society, the Obstetrical Society, the Ophthalmological and Otological Society, and that this Committee shall have power to request and arrange for representation upon the same basis as the various organizations now recognized in the governing body of the American College of Surgeons: said Committee also to act with the Legislative Committee of the American Institute of Homœopathy, to protect the legal rights of our members in the practice of surgery or any of the surgical specialties.

Recommended by the Committee on Resolutions.

(Signed) Joseph P. Cobb, Chairman.

Dr. James C. Wood of Cleveland, has been made chairman and we can rest assured that our interests in this line will be carefully guarded. Of still greater importance was the continuation of a Committee headed by Dr. Herbert D. Schenck, which was appointed five years ago for the purpose of presenting to the American Medical Association a proposition for a joint investigation of the scientific merits of the method of drug selection expressed in the formula "Similia Similibus Curentur."

While this committee has persistently endeavored to get such a proposition before the House of Delegates of the American Medical Association,

it has failed until the last meeting of this body at Minneapolis in June, 1913. At that meeting Dr. Abraham Jacobi, the retiring President, recommended that a committee be appointed to consider such a proposition. That such a committee will be appointed is now assured.

As an evidence of the interest which the general public takes in this particular matter, we would refer our readers to an Editorial in the *New York Sun* for June 30, 1913.

DOCTORS ABOUT TO AGREE.

"The spirit of Gettysburg is abroad in the land; recognition appears to be the order of the day. For nearly two centuries the homœopaths and allopaths above stood in bitter array of opposition in the practice of medicine.

Homœopathy originated in and was sustained by the revolt of the public against excessive drugging and blood letting. The latter was substituted by sugar coated pellets and infinitesimal droplets that did not offend the palate or demand sacrifices. Little wonder that the doctrine of "*similia similibus curentur*" (like cures like) brought many adherents to its banner, as does the still more negative Christian Science of today.

In the early '80s the clash grew so bitter in this city that a large number of the members of the New York County Medical Society, the oldest medical organization, seceded under the leadership of that tenacious fighter for conservatism Austin Flint, on the ground that the code of ethics of the American Medical Association forbade consultations with the homœopaths.

On the other side stood the broad-minded Abraham Jacobi, who had expatriated himself in the cause of liberal democracy. He and others contended that the code of ethics forbade consultations only with the sects whose practice was not based on anatomy, physiology, etc. These two protagonists of their respective causes are still with us, while others, like Alfred Loomis, Fordyce Barker, Gaillard Thomas, have passed over the river.

Slowly but surely has an evolution come about. As we pointed out recently, the practical scientific doctor has come to realize that not he, but nature, cures in most diseases, and that whether the patient takes pellets or pills, droplets or potions, the course of the disease is as inexorable as the tides. After all, the doctor directs these forces which yield to his skillful guidance, making him more imperatively necessary than he would be if each disease yielded to a specific remedy.

In this evolution, homœopathy has unconsciously played a most important part. Since its opponents regarded its remedies as inert and the recoveries due to nature aided by skillful dietetic and other guidance, they attributed its cures to the natural powers of the body.

The dove of peace is now hovering over these contending medicos. Dr. A. Jacobi, the President of the American Medical Association, in his recent presidential address read a letter from the American Institute of Homœopathy asking for a committee of five to meet a similar committee from that organization to investigate scientifically the doctrine of "*similia similibus curentur*" under the auspices of the Rockefeller Institute or some similar institution. Dr. Jacobi properly said that such an investigation would be of the utmost value to both schools, because if the homœopathic theory were true its practice would add to the armamentarium of the regular physicians, and if disproved the last barrier to medical unity would be swept away.

No report of the action of this great body on the conciliatory and humane proposal of its whilom antagonist has reached us. It would be a grand achievement if it were accepted in the spirit in which it is made. The spirit of good will is abroad in the land; may it imbue the contending medicos and thus inure to the great benefit of suffering humanity."

It is becoming more and more apparent that the day is not far distant in which Homœopathy will be taught in all the old school colleges. We need but stand firm in our faith and stand together as one man to gain the victory for which we and our medical forefathers have fought these one hundred years.

This report would not be complete without personal mention of a few

of the many men and women, who by their unselfish and untiring efforts made the Denver meeting a success. To Dr. W. E. Reily, the Chairman of the Board of Censors, much credit is due for the large list of new members. Back of him was that indefatigable worker, Dr. James C. Wood, Chairman of the Committee on New Members, whose systematic method of working brought results never before equalled in the history of the Institute.

Few people not conversant with the workings of the Institute have any idea of the amount of work done by the Board of Trustees, both during the meetings and in the interim between meetings. They are a devoted set of men working unselfishly in a good cause.

To Dr. Peck of Denver and his associates we have already given much of the credit for the social success of the meeting and the material comfort of the members. Dr. Cobb seemed tireless in his ability to carefully digest every resolution offered and have it come before the Institute in a form best fitted for consideration.

Drs. Fisher and Costain were giants on Transportation and their like will be hard to duplicate. In our next issue we will take up in detail other work transacted by the Institute.

THE INSTITUTE SOCIALLY.

The American Institute of Homœopathy, like all Gaul, is divided into three parts,—the scientific, the political, and the social. We are now writing of the social, and here let it be said that, though mentioned last, it is by no means least in the many attractions of the "Dear old Institute." Young man! join the Institute now, if for no other reason than the formation of those endearing ties of friendship whose bands of steel grapple more tightly as the years roll on. Ask any old war-horse of the Institute what friendships of his long life are most precious to him and the chances are he will reply, "those of the Institute."

One has lost much of the charm of medical practice unless he has felt the close comradeship which comes from a yearly meeting with those who have a common cause which is dear to their hearts. The gathering of the clan in the palatial North Western Terminal at Chicago was the first clarion call to arms and soon it was a falling into arms of old friends as the various trains pulled in from North, East and South.

Here is where Fisher and Costain showed their generalship as Railroad managers. The splendid special train of the North Western & Union Pacific, made up of eight Pullmans, two diners, a smoker and baggage, was a triumph in railroading "a la famille."

From Chicago to Denver it was as gay as a five o'clock tea. The last few years have demonstrated that the special train plan of all travelling in a body to the Institute has enhanced the pleasure very materially as well as increasing the stability of the organization. It has further encouraged the very delightful custom of "bringing your wife and family." The young people in the gay party were conspicuous and added materially to the enjoyment of the journey, as well as the social functions at Denver.

"Charles E." knew every foot of the journey and could tell us miles in advance just where we would see a prairie-dog or a gopher, although he could not always tell which was which.

At Sterling, Colorado, where Charles "lives at" our Pullmanized prairie schooner came to a stop and notwithstanding the quiet Sunday morning some forty automobiles, with their respective owners at the wheel, lined up, took us aboard, and for an hour and a half we inspected irrigation, sugar beet industry, alfalfa farming and Industrial schools, as only Sterling knows how to run them. The hospitality displayed by the citizens of that progressive Colorado town would be hard to equal anywhere on earth.

We arrived in Denver as comfortable and rested as though we had been taking a pleasant afternoon jaunt. While the hotel accommodations were ample and satisfactory, the main auditorium, (the "cathedral hall") was noisy and of poor acoustics. It is rare that an ideal room is found for holding public meetings of this sort.

Dr. Peck and his able staff of assistants, comprising the local committee, did themselves proud in looking after the comfort of their guests and keeping the whirl of social attractions in motion. Professor Foster, who had charge of the Bureau of Information, proved a fund of valuable information, much to the benefit of all the visitors. The visiting ladies and their friends were looked after every moment, auto rides, receptions, "teas," dances, which in addition to the functions of "The Meissen," allowed no idle moment to slip in.

The hotel management did not display any great ingenuity or generosity in the one entertainment given under its auspices, it being the only "flat" feature of the meeting. The trolley ride to Golden and up the incline railway to Castle Rock was charming in the extreme, the day being perfect.

It would require many pages to tell even the "main events" of that three days' trip up the Rockies and over the Divide to "Steamboat Springs," (so-called because there is no steamboat within 2,000 miles of it and because one of the sulphur springs there makes a noise like a steamboat or did until a boy threw a stone into the spring and shut off the likeness). The Institute adjourned Friday evening, thus allowing the members the opportunity of taking this trip.

The local committee had secured greatly reduced rates for this trip over the Moffat Road and about 125 members and visitors took advantage of it. It is a steady climb of nearly one mile in altitude above Denver and two miles above sea level, eleven hours of mountains, canyons, of alfalfa valleys, tunnels, trestles, snow banks, gold mines, and unparalleled scenery.

Our schedule permitted a one day's stay at Steamboat Springs, but the burning of a trestle shortly after we passed over it necessitated another day's stay which but few regretted.

Here again we had our special train and a conductor who was a "peach." Thus we were able to stop and enjoy the rare bits of scenery which otherwise could only be "glimpsed." At Arrow, 11,000 feet up into the clouds, we had a snowball fight and incidentally made a snow man of Dr. Krause. Just before sunset we reached "Brooklyn," a "suburb" of Steamboat Springs. Here we stopped, walked a short distance to a real grand stand, seated ourselves and awaited the surprise. It came quickly. Some "Broncho Busting" of the real live type. The cowboy and the bucking broncho may some day pass into history, but while he lives and "busts" he will ever have an admiring audience, whether they be children or dignified doctors from the four corners of the Earth.

We venture to say that rarely has "Brooklyn" had a more enthusiastic audience than the one composed of the Institute members on that rare evening during the glorious sunset over the Rockies. But thereby hangs a tale. The power of suggestion was too great for the mind of one man and the first part of his name is Hamilton F., Jr., and he hails from Cleveland. The departure of our special train from Steamboat Springs was on a sliding scale anywhere from 9 a.m. to 12 m., according to the time when the burned trestle would be repaired. Our friend Hamilton learned officially the departure would be 11 a.m. Now here appears the psychology of suggestion! At 10 a.m. he surreptitiously crept off to Brooklyn, arrayed himself as a cowboy, full regalia, mounted a broncho, hired an accompanying cowboy rider and together they made a whirlwind descent upon the hotel veranda, where all the friends *should have* been assembled, waiting for their locomotive to give five snorts of the whistle as a signal for starting, but no friends were there, the veranda looked like an abandoned ranch, so the twin cowboys descended with a whoop and a yell upon the railroad station, expecting to see all the friends there assembled, but this too was abandoned, save by the agent who calmly told the "Busters" that the special train and their friends had departed some 20 minutes ago.

The second scene showed Hamilton F., Jr., in citizen's attire sitting desolately upon the steps of the Station wondering when there would be a regular train for Denver. But his friends on the special could not travel far without missing him and soon the special was backing up to Steamboat Springs and the joyful broncho buster taken aboard.

DISCUSSION OF DR. WESSELHOEFT'S PAPER.

Dr. J. E. Briggs.

"After listening to this paper, which is so instructive and entertaining, I am constrained to think that there is no need of treating constipation—that all you have to do is to give milk sugar. Very likely that is so in many instances, but we all have cases that whether we think they need treatment or not, we know very well are going to get treatment somewhere, and that they absolutely do need it from their own standpoint.

When we consider the bacterial contents of the intestinal tract, I think it is advisable to keep them moving at least. According to statistics the stomach contains 50,000 bacteria to the cubic millimeter. Passing on to the duodenum, 30,000, and arriving at the ileum, 100,000. This seems to be the veritable paradise of bacteria, 100,000 to the cubic millimeter, and the colon has on the average 25 to 30,000. These bacteria are said to have some action in the secondary digestion, however toxins are produced by the action of the bacteria on the proteid elements in the diet.

We do not think that all these bacteria are harmful, or that they act in harmony against the system, but certainly, forming the substances they do, they must throw additional strain upon the eliminating organs, of which the lungs, kidneys, skin and liver, bear the brunt; so that if the intestinal contents are as toxic as this, a condition of stasis should not long endure if it can be overcome with milk sugar or by a Homœopathic remedy, which is certainly the ideal way.

In regard to the pathology of constipation, there are several types, and here the x-ray has helped out. Although one accustomed to palpating the abdomen does not feel the need of this method, I think it is desirable to have it. There are spasmodic and atonic conditions, and the x-ray shows that in the spasmodic cases the faeces are collected especially in the ascending and descending colons, whereas the transverse colon is likely to be emptied, or practically so. In the atonic cases there is complete filling up of the colon, and this is very easily demonstrable by palpation, or even by inspection you can see the colon standing out, in a patient with moderately thin abdominal walls. In other cases you will feel the collections in the ascending and descending colons—the spasmodic cases, or spastic, as they are described.

There are certain sequelae which seem to follow from constipation, among the most common of which is neurasthenia—that is after having constipation for many years, most of the patients show some neurasthenic symptoms.

Arteriosclerosis bears some relation to continued constipation.

In regard to the methods of treatment, the dietetic and hygienic is the ideal form of treatment, provided it works. Dr. Wesselhoeft has given us some very good ideas in regard to diet and hygiene. Of course exercise comes in as one of the cardinal factors in the treatment of these cases. If the patients cannot get a reasonable amount of exercise, you will have much more trouble with them. I fully endorse all that has been said about the use of cathartics. They never lead anywhere, and the habit is kept up for a lifetime, perhaps, and it is not uncommon for people to take the maximum dose of strychnine each day. First it is a sixty-fourth grain of strychnine; after a time they find it does not work, and take two doses, and that approaches the maximum dose of strychnine. When this is kept up for months and even years, the effect on the system must be pernicious in the extreme.

As far as the treatment by enemata is concerned, that is, as well as cathartics, excusable in surgical preparation, where the bowels have to be evacuated for a special purpose. We all use those things in emergency, and that is all they are good for.

There is a surgical form of constipation which must be eliminated, and it is no use to treat it by ordinary methods—constipation due to adhesions, or even retroflexed uterus. The only recommendation in these cases is to relieve the causative factor.

The employment of vibration and electricity combined with special diet and hygiene, I find most satisfactory in these patients. They are sure that something is being done, and they are sure that they will be relieved. In regard to this method, I do not claim anything original about it, because it has been described in enough places so that anybody can read concerning it, but having some very difficult cases, I find that they require all of these things to establish regular movements.

Almost everybody has an electrical machine, and if physicians would try it, they would be as sure as I have been of its benefit. With a high frequency machine I am accustomed to employ the rectal electrode, and over the colon to place a wet pad. In this way it seems to me you can direct the current about where you want it, for the principal difficulty is in the atonic condition of the colon. If it is a spastic condition, about the umbilicus is the best place for the wet pad. There is no pain connected with this treatment, for I have seen patients go to sleep while taking it. The treatment lasts from 20-25 minutes.

In some cases a little abdominal vibration is sufficient.

Usually it is easy to relieve these simple cases of constipation, but some come along that you know from the history, will require all the resources at your command. Particular emphasis is laid on the diet and hygiene, and the following treatment is adopted as a regular procedure—20-25 minutes of the application of high frequency current per rectum, and about five minutes of vibration on the abdomen.

In regard to rectal electrodes, the glass ones are heating. The best kind is a metallic electrode, with hard rubber insulation, so that there is no contact with the anus, for that is irritating and heating. Insert the rectal electrode far enough to get the benefit of the insulation, and it will cause little difficulty in that respect.

Now to analyze the *modus operandi*. One element is dilatation, because we have all seen cases of constipation that could be relieved by dilation of the sphincter. The electrode is nearly one inch in diameter; the dilatation is not a very great factor, but I think it helps.

The effect of electricity upon the circulation also comes in here. You do not get much healing anywhere without hyperemia. There is no doubt of the mechanical action, as well as the slight increase in internal temperature for the time being. There is something tonic in the electricity itself. I believe there is very much in the mechanical action—the passive exercise of these non-striated muscles in the intestinal walls, which is kept up for a period of 20-25 minutes. It gets them used to working again, sometimes when they have not done anything for very many years, and after a few treatments they start in to help themselves. I never neglect the psychological element in these cases.

There are some accessory factors which must help the individual patient. Dr. Sutherland has established that elimination is increased in connection with the high frequency current, by frequent examination of the urine the solids, including the urea, are much increased. Another thing that has been very marked in the few cases of which I have kept record, is the decrease in blood pressure. Sometimes these patients are aged, and suffer from arteriosclerosis. Those I have in mind felt so much better from a treatment that I began to take the blood pressure, and saw it fall from 185 to 145. These are maximum and minimum figures. That accounted to me for the great improvement in the general condition. I had one patient who had not been able to leave the house, so it was with some misgiving that I had her come for the first treatment. She improved so that she could go out every day, and recently she took an all day trip to an adjacent city. The constipation is relieved, and also the blood pressure is lower.

In private practice I have a record of thirty-two cases, and they are of a very different type from the cases that have been referred to, not foreigners, but highly intelligent people, who knew that they were constipated. Some of them had been dependent upon cathartics and enemata for thirty years. It seemed a matter of surprise to me that anyone could go thirty years

without a natural movement of the bowels. It is quite satisfactory to such a patient, as to myself, to know that they have had normal evacuation for several years now. I have had two cases over sixty with distinct histories of a long period of dependence upon cathartics and enemata. One woman would take a tumblerful of salts every night, and would no more go away from home without a supply of salts than without a comb and brush. Another tried all drugs, and got better satisfaction from enemata. She used a "Tirrell's internal cascade," some sort of forceful enema, and it was only when that failed to relieve that she sought advice as to what to do. She is completely restored.

In regard to relapses. The only people I have seen relapse to any extent were the aged and those who had to go to bed for a time. I think that where the age is so advanced and they have abused cathartics for so long, it is more difficult to restore natural movements. In one instance it was on confinement to the bed and to the house for a considerable time that the old constipation returned; this was readily amenable to the same treatment.

Of these thirty-two cases, three had only one treatment and did not care for any more. I do not know anything further about them. Three more took an incomplete course. One was unexpectedly obliged to go to Europe last summer, but was temporarily relieved. I think that for a month after treatment he had no trouble, but since then he has gone back to cathartics. Another had a surgical condition which caused the constipation.

Another point which I wish to bring out is that the scope of this particular procedure is for chronic cases. It is of no use in acute obstipation. The type of case that can get benefit in this way is the one who has had chronic constipation for so long that he is sick of it and is really serious in his attempt and willing to follow it up to get rid of the condition. These cases require from three to twenty treatments. An ordinary case has frequently been relieved in three or four treatments. About two weeks of treatments every other day is what one expects. But where they have been abusing cathartics for a long time, it is sure to take longer than that. If they have the assurance that they can get well, it will keep people who are really sufferers from constipation faithful to the end.

A case of some interest to me was that of a man who had had a diagnosis of rectal stenosis—a Portland man who came to Boston for operation, and went into the hospital. He was examined under ether, having given permission to do any operation that was necessary to relieve the stenosis. Under careful ether examination, no surgical condition was found, and the patient was referred to me. It took this man seven treatments to begin regular movements, but he wanted two more, because he had been to so much trouble. I have heard from him frequently in the last three or four years, and he has been all right ever since."

Dr. F. B. Percy

"I think we are all very much indebted to the essayists of the evening because they have collected a lot of facts, and have added very much to our knowledge. I can imagine nothing which is of more help than this statistical evidence in regard to the value of treatment in any one disease, and by a strange coincidence, there was called to my attention some years ago a very interesting series of cases where absolutely no medicine was given, and where the results were practically the same as have been stated here.

It is a fact beyond dispute that constipation is among the most common of all the diseases we have to deal with. In a series of 1200 cases in the Out Patient department, fifty-one per cent gave evidence of chronic constipation. Now, that was a large number, and yet I doubt not that every member of this society believes that he is perfectly competent and perfectly equal to the treatment of chronic constipation. I well remember some years ago my own feeling of pride when a man of the other school came to me one day, and said, 'Dr. Percy, I have come on a very strange errand. I have been having chronic constipation for a good many years, and I have been unable

to relieve myself or to find some method of relief. But the thing which I want is not relief,—it is that this thing be cured, and I would like very much to have you tell me what to do.' He said that the daily evacuations of the bowels amounted to no consequence, and that the thing he missed most was the mental stimulation which comes from a normal evacuation of the bowels.

Now, it is perfectly true that a great many people do value very strongly the daily movement of the bowels. In the treatment of chronic constipation, there are three things which have to be laid down as essential. The first thing is that there will be a daily habit, and that means that the hour should not vary very much. In the second place a sufficient amount of exercise should be taken; and in the third place the diet should be along the lines which have been suggested here.

I have read of just such cases where a man could go without a natural movement for a week, for six weeks, or two months, without apparent injury. I remember distinctly my own horror in the early part of my professional life in watching in our hospital the case of inactivity of the bowels which was allowed to go on for six weeks without any interference.

I think we can see that the best method of treating these cases is opposed to cathartics. I know that if you will read carefully an interesting paper by Sir Andrew Clark, published some time in the 90's, or a paper published in the Boston Medical & Surgical Journal in 1913, by Hughes,—also a paper by James Barrington, you will understand that the attempt to cure constipation is without drugs and by diet. I am firmly convinced that there are certain foods that help very materially in the movement of the bowels. I have in mind a case, the wife of a physician who has had chronic constipation for forty years. I am willing to admit that it may have been due to a fibroid of the uterus which was very much in evidence during her menstrual life, and which disappeared entirely after the menopause. She had been using cathartics. In this case no medicine was given whatever. The use of figs, together with finding out what she needed, has entirely relieved her. She is so confident that the figs have been a factor in her cure that last year when going to Europe she had a little box of her special brand to take with her.

In many of these cases we have constipation following hospital operations. Also where there are adhesions following operation, and when it seems almost impossible to bring about an action of the bowels, a very simple mechanical procedure in my hands has been an oil enema at night which the patient retains.

One thing which Dr. Wesselhoeft has said, which is the keynote to the whole situation, is that constipation is a symptom and not a disease. A physician who treats constipation without reference to the general condition, is a man who fails and signally fails."

Dr. Walter Wesselhoeft

In the suggestions that come to me, after hearing the very interesting papers of the evening and their discussion by Dr. Percy, I must be understood to address myself mainly to the subject of constipation in its habitual and uncomplicated form, that form so general which causes three-fourths of the civilized world to be harassed in mind by the constant fear of an insufficient evacuation or of the entire absence of the daily relief. The affliction is so general and therefore important that the essayists are to be congratulated on having brought it forward in so full and scientific a manner. It is important, not only by reason of its extent, but also because it exhibits in the clearest light the attitude of the whole profession towards both pathology and therapeutics at the bedside.

The allopathic or old school—and I use these terms advisedly because for three thousand years that school has not changed its principle of *contraria contrariis* in the treatment of this affection—the old school, I say, as in the greater number of all internal diseases, still practically looks upon constipation as a disease. We, on the other hand, profess to consider it no

more than a symptom of a more general process or condition, and are supposed to treat it from that point of view. It is to be feared, however, that in these degenerate days few among us have in this matter the courage of our convictions. This is the more remarkable and to be deplored because for a century Homœopathy has shown that both in old and young, habitual constipation is in the great majority of cases more easily and effectually relieved by courage and patience than by aperient drugs.

The blindness of the majority of the profession is the more strange because for the past twenty years all who choose to see may witness the markedly beneficial effects of Christian Science, so-called, or of all forms of suggestion by mental healing. Who has not observed on the Christian Science countenance the serene and contented expression arising from the faithful action of the rectum? Who can doubt that the great temple which stands as a lasting reproach to scientific medicine is built up mainly by the moneys formerly lavished on the luxury of laxatives, aperients and cathartics?

The fact is that no other functional disorder so plainly exhibits the self-regulating power of the organism as does constipation, or the evils of interfering directly with this self-regulation. No other demand upon us is so productive of deception and self-deception. Despite the best modern teaching, to which Dr. Percy has referred, the fear of auto-infection is so deeply ingrained in the human mind that no experience, no observation, no research will remove the prejudices it has engendered in both the lay and the professional breast. The vast majority of people want their bowels moved at all hazards, and the majority of physicians are ever ready to frame theories of biliousness, sluggish liver, auto-infection, and what not to justify their yielding to this unadvised cry. But when we relinquish, by yielding in this way, our authority we act not on scientific insight but on empty phrases expressing traditional theories and assumptions. We err because we permit the patients to direct their own treatment according to their own pathological conceptions, thereby giving the amplest proof that no difference in these days exists between the practice of the old school and our own.

I have been moved to consider in this way the ethical side of the question which is intimately related to the practical side. And regarding this I would say that habitual constipation, in the great majority of cases, dates back to infancy and childhood. As soon as a baby's bowels refuse to move freely the nurse, the mother, or the physician attack them with mechanical or medicinal means, when, from that time forward there is no action without some aid. An intestinal catarrh is thus established which in time leads to all manner of digestive troubles and I believe too often lays the foundation for appendicitis. Now, knowing as we do that nature readily helps herself and that in diet we possess the most efficient means of aiding her, I believe that before resorting to medicines, to mechanical, hydrotherapeutic and other means, all of which have their place, we should carefully study not only food values but also the individual peculiarities of the patient. These too often upset all rules we may lay down for treatment. I recall many cases like one of an old lady of 77 who for forty years had had no natural dejection. By diet alone she was brought to regular discharges.

But to treat these cases without the drugs on which the druggists so largely rely for their wealth, a degree of fortitude on the part of the patient and of courage, patience, and persuasive power are needed on the part of the physician such as no other affection save neurasthenia calls for.

The subject, however, is too large for more extensive treatment after the able papers to which we have listened. I will only say that in the long run we shall advance the cause of Homœopathy and of therapeutic truth in general so ably advocated in these papers by comparing our successful cases with control cases and plainly telling of our failures. Our principles are sufficiently broad and secure to stand in the presence of any scientific test.

DEPARTMENT OF EUGENICS.

CONDUCTED BY MARA L. PRATT CHADWICK, M.D.

Dr. Chadwick will gladly receive communications, reports of cases etc., etc., pertaining in any wise to the matter of child culture and race improvement.

The May number of the *Survey* has as its cover design the Eberle statue representing the hideous thought of white slavery. This is receiving much praise as a piece of sculpture whatever personal prejudice one may feel against it. One would hardly care to decorate the walls of one's home with a reproduction of it; but it is not intended for that purpose. It expresses one sculptor's loathing of the loathsome traffic; and as an expression it is perfect. It gives one the "creeps" to look at it; and that is what the designer intended it to do.

It is interesting to read the letters that poured into the *Survey* Editorial department for and against the use of this as a cover design. The following from the famous Baltimore surgeon Howard Kelly M.D., who has taken an active part in vice suppression in his own city, is interesting to us as physicians:

To the Editor of the Survey:

Thank you for the frontispiece on *The Survey* of May 3. The beast carrying the woman did effective service in the Atlanta campaign, but this picture of a low human brute hawking into slavery a poor little immature girl will, I believe, be yet more effective in arousing the sluggish consciences of our American people. If it is art to use the pencil or the graver's tool to portray sin in such a manner as to apply the lash to conscience, then I prefer this, under the existing dreadful conditions of tolerance of vice, to the Venus de Milo, and I thank the courageous artist who so consecrates her talents to the highest possible service of humanity.

A picture of this kind will do more to instruct my daughters and my sons as to the dangers which surround them and their obligations to help the down-trodden daughters of the poor than many arguments. Thank God we have brought these reptiles out into the open where we can handle them with due violence, and we can now place the responsibility where it belongs—on our churches.

Can you loan me the original to make a lantern slide to use in my public talks on vice?

Baltimore.

HOWARD A. KELLY, M. D.

The book of the hour in regard to White Slave Traffic and legalized prostitution is by George J. Kneeland, N. Y., who has done such efficient work under the Rockefeller foundation. In his bulletin to be published by the Bureau of Social Hygiene, N. Y., he gives as his reason, based upon investigation, for girls going wrong, commercialization of prostitution rather than low wages much as the latter has to do in individual cases. He says: "Most of the wreckage and the worst of it is due to persistent cunning and unprincipled exploitation; to the banding together in infamous enterprises of 'madam,' 'pimp,' procurer, brothel keeper and liquor vendor to deliberately carry on a cold blooded traffic for their joint profit. There is profit in selling girls to houses of prostitution, profit again in selling their services, profit in selling clothes to them and liquor to their customers, profit in renting disorderly houses and apartments—and all this goes to a comparatively small group of men who make up the 'trust.'"

Kneeland describes one group of men engaged in the business of "selling shares." He says: "The meeting place is a delicatessen store in Seventh Avenue. Here sit owners of houses, 'madames and inmates, pimps, runners and light-houses.' All the forces for the conduct of the business of prostitution are here scheming, quarreling, discussing profits, selling shares, buying women and paying out money for favors received.

The value of houses is debated, the income from the business, the expenses of conducting it, the price of shares today or tomorrow, or in the

future, if this or that happens. Here is the center of trade . . . the stock market where members bid and outbid each other and quarrel over advantage given or taken."

There is nothing secret about it—witness the presence of an investigator for a body of reformers. He was present, too, at a "settlement" between perhaps the best-known collector for the police and the owners of fifteen different establishments situated between West Eighteenth Street and West Thirty-sixth Street. At one o'clock in the morning they sat around a large table on which four piles of money, the smallest denomination being \$5 bills, were heaped up. It had been paid to the police collector who carried it away in a violin case."

More than that, he was himself offered a sheaf of bills to take to the police by an owner who had been turned down by them during the "hard times" following the Rosenthal murder. He could have bought stock and bought women, bought police protection, bought shrewd legal service and rented houses with the full knowledge of the agents if not of the owners.

The men who control are all well known. Mostly foreign-born, they have been in the same trade in Europe, South Africa, Argentine, Brazil, Cuba, Canada, Alaska, San Francisco, Portland, Seattle, Tacoma, Butte, Denver, Omaha, St. Louis and Chicago. They boast openly that they can buy their way out of any difficulty. One of them spent \$25,000 in freeing himself from a charge in St. Louis. The only things that hurt them are the periodic waves of reform which close their houses. But "it will blow over," they say, and go to another city for a time.

One of them is known as the "king." He is said to have great influence with the authorities—at any rate his judgment is taken as to when to open and close houses during times of stress. He owns eleven houses, but his chief asset is a mistress said to be the greatest "money getter" of all prostitutes in the world. When he had lost everything she earned enough to put him on his feet again. His hold on her began when he ruined her, a young girl in Russia, and took her to South Africa.

Kneeland has another picture of one of these men in the early morning settling the day's account with one of his "madames" and throwing a bowl at her head because the receipts were small—this after her explanation that the girls could not stay their full time on the hottest day of a stifling summer. And still another of a furious woman breaking in on her man at a restaurant, upbraiding him for giving an automobile to another of his "madames," a younger woman. She had given him everything—"been cut to pieces" for him, she said—and had nothing to show for it; she would "squeal" on him to the police. The man rose deliberately, walked over to her and dealt her a heavy blow in the face. It was his only answer—she did not "squeal." Blows are a prostitute's usual reward—indeed they are a regular part of the slaver's hold on his victims and Kneeland found that a woman has small respect for a man who does not beat her up now and then.

All of this has to do with brothels or "parlor houses." It is in them that the high degree of organization and the big profits lead to the worst features of white slavery. The procurers fill for them specific orders for blonde or brunette, fat or slim girls, in their literally insatiable demand for the young and the fresh. It is girlishness, not sophistication, for which the high prices are paid. Their agents drum up business on the streets, in dance halls and in political clubs; cabbies and chauffeurs are paid for bringing men; a "lighthouse" stands at the curb to inveigle passersby. Their inmates give lewd "circuses" and offer perverted practices. Mr. Kneeland's descriptions are painstaking and full of all sorts of places from dilapidated fifty-cent houses, where laborers crowd in, to handsome establishments full of young women in evening gowns, where a customer must be introduced to gain access.

Under the Russell Sage Foundation, Hastings H. Hart in the *Survey* for May makes the following interesting statement and suggestion for a working programme in bringing about the extinction of the defective and the delinquent: "The condemnation of Dr. Sharp's plan for sterilization is severe; and the plan does, we must admit, present the possibilities which Mr. Hart condemns. Dr. Sharpe, however, is struggling with the hopelessness of the pauper and criminal problem as he has seen it in his life work and has at heart but one wish—improvement of the race.

In every prison and reformatory are found insane, feeble-minded, epileptic, alcoholic, "drug fiends" or cripples. The term defective delinquents is applied to such individuals. Until recently there was no reliable information as to the number of defectives in prisons and reformatories.

Scientific psychological studies of the inmates of several adult and juvenile reformatories indicate that the number of the feeble-minded in reformatories is much larger than had been supposed. Dr. Walter E. Fernald of the Massachusetts School for the Feeble-minded says "At least 25 per cent of the inmates of our penal institutions are mentally defective. Nearly 50 per cent of the girls at the Lancaster Reformatory are mentally defective."

Psychological examinations of inmates of a number of reformatories indicate defectives, approximately, as follows:

New York Reformatory, Elmira, 37 per cent.

New Jersey Reformatory, Rahway, 33 per cent.

New York Reformatory for Women, Bedford, 37 per cent.

Massachusetts Industrial School for Girls, Lancaster, 50 per cent.

Maryland Industrial School for Girls, Baltimore, 60 per cent.

State Home for Girls, Trenton, 33 per cent.

Illinois State School for Boys, St. Charles, 20 per cent.

Judging from these figures, Dr. Fernald's estimate of 25 per cent is conservative. On that basis there are 20,000 defective delinquents in adult prisons and 6,000 in juvenile reformatories, or a total of 26,000 in actual custody. Probably as many more are at large as there are in institutions.

Thus we have two classes of inmates: people able to take care of themselves if a proper basis of character could be established; and people so deficient in mentality as to be unable to succeed.

These two classes need radically different treatment. The normal inmate needs physical renovation, intellectual stimulus, educational treatment, religious training, proper desires, self-control and self-reliance, vocational training, release on parole, restoration to family life. But the defectives in prisons and reformatories need kindly care, rudimentary education, physical training, vocational training in simple industries, plenty of recreation and sympathetic care, and permanent institutional life. It is a needless cruelty to discipline, exhort and educate the feeble-minded in fruitless efforts to develop faculties of mind and soul which do not exist.

In order to extinguish defective delinquents we must restrict the propagation of the feeble-minded. This may be undertaken by popular education in the principles of eugenics, by laws restricting marriage, by the sterilization of defectives and by segregation.

Education against the marriage of the unfit reaches only the intelligent, not the most dangerous. Restrictive marriage laws are unavailing because the unfit reproduce their kind regardless of marriage laws. Sterilization is at best a partial remedy, and is restricted in application by public sentiment. It is actually operative in only one of the eight states which have passed sterilization laws.

Sterilization

Sterilization is advocated by many penologists and alienists as a preventive measure. The writer, it should be stated in order to avoid misunderstanding, is one of those who favor the sterilization of rapists, sexual perverts or degenerates, confirmed masturbators and others whose sexual tendencies call for such action for the protection of the community.

Laws providing for the sterilization of certain classes have been passed by eight states: Indiana (1907); Connecticut, California and Washington (1909); Nevada, New Jersey and Iowa (1911); and New York (1912). Most of these acts have followed the general trend of the Indiana law, which provides that each institution entrusted with the care of confirmed criminals, idiots, rapists and imbeciles must appoint two skilled surgeons. These with the chief physician of the institution, are directed to examine the mental and physical condition of such inmates as are recommended by the institutional physician and board of managers. If, in the judgment of this committee and the board of managers, procreation is inadvisable and there is no probability of improvement it shall be lawful to perform such operation for the prevention of procreation as shall be decided safest and most effective.

The New Jersey law covers rapists, idiots, imbeciles, morons, epileptics and other defectives.

The provision of the laws passed in other states are similar to those of Indiana and New Jersey. The Connecticut and the Iowa laws impose a penalty upon a surgeon who performs such an operation upon any person outside of the classes described in the act. The Iowa law adds drunkards, drug fiends and syphilitics.

The objects of sterilization laws are stated as follows:

- (a) To prevent criminal heredity.
- (b) To prevent rape and punish rapists.
- (c) To prevent the inheritance of feeble-mindedness, epilepsy, etc.
- (d) To provide "a healthful warning and deterrent for reckless sex defectives."

Dr. E. C. Sharp, physician of the Indiana State Reformatory at Jeffersonville, in a pamphlet published by the National Christian League for the Promotion of Purity, considers "means by which we may beget none but sound offspring."

He discusses proposed methods and says: "Restricting propagation seems to be universally agreed upon as necessary for the relief of this condition. The difficulty lies in deciding upon the proper method." He discards several proposed methods, as follows:

(a) "The education of public opinion, so that those who are from defective parentage shall abstain from marriage" because it "is even worse than absurd."

(b) "Restrictive legislation for the purpose of preventing marriage among defectives because unfortunately 'matrimony is not always necessary to propagation.'"

(c) "Segregation of degenerates in institutions because it would necessitate the expenditure of enormous sums to maintain colonies or industrial refuges, which would be a disappointment in the end."

(d) "Castration" because "it causes too much mental and nervous disturbance."

Dr. Sharp says: "I heartily endorse as an additional punishment in certain offenses an operation known as vasectomy, which consists of ligating and resecting a small portion of the vas deferens."

(a) "This operation is simple and easy without anesthetic, general or local."

(b) "The subject is effectually sterilized."

(c) "He returns to work immediately, suffers no inconvenience, and is in no way impaired for his pursuit of life, liberty and happiness."

(d) "There is no disturbed mental or nervous condition following."

(e) "The patient ceases excessive masturbation."

(f) "He advises his fellows to submit to the operation for their own good."

(g) "After the vas deferens has been severed, you may by a second operation repair it and re-establish the original function."

(h) "Women may be subject to sterilization as well as men."

It is astonishing that this plan should have been adopted by so many legislatures in view of the fact that it has been discredited in Dr. Sharp's own state, and has been put into operation thus far in only one other state.

The Indiana law went into effect in 1907. The published reports of the Indiana State Reformatory show in the fiscal year 1907-8 119 operations, in 1908-9 thirty-nine operations, in 1909-10 one operation, in 1910-11 none. The reason for the discontinuance of this operation, notwithstanding the fact that the law said "it shall be compulsory for each and every institution," is that the Governor of the state of Indiana believed the law unconstitutional. Up to November 1, 1912, there had been no operations under the laws of Connecticut, Washington, New Jersey, Iowa or New York. In California the law has gone into effect, and more than 300 operations have been performed.

In view of these facts, it would seem wise for other states to await judicial decisions and practical tests of this plan in states where the law has already been adopted before enacting such legislation. Certain objections to the method proposed by Dr. Sharp present themselves to the practical student:

(1) The operation has little, if any, deterrent value. Dr. Sharp says: "All other methods proposed place restrictions—therefore punishment—upon the subject; this method absolutely does not." In another article he calls attention to the fact that the disability can be removed by a second operation.

(2) This operation, while it sterilizes the individual, does not interfere with the practice of sexual intercourse; it does not prevent the individual from committing rape; it does not prevent masturbation (Dr. Sharp says: "The patient . . . ceases excessive masturbation"); it does not interfere in the slightest degree with the transmission of venereal disease.

(3) The plan advocated by Dr. Sharp carries with it a proposition which is monstrous and abhorrent. After setting forth the contents and the effect of the Indiana law, he says: "This is indeed a very long step in the right direction . . . I would, however, carry it a little further, and make the provision in our marriage laws, that when one or both contracting parties suffer from a defect, or a chronic transmissible disease, the male should be sterilized. Then let them go on and marry; and by this means there will possibly be a support given and a protectorate thrown about some feeble-minded woman, that in any other event would become a public charge or a prostitute, or more than likely the mother of illegitimate children."

Consider the meaning of this last declaration. The feeble-minded girl is, in physical development and inclinations, a woman; she is in mind an innocent child. Dr. Sharp proposes to take this innocent and helpless child and hand her over bodily to a diseased rake, "and by this means there will possibly be a support given and a protectorate thrown about some feeble-minded woman." It is time that a protest was raised against this inhuman proposition.

Sterilization is a legitimate and proper proceeding for certain classes, but the method employed should be such that it will be dreaded and not welcomed by the criminal and the degenerate, and such as to hinder and not to promote the spread of disease. No sterilization law can be effective until a strong public sentiment is developed to sustain the execution of such laws.

Segregation—the Method Cited

Segregation is the most practical and effective means to restrict the propagation of the feeble-minded. It has been successfully tested with the insane. Thirty years ago the segregation of the insane seemed almost a hopeless undertaking, but in twenty-three years, from 1880 to 1903 the number of insane in hospitals was increased nearly four-fold, and the ratio was increased from eighty-two to 186 for each 100,000 of the population. What has been done for the insane can be done for the feeble-minded.

We may estimate the number of the feeble-minded under public care

as follows: in institutions for feeble-minded, 20,000; in almshouses, 16,000; in hospitals for insane, 5,000; in prisons and reformatories, 26,000. Thus 67,000 are already under public care or as near as can be judged one-third of the feeble-minded persons in the United States. The problem of segregating the feeble-minded is not as large in proportion to our resources as was that of segregating the insane thirty years ago.

A Practical Working Program

Thus far we have started at the wrong end. Schools have been built on the theory that, by employing teachers of special skill and training and by adopting improved educational methods, defective children will become normal members of the community.

These hopes have invariably been disappointed. When these children have been sent out into the world, they have either been returned or have become a burden upon the community in other ways. The most competent authorities agree that it is useless to try to develop the latent mentality of feeble-minded children, because it does not exist.

The following suggestions are offered as a working program:

1. Secure legislation whereby institutions for feeble-minded children shall hold their inmates as the insane are, by legal commitment. In most states, the parents' consent to commitment is either required or is customary. Parents who find their children apparently improved often insist upon their release against professional advice.

2. Secure legislation whereby, whenever inmates of institutions for other classes are found to be feeble-minded, they may be kept permanently in public care.

3. Provide by law for the establishment of separate departments, in connection with prisons and reformatories, and transfer to these colonies for permanent custodial care all inmates found to be feeble-minded.

4. Convert existing institutions which are no longer needed for present purposes into state institutions for defective delinquents.

5. Undertake a comprehensive campaign for the care of all feeble-minded girls of child-bearing age. The problem of the feeble-minded girl is much more acute than that of the feeble-minded boy. In a letter just received from Dr. Henry H. Goddard, of New Jersey, he says: "The feeble-minded woman is more dangerous to society than the feeble-minded man, because she is much more likely to find a mate than he is—possibly, according to our statistics, somewhere in the neighborhood of three times as likely." There are probably 60,000 feeble-minded women of child-bearing age in the United States. About 13,000 are already under care in reformatories and institutions for the feeble-minded. We are already taking care of about 100,000 insane women in hospitals. It is possible to make institutional provision for all of the feeble-minded women in the United States.

6. Secure legislation whereby institutions for feeble-minded shall cease to receive girls under the age of twelve, or boys of any age, until every feeble-minded girl of child-bearing age is provided for. The feeble-minded girl is but a child. She is as innocent, helpless and child-like as her normal sister of half her years, and she is entitled to the same protection and chivalrous regard as the little girl of similar mentality. Yet she is left without protection to be pursued and hunted by evil-minded men *as ruthlessly as hunters pursue a rabbit*. Society deals with her as if she were responsible. She is arrested, condemned to prison, or, more humanely, sent to a reformatory for discipline and training; but the managers are compelled by law to send her home to be exposed to fresh temptation, abuse and contumely, to breed her own sort, and finally to join the great army of prostitutes.

7. Undertake a vigorous campaign throughout the country for increased provision for the feeble-minded classes. This is the next great task of our people, and it must be bravely met.

This campaign should undertake to establish:

- (a) Care in almshouses for males over fourteen years and females over forty-five;

(b) Custodial institutions for feeble-minded women like those in New York and New Jersey;

(c) Institutions for defective delinquents among those committed by the criminal and juvenile courts;

(d) Small institutions for your children who ought to be cared for as a matter of humanity;

(e) Schools for backward children in the large cities to sift out sub-normal children, and give them school-room care until institutional care can be provided.¹ In small communities, it is impossible to establish such schools, and the only practicable way to meet their needs is by creating state or county institutions.

¹The New Jersey law requires a special class in every school district having ten or more children three years behind grade. The state gives a subsidy of \$500 a year for each special class. We incline to think feeble-minded children might stay at home and attend special classes until puberty.

THE LOYALTY COMMITTEE OF BOSTON UNIVERSITY SCHOOL OF MEDICINE, INCORPORATED.

This Committee will in the near future commence the publication of a four-page quarterly. This will be sent not to our physicians, but to their patients and friends.

The quarterly is designed to present the facts of the achievements, needs financial and otherwise, of Boston University School of Medicine. There will also be articles of general interest on topics relating to hygiene, as well as articles on Homœopathy.

Some advertising of an unobjectionable nature will be carried if possible and a nominal subscription fee of 25 cents will be asked for. The first issue will be sent gratis and subscription list of 1,000 or more is needed for this issue.

Our physicians are hereby requested to send to the Secretary, Dr. William A. Ham, 1799 Dorchester Avenue, Ashmont, Mass., or to the Treasurer, Dr. Dana F. Downing, 419 Boylston Street, Boston, the names of as many people of influence and means as they can think of, whom they feel would be interested to receive this quarterly.

The publication will be conducted in a safe, sane and enthusiastic manner, and the Committee feels that none of the friends of the School should hesitate a moment to respond to this appeal.

The first \$100,000 of endowment for the School is already in sight but we mustn't stop there. As "eternal vigilance is the price of liberty," so continuous persistence is necessary to bring success. The work of the Committee is not intended to duplicate the work of the Finance Committee, a report of whose work will be found herewith, but to supplement that work.

The expense of conducting even this modest publication will be considerable so that subscriptions to the general fund of the Committee as well as individual subscriptions will be needed. It is suggested that our physicians subscribe for at least one copy for placing on the reading table in their offices.

The Finance Committee of Boston University School of Medicine report progress and an increasing interest in the first one hundred thousand dollars of endowment fund. The fund now lacks \$10,000 of completion. The income only of this sum approximately \$4,000 a year will be used by the school; the principal will be kept intact.

A fair is now planned for November to complete the amount, and if possible to start the next hundred thousand.

A list of subscribers to the endowment fund to date has been issued.

Beginning June 11th, rates at the Massachusetts Homœopathic Hospital have been advanced as follows:—

\$14.00	beds	to	\$15	per	week
\$17.50	rooms	"	\$21	"	"
\$25.00	"	"	\$28	"	"

CORRESPONDENCE.

Dr. Horace Packard is traveling abroad and during the month of June was having a pleasant visit to Japan. In a letter to the editor dated at Kyoto, June 5, he writes: "This is just a word of greeting from the wonderful land of torii, temples, sunshine, showers and flowers; enchanting gardens, pagodas, warm-hearted people, wonderful fabrics, carvings and curios. We are daft over it all."

The Business Manager of the *Gazette* is abroad this summer and the following letter is from her:

Sunday, June 1, 1913.

My vocabulary in either English or Italian is not equal to a description of this beautiful city of Naples, so I will not make the attempt. To begin with, the situation, as doubtless you know, is ideal, and the views from almost any point are wonderfully beautiful. From the waterfront, where we are staying, and the upper streets of the city one looks out on the lovely Bay of Naples and over to Vesuvius. Our first night here was worth the voyage over, and after a little necessary unpacking and "settling," I sat out on the balcony and drank in the loveliness of the scene, the reflected, soft changing sunset colors in the water and over Vesuvius. I must confess that already my heart is lost to "Sunny Italy," the land of poetry and art.

The voyage over was a fine one with pleasant weather and smooth sailing almost all the long way. The steamer made four stops,—at Ponta Delgada (Azores), Madeira, Gibraltar and Algiers, each place more fascinating and interesting than its predecessor. Ponta Delgada looked like a water color sketch with its picturesque streets and softly colored houses in pinks, yellows, blues, greens, and some in patterns. An amiable old man driving a donkey cart let me take a snapshot of his equipage and himself, and traffic was held up for a minute while I tried my luck.

Funchal, Madeira, is very beautiful and I had a delightful morning there with a young woman artist from Boston. We explored for ourselves independent of the other people from the steamer, and found such lovely bits of scenery, with peeps into beautiful gardens, and smiles and pleasant greetings from pretty children and handsome women, all nicely dressed for church (the day being Sunday).

Gibraltar and Algiers were absorbingly interesting, especially from a human point of view, and at those two places we seemed to be in the Orient, so many dark-browed, swarthy Arabs in their turbans and baggy trousers were in the streets and market places especially. In Algiers, North and South touch elbows, and it seemed to me that the two sections of the city, old and new, were centuries apart. Old Algiers with its crooked maze of dirty, narrow lanes for streets, too narrow for anything but travel by foot—and that with great care to avoid slipping on the dirty stones or making a wrong turn—is really awful, swarming with Moslems who doubtless look upon all visitors as Christian dogs to be ignored or even murdered if occasion and opportunity allowed. Most of the Moslem women we saw were veiled, nothing of their faces showing below their eyes. I wondered what they thought of the women of our party, walking with uncovered faces.

The new French part of Algiers is very handsome indeed, and from the heights there is a very beautiful view over the city and out onto the Mediterranean, with the Atlas Mountains on the right. We visited a part of the Governor of Algeria's summer palace, once the palace of the Sultan, and garden, two mosques where Moslem men were praying to Allah and no one is allowed to step except without shoes, and had a long drive about the city. You should see the fine automobiles and garages of the French portion of Algiers. They are the finest and handsomest I ever saw, and they seem to indicate great wealth.

To-morrow we go to Pompeii, and yesterday saw at the Museo Nazionale in Naples a wonderful collection of things which have been found in the excavations, amongst them some *surgical instruments* used nineteen centuries ago! I recognized a few.

With cordial regards for all my associates,

Yours sincerely,

LILLIAN G. KNOWLES.

MEDICAL JOURNAL REVIEWS.

North American Jour. of Homœopathy, July, 1913.

1. *Radiographic Color Diagnosis.* Upham, R.
2. *Dietetic Treatment of Summer Diarrhœa.* Benson, R. A.

The author follows Finkelstein's method. The infant is put immediately on casein milk, instead of waiting for the usual twenty-four hour fast. In twenty-four to forty-eight hours the stools become yellow and less frequent. Malt sugar in the form of dextro-maltose is then added. In a series of twenty cases treated with casein milk alone for five days the results were highly satisfactory. No cathartics, rectal irrigations or medicines were given in this series.

3. *The Fundus Oculi in Arteriosclerosis.* Clark, L. H.
4. *The Homœopathic Remedy and Adjuvants in Dermatology.* Love, W. A.
5. *The Need for Improved Sanitary Conditions and the Benefits to be derived therefrom.* Gorham, G. E.
6. *Sterilization as a Factor in Social Betterment.* Sanders, O. B.
7. *Social Service in the Tuberculosis Infirmary of the Metropolitan Hospital.* Murray, M. M. (R. N.)
8. *The Prevention of Communicable Diseases.* Lumsden, L.L.

C. W

Medical Century, June, 1913.

The Effect of Baptisia in the Production of Typhoid Agglutinins. Ralph R. Mellon, M.D.

The sera of two healthy subjects were tested for agglutination power against typhoid bacilli and found to be practically negative in dilutions 1:5, 1:8, and 1:12. The subjects were then given one drain of baptisia 3 x t. i. d., for a week and the Widal test again applied. Following this the lower dilutions and the tincture were administered seriatim over a period of about six weeks and serum reactions obtained. Clumping and loss of motility appeared with gratifying uniformity, most marked during the first part of the tincture period and reappearing some days after discontinuing the drug. There follows an interesting exposition of "quantitation specificity and qualitative non-specificity" which will be gratefully perused by the more inexact prescriber.

The work is discussed by Dr. W. A. Dewey who does not fail to direct attention toward the "minimum" dose, and who believes that drop doses would have answered as well. This belief the reviewer does not share, since the reaction, somewhat quantitation in itself, was most consistently produced by the stronger doses of the antigen, and absolutely no encouraging deductions as to the efficacy of dynamization can be drawn from the results of the experiments, (which is no small satisfaction in itself.)

On Diseases of the Nervous System. Dr. J. H. Peterman.

A short series of assertions on many things medical, woefully lacking both unity and coherence, but giving some measure of emphasis.

Medical Helps in Surgical Conditions. Daniel O. Webster, M.D.

Another plea for the use of the indicated remedy instead of narcotic palliatives.

The Relationship between the Homœopathic Remedy and the Human Defensive Theory. Benj. F. Bailey, M.D.

A short discussion of the relations of immunity, similia anaphylaxis, etc.

Obstetrical Observations. L. C. M'Elwee, M.D.

Nothing new is presented.

The Treatment of Gonorrhœal Arthritis. John A. Brooke, A.M., M.D.

A short but instructive review.

Annual Address of the President of the Missouri Institute of Homœopathy. Edward J. Burch, M.D.

The Critique, June, 1913.

Seborrhœa, Pityriasis Steatoides, Dermatitis, Seborrhœicum Manifestations, Diagnostics, and Treatment Methods. Ralph Bernstein, M.D.

S. B. H.

SOCIETIES.

The New Hampshire Homœopathic Medical Society.

The sixtieth annual meeting of the New Hampshire Homœopathic Medical Society was held at the Eagle Hotel, Concord, on Wednesday, June 11. The program included the regular business meeting with addresses in the afternoon, followed by a banquet at 6.30.

Delegates were received and appointed from the Mass., Maine, and Vermont societies.

Dr. Maurice W. Turner of Brookline, Mass., was elected to membership.

Perhaps the most important proceeding of the meeting was a resolution to the effect, that whatever legislation may in the future be proposed or enacted relative to changes in the law regulating the State Board of Medical Examiners; it is the sentiment of this Society that its members do not favor any law which would give to the Regular school of medicine a majority membership.

The following officers were re-elected for the ensuing year:

President, C. A. Sturtevant, M.D., Manchester; Vice-President, L. R. Clapp, M.D., Farmington; Secretary, B. C. Woodbury, M.D., Portsmouth; Treasurer, H. Christophe, M.D., Manchester.

Censors: R. V. Sweet, M.D., Rochester; Channing Bishop, M.D., Bristol; A. J. Todd, M.D., Manchester.

Examining Board: George R. Smith, M.D., Dover; President, Channing Bishop, M.D., Bristol; Secretary, R. V. Sweet, M.D., Rochester; C. F. Adams, Franklin; H. M. Wiggin, M.D., Whitefield.

Legislative Committee: George R. Smith, M.D., Dover; F. S. Eveleth, M.D., Concord.

The society was addressed by two Boston physicians, Dr. William F. Wesselhoeft and Dr. Frank W. Patch.

The following is the program:

"Emergency Surgery of the Abdominal Cavity"

William F. Wesselhoeft, M.D., Boston, Mass.

"The Profession of Medicine—A Survey"

Frank W. Patch, M.D., Framingham, Mass.

"Pernicious Vomiting: Two Cases of Fatality"

B. C. Woodbury, M.D., Portsmouth, N. H.

"Our Joint Examining Board"

R. V. Sweet, M.D., Rochester, N. H.

If an extended review of Dr. Wesselhoeft's paper were possible, it would best be in the terse, clear-cut style of the speaker himself. It will suffice, however, to say that it was a paper full of helpful suggestions, carefully recorded statements of the pros and cons calling for immediate exploration of the abdominal cavity. The basis of these indications being four-fold: inflammation, obstruction, perforation and hemorrhage.

All of these types of emergencies were discussed with reference to symptomatology, differential diagnosis and operative procedure, illustrated fully by a series of cases.

It is ever an inspiration to hear Dr. Wesselhoeft.

Dr. Patch discussed Old medicine, New medicine, and the influence upon the profession and the public generally of the non-medical systems of healing.

The Author looks cheerfully forward to the time when, out of the flux of traditional medicine, the uncertainty of the cults (which not only apparently discredit experience but also knowledge), and the past unfortunate division in our ranks there shall arise an amalgamation of science and knowledge, which shall be for the prevention of disease, rather than elusive theories as to its possible cure.

When we recognize, he states, that the rectifying of social and sociological conditions which are largely or in part responsible for many of our chronic diseases would ultimately lead to their eradication, there should be less dissension among the profession. There was also a timely appeal to the profession to support our homœopathic medical schools.

This was a paper, which one hearing, would desire to read again, slowly and carefully, that its import may be fully appreciated.

Interesting discussions followed all the papers; the fatal cases of pernicious vomiting were of that type, presenting acetoneuria alone, in contradistinction to the vomiting of pregnancy or diabetes, where both acetone and diacetic acid are present.

Things *homœopathic* seem to be everywhere rife for discussion, propagandism and consideration; an effort was made at this meeting to arouse interest and enthusiasm in the cause of Homœopathy in New Hampshire.

Such meetings as this just recorded can only serve to awaken renewed activity along this line, which is the surest basis for success, and offers the brightest outlook for the future of Homœopathy.

Favorable weather and a good attendance served to make this meeting a successful one in the history of this Society.

B. C. Woodbury Jr. M.D., Secretary.

The Homœopathic Medical Society of the County of Kings.

The four hundred and sixty seventh meeting of the Homœopathic Medical Society of the County of Kings was held June 10, and two very interesting papers occupied the evening. The first, by Dr. Walter Gray Crump of New York, was entitled "Post Operative Abdominal Adhesions and Sepsis. Some Ideas as to their Prevention and Treatment." Dr. Crump dwelt upon the uses of camphor in abdominal sepsis calling attention to the apparent similitum between the effects of camphor in its provings and the conditions found in septic peritonitis, and reciting experiences in the use of that remedy in combination with oil, in varying strengths, as a preventive of adhesions in abdominal inflammations. He also mentioned the use of neutral animal oils as preventives of adhesions in inflammatory conditions of the peritoneum. In discussing the paper, Dr. Her, of the Cumberland Street Hospital, spoke of a paper recently published by Dr. Patrick of Boston on the uses of camphor in the treatment of septic conditions of the skin, especially in stitch abscesses, and where unhealthy skin wounds did not respond to ordinary treatment.

Prof. Soresi, of the New York Homœopathic Medical College, presented a paper, entitled: "Prevention of Death, and Resuscitation." The paper was an analysis of the Professor's work in vivisection upon dogs to study the effects of hemorrhage, shock, gas poisoning, and autointoxications. He claimed that many deaths could be prevented in acute diseases if transfusion of blood could be made from a healthy individual. He has bled dogs to such a degree of lifelessness that they were actually stiff and practically dead, and then by transfusion of blood from a live dog the apparently dead animal returned to life. He mentioned one case where a patient was dying from a severe pneumonia, and when the brother begged that something be done to save the patient, Dr. Soresi opened the jugular vein of the sick man and made a transfusion of blood from the brother direct, with the resulting recovery of the patient. He stated that it is a simple matter to get blood into the right side of the heart by way of the jugular vein and superior vena cava, but so far it had not been possible to get blood to the left side of the heart. If the latter could be accomplished and healthy blood be delivered from the left ventricle throughout the body death could frequently be prevented in acute diseases. The one essential in all transfusion work was that the organs must be in good condition and the central nervous system not impaired. In Bright's disease, where the kidneys were impaired, attempts had been made to transplant a healthy kidney, leaving the original kidneys in place so that the animal had three kidneys, with the ureters attached to the bladder. It had not been tried in human beings yet, and he could not advise it at the present time. In gas poisoning, in young people especially, by transfusion every case should be saved. In elderly people with arterio-sclerosis or organic lesions there was nothing to be done.

L. D. BROUGHTON, M.D., Secretary.

Maine Homœopathic Medical Society.

The Maine Homœopathic Medical Society held its 47th annual meeting June 10, at the residence of Dr. R. J. Wasgatt in Rockland. About 35 members were present.

The business session was held upon the arrival of the forenoon train, and included an address by the retiring president, Dr. William H. Kennison of Madison. "Get together" was his injunction to the members of the profession. A new board of officers was elected as follows:

President, Dr. George H. Rand of Livermore Falls; 1st vice president, Dr. H. H. Plummer of Union; 2d vice president, Dr. Luther A. Brown of Portland; recording secretary, Dr. J. H. Hayward of Biddeford (who is soon to locate in Camden); corresponding secretary, Dr. Carrie E. Newton of Brewer; treasurer, Dr. W. S. Thompson of Augusta; necrologist, Dr. R. J. Wasgatt of Rockland. It was voted to hold the next annual meeting in Augusta.

Addresses which possessed marked interest for the homœopaths were delivered as follows:

"Does Homœopathy fail in Mental Diseases?" H. H. Plummer, Union; "The Future of Homœopathy." W. S. Thompson, Augusta; "A Case of probable Maternal Infection." J. H. Hayward, Biddeford; "A Few Obstetrical Experiences." E. S. Abbott, Bridgton.

From the hospitable home of Dr. Wasgatt the physicians were taken in motor cars to Owl's Head Inn, where they consumed a quantity and variety of shore victuals such as they would never prescribe for anybody but a rugged patient. Their stay at this picturesque summer hostelry was greatly enjoyed.

Wednesday forenoon was devoted to a surgical clinic at the Hanscom hospital, proving to be one of the most interesting and instructive the Society has ever held. There was a series of six operative cases. One which excited especially favorable comment upon the part of the spectators was the grafting of plastic skin over a knee joint.

BOOK REVIEWS

Massage—Manual Treatment, Remedial Treatment. History, Mode of Application, and Effects; Indications and Contra-Indications, by Douglas Graham, M.D., Consultant and Instructor in Massage, Boston, Mass. Member of the American Association for the Advancement of Science; of the American Medical Association; The Massachusetts Medical Society, etc.

With a Chapter on Massage of the Eye, by Dr. A. Darier, Paris, formerly President of the Ophthalmological Society of Paris; Chevalier of the Legion of Honor, etc.

"Oh that mine adversary had written a book!" (Job xxxi-35.)

Fourth Edition, Revised and Enlarged, with 75 Illustrations.

Philadelphia and London, J. B. Lippincott Company.

This book is one with which every medical practitioner no matter what his specialty, where his practice or what class his patients, should be thoroughly familiar. It deals with a subject which is as essential to the correction and cure of certain lesions as any agent of which the medical man has knowledge. Did we but know the full meaning of rest and exercise, we should not so frequently fall ill upon the one hand, and upon the other, we should recover much more promptly when we were so affected. It is not enough to know that massage is a valuable agent in certain diseased or traumatic conditions, but one must know precisely and definitely in just what conditions it is best suited and just when it should be applied. It is not possible that everyone can obtain the good results which Dr. Graham obtains because all cannot become expert in that line, but one should know when to advise his patients to employ such treatment. Dr. Graham has given the profession a valuable volume, printed on unglossed, readable paper, in clear print, and well bound. We are again indebted to him.

Manual of Surgery, by Francis T. Stewart, M.D., Professor of Clinical Surgery, Jefferson Medical College; Surgeon to the Germantown Hospital; out-patient Surgeon to the Pennsylvania Hospital. Published by P. Blakiston's Son & Co., Philadelphia, 1911. Price \$4.00.

The author says, very truly, that the chief factors in a diagnosis are to obtain correct facts, to interpret them properly, to know what to look for and above all to *look*. More mistakes are made by want of looking than by want of knowing.

This volume is particularly adapted to the advanced student and a general practitioner who seeks a guide to present day surgery in as few words as possible. One who demands a work wherein there is a sufficiently graphic picture to enable him to recognize the conditions in hand most readily and accurately will find it in this work. The first half dozen chapters prepare one quite thoroughly for the general application of surgical knowledge, Anesthesia, Bacteriology, Surgical technic, Bandages, Inflammation and Repair and Suppuration. The undergraduate or practitioner who has mastered those subjects is more than half a surgeon, conversely, no man is even a fair surgeon who has not mastered them. The remaining chapters are up-to-date and concisely written, and contain the necessary information to give the reader a thorough and comprehensive knowledge of the matter in hand. The print and paper are unusually good.

Diet Lists of the Presbyterian Hospital, New York City. Compiled, with notes, by Robert S. Carter, M.D., Assistant Visiting Physician to the Presbyterian Hospital, Associate in Medicine at Columbia University, etc. 12mo of 129 pages. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$1.00 net.

This little book is so concise and practical that it should be in the hands of every physician and nurse. No subject is more vague in the mind of the average doctor, who frequently finds it easier to use the prepared diet list of some patent food manufacturer, than to individualize his case by careful study of dietetics. The practicality of the book is well illustrated in the following Diet Table for Obesity:

Obesity Diet.

(Richter.)

- Early A. M.: Cupful of tea, no milk or sugar.
 Ham, 40 gm. (1 1-3 oz.)
 1 Roll (dry.)
- 10 A. M.: Fresh fruit.
- 12 A. M.: Fresh fruit.
- 2 P. M.: Clear soup, 100 gm. (3 1-3 oz.); lean meat, plenty of green vegetables without butter or milk.
 Salad.
 1 or 2 glasses of lemonade without sugar.
 Use saccharin if wanted.
- 4 P. M.: Cup of tea.
- 6 P. M.: Fruit.
- 8 P. M.: 75 gm. (2 2-3 oz.) of lean meat, radishes, potato (small one), sour pickles.

In the back of the book are many valuable tables of food values and calories.

We heartily commend this excellent work.

Massage and Its Principles and Technic, by Max Bohm, M.D., of Berlin, Germany, Edited, with an introduction by Charles F. Painter, M.D., Professor of Orthopedic Surgery at Tufts Medical School, Boston. Octavo of 91 pages, with 97 illustrations. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$1.75 net.

This is a most welcome book. In less than one hundred pages it gives the essentials necessary for an understanding of the subject, indeed one need not read a word, but may learn entirely from the pictures, so profuse and excellent are its illustrations. We make far too little of this important therapeutic agent in America. Dr. Painter rightly says in his introduction that "the aloofness from all things therapeutic which characterizes a considerable portion of the medical profession in this country is regrettable. If it can be defended when applied to drugs and compound prescription writing, it cannot longer be defended as applied to massage, hydrotherapy and possibly to some forms of thermal therapy. Massage has long been part of the German physician's armentarium, and it is time that it was given a more dignified place in our own curative schema.

Dr. Bohm's little book especially commends itself to nursing schools as an inexpensive and practical manual. The half tones are well-chosen and stand out sharply on the high gloss paper.

Homœopathy in Medicine and Surgery. By Edmund Carleton, M.D. 311 pages. Cloth, \$2.00 net. Postage, 15 cents. Philadelphia. Boericke & Tafel, 1913.

The book is one of those valuable compilations of the observations, experiences and methods of a successful practitioner. Dr. Edmund Carleton was a close follower of later teachings of Hahnemann. As the title of book implies, the author deals with the application of homœopathy to a great variety of conditions from insanity and infectious diseases to wounds and malignant tumors. Most of the cases are exceptionally well recorded and followed by a discussion, thus giving the reader a good idea of the way in which the author selected his remedies. Since the object of the book is to bring out the value of homœopathy and the directions for its successful use, the other methods employed as adjuvants to the homœopathic remedy, such as diet, hygiene, etc., etc., as mostly omitted except in surgical cases.

In dealing with diphtheria the author betrays a deep-seated prejudice to antitoxin. He terms it a vile and disgusting poison which is both useless as a curative and as a prophylactic. His argument in favor of the homœopathic remedy in this disease is based upon philosophy rather than the more conclusive arguments of statistics which we might have made use of. He has a poor opinion of the "pathological prescriber," insisting on the great importance of individualizing cases. He himself would not try antitoxin because he "never experiments on the sick." In regard to vaccination against smallpox we find a very fair-minded consideration. Compulsory vaccination is condemned as a monstrous tyranny in the light of the general history of this prophylactic measure. The terse remark that it was at first guaranteed to protect for life, later for seven years, then for one year and now that it is only claimed to modify an epidemic of small pox is indeed significant. Vaccinum, melandrinum and variolinum are better given in potency by mouth, and of these three variolinum is the one to be chosen for conveying immunity to variola. To the author's opinion, vaccinum does not require the requisite superiority by virtue of dilution or potentiation. He goes at length into the method of using Allen's Fevers, but his cases of malaria do not exhibit striking results although they inspire interest and are valuable studies. The surgical cases portray the highest degree of confidence in homœopathic medication as an adjunct to this branch of medical art.

The author does not shrink from publishing his failures. This adds greatly to the value of the work, since failures are often more instructive than successes, the latter being frequently deceptive as regards their therapeutic significance. To those who follow the later and stricter teachings of Hahnemann, this book should be welcomed as a reference and guide; to those who place more confining limits on the theory and practice of homœopathy the book brings a broadening influence.

C. W.

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ORIGINAL COMMUNICATIONS.

“WAS IT WORTH WHILE?”

By JOHN P. SUTHERLAND, M.D., Boston, Mass.

The sixty-ninth annual session of the American Institute of Homœopathy is now on history's roll; no longer to be anticipated, it has become *un fait accompli*, and the time therefore has come when the doings of the session can be compared with the doings of its long list of memorable predecessors; when the meeting as a whole may be analyzed, its details retrospectively examined and its various activities weighed as to their possible usefulness. The judicial and critical attitude, however, should be left where it eminently belongs: viz., with those whose editorial functions impose such duties upon them. The ordinary correspondent should be content with the mere statement of facts and opinions; with the narration of incidents and occurrences, leaving it to his readers to draw such inferences from the narrative as may seem to them proper. Therefore without any effort to be historical or critical, to draw any lessons from the meeting, to offer any advice or make any prophecy concerning future meetings, allow me please in the pages of our much esteemed “GAZETTE” to ask a few brief and simple questions and briefly and simply to answer them:

I. Was it worth while to hold a meeting of the Institute at Denver?

II. Was it worth while for New Englanders to travel over two thousand miles each way in the broiling heat of summer to attend such a meeting?

III. Was it worth while to take the time needed or desired for some other purpose and devote it to the Institute?

IV. Was it worth while to assume the expense incurred by a two weeks' absence from professional work and by the incidentals of such a trip?

These and kindred questions suggest themselves, and to these

and kindred questions the writer would give a wholly and unreservedly affirmative reply. His answer would be an enthusiastic Yes! All these things were worth while, and well worth while.

The questions will not be answered seriatim, though the methodical mind might prefer to do so, just as the chronologically-minded might prefer to narrate the incidents of the days as they followed one another. The temptation to tell the details of the outward trip which was exceptionally enjoyable despite the small band of lay and professional pilgrims that started from Boston is almost too strong to be withstood, for a small party of congenial people can enjoy traveling together even during hot and dusty weather in confined Pullman cars. One must refer to the cordial welcome at Buffalo where a prettily decorated and abundantly supplied breakfast table waited the arrival of the train with its united Boston and New York contingents. A few hours later, as allowed by a "stop-over," our Niagara Falls colleagues, in spite of its being a holiday—the "Glorious Fourth"—and a very hot day into the bargain, loyally and generously demonstrated their hospitality by meeting the tourists at the station with automobiles, and in the short hour at their disposal showing their local attractions and the always wonderful, awe-inspiring and majestic Falls! And there comes to mind the "gathering of the clans" at Chicago under the experienced, thoughtful and decidedly efficient marshalship of Drs. Fisher and Costain of the Transportation Committee. The "Special" train, and it was a big one, was none too big to accommodate the host that collected under the banner of similia. The following hours of traveling could not be dreary in such company; in fact the hours were too short. And none who were there can forget the short "stop-over" at Sterling, Colorado, the home of Dr. Fisher, where the strains of martial music from the local brass band spoke a rhythmical and tuneful welcome to the thriving little city of the plains as the train slowed down at the station; or the courtesy extended by the Chamber of Commerce under whose auspices a procession of fifty or more automobiles conveyed the excursionists through the city and out into the fertile, irrigated alfalfa fields; or the Logan County Industrial High School, a model in more senses than one, which was exhibited with pardonable pride; or the consideration of the clergy (for it was Sunday morning) who on learning that our train was late thoughtfully postponed the opening of their services till after the procession had passed through the streets. Many other incidents of the trip might be referred to if space and purpose permitted.

During the sixty-nine years of its existence the Institute has held meetings once each at Milwaukee, Minnetonka, Waukesha,

Omaha, Kansas City and Pasadena, and twice each at St. Louis and Denver. All its other meetings have been held well to the east of the Mississippi River. The meeting in Denver this year was well worth while because it did more than any other agency could have done to cement into a solid unit the scattered forces of Homœopathy in the South West; it brought together in a spirit of unselfish coöperation a body of physicians whose individual interests would make for separation; it not only unified, it harmonized the activities of "many men of many minds;" it showed the real strength and latent energy existing in the profession of Denver and its neighborhood; through the generous allotment of space in the daily press for reports of and comments on the sessions, thousands of people heard of Homœopathy for the first time and thousands more were convinced that Homœopathy still lives as an active, militant, progressive influence in the world. Larger meetings of the Institute have been held; programs may have included a larger number of papers; but the spirit of the meeting was definite, determined, strong, ambitious and courageous, and never in the history of the Institute has there been at the end of the year's work so large an addition of new members!

Was it worth while?

It was worth while to carry from the far East to the sturdy frontiersmen of the far West a message of greeting and good-will, of faith and confidence, of encouragement and expectation, and demonstrate by actual presence in the flesh rather than by "windy affirmation" that, though separated by wide distances and living under widely different environment, our professional trials and difficulties, our hopes, our ambitions, our efforts, our combats with disease and our general experiences in life are so similar that we are a real fraternity, working for a common cause and able to sympathize deeply with each other.

While essentially one with our Western brethren it is decidedly worth while for the "effete" Easterner to become familiar by personal observation, inspection and contact with the peculiar local problems, social, educational, economic and professional with which his Western brother is confronted; problems which are not academic but intensely practical. Topographical and climatic differences are no greater than are some of the problems referred to.

It is worth while to realize that after all East and West are mere terms of convenience, and that in medicine as undoubtedly in other things, it is well to remember Kipling's words,—

"For there is neither East nor West,
Border, nor breed nor birth,

When two strong men stand face to face
 Though they come from the ends of the earth."

As to the adjuncts of the meeting,—It was worth while to travel thousands of miles to become the recipients of such a hearty welcome, and generous, whole-souled hospitality as our hosts showered upon their guests; and it was better than worth while to have one's horizon immensely broadened by traveling across boundless fertile plains made useful and prosperous by man's ingenuity and industry; to have one's imagination stirred by the relics of pioneer life which recalled pictures of the romantic and heroic struggles which carried our civilization to the setting sun; to experience the physical stimulation and the mental and spiritual uplift to be found only in dark, picturesque, shadowy, rock-ribbed cañons among the calm, peaceful, majestic hills which raise their snow-capped peaks high into the eternal heavens. To stand at an altitude of more than two miles and gaze out upon a two-hundred-mile panorama of incomparable mountain scenery with its ever-changing hues, and shadows and suggestiveness is compensation enough for a long trip in the boiling heat of summer.

But why speak of "compensation?"

Was it not worth while to do a little propagandistic work?

To let people know there is such a thing as Homœopathy and that it is alive?

To help accomplish good and useful work?

To add to one's knowledge of things medical?

To make new friends?

To meet old friends, for the years and the men are passing?

To be stimulated by contact with new problems and new personalities?

To be recipients of "Western" hospitality?

To have a good time?

To have one's enthusiasm rejuvenated?

To get at the best of his fellow-men?

To enjoy the recreation of travel?

To see some of Nature's marvels?

To realize the ingenuity, industry, courage and fortitude of Man in overcoming formidable natural obstacles?

To have the opportunity of dwelling if but for a day among some of Nature's grandest scenery?

To be encouraged to take up life's work with renewed hope, and strength and ambition?

To some these things seem worth while; and that is only a part of what the Denver meeting was!

A CONSIDERATION OF COLONIC DISEASES.*

By ROY UPHAM, M.D., Brooklyn, N. Y.

“In the legacy acquired by man from his animal ancestors, there occur not only rudimentary organs that are useless, but fully developed organs equally useless; the large intestine must be regarded as one of the organs possessed by man and yet harmful to his life and health” (Metchnikoff.) Groves in 1909 arrived at the conclusion that the absorbed foodstuffs in the colon is so slight as to be negligible, and that the greater part of the large intestine is functionally unnecessary. These quotations are presented but to show the error of such views. Virchow, as far back as 1853, drew the attention of the profession to the fact that the localized peritoneal adhesions were a frequent cause for narrowing the large bowel, and Glenard in 1887 made the statement that the constipation associated with enteroptosis was due to kinks in the colon. It can thus be seen that a wealth of valuable material made but little impression, and years passed before Lane in 1901 and Jackson in 1909 completed the work begun by the earlier observers with their papers on intestinal kinks and pericolic membranes.

Later observation has absolutely proved the error of Metchnikoff's views, for at the present time the accepted physiology of the colon leads us to realize its important functions: the first portion of the colon up to the splenic flexure is one of the greatest points of absorption of the whole digestive system. It is here that 50 per cent of the liquid portion of the intestinal contents and 10 per cent of the solid portion are taken up; and the marked evidence of the evil results of stasis here is well evidenced by the invalids due to defective motility in this section of the gut; wherefore, if the results of toxins at this point will do evil, the lifegiving pabulum can likewise be taken into economy under normal circumstances. If this were not so, would so many such brilliant minds be at work at the problems of this region?

The surgeon may present the argument that many times has the colon been removed and improved health been the result. Yes, there is probably no section of the intestinal tract that cannot in part be dispensed with; for nature in the intestinal tract has protected us by double functions, and when one is unable to perform its duty another one can by overwork make up the defect. At no place is this shown better than in the stomach, which Einhorn is wont to call achylia. We will not discuss its separate identity, but draw your attention to the fact that I have observed many cases where with a total absence of gastric juice there were no symptoms of diges-

*Read before The Academy of Pathological Science, May, 1912.

tive disturbance. So will nature overcome the lack of an extirpated colon. But never forget the words of that great surgeon Macewen, who said, "With all his imperfections, normal man is more perfect than surgeon or physiologist can make him."

The great lesson of this paper is, that the result of intestinal stasis in the upper part of the large intestine is a much more serious matter than in the lower part of the large bowel, due to the function of the former which is that of absorption.

The normal position of the colon must first be deeply impressed upon the mind; and the position is not the only point to be considered, but the relative size is quite as important, and lastly the time of passage of the meal through the viscera as well as the time of emptying.

The normal position of the cecum is with its lower border about one inch below the crest of the ileum and not lower at the pelvic brim nor below. It is normally about one and a half to two inches wide, not over two inches.

The technique of the bismuth meal is to give six hours before radiographing the cecum alone, or twelve hours if the whole colon is required, two ounces of bismuth oxychloride in six ounces of mucilage of acacia and milk enough to make the pint. We have discarded the use of the subcarbonate of bismuth because of its immediate union in the stomach with all the hydrochloric acid, which results in the absence of free hydrochloric acid. It has been proved beyond question that the hydrochloric acid is the substance that causes the activity of the pyloric section of the stomach. The more hydrochloric acid, the greater the activity in this region. This fact is the reason that ulcer cases as well as other cases of dyspepsia of a gastric variety obtain relief from soda and the other alkalies. As long as there is free hydrochloric acid in the duodenum, the pylorus is held shut, and so the stronger the gastric juice in hydrochloric acid, the more the pylorus is kept closed. The reason for the crampy pains in ulcer late in the digestive period is the spasmodic closure of the pylorus kept up by the hydrochloric acid. This, therefore, is the reason why we have discarded a neutralizing substance for one that is inert, as the oxychloride salt. In considering all radiographs of the gastro-intestinal canal, the opaque metal used in making the picture should be known, for some pass more rapidly onward than others: as a concrete example the sulphate of barium will leave the stomach in one-sixth the time required for the passage of the bismuth.

Cecal stasis is one of the more common causes of disturbances and it results in the classic symptoms of stasis which are now well known to all; but even at the risk of fatiguing you, they will be brought to your attention; malaise, backache, headache, eructation

of gas, nausea, vomiting, loss of weight and muscular tone, constipation with alternate attacks of diarrhea lasting over several days, due to the retained poisons; the skin becomes sallow and dry with itching; depression and despondency are the state of mind. With such a patient the proof of the pudding and the final evidence is presented by the radiograph and the bismuth meals.

Returning to the cecal stasis or typhlatona, it is diagnosed radiographically by the altered position, the cecum with its lower border down to the pelvic brim or below, further by its increase in area, and lastly by the fact that there is bismuth retained in it in appreciable quantities twenty-four hours after its ingestion in the bismuth meal. The result of this type of cecum is one of the most obstinate forms of constipation; it is called the lake variety for reasons that you can understand. The cure in many cases is the lateral anastomosis of the ileum to the sigmoid.

Stern emphasizes, in a recent paper, a diagnostic symptom which is that of turning the patient into the left lateral position, the enlarged and dilated cecum drops downward and carries an area of tympany over to the median line. This has been verified a number of times.

Mobile cecum is a term found in recent literature that should be excluded, for it is not a pathological condition. The organ is naturally mobile as any one who has done any operative work in that region can testify; but like the stomach, it has its normal position of repose. The *disease conditions* here are prolapse and atony, but mobility is not a disease.

A word relative to the meals and technique necessary for taking the colon radiography. I have already given the technique for the meal by mouth which I formerly used entirely and which is used by many operators at the present time. This will not fill the colon completely in the majority of cases. It results in a good picture of the cecum, ascending, and transverse colon, but fails in filling the descending colon, sigmoid and rectum. This is accomplished by giving an enema of one pint of farina gruel with two ounces of bismuth oxychloride when the patient presents himself twelve hours after the meal of bismuth.

This technique will not cover all cases, as the stricture of the large gut either of benign or malignant nature requires special technique. If low down, i. e. the stricture, the enema from below usually gives the best result; if high up, more is accomplished with the meal by mouth alone.

The proper relationship of kinks of the bowel, pericolic membranes and intestinal stasis as well as ptosis of the viscera is a subject for much consideration. It has been settled in my mind in the following manner. The primary factor at work is the ptosis which

is in my opinion a condition of childhood and has its origin in the improper fusing of the peritoneum which occurs normally when the organs have entirely rotated and their peritoneal surfaces come in contact. This state of affairs occurs in about twenty per cent of individuals, and this plus improper corset pressure, of which more will be written later, is the primary cause of ptosis. Therefore, we see that the ptosis is beginning in childhood and takes years to complete itself and produce the second factor, which is intestinal stasis. As a result of the stasis there is bacterial infection with a colon swarming with micro-organisms which in part migrate through the bowel wall to irritate the serous surface; and the result of the irritation is the throwing out of plastic material which becoming organized results in pericolic membranes of Jackson. The next step is further dropping of the organs with a drawing on the gut of these membranes and further obstruction arising by the angulations and kinks. However, I am of the opinion that the stasis of kinking and the obstruction of peritoneal bands is an exaggerated state of pathology much in vogue at the present time to explain all intestinal evils. The profession is too prone to its fads to always observe all matters with the keen and calculating judgment it should display.

It has been my observation in operating that floating kidneys are rare complicating causes of appendicitis in men and that also the pericolic membranes are not found frequently in operations about the cecum in men. However, most cases of chronic insidious appendicitis in females are accompanied with the complicating causal factor of a dropped right kidney, and it is in these cases that the pericolic membranes are discovered at time of operation. There I believe that ptoses of the organs are the factors necessary to induce pericolic membranes. Let me draw your attention to the fact that a dropped kidney always means a dropped cecum, as the two are so intimately connected that the kidney does not come down till the colon precedes it.

Another set of arguments to substantiate my views is a consideration of obstruction in other viscera. Take for instance the heart: with an obstruction to the circulation there is an hypertrophy of the muscle fibers to overcome the obstruction. Again, in a stomach with an occluded outlet there is an hypertrophy of the muscular structure of that organ and as a result we have present the visible peristaltic waves characteristic of this state of affairs. And lastly, right in the intestine itself, with a well-defined obstruction to the onward passage of contents, there is an hypertrophy of the muscle fibers and nature attempts by force to overcome the occlusion by increase of *vis a tergo*. I have verified this in operation on tumors at the ileo-cecal junction as well as in the flexures of the colon. Therefore, if our bands acted alone to produce obstruction and stasis, nature

would produce the selfsame hypertrophy to overcome it, and this does not happen. This argument cannot be denied, and therefore, I say that pericolic membrane and kinks are not primary causal but resultant factors of intestinal stasis.

In the sphere of operative procedures much originality has been displayed. Extremes are met with in the views of Rovsing of Copenhagen who devotes practically his entire attention to the stomach and sews that organ directly to the abdominal wall. A glass plate covered with gauze is applied externally to tie the sutures over to prevent the stitches cutting through. Lane, at the other extreme, removes the entire colon or short-circuits it by attaching the ileum to the sigmoid. Again, however, the ray has proven that what we often attempt to accomplish, we often fail in, for I, as well as others, have proven in these cases after operation, nature creates a reverse peristalsis and carries up from the sigmoid into the supposedly short-circuited colon food remnants. This is done, I believe, because the upper portion of the large intestine is such an important location of absorption into the economy that nature resists the effort to eliminate this function and does all in her power to re-establish it. This matter of reverse peristaltic action after short-circuiting operation can assume serious proportions. A radiologist at the Hampden Hospital recites such a state of affairs after a posterior no-loop gastro-enterostomy with a passage through new stoma and a return by way of the pylorus into the stomach. This was proven to be the case by the ray, and despite the desperate condition of the patient a secondary operation had to be undertaken to close the pylorus and prevent this result. This adds a weighty argument to Fowler's advice to narrow the outlet of the stomach, if not to close it, in doing a posterior enterostomy, wherever nature has not anticipated you.

During the past winter, I have conducted a rather exhaustive vaccine treatment of this type of case. Fifteen cases have been observed thus far, all of which beside the beforementioned symptoms showed large amounts of indican in the urine. This latter has been used as a standard of the progress of the individual. In all cases the flora of the stool has been isolated and vaccines have been made from this. The preponderance of the germ infection has been colon bacillus, streptococcus and staphylococcus. These would be present in all cases with the proteus vulgaris in one case, and spore-forming bacilli in all cases. Autogenous vaccines were made, and at first four inoculations of 500,000,000 were given on every fifth day. In our first series four inoculations were given, but latterly we are using six or eight. The difficulty in making the vaccines is the difficulty of destroying the spore-forming germ without carrying the vaccine to a temperature to destroy it. It was interesting to deter-

mine if the immunity of the body could be raised against germs in the intestinal canal. While fifteen cases is too few to report on finally, still we have produced undoubtedly favorable results evidenced by the diminution of indican in the urine and general improvement in health.

While the results are not so satisfactory as in vaccine treatment purely within the blood supply, yet it is an advance in destroying bacterial content and a step toward intestinal antiseptics far in advance of any treatment so far. *We must all admit that drugs are here practically useless.* One of this series of cases demands special attention—a melancholia due to auto-intoxication on which all types of treatment had been tried. Abbott's intestinal antiseptic was the drug the case was found on, but on the vaccine treatment the return to normal mentality has been most pronounced. My conclusion is that with an indicanuria which denotes a proteid decomposition in the intestines, this form of treatment is more worthy of trial than all other methods.

To put you in touch with modern physiology, we must be familiar with the substances known as hormones which are activators of the functions of the digestive tract, that is, they are substances that are sent into the canal to produce the secretive result further along the tract. By this is meant that with the taking of food into the mouth, the hormone or activator of the gastric juice is set free in the stomach and it is this that results in gastric juice being poured forth. The origin of the hormones, or if not the substance itself, at least the stimulus which results in its production is one of the functions of the ductless glands. A second theory is that the glands, especially the spleen, act as storehouses for the substances until they are needed in the system. The value of this in practice is that the ductless glands and their allied nervous system, the sympathetic, are seriously affected as a result of intestinal auto-intoxication, and as a result the hormones are not distributed in normal amounts to the organs in the intestinal canal and as a result further stasis ensues and the vicious circle is complete.

Blum goes farther than this state and shows that the thyroid gland has the definite ability of producing a substance that neutralizes substances of a toxic nature that are absorbed from the intestine, and that it is failure to complete action when overwhelmed by the poison that results in the pernicious effects of auto-intoxication.

The picture of a ptosed colon with a stomach showing a marked retention six hours after the bismuth meal shows the marked effect a ptosis has on the motility of the stomach. To hesitate a minute and consider the causal factors of gastro-coloptosis, Stiller's views at the present time seem to have more to substantiate them than



FIG. 1

Normal Colon. Cecum in its normal position well above the brim of the Pelvis. Transverse Colon crossing the abdomen above the navel. Descending Colon Sigmoid and Rectum normal.

Observe the length of the Cecum and Ascending Colon about 6 to 8 inches in length, showing ascending Colon free from draping and Pericolic membranes. Colon completely filled by the combined meal by mouth and rectal enema.

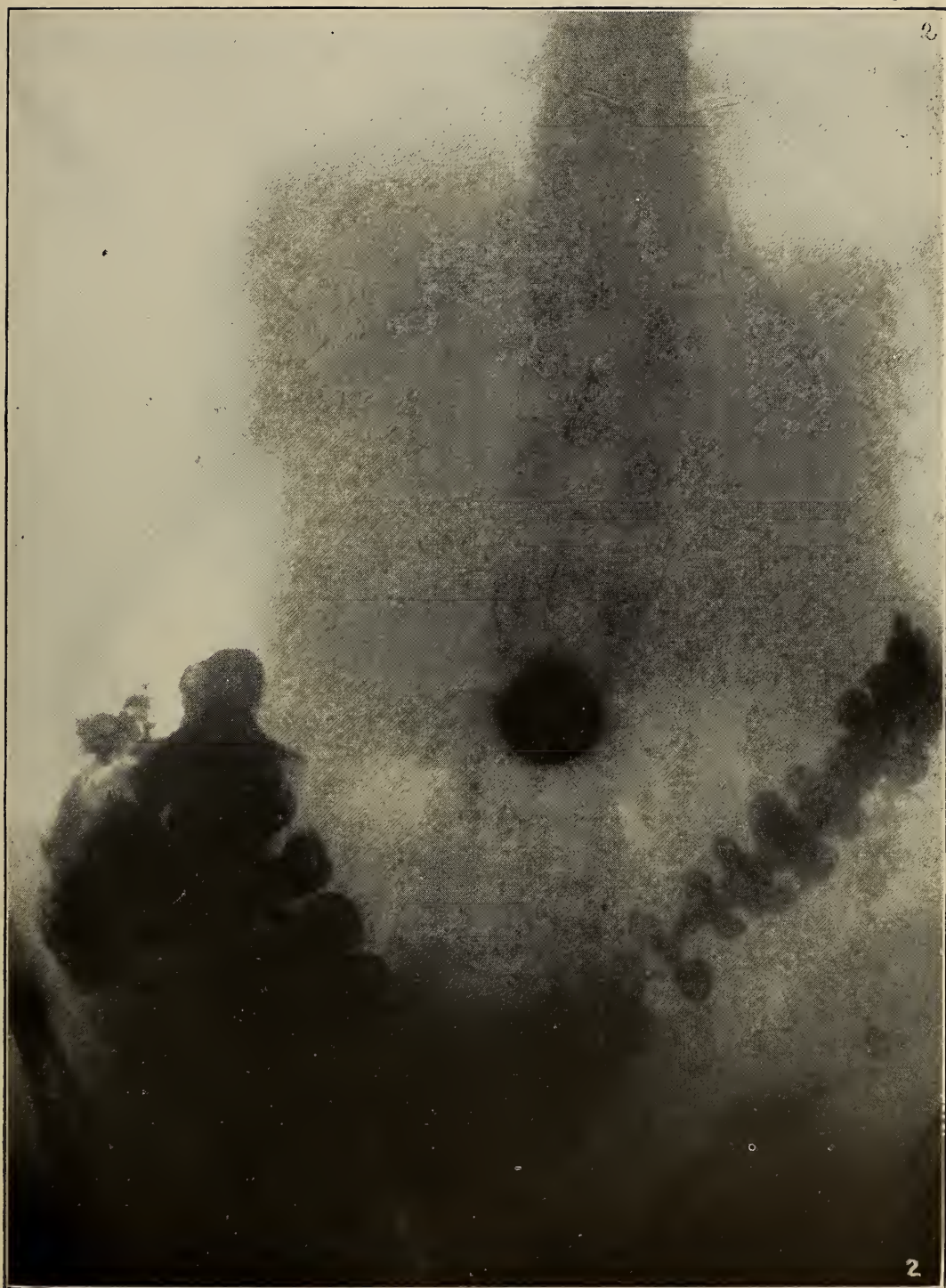


FIG. 2

Marked deformity and shortening of the Cecum, and ascending Colon. Extreme prolapse of the transverse Colon, the ragged irregular outline of ascending Colon is the typical appearance of Pericolic membranes. After loosening of the Pericolic membranes the Cecum readily resumed its normal length not allowed by the Pericolic membranes.



FIG. 3

Marked prolapse of the whole Colon, which was carried down by the weight of a large Cancer of the Stomach, which was situated in the Pyloric region.

The Bismuth residue retained in the stomach after 12 hours shows marked interference with motility, Characteristic defect in gastric shadow, and the pathognomonic finger print indications of Carcinoma.



FIG. 4

Marked prolapse of the Colon, and especially of the head of the Cecum, which has dropped down way below the Pelvic brfm. Residue is shown in the stomach after 12 hours due to kinking at the Duodenum verified by operation. No organic obstruction save that of angulation.

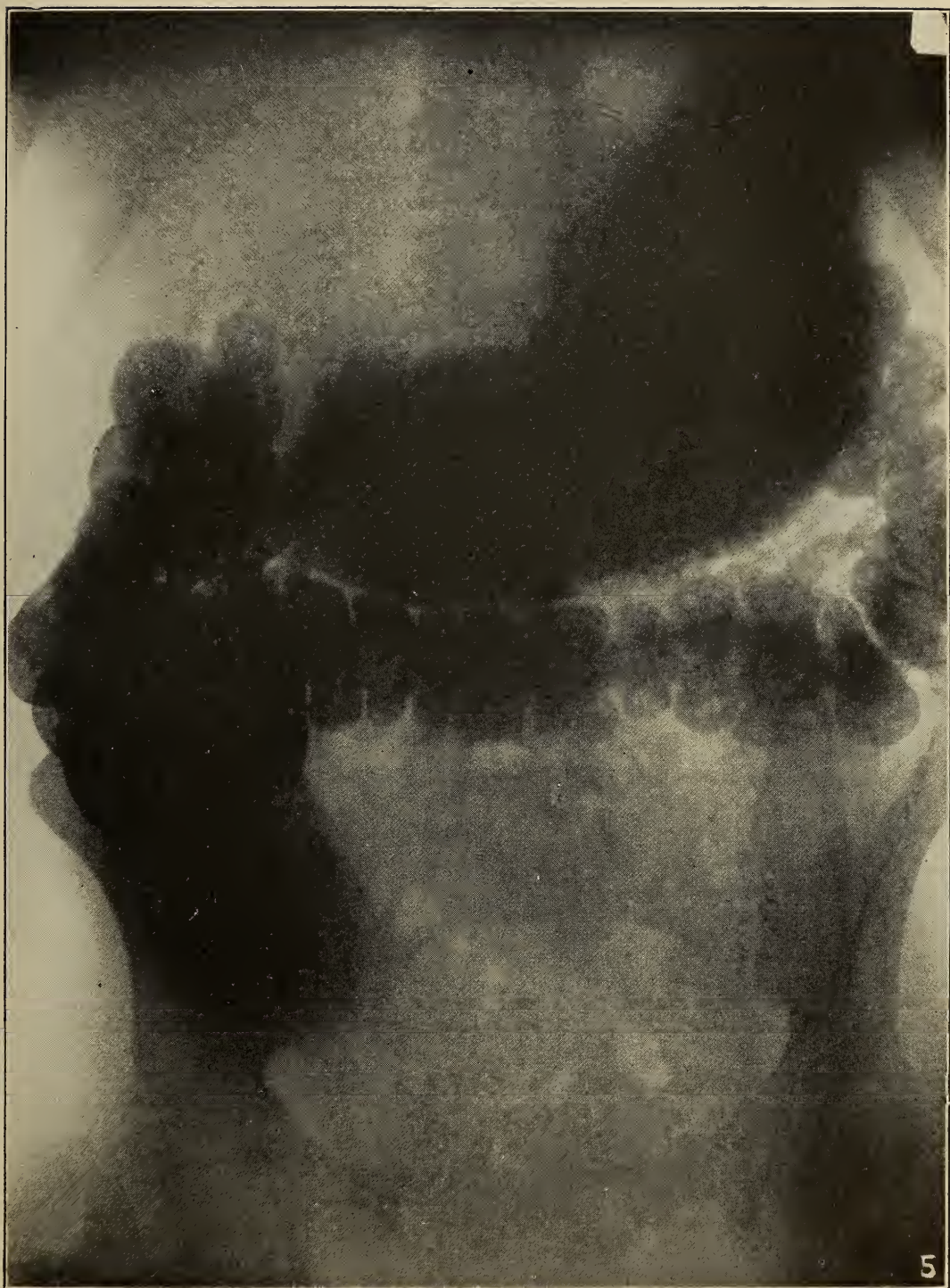


FIG. 5

Stomach and Intestines slightly prolapsed. The picture proves that the whole Colon cannot be demonstrated by the meal by mouth alone, there being a defect in filling the descending Colon Sigmoid and Rectum.

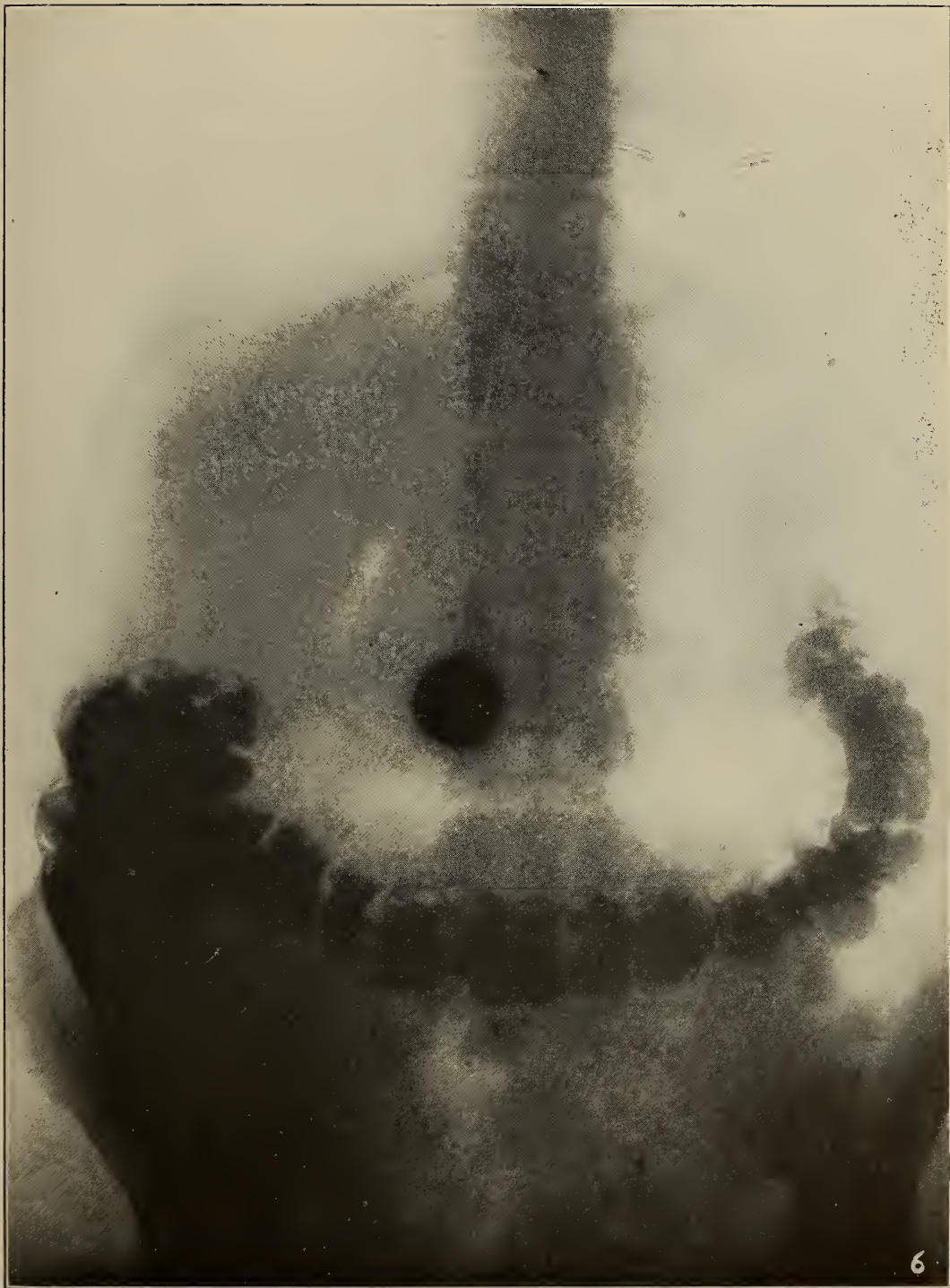


FIG. 6

Contracted ascending Colon, little Cecal Ptosis, marked transverse Ptosis, and Pericolic membranes.

any other hypothesis. Stiller believes ptoses are due to congenital defects, but we realize that most ptosis cases occur in women, and it is hard to reconcile the fact that there are more congenital defects in women than in men. The occurrence of pregnancy cannot account for all cases, for most of these cases occur in women who have never married.

I believe we shall have to recur to the corset theory, as the tight lacing occurs at the time of a girl's development period, to account for most of these cases, also for congenital malformation. As before stated, it is extremely rare to find a condition of dropped organ in the male, but such a thing is possible; therefore there must be the contributing factor which is a corset pressure improperly applied to bring about the ptosis of the female.

The presence of a retention in the dropped stomach would naturally suggest a gastro-enterostomy, but this operation is extremely ill-advised in ptosis cases. You can see by this and other pictures which we will show or have shown that the muscular power of a ptosed stomach is very good; nature has hypertrofied the muscle to try in a measure to overcome the obstruction which is present. To overcome the obstruction the organ need only be put back into its normal position and then nature can look after the matter thoroughly.

The two greatest articles on the operative treatment of gastrocoloptosis are by Rovsing of Copenhagen, and Coffey of Portland. It would seem that the best results were obtained by the combination of the methods of treatment, that is, to attach the stomach directly to the anterior abdominal wall by three silk stitches carried over a glass plate as in Rovsing's method. This supports the stomach better than in Coffey's method, as the gastro-hepatic ligament is very thin in these cases and will not stand many sutures, and it has been demonstrated that sewing the stomach to the anterior abdominal wall does not interfere with its function provided the pylorus is left free. The prepyloric region even can be attached to the anterior abdominal wall without any evil effects.

The part of the operation appropriated from Coffey is the attachment of the greater omentum to the anterior abdominal wall by stitches. Rovsing attaches the stomach and then plicates up the gastro-colic omentum; but this is so thin I do not think it will do the work alone unless the greater omentum is attached to the anterior abdominal wall.

Often in these cases the presence of ulcer complicating the ptosis must be excluded. It is done by this means: in ulcer the seat of the cardialgia is to the right or in the median line, in gastroptosis the cardialgia more to the left of the median line; in gastrotroposis the cardialgia does not depend upon the quality of the

food but more on the quantity, whereas in ulcer it has pain from eating even a small amount of rich, sour or highly-spiced food. No matter how small the quantity, the pain comes on, whereas in ptosis cases they can take small quantities of any kind of food no matter how highly-spiced, but when they take large quantities of even milk, the pain is intense. In ulcer the position of the patient does not influence the pain, whereas in ptosis cases the pain disappears entirely by the patient's assuming the recumbent position, and confinement in bed for twenty-four hours entirely removes the condition.

STERILIZATION OF THE UNFIT.

By REBECCA ROGERS GEORGE, M.D., Indianapolis, Indiana.

In the great general movement of to-day, looking toward the betterment of those social and economic conditions which concern the community, the state, and the nation, we find the foundation stones must be laid in the improved physical and moral ideals of the individual.

Each community is beginning to realize, more and more fully, that its growth and prosperity, indeed its very life, depend not so much on the highly developed intelligence of the favored few, as upon the healthy minds and wholesome ideals of the many.

And so we find our philanthropists, our criminologists, our State Boards of Charities, our State Boards of Health, and even our State Legislatures, turning their attention, more and more, to those practical fundamental measures, which have to do with the general uplift of the normal individual, as well as the protection and care of the needy, the unfortunate, and the unsafe.

More and more are the thoughtful beginning to realize the truth of our present day medical teaching, that "Prevention is better than cure," and more and more are conscientious sociologists striving to work in accordance with the old maxim.

Those who are in a position to know, claim that our country is being swept by a deluge of vice and crime, and that the State Institutions for the care of the blind, the deaf and dumb, the feeble-minded, and the insane, can not keep pace with the growing numbers of these unfortunates, while our penal institutions are proving quite as inadequate.

It is also estimated by good authorities that about one per cent of our population is now unfit for reproducing good stock, the so-called unfit including the feeble-minded, the pauper, the inebriate, the criminal, the epileptic, the insane, those with specific diseases, the deformed, and those with defective sense organs, and as these

State institutions which have become such a financial burden upon the tax-payer are kept filled by the unfit and their descendants, it is now a matter of the supremest social importance to determine upon such measures as will limit the output of a class of individuals which is becoming a menace to our national life.

For years it has been a debatable question as to whether crime was hereditary or whether it just happened, but it has been conclusively proven that the feeble-minded breed more feeble minds, that the pauper breeds paupers, that the inebriate father or mother breeds a being with defective tendencies, that the epileptic passes on the same stigmata to his children, that the insane are incapable of giving a normal nervous system to their posterity, and observation has borne out the logical deduction that the criminal class also is incapable of transmitting to its children normal minds or ideals.

The tenets of modern criminology according to Dr. G. Frank Lydston in brief are:—

(1) "The criminal and vicious classes are the product of certain influences of heredity, congenital and acquired disease, and unfavorable surroundings involving pernicious teaching and example, physical necessities and other social maladies.

(2) These influences result in a class of persons of low grade development, physically and mentally, with a defective understanding of their true relations to the social system in which they live.

Some become criminals, some paupers, some prostitutes, inebriates, or insane.

These subjects are characterized upon the average, by certain anomalies of development that constitute the so called stigmata or marks of degeneracy.

In them, vice, crime, and disease go hand in hand.

For many generations, imprisonment had been looked upon as the principal and rational punishment for crime, with but little thought as to the reclamation of the criminal or conversion into a helpful member of society, but today the object of imprisonment is three-fold.

- (1) Punitive
- (2) Protective
- (3) Reformative

In recent years there has been more stress laid upon reformatory effects and decidedly less upon imprisonment as mere punishment, for experience has shown that imprisonment uncombined with reformatory or educational measures, had little if any beneficial effect; in fact it seemed to brutalize and perpetuate the criminal tendency when liberated.

The modern theory now being that the criminal is a diseased individual and is to be treated accordingly.

That crime and degeneracy are on the increase in all countries, seems to be an undisputed fact, and is proven by statistics given by those in a position to know.

Dr. T. Alex Mitchell of New York, who was sent abroad a few years ago to investigate the subjects of alcoholism and narcotics, said recently before the American Medical Association that, "A wave of degeneracy is sweeping the land, and its development threatens the physical vitality of the nation."

Within a period of 50 years the population of the United States increased 630 per cent, while the insane and feeble-minded increased 950 per cent.

Degeneracy is shown in the lessened fertility of the nation.

In five years the birthrate of the United States has fallen 33-3 per cent. This means the loss of one million babies a year. Let degeneracy continue at the same rate for 100 years, and there will not be a native-born child five years old in the United States.

What is the cause of this degeneracy? A hundred different intermediate agencies may contribute to the undoing of the race, but back of them all stands alcohol as the chief degenerative factor.

Statistics compiled by the leading insurance companies, and presented by Sir T. W. Whitaker in a report to British Parliament shows that out of every 1,000 deaths among the population at large, 440 are due to alcohol.

This would mean a mortality from alcohol in the United States of 68,000 a year.

The great burden of drink is not borne, however, by the drinker, but by the drinker's children. The germ cell that is to be evolved into another being is the most highly organized of all the cells in the body.

In its protoplasm lies the material and pattern of the perfected organization. Should such a poison as alcohol lessen the nutrition of the cell or impair the quality of the protoplasmic material, and deface the pattern, these defects would be apparent in subsequent stages of its development.

A defective germ cell cannot evolve a normal body, which is the reason so large a percentage of functional and organic diseases are found among the children of drinking parents.

While society has probably always shown a certain proportion of drunkards, feeble-minded, insane, epileptics, imbeciles, and criminals, the rapid increase of the so-called Unfit is stupendous and staggering, when one stops to consider not only the physical menace, but the financial burden this class of individuals is upon the normal, law-abiding citizen.

One author estimates that it costs from \$3.00 to \$5.00 per year for every honest man in America to protect good from evil, or

about \$200,000,000 per year, in the United States alone, while the depredation and non-productiveness of criminals bring this total up to approximately \$600,000,000 per annum, or \$25.00 per annum per family.

From statistics compiled by the Elmira Reformatory officials, it appears that 38 per cent of their inmates stated that there was drunkenness in one or both parents; 19 per cent were tubercular; 43 per cent were mentally deranged; 37 per cent mentally defective.

Morrison reports that in the English Industrial schools 51 per cent are illegitimate and are the offspring of criminals, or are abandoned children.

As specific instances of the heredity of crime may be mentioned Jesse Pomeroy and the famous Jukes family whose history is so well known as not to require amplification.

With such statistics and examples confronting us, it is but logical that the student of criminology should arrive at the conclusion that heredity does play a very important role as one of the great causes of crime and degeneracy.

If this be true, (and what student of the subject can doubt it?) what is to be the logical treatment for this stupendous epidemic of criminal degeneracy which is endangering our nation at the present time?

Dr. Austin Flint says there is but one solution of the problem and that is "STERILIZATION."

Four methods have been suggested.

- (1) Emasculation
- (2) Rigid marriage regulation
- (3) Segregation or colonization
- (4) Vasectomy

The complete physical and psychical changes in the individual following emasculation are such that public opinion would not tolerate this method except in very extreme cases, although it certainly would be the appropriate treatment in rape and similar crimes.

The second method would be palpably futile in overcoming the evil, for, while more rigid marriage regulations are to be encouraged, illegitimacy would be increased, if rigid marriage laws were looked to as the only solution of the problem.

The third method, that of segregation or colonization of the criminal, has been tried for hundreds of years with the result of an increase in the number of criminals in proportion to the population.

The fourth method, vasectomy, in the hands of competent physicians furnishes a way by which male criminals and other defectives, may be sterilized with absolutely no impairment of sexual desire or capacity.

Sterilization of criminals by vasectomy was first performed in

October 1899 by Dr. H. C. Sharp of Indianapolis who was then physician to the Indiana State Reformatory at Jeffersonville, although the value of this operation was well known to surgeons in private practice, prior to that time.

For some years Dr. Sharp performed this operation without the authority of the law, upon such criminals as willingly gave their consent.

Other physicians, observing the uniformly good results following this simple operation, succeeded in starting an agitation which resulted in the establishing of a law now known far and wide as "The Indiana Plan."

In a paper read in June, 1909, Dr. Sharp says that "Vasectomy consists in ligating and resecting a small part of the vas deferens.

This operation is simple and easy to perform.

I do it without administering an anesthetic, either local or general. It requires about three minutes to perform, and the subject returns to his work immediately, suffers no inconvenience and is in no way hampered in his pursuit of life, liberty and happiness, but is effectually sterilized."

"I have been doing this operation for over 9 years, and I have 456 cases that have afforded splendid opportunities for post-operative observation, and I have never seen an unfavorable symptom."

"There is no atrophy of the testicle, no cystic degeneration or nervous condition following, but on the contrary, the patient becomes of a more sunny disposition, brighter of intellect, ceases excessive masturbation, and advises his fellows to submit to the operation for their own good."

"And this is the point which this method of preventing procreation is infinitely superior to all others proposed, that it is endorsed by the persons subjected to it.

All other methods suggested, place restrictions and therefore punishment on the subject, while this method absolutely does not.

There is no expense to the State, no sorrow and shame to the friends of the individual, as there is bound to be in carrying out the segregation idea."

"After observing 500 males in whom I severed the vas deferens, I am prepared to state that there is not only a diminution of muscular and nervous fatigue resulting from muscular exertion, but a lessening of fatigue sensation and a decided increase of energy and well-being.

Splendid results have been observed also in Neurasthenia."

In March 1907, Indiana made the operation of vasectomy compulsory upon confirmed criminals, idiots, rapists and imbeciles, in all cases where the Board decides that procreation is inadvisable and

that there is no probability of physical and mental improvement of the inmates under consideration.

Governor Marshall of Indiana whilst conceding the beneficial effects of the law, its necessity, etc., is of the opinion that it should be a part of the sentence of the trial court, and that, if applied otherwise, the constitutionality of the law might be open to doubt. So that since Governor Marshall's term of office began in 1909, vasectomy has not been compulsory in the treatment of the unfit confined in institutions in Indiana. Such treatment being limited to those inmates who are willing for the operation, as very many are.

According to Indiana Statutes, the sterilization act does not provide that habitual criminals may be sentenced to be sterilized, but provides that sterilization may be inflicted under certain conditions, as follows:—

“That on and after the passage of this act it shall be compulsory for each and every institution in the State, entrusted with the care of the confirmed criminals, idiots, rapists and imbeciles, to appoint upon its staff, in addition to the regular institutional physician two skilled surgeons of recognized ability, whose duty it shall be, in conjunction with the chief physician of the institution, to examine the mental and physical condition of such inmates as are recommended by the institutional physicians and board of managers. If, in the judgment of this committee of experts and the board of managers, procreation is inadvisable and there is no probability of improvement of the mental condition of the inmate, it shall be lawful for the surgeons to perform such operation for the prevention of procreation as shall be decided safest and most effective. But this operation shall not be performed except in cases that have been pronounced unimprovable: Provided that in no case shall the consultation fee be more than three dollars to each expert, to be paid out of the funds appropriated for the maintenance of such institution.”

Since the Indiana Plan became a law in 1907, seven (7) states have swung into line, so that Connecticut, California, Iowa, Oregon, New York, and New Jersey now have laws providing for the sterilization of degenerates, and when such laws become operative in every state in our union, it is not too much to believe that it would take less than four generations to eliminate four-fifths of the crime, insanity, and degeneracy of this country, and with the proportionate decrease in the number of our asylums, prisons, and hospitals, would also decrease the problem of the unemployed and unemployable, as well as the high cost of living.

Havelock Ellis, however, an authority on race regeneration, believes that the greatest menace to regeneration of the race lies in the enormous population of feeble-minded and inefficient.

Nearly half of the whole number of feeble-minded at the pres-

ent time being unprovided for and neglected, become a danger to themselves and society. If these feeble-minded ones who are free to move around in the world, could be subjected to the same benign and merciful operation then might this huge problem of the unfit become a manageable one in a few, instead of several generations.

Indiana has another eugenic law, passed in 1905, which is also one pointing to the wise method of prevention.

This law commands that no marriage license shall be issued except upon written and verified application, such applications to be uniform throughout the state, and it is the duty of the State Board of Health to furnish such application blanks to each of its county clerks.

The law further commands that "No license to marry shall be issued when either of the contracting parties is an imbecile, epileptic, or of unsound mind, or under guardianship of a person of unsound mind, nor to any male person who is or has been within five years an inmate of any county asylum or home for indigent persons, unless it satisfactorily appears that the cause of such condition has been removed, and that such male applicant is able to support a family and likely to so continue, nor shall any license be issued when either of the contracting parties is afflicted with a transmissible disease, or at the time of application is under the influence of an intoxicating liquor or narcotic drug."

After the passage of this law, the Indiana State Board of Health prepared the blank forms of application for license to marry, as follows:

APPLICATION FOR MARRIAGE—MALE.

Application is hereby made for a license for the marriage of to upon the following statement of facts relative to said parties:

1. Full christian and surname of the man is
2. Color
3. Where born
4. When born
5. Present residence
6. Present occupation
7. If no occupation, what means has the male contracting party to support a family?
8. Is the male contracting party of nearer blood kin to the female contracting party than second cousin?
9. Full christian and surname of father
10. His color
11. His birthplace
12. His occupation
13. His residence
14. Full christian and maiden name of mother
15. Her color
16. Her residence
17. Her occupation
18. Her birthplace
19. Has the male contracting party been an inmate of any county asylum home for indigent persons within the last five years?
20. If so, is he now able to support a family and likely to so continue?
21. Is this his first marriage?
22. If not, how often has he been married?
23. Has such prior marriage or marriages been dissolved?
24. If so, how?
25. When?
26. Is the male contracting party afflicted with epilepsy, tuberculosis, venereal, or any other contagious or transmissible disease?
27. Is he an imbecile, feeble minded, idiotic or insane, or is he under guardianship as a person of unsound mind?

Signature of Applicant

Affidavit follows here.

APPLICATION FOR MARRIAGE—FEMALE.

Application is hereby made for a license for the marriage of to upon the following statement of facts relative to said parties: 1. The full christian and surname of the woman is 2. Color 3. Where born 4. When born 5. Present residence 6. Present occupation 7. Full christian and surname of father 8. His color 9. His birthplace 10. His occupation 11. His residence 12. Full christian and maiden name of mother 13. Her color 14. Her occupation 15. Her birthplace 16. Her residence 17. Has the female contracting party been an inmate of any county asylum or home for indigent persons within the last five years? 18. Is this her first marriage? 19. If not, how often has she been married? 20. Has such prior marriage, or marriages, been dissolved? 21. If so, how and when? 22. Is the female contracting party afflicted with epilepsy, tuberculosis, venereal or any other contagious or transmissible disease? 23. Is she an imbecile, feeble minded, idiotic or insane, or is she under guardianship as a person of unsound mind?
Signature of applicant

Affidavit follows here.

Dr. J. N. Hurty, secretary of the State Board, says that at first there was manifest some opposition, and in instances very harsh statements were made, but finally this all died out, and now not the slightest opposition appears. The highest court has upheld the law in the case of a very rich and prominent man who was luetic and knew it, who was refused a license to marry.

He thereupon went to Kentucky and was married, and upon return to Indiana, in due time, the marriage was declared null and void. So if people with certain hereditary diseases get married in other states to avoid Indiana's statute, they must remain out of the state or suffer the penalty.

As the enforcement of the law depends upon the county clerks, all new ones are sent a special letter from the State Board of Health which gives the argument for the law, and makes plain the benefits its rigid enforcement will bring to the state. Of course, this to educate and to arouse the interest of new officials.

We have not sufficient data for conclusions, but it is true that licenses to marry are denied daily in the State, to those who should not marry; and although marriage is not necessary for procreation, still it is certain the law has done something toward the end at which it is aimed.

When similar laws regarding marriage and the sterilization of the unfit prevail in every State in our union, and when the saloon and brothel are looked upon and treated not as a necessity, but as a disgusting and unmitigated nuisance, then indeed will this tide of degeneracy be stayed and our nation's decadence arrested.

“BONE TRANSPLANTATION AS A TREATMENT OF POTT’S DISEASE.” *

By HENRY C. ALDRICH, M.D., Minneapolis, Minn., President,
Surgical and Gynecological Society of the American
Institute of Homœopathy.

In November last, during the session of the International Surgical Congress in New York City, I was fortunate enough to witness operations by Fred H. Albee, M.D., of New York City, which demonstrated the possibilities of good in the curing of Pott’s Disease of the spine by bone transplantation. To my mind this marks an era of good in the treatment of this disease, an era which must bring about wonderful changes in the methods of treating this affection and also produce almost invariably, if not invariably, curative results.

Dr. Albee has been experimenting on animals and operating upon children and adults for the demonstration of the truth of his ideas for the past two or three years, and in November last reported considerably over one hundred cases operated successfully with curative results. He has written various articles upon the subject which have appeared in many of the medical journals of the country and I can do no better than to quote quite extensively from his writings.

The operation consists of splitting the spinous processes of the affected vertebræ down to or nearly to the laminæ, a splitting not only of these processes but of the interspinous ligaments as well, then the insertion in this cleft of a bone splint removed from the shin of the individual preferably, this bone splint being long enough to extend over the length of the affected vertebræ and a healthy vertebræ on either side, and as said above, almost invariably results in a successful outcome.

Dr. Albee was induced to undertake this work on the spine because of the inefficiency of the present ambulatory treatment of Pott’s Disease and secondly, on account of the excellent operative results obtained in tubercular joints elsewhere in the body, where bony union with its perfect support and immobilization has caused the tuberculosis to disappear so rapidly, although only a part of the diseased tubercular tissues were removed. The fact that it was only necessary to secure bony stiffening in tubercular joints by operation or otherwise in order to get a rapid disappearance of the tubercular disease, has been emphasized very strongly in the writings of others from their pathologic studies.

The operation produces bony fixation, holding the vertebræ involved in hyper-extension by the splint-like action of the bone insert or transplant, and also by the leverage action of the spinous pro-

*Read at the Denver Meeting of the American Institute of Homœopathy.

cesses, and as the bone transplant unites with these spinous processes, prevents flexion of the diseased vertebræ or crushing of the bodies of the same by transferring the superincumbent body-weight to the spinous processes by this fixation.

Many writers tell us that bony fixation of tubercular joints is an absolute panacea in the treatment of this diseased condition. And, in the case of spinal transplantation, the operative field is in healthy tissues and bony union in all cases has been apparently immediate between the split spinous processes and this bone-splint or insert. None of the tubercular tissue is or has been removed and gradually the tubercular condition disappears.

There are two views as to the ultimate fate of bone transplanted into bone. Some writers tell us that bone transplanted into bone persists and lives as such, others holding that bone transplanted in the same individual and in contact with other living bone, the two or both ends of the transplanted fragment always become united to the living fragments and act as a scaffold to the new bone of the same size and shape as this transplanted fragment, if asepsis is attained. You can readily see that in operations upon the spine of this nature, it makes no difference which of these views is the correct one, a permanent supporting bone splint being obtained in either case.

The accepted requirement for a bone-graft is that it has contact with the recipient bone on one end. In this operation there are two bony contacts for each vertebræ into which it is inserted and, when inserted into three or four vertebræ, it has six or eight bony contacts. The bed into which a transplant is placed has apparently everything to do with its fate. In this operation the insert is wedged into healthy spinous processes less than three-quarters of an inch apart and in addition it is imbedded throughout its remaining extent in freshly cut ligamentous tissue. Again, in grafting on the long bones, the graft is imbedded throughout its whole length in soft tissues (muscular, adipose or fascial) and has only a bone contact at one or both ends. In one instance the graft lives, and it becomes osteo-conductive in the other.

Animal experimentation as well as surgical experience proves to Albee that the spinal transplant persists and lives as such. The evidence consists of microscopic and X-ray examinations not only of gross specimens, but of decalcified and non-decalcified sections of both surgical and animal experimental origin. The operation is carried out, as you can readily understand, under the most complete surgical asepsis possible.

With the patient lying on the face, a curved incision to one side of the spinous processes is made through the skin and the flap is turned up, being careful not to incise transversely the supra-spinous

ligament. With a scalpel, the cartilaginous tips of the spinous processes are split in the center, also the supra-spinous ligament, leaving it still attached to the halves of the spinous processes. The interspinous ligaments are split to a depth of about three-quarters of an inch without disturbing their attachments to the spinous processes. Very little hemorrhage results, because only dense ligamentous tissues have been incised. With the chisel and hammer, each spinous process is split longitudinally into equal parts for a depth of about three-quarters of an inch, care being taken that green-stick fractures are produced on one and the same side of all the processes. The unbroken halves preserve intact the leverage of these processes. The separation of the tips of the halves of the spinous processes produces a wedge shaped cavity into which the prismatic shaped transplant is later placed. It is very important that the spinous processes be split without disturbing the ligamentous and muscular insertions and in this way none of the natural supports of the spine are taken away and the ligaments afford by means of strong ligatures an excellent medium for firmly fixing the bone-splint in place. Next, while removing the bone-splint from the tibia, a hot saline pack is placed over the wound in the spine. The leg is now flexed on to the thigh, and an incision over and down to the crest of the tibia is made. The fascia and subcutaneous tissues are separated from the periosteum of the anterior, internal flat surface of the tibia. With a sand bag in the popliteal space and behind the leg a prismatic shaped piece of tibia is removed with a sharp chisel, but a motor circular saw affords a much more rapid and exact method of securing the graft.

The length of the graft varies according to the number of the vertebræ to be spanned, its breadth being from two-thirds to three-quarters of an inch, according to the size of the patient and its thickness from one-fourth to one-half of an inch for the same reason, and the graft should extend through the spinous processes of the diseased vertebræ and one healthy one on each side. In removing the graft from the tibia, we must be sure that the inner surface contains some of the bone marrow, the thinner edge being placed innermost. It is crowded firmly into position and held by interrupted sutures of heavy kangaroo tendon, which are passed through the supraspinous ligaments as well as the interspinous ligaments at or near the tips of the spinous processes. It will be found that a moderate curvature or kyphosis of short duration will be almost entirely obliterated, and that a kyphosis of greater extent and longer duration becomes much diminished not only at the time of the operation, but during the first few weeks. Albee tells us that these grafts have always united by primary union. Where there is much curvature, the bone-graft or insert can be curved by transverse saw-

ing of the bone, as a carpenter does in bending a board. The graft, however, is always straighter than the kyphosis and the spine is straightened and drawn to the bone splint by means of the heavy ligatures and the strain brought about by the spinous processes. In children the periosteum of the bone transplant or graft should be incised transversely to allow the osteogenetic cells underneath to develop and produce a growth of the bone longitudinally. In adults the insertion should be longitudinally so that the bone will grow transversely and not longitudinally. You can readily understand that the immediate fixation obtained by this operation is much more perfect than can be secured by any external orthopedic appliance.

Albee tells us further that in one case some seven weeks after operation in a child where there had been a large kyphosis and the graft or transplant had been bent into place under considerable tension, although the spinal deformity had been straightened considerably, the constant tension of the bent bone insert had caused a disengagement of the upper end of this insert from the tips of the spinous processes and it had sprung outwardly into the soft tissues and it was necessary for him to cut down upon it. He found that the graft was firmly united to all the spinous processes with which it was in contact except this upper one; that there was a large amount of new bone formation about the graft and the tips of the spinous processes and that the graft had increased in its diameter between the spinous processes to which it had become united. Careful inspection failed to find any evidence of bone degeneration or absorption and the removal of about one-half inch of this upper end with bone forceps showed that it bled uniformly throughout the whole diameter. The important feature of this event was that the graft showed every evidence of healthy live bone, and microscopical examinations showed no dead or degenerated bone cells to be present. The elasticity of the tissues and the straightening effect of the bone-insert bent under tension is undoubtedly largely responsible for the additional kyphotic recession noticed subsequent to the operation.

The post-operative treatment has been as simple as possible. No plaster-of-Paris jackets and no spinal braces have been used except in one case where the man, a carpenter, went back to work seven weeks after his operation. With children the patients have been kept on a narrow gas-pipe frame or fracture bed some five to twelve weeks. After this, they have walked about without apparatus. In adults, keeping the patient on the back on a hard bed or with a board under the mattress opposite the location of the operation, is advisable.

There is no shock and all of the wounds have healed by primary union. One of the most serious cases operated by Dr. Albee was

where, as a result of the destruction of the bodies of the vertebræ, there had been so much pressure upon the cord, that there was incontinence of the urine and feces as well as complete paraplegia, and in five months from the time of operation this child was walking and did not have an increase of the knee jerks, and the bodily functions were normal.

He says that from the clinical course of all the cases and from frequent X-ray examinations by two planes, it seems very certain that all the inserts have become united with the spinous processes. The X-ray showed bone proliferation about the graft or insert and tips of the spinous processes and an increase in the diameter, in most of the cases, of the transplant itself. The vertebral bodies after several months become dense and the bone detail clearer and sharper in outline.

In many cases it is possible to use inserts taken from bones of other individuals that have been kept in cold storage for three or four days.

Seeing Albee's operations and listening to his enthusiastic remarks made me a firm believer in his ideas and the first opportunity I have had of performing the operation was on April 2d last, when I operated on a woman of forty-three, who had tubercular disease of the two first lumbar vertebræ, who was running a tubercular temperature, varying from ninety-nine in the morning to one hundred four-fifths in the afternoon, with the typical symptoms of early Pott's disease. Now, eight weeks after the operation the temperature has dropped to normal mornings and to ninety-nine and two-tenths in the afternoon. The patient is taking on flesh, has lain flat on her back the most of the time, is feeling fine and is now able to be up in a chair. In fact, her general condition has improved markedly and I must announce myself as a most enthusiastic believer and advocate of this operation.

I give herewith Dr. Albee's summary of his series of operations:

1. The operative procedure is superficial and confined to bone and ligamentous structures, therefore, it is of short duration, usually taking from fifteen to thirty minutes, and is associated with a minimum amount of shock and hemorrhage.

2. No normal anatomical structure or support of the spine is severed or destroyed. The full leverage of the spinous processes, which is the only physiological means of holding the spine in hyper-extension, is preserved and taken advantage of, thus preventing kyphotic deformity. It should be noted, in this connection, that the nearer the bone transplant is to the tips of the spinous processes (or the more superficial), the greater mechanical advantage is derived.

3. The bone-splint insert, as described, gives firm fixation

the moment it is sutured in place and affords, even before bony union, far more efficient immobilization than any external brace or plaster-of-Paris jacket can possibly supply.

6. On account of the fixation being applied internally and directly to the vertebræ involved, and those only, the function of the rest of the spine and respiration is not interfered with. Long confinement on a frame or in a plaster-of-Paris jacket or spinal brace is no longer necessary.

5. The bed, into which the bone-insert is placed, is of an ideal nature, for a bone graft, as it is composed of freshly severed ligamentous and bone structures. It is claimed that one bony contact, of recipient bone to graft, is sufficient for the establishment of a proper blood supply for the latter. In the case of our graft, there are two bony contacts for each spinous process involved, and they are only the distance of the interspinous space apart. In this environment the bone graft lives and persists as such.

6. As stated above, the field of operation is superficial and distal from the neural arches, therefore, there is no danger of encroachment upon the spinal canal by overgrowth of bone or infection, which might arise from operative trauma.

7. If bone union of graft to spinous processes should not by chance occur, the same mechanical effect of the splint action of the bone transplant and the leverage of the spinous processes, above referred to, would still be obtained in a large degree, on account of the insert being imbedded in the spinous processes and the dense ligamentous structures attached to the spinous processes.

8. The post-operative treatment is simple in character and of short duration. It consists of dorsal recumbency on a gas-pipe frame or a firm mattress with a board under it, in the region where the kyphosis comes (fracture bed) for a period of five or twelve weeks. At the end of this time, bony union has taken place between bone-splint and vertebræ and no further supportive or immobilization treatment by plaster-of-Paris jackets, braces, etc., is necessary.

9. A continuous bridge of bone with periosteum and endosteum is furnished, spanning the entire number of vertebræ, which are desired to be immobilized and, therefore, should be under the influence of Wolff's anatomic law and become greater in diameter and length as the parts develop. In other words it is an imitation of Nature's process. In dogs this bone transplant loses its identity in four to five months and becomes continuous and homogeneous with the spinous process into which it was placed, and apparently innervated by the same trophic nerves.

10. Diseased tissues are not entered. The field of operation is, entirely, in healthy tissues, therefore, primary union can be expected.

11. The procedure is not a formidable one. The technique is very simple. In three cases the operating time was not over fifteen minutes.

12. Metal splints placed into or on bone will not hold stress for any length of time, because of bone atrophy and absorption, which takes place, very early, wherever contact between metal and bones occurs. Therefore, the advantages of a bone graft over metal is apparent.

13. When possible, a recession of the kyphosis by recumbency on a convex gas-pipe frame should be secured. The bone-graft offers great promise of holding permanently the correction obtained, whereas, without this artificial bone support there is a great tendency to a relapse of the deformity, when ambulatory treatment is later resumed, on account of the inhibition of the tuberculous bacillus to the rapid new bone formation between the diseased vertebræ.

14. One of the most gratifying features of this mode of treatment has been the large amount of correction of the kyphotic deformity which it has been possible to obtain at the operation and during the first few days after; especially in early cases with angular deformities the kyphotic recession has resulted from the straightening effect of the bone transplant sutured under lateral tension into the dense interspinous and supraspinous ligaments and the spinous processes.

15. Perfect immobilization and support of the involved vertebræ in the respiratory area of the spine is secured which is an impossibility by any external mechanical device or treatment, on account of the constant respiratory movement of the ribs and attached vertebræ. This motion of the diseased vertebræ upon each other has been especially noticeable when the spinous processes are cut down upon; this necessarily ceases entirely as soon as the bone-splint is fixed in place.

NERVE FORCE—A PLEA FOR ITS CONSERVATION.*

By CHARLES F. A. HALL, M.D., Newburyport, Mass.

In these days of progress when the efforts of our national leaders are toward the conservation of all natural resources; when almost daily appeals are being made for the conservation of this that and the other thing, you will certainly pardon me if I enter one more plea for conservation. An appeal for the conservation of an article, the loss of which makes all else seem as naught, might, perhaps, be thought to be unnecessary; but a glance at our present day population, particularly the coming generation, leads one to think differently. And indeed no very deep thinking is necessary to assure one of our profession that it is high time that we take cognizance of a very evident condition and do what we can to remedy it.

I refer to the ever increasing tendency of civilization to make nervous bankrupts of our people. We are living in a transitional stage. Minds and bodies, only one step removed from the days of the stagecoach, are asked to live a pace of the automobile, the 20th century limited, the telephone and wireless telegraph. Machinery, methods of locomotion and communication have been speeded up to an enormous degree, and the end is not in sight. But what of our poor bodies in the attempt to keep pace with mechanical improvements? Can we wonder at the ever increasing number of those who, finding the pace too hot, have been obliged to step aside and let their more fortunately endowed brothers and sisters march on until they too drop out, losers in the contest between muscles and machines?

This struggle, which had its inception within the memory of the present generation, may be said to have just begun. What of its ending?

I am optimist enough to believe that eventually a race will be developed that can cope with these changed conditions successfully but until such time comes what can we, as physicians, do to relieve the present conditions?

It seems to me that we should accept this problem as one of our duties to the community and, by reason of our special fitness for this work, aid in its solution. The principal effect of life under these conditions is felt upon the nervous system simply because all effort, physical and mental, reacts upon the nervous system and depletes the store of nerve force.

We have had from time immemorial, nervous invalids, even in the days of slow living, due to disease, acquired or inherited, or to faulty habits of life. These will continue and will be added

*Read before the Newburyport Medical Club, February 19, 1913.

to those who may have started with a goodly stock of nervous energy but have lost it through too lavish use. The result is the same whether the cause be disease, faulty habits or a too strenuous existence, and we see all stages from affluence to poverty. I am sure you all know the bankrupt whom I have mentioned. I do not mean the vicious or the insane. I have reference only to the poor chap who has lost his nervous reserve, who leads a hand to mouth existence, using today what he makes today, with no thought for the morrow, or who, through the demands of stern necessity, can have no thought of the morrow, and must live in today, letting to-morrow take care of itself. You must all have concrete examples in mind, doubtless have some under treatment at present, and probably, if such be the case, would welcome the appropriation of these cases by some brother physician and wish him a hearty Godspeed. These cases comprise that class of poor unfortunates who, having no discoverable organic lesion, are shuffled about without mercy, driven from pillar to post, advised to see some specialist, to go South or to California, anywhere, anything so long as they remove from our immediate vicinity, because under no other circumstances can we feel safe from pursuit. The removal of such patients from town or the knowledge that some brother physician has acquired them or been acquired by them perhaps, is accompanied by such a feeling of relief as to almost pass understanding.

A part of this feeling is due to the old idea that these cases were making believe, that they enjoyed poor health and could be well if they **so** desired and to which we, as physicians are too willing to subscribe.

I must confess that during the earlier years of my practise I had similar feelings toward every case of "nerves" that entered my office. As I began to see a little light, however, the viewpoint changed a bit and I began to realize a little of the sufferings of these poor unfortunates, and sufferings they are just as truly as if caused by some gross pathological lesion rather than being caused by an unfortunate "ground" somewhere in the complications of the nervous system.

A realization of the actual condition of these patients can but result in a feeling of sympathy for them and so, naturally, lead to a desire to help them in some way. With this desire to help comes a study of the conditions and a certain knowledge is gained of the fundamentals.

Further than this I believe it is impossible to go. No amount of expert knowledge will enable one to go farther than to lay a foundation upon which a superstructure may be erected if the builder be fortunate and secures the coöperation of his client. This superstructure must vary widely, in material, in size, in structure

and in ornamentation, as widely as the number of different ones for each must differ from every other.

If these cases had been seen earlier, had been properly advised as soon as they began to show signs of weakness they might have been saved from themselves to be more or less useful members of society. Under proper guidance many of these may be made over to a great degree.

This condition, variously known as nervous, cerebral or spinal exhaustion, nervous prostration, neurasthenia etc., etc., *ad lib.*, may be the result of many different factors. It is not necessary for me to mention them to you—overwork, worry, abuse of alcohol, tobacco, bodily disease etc. You know them all. Nor is it necessary for me to elaborate on the different types, named according to the predominant symptoms, for the principle of treatment remains the same whatever the type. The symptoms too, motor and sensory disorders, eye, ear, heart, brain, intestinal, stomach and sexual signs, all these you know as well or better than I, and the diagnosis, while in some cases very difficult, can usually be made with reasonable accuracy.

The diagnosis should be made with great care both for your own sake and for the sake of the patient. The objective symptoms should be held of less value than the subjective in this condition as is more often better to “know the kind of patient the disease has than to know the kind of disease the patient has.”

The prognosis in these conditions is, as a rule, good. It is dependent on many things, however, the patient, his habits, the cause and the severity of reaction on the part of his nervous system.

Heredity plays a subordinate part in neurasthenia provided the patient can be brought to a realization of this fact.

The treatment of this condition, both in the severe cases and in the incipient ones, is, I think, more dependent upon the degree of coöperation of the patient than any other diseased condition. A patient must, first of all, be brought to a full realization of his condition and its causes, if such can be determined; faulty habits of living must be corrected; he must be encouraged to live an hygienic life; work, recreation and rest must alternate in properly measured intervals, and no smallest detail of daily life should be considered of so little value as to have no bearing on the condition.

In many cases the cultivation of some hobby which will be as opposite to the regular work as possible, is of great importance, but care should be exercised that, in the attempt to stimulate interest in some outside matters, valuable nerve energy is not uselessly absorbed.

Exercise, hydrotherapy, electricity, can all be used in some

cases but must be properly selected and measured for each individual. In fact I know of no condition where cases must be more carefully individualized or where breadth of judgment and discretion on the part of the physician are of more importance.

All this means a great deal of time devoted to each patient, but in no other way can the desired result be obtained. No hurried prescription or the calling into play of the intuitive faculties on the part of the physician will suffice with these cases.

The question of remedial measures is a debatable one. Authorities differ on this subject but personally I am inclined to think that the average case will do better if he has the mental and moral support that comes from taking medicine. Remedies should be used for their physiological effect with extreme caution and never without a very good reason. The indiscriminate use of tonics and stimulants as a routine measure in these cases is not advisable, and I believe that more harm than good has resulted from such use.

But after all the really important part of our work in this as in many other diseased conditions, should be along preventive lines, and surely preventive medicine never had a more fertile field to cultivate than this. Unfortunately we do not see many of these cases until they have become nervous bankrupts with liabilities far in excess of the assets. The reason for this is probably two-fold, partly through ignorance of the condition and the serious consequences which may result from a delay in righting matters and partly through fear of ridicule. Our duties along educational lines were never more clearly indicated, for, if we are to accomplish anything along the line of prevention, it must be by educational methods almost exclusively. In all probability this condition could be very largely prevented by the proper oversight and training of the young and the acceptance by the adult of proper standards of living.

To be sure, the absolute eradication of neurasthenia would not result in as great an economic saving to the world as would the eradication of tuberculosis or of typhoid fever because the majority of neurasthenics start life with a deficient nervous reserve and could never live as strenuous an existence as they could if more favorable conditions obtained. Even so, with their limitations known and observed, they would accomplish a great deal in the aggregate and materially add to the world production and would also render the world a more comfortable place of abode for the rest of us.

Particularly may our policies of prevention be applied to the development of nervous stability in the young. We must remember that, in order to have neurasthenia, we must have, first, an enfeebled or unstable nervous system, second, an irritant. An

enfeebled nervous system may, by proper training and development, be so strengthened that it is not as easily affected by the irritant or we may, by our advice, enable our patients to avoid many of these irritants or we may combine our efforts along both lines.

The modern attitude toward growing youth is to my mind deplorable and must inevitably show harmful results in the coming generation. The average baby of today is to be pitied; it is not allowed to grow up naturally, and its nervous system is being constantly stimulated by fond parents and well meaning but mistaken friends and relatives. This stimulation is continued through the five or six years of home life and is carried along throughout school and college life by our methods of education in public schools. Every individual is held up to a certain standard, there being no provision for the weak and deficient. It has been said that this method develops the best individual types, and I think that is true, but the cost is sometimes too great. Some limit should be placed somewhere for the benefit of the weaker individuals.

By intelligent oversight, proper methods of training, care in the establishment of proper habits of living, these individuals who start life handicapped with a deficient nervous reserve may be developed to a reasonably normal condition. The senseless frittering away of nerve energy in the young during the period in which they should be accumulating nervous force is the tendency which I deplore. How much more profitable would be the development of self control during this period, the endeavor to cultivate an unresponsive attitude toward irritation from without and within, for by these means such excellent self control may be gained as to conserve a vast amount of nervous energy and direct it along useful channels.

The specialist may not do this, not because of lack of knowledge but because he cannot know his patient intimately enough. It is for us as general practitioners, family physicians if you will, to do, and if there be any salvation for us as family physicians it is that an intimate knowledge of the lives of our patients gives us an advantage which we should be slow to relinquish: an advantage about which we are too often overmodest and with which we too seldom impress our patients.

In conclusion let me add that rest is not a panacea for neurasthenia, nor can nerve energy be developed by rest as well as in congenial occupation properly directed. I believe it was Cowper who said that

“Absence of occupation is not rest;

A mind quite vacant is a mind distressed.”

and some of the most unhappy mortals whom I know are trying to find rest in absence of occupation.

It is impossible in the limits of a short paper to cover properly a subject of this kind, a subject so broad that it involves the function of every organ in the body and upon which volumes have been written, and I feel like apologizing for even making the attempt. I know, however, from experience with many of these cases that much can be done, and I know of no greater satisfaction than that which comes from the knowledge that we have been able to relieve or avert a condition so fraught with suffering.

THE NERVOUS MANIFESTATIONS OF ECLAMPSIA.

By A. H. RING, M.D., Arlington Heights, Mass.

The striking similarity between eclampsia and epilepsy is so evident as to need only passing reference. The best authors classify epilepsy as—(1) idiopathic; (2) organic; (3) reflex; (4) toxic. It seems evident that eclampsia rightly fits into this last division, and from the neurological standpoint, therefore, eclampsia is merely epilepsy of toxic origin, and it would almost seem that we are carrying an unnecessary term in our nomenclature when we use the word eclampsia. However, since it stands for such a perfectly definite syndrome, existing most commonly in a different field of medicine, it can hardly be dropped.

Kaltenback (Williams' Obstetrics) has demonstrated that vomiting of pregnancy is commonly a manifestation of a neurosis and often yields to suggestion. Williams says: "Clinical observation affords abundant evidence in favor of such a view. It is well known that many women who are apparently upon the verge of death from starvation, as the result of vomiting, suddenly become better spontaneously following a threat to induce abortion. Moreover, prompt cure frequently follows the employment of most varied and unscientific methods of treatment, i. e., electricity when later the battery was found to be out of order.

Eclampsia is an acute toxæmia occurring in the pregnant, parturient or puerperal woman and is usually characterized by clonic and tonic convulsions, during which there is a loss of consciousness, followed by a more or less prolonged coma. It may, however, exist without convulsions; the only characteristic thing is the lesions.

The pathology so far as the nervous system is concerned is that the brains of cases dying from eclampsia have shown œdema, hyperemia, anæmia, thrombosis, and apoplexy. Pruly found brain changes in all but ten per cent. of autopsies on eclamptics, and Schmovl in 58 of 65 autopsies noted the presence of thrombi in the small cerebral vessels and regarded them

as the cause of small areas of necrosis which are often observed.

The first striking symptom is epigastric pain, and I take this to be due to the irritation which the toxine exerts upon the sympathetic plexes in the abdomen, although so far as I am aware no researches have been conducted in which these plexes have been studied post mortem, to determine the pathological process. It is undoubtedly a functional change such as must exist in ptomain poisoning and any other cramp-like bowel pain. This would make an interesting subject of research for the student.

The next symptom is headache. Pain in the head means disturbance either in the nervous or the vascular supply of the meninges. It is generally conceded that pain in the head exists only when the meninges are involved and does not result from changes in the brain proper without meningeal involvement. For example: The parietic and arterio-sclerotic may not complain of headache, although they will describe many distressing head sensations,—as pressure, tension, confusion, etc. Many brain tumors are overlooked for want of headache, it being considered more or less pathognomonic of cerebral tumors, but it is probably not present unless the meninges have also become involved through inflammation or pressure. Whether this involvement is in the nervous supply proper of the meninges, a neuralgia, or is in the vaso-motor nerves which would again place the responsibility upon the sympathetic neural mechanism, and so make it comparable to the abdominal pain, it would be futile to guess. Migraine presents similar problems.

Then occurs one of two things: either a progressive lowering of the intellectual faculties, causing an increasing stupefaction and coma, or else convulsions. It would seem either that these two sets of symptoms represented merely degrees of intensity of the same toxic process or else pointed to the tissue involved, i. e., meninges or cortex. If we assume that the headache is due to a disturbance of the urea-forming mechanism by which the amount or relation of the total nitrogen to the urea output is altered; or if we assume that the toxine is one which increases fibre ferment or colloid substance in the blood, or if, as is demonstrable in some cases, the amido-acids are disturbed, resulting in the output of acetone and diacetic acid in the urine, or whatever else may be the source of this irritant, it is fair to assume that if the effect of this toxine is exerted upon the cortical vessels, thus numbing the association tracks, the outcome will be coma. If, however, the effect of poison has been exerted upon the meninges, the cortex instead of being numbed, will be simply irritated, resulting in convulsions. It would be fair to

deduce from this explanation the fact that convulsions are more apt to follow headache than coma. This, it seems to me, is the explanation of the headache and convulsions in eclampsia on the nervous side.

Dr. Blodgett says in the *Medical Century* for December, 1907, "You all know that the larger proportion of puerperal convulsions can be foreseen and oftentimes prevented by a proper examination of the urine, and I think,—although as I have said above, my data are not sufficient to allow me to state it as an absolute fact,—that in cases where convulsions occur but the common urinary examination has shown no intimation that they were likely to occur, we shall find that acetone and diacetic acid were present, and it is due to this toxine, hitherto unrecognized, that the convulsions occur."

That convulsions identical with eclampsia may also result from this cause, is evidenced by the following case:

The case is that of a woman aged 54 years, under treatment for her fifth attack of acute mania. The attacks have been short, lasting from four to eight weeks, and coming from one to three years apart. The mania itself has been of the ordinary type, but the last illness before this one was culminated by one convulsive seizure, which was epileptiform in nature.

The present attack began July 5, 1910. There was the usual prodromal period of insomnia, restlessness, and unreasonableness, that shaded into loquaciousness, exhilaration, and psychomotor excitement, singing, dancing, etc.

A few days later she refused food, vomited several times, and her breath became strongly acetone. She sank into a stupor, which deepened into coma. The right face muscle began at intervals to twitch convulsively, the eyes to roll upward and to the right; then the right fingers and arm took up the spasm, and, finally, the eyes would roll to the left and the spasm would pass to the opposite side, the seizure being typically Jacksonian. They were frequently ushered in by a scream, tonic muscle spasm, suspension of respiration, blue lips and nails, involuntary micturition, and at times defecation. This was followed by a long gasp, frothing and clonic spasm, beginning in the right jaw as described. The fits now began to recur at more frequent intervals until, in twelve hours, they were coming every five minutes, the tonic spasm lasting thirty seconds and the clonic about a minute. It was to all appearances a status epilepticus. For about thirty-six hours there was an average of twelve fits an hour. The heart action grew very weak, 160, with a small, thin pulse, and the temperature rose to 103° F. The urine was loaded with acetone. The outcome looked gloomy. Swallow-

ing was impossible, so that the nasal tube was used every two to three hours to put into the stomach the following:

After six feedings the chloral and bromide were omitted, as the spasms were diminishing, and barley water was substituted. The soda was continued for another two days, until the acetone odor had left the breath and urine. The mental state rapidly cleared up, and she returned home after having made a good recovery.

Doubtless these attacks were due to the acetone. The complication of this state in so marked a degree in mania is certainly very unusual, although acetone breath is quite common, probably from starvation.

It seems to me that it would be hardly possible to draw a more typical picture of eclampsia than this case affords, and I see no reason for not supposing that some cases, at least, of eclampsia may have the same cause, while this case would be distinctly classed as toxic epilepsy. Eclampsia is, then, one type of toxic epilepsy.

To summarize: (1) The striking symptoms of eclampsia, namely, epigastric pain of a cramp-like character, headache, convulsions and coma, are due to the effect which the toxine exerts upon the nervous system. (2) The degree and kind of nervous symptoms will depend upon the predilection which poison shows for the particular part of the nervous system. (3) The presence of coma means that the toxine is affecting more especially the brain cortex, i. e., the association mechanism in which the function of active conscious cerebration resides, while (4) the presence of marked headache and convulsions indicates that the meninges are the tissue more especially involved, the motor cortex being merely irritated. (5) If death supervenes upon coma, it is probable that it results from cortical odema, similar to acute encephalomalacia, causing the medulla to be jammed down into the foramen magnum, thus pressing upon the fourth ventricle and paralyzing the vital centers in the brain stem.

CLINICAL DEPARTMENT.

Conducted by A. H. RING, M.D.

Case 8-D. Diagnosis: Chloral Habit. This case illustrates very well the neural background upon which drug habits grow. The patient inherited a poor circulatory system—his father died of apoplexy and his mother evidently had myocarditis.

From boyhood he was imperious and quick tempered. Fortunately he possessed an excellent mind and a fair degree of self-

control which served him in good stead over his active business life. But he believed himself to have inherited from his mother her intuitive power of discernment, and in his turn became the herb doctor of the neighborhood.

About the age of fifty he evidently began to wear out and to have some cardiac weakness with neuralgic pains and sufficient cerebral anæmia at times to give him periods of insomnia. The heart condition may of course have been a late effect of the same infection, that gave him his arthritis twenty years before, but there was no evident murmur and it seems probable that it was rather the early sign of a deteriorating heart muscle.

Then seven years ago came a severe attack of brachial and cervico-occipital neuralgia which required morphia. This was undoubtedly the right thing to do at the time, as the pain was extreme, but he acknowledges that he insisted upon having another hypodermic on several succeeding nights "for fear of recurrence." This should have been sufficient to put the physician on his guard. Evidently it did to some extent, for he substituted what he considered a harmless hypnotic (chloral hydrate) to get away from his morphia. Had he formed a clear conception of the reasons underlying the insomnia and fearful mental state, he would not have done this, because it would have been evident that chloral was not a safe drug for a man with weak heart action. This emphasizes the importance of carefully ferreting out the cause of each case of sleeplessness. There is no symptom which so readily leads to the use of drug habits. Professor Howells says that normal sleep is dependent upon three factors:

1. Reduced cerebral irritability caused by the fatigue of the day's work.
2. Voluntary withdrawal of sensory and mental stimuli involved in the preparations for sleep.
3. Diminished blood supply to the brain owing to the relaxed tone of the vasomotor centre, hence a fall in arterial tension.

It is evident if these functions produce sleep, that one should look for the possible things which might disturb them in cases suffering from an error in this important function—and in this patient the fault was not difficult to find.

In going over the literature I was surprised to find almost nothing in regard to the treatment of the chloral habit, though it certainly is not uncommon.

This patient presented evident symptoms of chronic chloral poisoning:—emaciation through inability to eat; burning in the epigastrium; neuralgic pain; very weak heart action; blue lips; dusky skin; extreme apprehension and restlessness, forgetfulness, and a tearful depression. Like most habit cases he refused to be-

lieve that these symptoms could be due to the drug and insisted that there was some other cause which the doctors had not discovered, because, had they not told him "that chloral was harmless?" When I came to know him better after his recovery it was easy to see why he had drawn this conclusion. He had a peculiar habit, growing out of his domineering nature, of telling you what he wanted you to say and then persuading you to agree to it.

The course pursued in treatment was to place him in a hospital with a day and a night nurse and put him to bed. Digitalis Infusion tablets one grain, were given four times a day and a sixtieth of strychnia sulphate before meals. His confidence was gained by a series of explanatory conversations. This I believe to be very important. For the first four nights he was allowed ten grains of chloral in addition to a five-grain powder of malonal through the night. Then the chloral was stopped and a mixture containing:

Rx Eno's fruit salt	one drachm
Codeine	1-4 grain
Malonal	V "

was substituted and repeated through the night if required. This mixture has the advantage of a harmless base which disguises the taste of the hypnotics, so that they may be withdrawn without detection by the patient, who goes on taking his fruit salts at bed time and sleeping contentedly. I believe this to be a legitimate type of psychotherapy in drug cases as they must have something tangible until the mind regains its stability. On the second day after withdrawal the patient vomited excessively and felt sure he was dying. His pulse became very weak, necessitating a thirtieth of strychnia sulphate hypodermatically, and he had diarrhea. After this one bad day, improvement was rapid and his night draft was soon reduced to just the fruit salt. Attempts were made to stop the heart tonics, but each time he became sleepless, restless and apprehensive. In four weeks he returned home free from the habit and feeling very well and happy. He still has a feeble heart, however, which at times gives him symptoms mostly mental and some insomnia.

Case 9-D for Diagnosis: The essential history of this case is brief. The patient is of Dutch stock, born in New York State. She was a healthy enough girl of a nervous, high-strung temperament, musical, dreamy, fantastic and very beautiful, of medium height, and blondé, though now rather gray. She married a prosaic, matter-of-fact traveling man, and has had the feeling that she has never been appreciated. She has always been wilful, domineering and imperious, but a good conversationalist, of easy and confiding manner. She had one miscarriage but no living child, though she has been married over twenty-five years. For years her relations with her husband have been merely those of a friend and often strained.

Some fifteen years ago while on a vacation she was taken with violent crampy pains and dysentery for which the doctor gave her a hypodermic of morphia and told her what it was. Soon after that at home she had more pain, demanding morphia for its relief and continued to be an invalid with much pain, for which she kept her family doctor coming regularly to give her the relief she craved. She says that she has never administered any morphia to herself but this is very questionable. However, she has managed to be more or less of a chronic invalid with considerable pain ever since, and has several times been placed in bed in a general hospital and had the morphia reduced to a small amount; she would never, however, allow it to be entirely stopped. She denies that she is at all dependent upon it, but has had to have it to stop her chronic diarrhea, and a severe sciatica which has proved incurable by other methods—"All of which she has given a fair trial."

In February, 1912, she got into a pitiable state. She was extremely emaciated and yellow; all the unfortunate traits of her temperament became so emphasized that she was unbearable in the home. She was forgetful and would spend her day in intense activity under the belief that she was doing a great amount of work, though in reality accomplishing almost nothing: shifted from one duty to another without completing anything—a useless business. She was boisterous, boastful, elated, or saddened and weeping in turn. Kept the household awake all night crying and moaning or jumping up to jot down some rhyme that cropped into her mind, for she believed herself to be an inspired poet. A nurse was secured and an attempt made to reduce the morphia, but she carried on so that it was constantly necessary to give in to her to secure any order or peace in the house. However, some reduction was made and the nurse discharged through July, but by August she was as bad as ever, and the nurse was reinstalled. By September she was demanding and getting hypodermic injections every time she thought she needed one, which was about every two hours, with an average total of four grains a day. The variety of discomforts which she gave as excuse for these was beyond description.

It now became clear to the family that something radical must be done, and she was placed in a hospital. On admission she protested that there was not the least need of treatment, anger alternated with supplication, and she was intensely restless and unreasonable, moaning and crying night and day.

Physically she was in very bad condition, extremely emaciated and sallow with a dry scaly skin. She had a persistent diarrhea (four to eight movements a day), and the abdomen was boardy and retracted. She seemed too weak to be out of bed, yet could not be kept in it.

The diagnosis is self-evident, but how would you treat this case?

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the *GAZETTE* only and preferably to be typewritten—personal and news items should be sent to THE NEW ENGLAND MEDICAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business should be sent to the Business Manager 80 East Concord Street, Boston, Mass.

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THE INSTITUTE COMMITTEE ON CONFERENCE WITH THE A. M. A.

We would direct the attention of our readers to the report of the Committee on Conference with the American Medical Association read at the Denver meeting of the Institute, as printed in this number of the *GAZETTE*. It is extremely encouraging that after five years of continued work this Committee has finally been recognized by the House of Delegates of the American Medical Association. A letter from the Secretary of the American Medical Association to the Chairman of our Committee requests that this Committee formulate a definite scientific proposition which if submitted to the American Medical Association would be received and considered.

So far so good. Dr. Schenck, the Chairman, recommended to the Institute that a new committee of five members be appointed by the President to carry out the request of the Secretary of the American Medical Association and prepare such proposition and arrange for a joint investigation of the law of similars.

This recommendation was adopted and a new committee to be known as the Joint Conference Committee will be created by the President-elect.

No more important work has come before the Institute than the creation of this committee and its preparation of a plan of action for a joint investigation of the Law of Similars.

THE AMERICAN COLLEGE OF SURGEONS.

In May of this year there gathered in Washington, D. C., four hundred and fifty representative surgeons of the United States. Their coming together was in response to an invitation issued by Dr. Franklin H. Martin of Chicago, secretary of an organization committee, appointed by the Clinical Congress of Surgeons of North America. The object of this meeting was for the purpose of effecting an organization to be known as the American College of Surgeons.

The purpose of such an organization was in brief the formulat-

ing of a minimum standard of requirement which should be possessed by any authorized graduate in medicine who is allowed to perform independently surgical operations in general surgery or any of the specialties. After such a standard has been established this organization will seek the means of legalizing, under National or State laws, a distinct degree supplementing the medical degree, which shall be conferred upon physicians possessing the necessary requirements to become operating surgeons.

This distinctive degree shall be "Fellow of the American College of Surgeons."

It is intended that there shall be four classes of fellows: A, B, C, D. A, B, and C shall be admitted without examination.

Class A. Founders of the College.

Class B. Those who are members of certain *accredited* surgical societies and one hundred additional who shall be nominated by each of certain accredited societies which are branches of the American Medical Association.

Class C. Only those who are considered eligible by the Committee on Credentials.

All others who might seek the title of Fellow of the American College of Surgeons will be obliged to meet certain requirements which are yet to be reported upon at the next meeting of the Regents in Chicago, November, 1913.

Just a few words as to the administrative plans. The College of American Surgeons will be composed of all those who are admitted as Fellows. These Fellows shall vest the general management in a Board of Governors consisting of five hundred Fellows who are the present founders. These shall be divided into classes, A, B and C, who shall serve one, two, and three years respectively. The Board of Governors shall in turn elect the Board of Regents, consisting of thirteen members, which Board becomes the real essence of the American College of Surgeons.

There is not a medical man in the country but should be deeply interested in this projected power-conferring-institution. Certainly no homœopathic physician or surgeon can be indifferent to its aims and objects. While we endorse most strongly the avowed aims of this organization, "to elevate the standard of Surgery and to formulate a plan which will indicate to the public and the profession that the physician is especially qualified to practice surgery as a specialty," yet we as a school have learned from long experience to be ever watchful for the "colored gen'l'man in de wood pile."

Note first that but one surgeon from the homœopathic school was invited to be present at this Washington meeting when the College was formally organized and as that surgeon will have some-

thing to say editorially about this matter in the next issue of the *American Institute Journal*, we will not anticipate him.

If the plan of conferring the degree of F.A.C.S. which has now been adopted maintains, let us see wherein our homœopathic surgeons would be eligible for the degree.

They could not come in Class A, unless they were Founders. At present but one homœopathic surgeon is a Founder.

In Class B, not one of our National or State Societies is included from which members may be nominated for the degree. If chosen from Class C they must be entirely satisfactory to the Committee on Credentials which naturally would be composed exclusively of old school surgeons. Class D has not yet been defined.

The point we seek to make here is this—that the American Institute of Homœopathy at its Denver meeting took action upon this matter after a careful and intelligent consideration of the subject by the Board of Trustees. That action resulted in the following resolutions:

“Resolved that the American Institute of Homœopathy, with a view to protecting the interest of its members, hereby appoints a Committee of seven, of which the President-elect shall be a member. Such Committee shall contain representatives of the following allied societies: the Surgical and Gynecological Society, the Obstetrical Society, the Ophthalmological and Otological Society, and that this Committee shall have power to request and arrange for representation upon the same basis as the various organizations now recognized in the governing body of the American College of Surgeons; said Committee also to act with the Legislative Committee of the American Institute of Homœopathy, to protect the legal rights of our members in the practice of surgery or any of the surgical specialties.”

The members of this Committee are as follows:

DeWitt G. Wilcox, M.D., Boston.

James C. Wood, M.D., Cleveland.

James W. Ward, M.D., San Francisco.

Herbert D. Schenck, M.D., Brooklyn.

Walter G. Crump, M.D., New York.

Charles E. Kalke, M.D., Chicago.

Dr. Wood of Cleveland has since been made Chairman of the Committee and as he is at present the only representative from our school who is a Founder we can be assured that we shall have a powerful representative in this matter.

It is highly desirable that no surgeon of the homœopathic school should make application for a Fellowship in this American College of Surgeons until he is assured that we as a school have a

decent representation upon the Board of Governors and upon the Board of Regents.

Had Dr. Wood considered himself only in this matter when he was asked to be a Founder he could no doubt have become a Regent and secured all the power *personally* any one could ask for in the College. But with the loyalty which has characterized his every professional act he at once requested that there be representation upon the Board of Governors from both the Eclectic and the Homœopathic Schools. That request he has strenuously adhered to and it is upon that question which the contest will wage warm when the Institute Committee meets with the Organization Committee of the College in Chicago next November.

REPORT OF THE COMMITTEE ON CONFERENCE WITH THE AMERICAN MEDICAL ASSOCIATION.

The committee appointed in 1908 at the request of the Homœopathic Medical Society of the State of New York, has reported progress and been continued from year to year. At Pittsburgh, your committee was on the point of making a final report of failure, when the chairman proposed that an official letter be sent to the officers of the American Medical Association, requesting them to present it to the House of Delegates for action. This suggestion the Institute unanimously adopted.

Your committee had in the past been refused the list of delegates by the officials of the American Medical Association, and had worked for four years to secure the support of enough individual delegates to insure favorable consideration once it should be brought up for action. We were never able, however, to find a delegate with enough enthusiasm and interest to introduce our request and fight it through. This year the Institute was particularly fortunate in having at the head of the American Medical Association a broad, liberal-minded man, Dr. Abram Jacobi, who took up our request and put it before the delegates.

Your committee was called to discuss a draft of the letter prepared by the chairman, in Chicago, on February 25th, 1913. Drs. Royal S. Copeland, Alonzo C. Tenney and the chairman were the only members of the committee present. The letter was re-drafted, sent to the members of the committee, and consents of the members to its signature obtained by the first week in May.

On May 15th the following open letter was sent to the president and secretary of the American Medical Association:—

May 15, 1913.

"To the President and Secretary of the American Medical Association,
535 Dearborn Avenue, Chicago, Ill.
Gentlemen:

In 1908 the undersigned were appointed a committee by the American Institute of Homœopathy to present to the American Medical Association on behalf of the Homœopathic profession of the United States a proposition for a joint investigation of the scientific merits of the methods of drug selection expressed by the formula "*Similia Similibus Curentur.*"

The committee has presented the matter to individual members of the House of Delegates, but, we believe, the matter has never been regularly presented to the House or to the Association itself, as a whole. We request that you bring the matter up for consideration and early action by both.

For the following reasons it seems to us a subject worthy of your serious thought.

This rule has governed the selection of drugs in the treatment of disease by a considerable number of medical practitioners for over a century. We feel that the time has come when this formula should be brought before

the whole medical profession, carefully investigated by modern scientific methods and a determination made of the exact value of this method in the practice of medicine.

We seek this:

First. Because the voluntary testimony of a large number of physicians who do not understand the correct application of this method indicates their desire to make use of it.

Second. Because a large number of men who attempt its use ought to be able to get a better understanding of its true significance.

Third. Because we believe a majority of the medical profession would have their usefulness and their power to benefit the sick largely enhanced by a thorough knowledge of this method.

Fourth. Because we believe that suffering is lessened and sickness more speedily and comfortably terminated through drugs administered according to the rule of similars.

Fifth. Because we feel that a careful investigation of this subject belongs to the whole medical profession and not to any single branch of it.

Sixth. We feel that such research regarding the formula of similars is desirable. Because the exactness of modern science with the present means of investigation, together with the accurate observation of the subjective as well as the objective symptoms, make it expedient to investigate the action of many drugs coming into use at the present time, as well as to re-examine those long proven.

For the above reasons we pray that your organization appoint a committee of five to meet a like committee from the American Institute of Homœopathy to discuss this subject with a view of attempting a demonstration of the accuracy of the theory of similars, or of proving its falsity.

It seems to us that its joint investigation should be made under the auspices of some research laboratory like the Rockefeller Institute of New York or the McCormick Institute of Chicago. These institutions have the experts necessary for such a test; with trained eyes they could follow its course from start to finish. Whether the result of the particular investigation should prove satisfactory or not, the effort would not be wasted because a list of drugs in common use among the members of your Association as well as ours can be selected for this study of their physiological action. These accurate observations would be of permanent value to both schools.

After careful investigation of the effects of these drugs in different strengths upon the human body, as well as observing their poisonous effects in animals, an extensive trial of their therapeutic efficacy should be made in some of the large public hospitals to test the action of these remedies in exemplifying this theory of drug administration.

In recent years every effort has been made to unite the medical profession. A large number of legal practitioners is kept from affiliation because of its belief in a method of drug selection, the truth of which is questioned by the majority. Let us make a thorough test of this hypothesis. If it be proven true, humanity will be benefited by the enlarged and improved armamentarium of all physicians; if it be disproven, the last obstacle to medical union will have been removed.

To the end, therefore, that the truth be established, let us put this theory to the test proposed. Naturally we feel confident that the principle will be established, but in the interest of mankind we request you to join with us in a scientific demonstration of the truth or falsity of the theory of cure promulgated by Samuel Hahnemann.

Respectfully submitted,

(Signed)

Herbert D. Schenck, M.D., Brooklyn.

J. B. G. Custis, M.D., Washington, D. C.

William R. King, M.D., Washington, D. C.

Royal S. Copeland, M.D., New York.

Frank C. Richardson, M.D., Boston.

Alonzo C. Tenney, M.D., Chicago.

Fred. W. Wood, M.D., Chicago.
Benjamin F. Bailey, M.D., Lincoln, Neb."

On May 19th the above letter, accompanied by the following, was sent to the editors of twenty old school journals and to eleven Homœopathic and two Eclectic Journals.

"Dear Sir :

The enclosed letter addressed to the president and secretary of the American Medical Association has been sent, and I am notifying you of the fact in order that you may apprise your readers, if you care to, of one of the things that ought to come before the House of Delegates at the next meeting of the American Medical Association,

The American Institute, of whose committee I am chairman, thinks this is a matter of great scientific importance, which ought to be taken up and carefully and scientifically investigated. To do this, we need the help of the largest organized body of American physicians. As our letter states this work should be managed by the whole medical profession and not by any one branch.

Trusting for your co-operation and support in bringing the matter to the attention of your readers, in order to inform them of the fair and broadly scientific spirit in which the American Institute wishes the subject broached, I beg to remain,

Very truly yours,

HERBERT D. SCHENCK,
Chairman."

The following were the thirty-three Journals to which it was addressed :

The New York State Journal of Medicine, The Critic and Guide, The Medical Times, The Medical World, The Medical Fortnightly, The Long Island Medical Journal, Medical Review of Reviews, Medical Brief, The Inter-State Medical Journal, The Indianapolis Medical Journal, American Medicine, Medical Record, Journal of the American Medical Association, New York Medical Journal, Cleveland Medical and Surgical Reporter, Boston Medical and Surgical Journal, Post Graduate, Therapeutic Record, Southern Practitioner, The North American Journal of Homœopathy, The Hahnemannian Monthly, The New England Medical Gazette, The Medical Century, The Pacific Coast Journal of Homœopathy, Iowa Homœopathic Journal, The Clinique, The Critique, The Homœopathic Recorder, The Chironian and The Journal of the American Institute of Homœopathy, The Eclectic Review, and the Eclectic Medical Journal and Journal of Ophthalmology, Otology and Laryngology.

A formal acknowledgment of the receipt of the letter was received by your chairman from Alexander R. Craig, M.D., Secretary of the American Medical Association, under date of May 22nd. During the next week replies were received from the following medical journals:—

New York State Journal of Medicine, Interstate Medical Journal, Medical Times, Medical Review of Reviews, Long Island Medical Journal, New England Medical Gazette, The Journal of Ophthalmology, Otology and Laryngology; and later, a copy of the June number of the Eclectic Review was received containing the letter. Of these eight journals, the Medical Times said its June issue was in press and that it could not be used; New York State Journal, that it had been referred to its committee on publication; and the Interstate Medical Journal, that it would be considered by the editor on his return to the city. The Medical Record published the last half of the letter in its news columns. The Editor of the Medical Review of Reviews said he would call the attention of his readers to the letter, with a hope that if the investigation failed to show the truth of Hahnemann's position, that sectarianism in medicine would be lessened. The Long Island Medical Journal published the letter and editorially commented, saying that it ought to be considered on its merits and its value in bringing about medical unity.

The Eclectic Review published the letter without comment, but Dr. DeWitt G. Wilcox, on behalf of the *New England Medical Gazette*, commented favorably upon the letter and promised to publish it in the July issue, as did Dr. John L. Moffat, the editor of the *Journal of Ophthalmology, Otology and Laryngology*. Other journals may have published it, as the chairman has not had an opportunity to search through the files of the June issues of all the journals since June 15th.

Under date of June 28th the following letter was addressed to your chairman by Alexander R. Craig, M.D., Secretary of the American Medical Association:—

“Dear Doctor:

At the meeting of the House of Delegates of the American Medical Association, held in Minneapolis, Dr. Abram Jacobi, in his presidential address, presented a communication of the committee of the American Institute of Homœopathy, which was referred to the Judicial Council of this Association for consideration. The Judicial Council reported to the House of Delegates recommending that the Secretary of the Association be directed to acknowledge the receipt of the communication of the committee of the American Institute of Homœopathy, constituted in 1908, and that this committee be asked to advise the American Medical Association as to whether or not it is still authorized to act for the American Institute of Homœopathy, and with what powers it is vested, and further, I am charged to advise your committee that if it wishes to renew the request for co-operation in determining proof, the American Medical Association will be pleased to receive a definite, scientific proposition, submitted over the individual signatures of your committee.

Upon motion, duly seconded and carried, this report of the Judicial Council, and its recommendations were adopted and I am now advising you of the action.

Very truly yours,
(Signed) ALEXANDER R. CRAIG,
Secretary.”

Your committee having secured the appointment of a committee of the American Medical Association, considers the work for which it was appointed finished and recommends that the Institute appoint a committee with definite powers to take this matter up with the American Medical Association.

As a suggestion in determining the powers of such a committee, we recommend the following:—

RESOLVED, that the president be requested to appoint a committee of five members to represent the American Institute of Homœopathy in its conference with a like committee of the American Medical Association.

RESOLVED, that this committee have full power to arrange for a joint investigation of the Law of Similars and report back to the Institute such arrangements as have been agreed upon at the next meeting.

IN MEMORIAM.

Richard R. Trotter, M.D., April 5, 1849, March 28, 1913.

Circumstances of fate give an unusual solemnity to this occasion. For the first time in our memory, we are to pay a final tribute to two of our departed members at the same meeting, both of whom were giants in their way, both exalted in the profession, and in the esteem of the community in which they moved, and both conspicuously related to the affairs of this Society, practically during the entire period of the professional lives of all those who remain. In the passing of Dr. Hasbrouck, and Dr. Trotter, we have lost two of our most honored, our most noble, and our best.

Dr. Richard R. Trotter was born in Roxbury, Mass., April 5th, 1849, and died in Yonkers, N. Y., March 28th, 1913. His parents were both natives of

Scotland, his father's birthplace, Berwick-on-Tweed, his mother's Castle Douglass. He was therefore a Scotchman, through and through.

His father's death, leaving two small children, Richard and Mary, was followed by his mother's second marriage, which resulted in the continued happiness of all concerned, and in the enlargement of the family by an additional son and daughter, both of whom survive. The half-brother is Dr. T. A. Sproat, of New York City, a dentist.

His young life was spent in Roxbury, where he received his education in the public schools. Following the footsteps of his father and step-father, both of whom were skilled mechanics, he found employment with the Remington Co., at Ilion, N. Y., where he was very successful, soon attaining to an important position.

During his leisure, he industriously read medicine with Dr. Gilbert, then of Ilion, now of New York City, becoming a member of the class of 1877 in the New York Homœopathic Medical College, where it was my pleasure to meet him, then-a serious faced young man. He chose Boston University for his senior year, graduating therefrom with the class of '77. After serving a year as interne in the Albany Hospital, he located at Berne, N. Y., in May, 1878. In 1880, he married Miss Mary Patton, the daughter of a prominent citizen of Berne. After two years of successful practice, in which he made an excellent reputation, but gave his health a serious wrench in fighting snow drifts, he decided that he preferred city life, and came to Yonkers in the spring of 1882, establishing himself on Warburton Avenue, not far from the house which he occupied at the time of his death.

Soon after he came to Yonkers, he opened a dispensary which immediately became very popular among the poor, for whom he always had a deep and true sympathy. The spirit of this early practice, of indefatigable devotion to the poor and unfortunate, he followed consistently to the end.

His official public service was limited to three or four years on the Board of Health, during which he gave much time and thought, with the late Dr. Sherman, to the task of reorganizing the Board, and the endeavor to establish it on a good, sound, working basis.

He was a member of the American Institute of Homœopathy, the New York State Homœopathic Medical Society, the Westchester County Homœopathic Medical Society, the Academy of Pathological Science and the Yonkers Clinical Club. He was also an associate member of the New York County Homœopathic Medical Society, and was a member of the Masonic Fraternity.

Upon the Yonkers Homœopathic Hospital and Maternity, he bestowed his chief labor, zeal and energy, where he proved himself a pillar of strength. As one of the four original members of the Medical Staff, during the early days when only the hopes and prayers of its sponsors, kept it from going down in the struggle for life. Dr. Trotter's great heart and soul were ever deep in its councils, and his wisdom and never-failing support contributed in a large degree to its present success and prosperity. In every official capacity of the Medical Board, he showed the same unassuming, yet true and vigorous devotion to duty, which so characterized his whole life. He was the first secretary of the Medical Staff, and was consecutively secretary of the Medical Governing Board, Chief of Staff, and Medical Executive Officer, and at the time of his death, he occupied the position of Consulting Physician. In each function he served without fear or favor, and in times of emergency, his calm, cool presence, together with his ever resourceful expediency, made him an exceedingly strong and helpful support.

The Hospital Laboratory was his creature, and his idol, and to him is due the credit for whatever efficiency it now possesses.

His unflagging interest in microscopy, bacteriology, pathology and diagnosis, kept him ever in the forefront of advancement, and gave to his services a distinctive mark of great worth.

Those of the medical fraternity who knew him best, honored and respected him for his ability, as a physician of lofty ideals, with attainments

as a general practitioner which were, in many ways, very superior. He was more than a friend, he was, in deed and in truth, an elder brother in the profession.

In his private practice, he made a host of devoted friends. Seldom did the sunshine of his presence fail to penetrate the shadows of gloom, and many a bleeding heart, and many a broken frame has been borne up through the vale of discouragement and despair, by his strong arm, and his intense human sympathy. His patients, as well as his co-workers, learned to love him, not only because he was their cherished friend, their firm counsel and guide, who could be relied upon whenever his ministrations were needed, but because, as they grew to know him, and to honor him, they became conscious that he was one of Nature's noblemen.

His many noble traits of character made him a most congenial, as well as dependable man. Unostentation marked his every step in life. His good-nature was ingenuous and cheerful. His good-fellowship was royal. His friendship never failed. His kindness was almost without limitation. His generosity was magnanimous. His hospitality was both gracious and sincere. His sympathy was quickly responsive. His charity for the unfortunate was always pronounced. His devotion to duty was unflinching. His self-sacrifice was boundless. His promptness in defending friend or foe against injustice, as he saw it, was characteristic. His frankness was always to the limit of discretion. He was "an honest man, the noblest work of God."

His heroism during the last few months of his life, when he well knew that the fateful messenger was already speeding on his way, was a fitting climax to his noble career of courageous manhood, and forgetfulness of self in his consideration for others. Throughout this entire period, there was apparent an unusual sweetness and tenderness, which his friends recognized, but of which they knew not the significance, until suddenly the truth was made manifest by the relentless doom. Then the indomitable fearlessness of the man asserted itself, and he declared: "I understand it perfectly, and am only concerned in setting my house in order." This he proceeded to do with such masterly precision and detail, that those nearest to him were quite overcome with melancholy admiration and astonishment. This final task complete, he "wrapped the drapery of his couch about him, and lay down to quiet rest."

Memory loves to linger over the charm of his simple, sturdy, rugged, yet lovable personality, which, when well understood and appreciated, quite overshadowed those human weaknesses, so common to us all. We shall sadly miss him, but the inspiration which his life has left will ever be as fresh as the dews of the morning, and as fragrant as the roses that bloom in the spring-time. We believe that his beautiful example has left its impress upon our lives, which time cannot efface, and that its true value, eternity alone can reveal.

ROUNDING UP FAKE CURES.

From now on the public will be less imposed upon by fake cures. The new amendment to the pure food and drugs act makes it possible to seize and condemn goods labeled "cures" but known to the medical profession to be anything but cures.

In this city the first seizure under the new law has prevented the distribution of a soothing sirup containing alcohol and codeine, which bore a label stating that it was safe and effectual medicine for teething children. The bane of soothing sirup is notorious throughout the land; but conditions should soon be changed for the better.

In Denver the government has won by default a case against a firm that sells what purports to be a cure for consumption. No such sale can honestly be made, and now the government inspectors are duty bound to see that it is not made.

The medical faker has seen his best days, so far as the United States is concerned. So much the better for public safety and sanity.—*Boston Journal*.

DEPARTMENT OF EUGENICS.

EDITED BY MARA L. PRATT-CHADWICK, M.D., MALDEN, MASS.

Dr. Chadwick will gladly receive communications, reports of cases, etc., etc., pertaining in any wise to the matter of child culture and race improvement.

July Vigilance calls attention to a case of immorality on the part of public schools. It says, "This is not the first time that school officials have been concerned in a thing of this kind but usually the matter is hushed up. Immorality in our public schools is a fact, but no one has definite data on this phase of immorality nor has the matter been given much attention."

Immorality like everything else exists in castes; at the base, the densest and grossest in the form of white slavery; next higher in the scale of grossness, perhaps, the immorality in our so-called high society; higher still, because somewhat intellectualized, immorality among the Bohemian, and genius class; but the immorality in our educational system colleges and universities is not less a menace to social life than that of the white slave. A case may be hushed up; and there is something commendable in the loyalty of men to men in this as in all matters that come up among them; it is, indeed, to be hoped that women, as they emerge more and more from their mental limitations, may learn from men this loyalty to each other. There are times, however, when loyalty to the wrongdoer is a sin against the community. When, for example, a man high in public position is proven untrue to his trust, the question should not be "How can we hush this up?" but "What will be the influence on the young who were under his direct influence, who know the facts and will watch the outcome."

Too often such an offender against morals is transferred to another section; and the matter is hushed up. His life is in nowise injured; women, with that peculiar complex of disloyalty to each other and traditional subserviency to men, hover around him, his friends rally to his support and all is—forgotten. But it is not forgotten by the youth who had been in touch with the offender and had looked up to him. The youth was alert to hear the story; he watched the outcome; and if the outcome was such as to indicate that no one minds very much, if the man goes on, successful, and respected, the youth learns a life lesson; he infers that after all immorality doesn't count; he infers that if his college professor, his superintendent, his principal is dismissed for immorality but reinstated in another locality that he was a pretty good fellow after all; and that after all, nobody makes much fuss about it. One mother whose son had seen such a case in his own college life said, 'I count my son's downfall due to the influence of one teacher's life upon him—a teacher who, having been dismissed from his small local teaching position, only rose the higher in public esteem and became more successful than ever he would have become had he remained in his early position.' Such illustrations of public hypocrisy make the young cynical and sneering; and no one can estimate the harm done to a group of young men who watch such an outcome of a teacher's immorality. The teacher is, almost more than anyone else, 'his brother's keeper;' and he should be held most strictly to account."

Says the Philistine:

"The New York board of education has voted unanimously to abolish all fraternal societies and secret orders in the high schools in Manhattan.

The 'Frats' are an importation from the universities of Germany, where caste, feud, intrigue, and the duel play prominent parts.

Leaving out of the discussion the question of fraternities in universities and colleges, it is certainly true that the secret society has no place in the public schools of America.

We are supposed to be a democratic people, and above all things the public school stands for equality, democracy, reciprocity, mutuality, co-operation, and no special privilege.

When youngsters get it into their heads that they are better than some

one else, and know something that others do not know, and that this knowledge is for themselves alone, we get snobbishness, and at adolescence it comes to us in a most offensive and demoralizing form.

The trouble is that the boy or girl of thirteen, fourteen, fifteen, or sixteen years of age takes the frat seriously, while the college youth of twenty knows the whole thing is more or less of a joke.

In the high schools the frats create the feud and evolve the fad. It will not do to allow the idea to creep into our public schools that some pupils are in station superior and others inferior.

The frat in the public school is simply a nuisance, and has got to be abolished.

An argument can be put up for the fraternity in the university, because there it sometimes creates ties of friendship and carries a promise of future help and co-operation in fighting the battle of life. But in the high school the youngsters are all so immature, things are so changing and shifting, that no argument can be made in any way for the continuance of a secret society. The whole thing is silly, and is a sore tax on the patience of every teacher."

For the Philistine, this is putting the matter of high school "frats" very mildly. One of the worst features of frats is the mixing of boys just entering the High with seniors—a thing strongly condemned by Dr. Stanley Hall as against all laws of adolescence—and, at the frat functions, with young men several years graduated. The small boy loves to do what the big boy does; and the big boy's example and instruction is not always best for the small boy.

If all High School boys went out into the business world strong moral forces and remained so, the "frat dinners," where these older men entertain and welcome the fifteen-year-old initiate would be a grand thing for the fifteen-year-old boy; but this ideal condition does not always prevail if one may judge from what these boys themselves too often relate.

The harm that comes from the girls' sororities works differently; the sorority girls are too likely to become snobbish and silly; and many a girl drops out of the High School, heartbroken because never invited into a frat. In our High School the recent valedictorian, with highest rank throughout her four years, a gentle lady in manner and instincts, had never been invited to join a frat. Her isolation cost her many a heartache; even valedictorian honors, do not heal the heartaches of a sensitive girl at this age.

A school board chairman, speaking recently of frats in the high school, deplored their presence but said, "There seems no way to be rid of them." This is a common statement from school boards; but why, we wonder? If frats are undemocratic and morally harmful *why* can a school board not rid a school of them? Is it mere lack of stamina on the part of school management? Is it political policy? Or is it part of that craze for liberty, for individualism and a part of the present day terror of doing anything paternal? It is a sad state of affairs when no one dares extend the protecting, guiding hand of paternalism even over our High School boys and girls.

Individualism run riot is largely back of the conditions that exist in our schools to-day and against which our reformers and philanthropists will have long to battle. The most forceful character in all known history taught the world that "*I-have-a-right*" is far from a righteous philosophy upon which to base either personal or national life.

After all that is said and done; after all the Commissions and Conventions and Congresses; after all the reforms and exploitations and "Foundations;" after all the investigations and tabulations and deductions, what are the plain facts of the matter?

We deplore the fact that young women are loud and indelicate and unwomanly; that their dress is immodest and immoral; that young men show no chivalry towards women either young or old; that our college boys have lowered standards both of manners and morals by their athletic garb and athletic behavior, their noisome pipe smoking and inevitably accompanying selfish rudeness and utter disregard for the comfort of others; that the gentleman and the gentlewoman are no longer an influencing factor in social life. But the burning question is not that young people do all these things

but how *can* young people do these things? How *can* the college youth for example slouch along the street, hands rammed into his pockets and a pipe in his mouth appearing in nowise different, except in quality of clothing from the slouch on Harrison Avenue; and how *can* the young woman togged out like the outcast of Paris stride along beside this type of youth?

There is much agitation now and then over coarse immodest modern dances in our High Schools. The thing, however, that should agitate parents and school boards is, How can these young people—presumably from our best homes—how can they *want* to dance these dances; what is the lack in the High School boy that makes him dare invite a classmate to these dances; and what lack in his classmate that she will accept his invitation?

It is not the acts but the moral viewpoint of the rising generation back of the acts that should interest the investigator and arouse grave inquiry on the part of teachers and parents.

The same note of decadence is heard, however, in every other aspect of life. The real musician with a soul tells us that there is no longer any place for the old masters; the ragtime secular song and the near-ragtime sacred song have taken the place of melody. In art the Cubist craze, sensual where any approach to interpretable form was evident tells the story of modern art. In literature, if in book form, we have the problem novel; the detective, Yiddish or hobo story, if in magazine. And in the drama—we all know what the drama is to-day; our young people sit through most pronounced plays at the theatre or listen to the cheapest vaudeville and moving picture shows. To them the "triangular love affair" is a mere matter of fact; it raises no blush of shame; as one girl said recently "It hardly piques my interest any more."

And so with all due deference to Commissions and Congresses and Foundations, would it not be well if the everyday parent and teacher would devote a little time to looking his own individual community problems straight in the face and considering seriously what it is that has gone out of our national life, that such an onrush of vulgarity both in morals and manners marks the conduct of the young to-day?

In the midsummer Ladies' Home Journal the Editor give a page of snap shots taken at beaches along our shore. These pictures represent young men and women lounging and loafing and horse playing. The page has the significant heading:

HOW MUCH OF THIS DO YOU WANT YOUR DAUGHTER TO SHARE?

The pictures are mild compared with what we may see daily at our beaches; but pictures of what one may see daily at the beaches would not be allowed in the mails.

In another part of the same magazine the "Guardian" writes as follows: "Funny how good breeding does stick out, isn't it? And it's rather funny, too, how little of it there is to stick out of the younger generation nowadays. I didn't wonder that you were amazed at the crowd on the beach Saturday morning, and in the Casino that night. I never get used to it myself, and I have been watching that sort of thing for many a season, though I believe it's worse now than it ever has been. I wonder what it all means, Susan, and where it will all end. Is modesty dying out altogether? Are young girls to-day really evil minded, or just ignorant and careless? Do they know how vulgar they are in their beach sprawling and their dancing and their horseplay with men, or are they decent down in their hearts and merely infected by false ideas of piquancy and smartness? I give it up. The feminists will have to figure it out for me. All I know is that a large percentage of the girls, in all classes, behave as though they were vicious in heart and mind, and their mothers seem quite satisfied to have them what they are.

That dancing contest was a trifle too raw for me, Susan. I couldn't sit there with you and watch it, though I'm keen on good dancing and have seen it all over the world. In the first place I don't believe in girls going in for public dancing contests unless they are professionals, and in the second place I can't stand for girls and men in my own class dancing in a fashion

that isn't decent. One can watch a crowd of savages outraging decency, without tearing one's hair; but when one's own people go in for it—well, I went away and I took you with me, which probably seemed unkind to you. I can't always take you away, Little Girl. I wish I could. You will have to see and think and judge for yourself, I suppose; but I'll be hanged if I want to stand by while you do it. The beach and the fresh sea wind and the stars seemed good to me, after that ballroom; and you belonged to them, Dear, not to the thing we had left behind us. I remember just how young and sweet and unspoiled you looked there in the starlight, with the big woolly white coat over your evening frock and the wind ruffling your hair; and whenever I think of you I take a grip on some resolutions that I made as I strolled along with you that night. I suppose it's quite out of date for young men to walk with bared heads, figuratively speaking, before the girls they favor, and to feel a choke in the throat and an ache in the heart and even a mist in the eyes because of the exceeding great purity and sweetness of those same girls. The slangy, sophisticated, turkey-trotting Young Thing isn't calculated to stir up feelings of that ilk in the breasts of her admirers; but you see I belong to an earlier day and I am still capable of being sentimental and unashamed of it."

In the Saturday Evening Post, too, has been a series of articles on Going Back to the Farm in which the author makes a telling comparison between the sloppy lazy blinking natives—"original New England stock," as they are pleased to call themselves, and two Italian families who live and farm on the outskirts of the village. These Italians, while socially ostracised, by the "original New England stock," nevertheless bring up and send to the city market the produce for the neighborhood and, moreover, loan money to the "original stock" farmers. The author reveals the book-keeping of the village grocer and accounts for the thrift of the ostracised Italians and the mortgaged conditions of the original stock who drag along never settled trade-and-barter accounts with the grocer.

The Three Gifts of Life, by Nellie M. Smith, A. M., is a book for girls which a physician may well place upon the table of his waiting room. It is very sweet and simple, presenting the subject of self development in a way to offend not even the opponent of sex instruction. It is an unusual presentation of the subject.

Dr. E. K. Sprague in a plea for trained inspectors at the immigrant stations says:

"We are admitting annually to this country 3000 mental defectives and an equal number who are or will become insane. We are now detecting only about 5 per cent of the mental defectives and only 25 per cent of the insane. The cost to the state of one insane patient is \$275 per year and the average life ten years. Using the reports of the last fiscal year for New York state, it is proved that insane immigrants cost the state \$220, and—three times the salary required to equip the immigrant stations, with trained investigators; and this does not include at all the costs, through crime, arson, and defective offspring of these undesirables.

The National Cash Register Co., Dayton, Ohio, found recently that there was a decided lack of efficiency in its traveling representatives. A careful investigation resulted in the discovery that each time the most of their men visited a large city they were in the habit of frequenting the vice districts and spending time, money and vitality in the resorts. The company, which, by the way, is one of the best managed institutions in the country, decided that something must be done. With them, to decide is to act. They immediately arranged with a reputable physician, a lady, to give a series of lectures, illustrated by slides, to their men. The first of the series showed the danger, the ravages, and the general results of venereal diseases, not alone to the individual, but to his family—his wife and children. This was followed by general lectures upon health, conservation of vitality and the building up of such personalities as make for the highest efficiency. The men attended

these lectures, as the matter was practically compulsory, and the effects were immediate. Even in the City of Dayton the resorts felt the effects of the movement to such an extent that they threatened to secure an injunction against the lectures which menaced their business with extinction. The Cash Register Company finds that the lectures are such a good investment that they are making them a regular departmental feature of their business.—*Inter-Purity Journal*.

Sex hygiene is being regularly taught in 138 public schools in the United States. In addition to this there are a number of private schools, colleges and universities where such teaching is being given. Most of the colleges have special lectures on the subject. The parents and teachers of the Chicago schools are being given a course of lectures to give the parents an idea of the need of teaching and to qualify the teachers to impart the necessary knowledge. The difficulty with the average physician in lecturing upon these subjects is that he is likely to treat the matter almost altogether from the physical standpoint. He is not to blame for this, for that is all the medical schools profess to teach. The difficulty of the average teacher is the same as that of the average parent, each lacks confidence in himself and thinks that to teach sex knowledge he must have a fund of scientific knowledge that would take weeks, if not months and years, to acquire. Hence, they think they must send off somewhere for an "expert," and while they are waiting the children of the home and of the school are being "instructed" in a lot of misinformation which is demoralizing and degrading, and may prove ruinous to the child. Any parent or teacher of average common sense and intelligence is capable of telling a child all he needs to know, that is, so that he will have right ideas of sex, its sacredness, the importance of right care, and freedom from the mystery of a false modesty which may result in a morbid, unwholesome consideration of the subject, if not the acquirement of unnatural and destructive habits.—*Inter-Purity Journal*.

The Massachusetts State Sunday School Convention gave two and a half hours to "Moral Hygiene." There was an address, a lecture, a committee report, a round table and a consultation period.

The following letter from Dr. Wilder to Editor of International Purity Journal (Chicago) is of profound interest:

Sir, Referring to your editorial on "The Protection of College Students from Venereal Diseases," it may be proper to state that the suggestion therein made as to the inculcation of continence "directly, and not by spiritual generalities," has been anticipated at Cornell University. In following to its legitimate conclusion the urgent and often-expressed wish of President White for "practical instruction in the laws of health," I have for several years supplemented the regular courses in physiology and hygiene by one or two lectures to the freshmen upon the advantages of continence and self-restraint, and the dangers, physical and mental, as well as moral, of sexual transgression. In addition, when requested by a majority of the class, I have given to the seniors, just before graduation, advice with regard to the hygiene of the marriage relation, especially the tendencies to excess, and to a lack of consideration for the wife. While far from satisfied with either the extent or the character of this instruction, I have reason to believe that it has diminished the amount of undergraduate immorality, and contributed to the welfare of the married alumni. Similar instruction is, I think, given at Amherst College, and I trust the time may come when college faculties will generally feel in some degree responsible for such errors of their students as might have been arrested by the impartation of adequate information and sound advice.

BURT G. WILDER, M.D.

THE INSTITUTIONAL CHURCH FOR THE RURAL COMMUNITY.

Harry Dieman.

FELLOW IN RURAL SOCIOLOGY, CHICAGO THEOLOGICAL SEMINARY

For years the city has boasted of its "institutional" church. At first it met the criticism of other christian organizations. This criticism was due to ignorance of the fine nature of this new type of church work, or to incapacity to sense the varying needs of a densely populated community. Institutional churches, nevertheless, did much good and helped adjust the religious world to new situations brought on by the expansion of commerce, the new industrial order and the congestion of population in manufacturing and business centers.

The necessity that called them forth, however, was soon met increasingly by other agencies. The spirit of community service spread and the local government has been led to assume many of these social functions undertaken by private or religious organizations. The institutional church differed from others not so much in spirit or in any change of theological interpretation, but rather by extending and adjusting its work more completely to the concrete needs of the people. In so doing it only gave expression of Christ-like love in terms of practical service. It applied Christianity practically to personal and community needs.

We are confronted in the country at present with needs that are just as urgent as were ever faced by a city, and the rural church organizations, as they at present exist, are often as inadequate as the older type of city church organization often proved to be. We need in the country a church organization that shall at once take cognizance of the actual state of affairs and be willing to perform many tasks to which it has heretofore been totally unaccustomed. The church of the country must not be satisfied with a gospel of personal salvation, but must be filled with the passion of vitalizing the life of the entire country-side with ideals that do justice to our social Christianity. It must be willing to inspire men and institutions with a zeal to make such adjustments of policy and aim as shall make them factors for the betterment of the community. The church must so energize rural life that it may keep pace with our advancing civilization. It is the purpose of this article to suggest the character of the rural institutional church and the specific steps to accomplish its social mission.

We have become aware of a situation in many of our rural districts startling to many who have rested under the assumption that the country districts were inhabited by sturdy Christian men and women without problems and somehow absolved from making adjustments in a civilization that is constantly undergoing change. The country-wide, as surely as the great cities, has undergone radical transformations. While the growth of large cities, the shifting of population and the changes in the industrial and educational requirements of our life were setting in, our country people for the most part held to their conservatism, cherished their old institutions and looked with pride upon their customs and traditions. Many of the most capable men and women were drawn from the country to the cities by the enchanting calls of industry and commerce. Advancing educational ideals, quickening religious interests and the adoption of scientific methods of business left the country comparatively untouched. Failing to keep pace with the advance of the nation as a whole, and in some respects deteriorating, we do not wonder that it now presents a problem.

Frederick C. Howe says that a rural civilization which has been in the process of formation since the fall of the Roman Empire has been destroyed by the industrial development and preponderant growth of the cities. George A. Russell takes a slightly different attitude, but comes to the same conclusion. At the annual general meeting of the Irish Agricultural Organization Society held in December, 1909, he delivered an address entitled *The Building of a Rural Civilization*. We quote from the address:

"Outside the cities there have always been the same country-sides of little homes, the same neglect of culture, the same want of education, the lack of organized intellectual, political and economic power which set up a barrier between the country man and his access to the finer things of life.

"We hear the cry 'back to the land' continually, but for one who goes back a thousand go away. The miracle to be wrought is the creation of a rural civilization. Civilization implies some measure of comfort and luxury. It can only be attained when the community is organized and has strength to retain some surplus of wealth beyond what is required for the bare necessities of life. The organized industries and the organized communities are always wresting any surplus from the unorganized. The business mind of the country must be organized to counter the business mind of the town."

BOOK REVIEWS.

Eat, Drink and Live Long. DON'T BE A FADDIST. (Common Sense Suggestions for Ordinary Diet and Hygiene.) By E. O. Richberg, M.D., Lecturer on Diet and Hygiene, Professor of Embryology and Physiology, Hering Medical College, Chicago. 82 pages. Cloth, 50 cents. Postage, 4 cents. Philadelphia. Boericke & Tafel. 1913.

This little book is literally a veritable mine of common sense and truths regarding foods and hygiene. In Chapter III there are lists of foods that are unfit for use, others that may be eaten confidently, others sparingly. Chapter IV discusses vegetarian and meat diets, showing the advantages in each, there is also a list of nitrogenous articles of food other than meats. The last two chapters take up bathing, cathartics, rest, insomnia, self-control, etc. An exceptionally good book for us to recommend to our patients.

Sex: Its Origin and Determination. A study of the metabolic cycle and its influence in the origin and determination of sex, the course of acute disease, parturition, etc.—By Thomas E. Reed, M.D., Middletown, Ohio. New York: Rebman Company, 141-145 West 36th Street. 295 pages with complete indices. Price \$3.00.

An interesting and instructive presentation of the influence of the metabolic cycle upon the origin and determination of sex. The author believes that the ovum is double sexed and as it can't functionate in both directions at once it does so first in a male direction and then in a female direction. He further determines that the sex depends upon the time of fertilization.

He then gives the results of observations as to the influence of the metabolic cycle upon sex. He determines that if fertilization occurs during the katabolic part of the cycle, a male will result, if during the anabolic, a female.

To explain this rhythm in the determination of sex, the writer goes back to the fact of evolution as formulated by Darwin that all animal life came out of water. In this way our ancestors had been, for long periods, subjected to tidal changes. And these followed them on the land so that we have sex determination according to the lunar cycle. If fertilization occurs during the positive phase of the lunar cycle, when the tide is coming in, a certain sex will obtain, while if during the negative phase, the opposite sex will be produced. All of which sounds fantastic enough to those who have not read the book perhaps, but the writer certainly presents convincing proofs of his theory.

Sterility in the Male and Female, and Its Treatment. By Max Hühner, M.D., New York, Chief, Genito-urinary department, Harlem Hospital Dispensary, New York City; Formerly, Attending Genito-urinary Sur-

geon, Bellevue Hospital, Out-patient Department, Assistant Gynecologist, Mount Sinai Hospital Dispensary, New York City, etc.
New York, Rebman Company, 141-145 West 36th Street. 245 pages with bibliography. Price \$2.00.

This book constitutes an unique contribution to the study of its subject. It is the result of many years' observation and original research in the genito-urinary clinics of the hospitals with which the author is connected.

It isn't too much to say that every physician who has to do with sterility cases, male, female, or both sexes, should be in possession of this book if he wishes to treat such cases intelligently. Such cases are daily proving enigmas to specialist and general practitioner alike. And in this book will be found possible solutions for just such puzzlers.

PERSONAL AND GENERAL NOTES.

Dr. Reuben T. Johnston, B.U.S.M. '03, announces his removal to 615 Eastern Parkway, corner of New York Avenue, one block from Nostrand Avenue, Brooklyn, N. Y.

Dr. Harry E. Davey, B.U.S.M. '13, is taking the practice of Dr. E. B. Coleman of Nantucket who is confined to the house by illness.

Dr. S. B. Hooker is engaged in original research in the Pharmacological Department of the Evans Memorial. This Department has already furnished excellent work of much interest. This has been published in the *GAZETTE* from time to time and reflects much credit on the investigator, Dr. Conrad Wesselhoeft.

Dr. Harriet J. Lawrence has accepted a position as Assistant Physician in the Edward Sanatorium at Naperville, Illinois. This Sanatorium is exclusively for the treatment of tuberculosis with a capacity of 85.

Dr. Luther G. Eastman, B.U.S.M. 1906, announces his removal from Beverly, Mass., to 60 Grove Street, Auburndale, Mass.

Word has reached us that William Rae Young, M.D., Class 1912, B.U.S.M., passed the examinations of the Michigan State Board of Registration in Medicine with a final average of 85.5 per cent, a rating that speaks for itself considering the standards of the Michigan Board. Dr. Young for a while after graduating was at the Fergus Falls State Hospital, Minn., but has settled in Shelbyville, Mich.

The next meeting of the Southern Homœopathic Medical Association will be held at Atlanta, Georgia, November 11, 12, 13. It is hoped that as many of the Northern brethren and sisters as possible will attend, as this Association needs the help of the North very materially.

Dr. Gilbert M. Mason announces the opening of his office at 520 Beacon Street, Boston, with hours from 1 to 3 P.M. and by appointment.—

Drs. F. B. Percy of Brookline and G. Forrest Martin of Lowell return from their European trip on September fifteenth.—

Dr. Horace Packard, returning from his world's tour, is expected to reach Boston on the fifteenth of September.

We clip the following from the *Lowell Courier-Citizen*:

One little London street gamin owes his life to the fact that a well-known Lowell physician, Dr. G. Forrest Martin, decided to take his vacation, this year, on the other side of the water. Yet it was not as a physician that the doctor performed this service,—merely as a man, though doubtless he was more prompt in action, because of his professional training as a life-saver. The story comes direct from London, through other Americans who were there at the time the incident occurred. This is the story:

With his young daughter, Marion, Dr. Martin was enjoying a walk on the bank of the Thames, one day, when a small girl came running to him, breathless, and said that her brother had fallen in the river. "Won't you please save him, Sir?" was the childish plea. Instantly realizing the situation, Dr. Martin waded into the Thames. Above his waist, then up to his neck, he was obliged to go, before he could catch hold of the drowning youngster; but catch hold he did, and with a firm grip, he dragged the boy to the shore. After waiting just long enough to see that the boy was all right and did not need medical attention, the doctor took a taxi and drove with his daughter to their hotel.

The Wisconsin Legislature recently passed a bill requiring a certificate of health from both parties to a nuptial agreement as a preliminary to the granting of a marriage license. Examinations by physicians are required.

Both houses also passed a bill for the sterilization of the feeble-minded, epileptic and criminal insane in State and county institutions.

THE LOYALTY COMMITTEE OF BOSTON UNIVERSITY SCHOOL OF MEDICINE, INCORPORATED.

This Committee will in the near future commence the publication of a four-page quarterly. This will be sent not to our physicians, but to their patients and friends.

The quarterly is designed to present the facts of the achievements, needs financial and otherwise, of Boston University School of Medicine. There will also be articles of general interest on topics relating to hygiene, as well as articles on Homœopathy.

Some advertising of an unobjectionable nature will be carried if possible and a nominal subscription fee of 25 cents will be asked for. The first issue will be sent gratis and subscription list of 1,000 or more is needed for this issue.

Our physicians are hereby requested to send to the Secretary, Dr. William A. Ham, 1799 Dorchester Avenue, Ashmont, Mass., or to the Treasurer, Dr. Dana F. Downing, 419 Boylston Street, Boston, the names of as many people of influence and means as they can think of, whom they feel would be interested to receive this quarterly.

The publication will be conducted in a safe, sane and enthusiastic manner, and the Committee feels that none of the friends of the School should hesitate a moment to respond to this appeal.

The first \$100,000 of endowment for the School is already in sight but we mustn't stop there. As "eternal vigilance is the price of liberty," so continuous persistence is necessary to bring success. The work of the Committee is not intended to duplicate the work of the Finance Committee, a report of whose work will be found herewith, but to supplement that work.

The expense of conducting even this modest publication will be considerable so that subscriptions to the general fund of the Committee as well as individual subscriptions will be needed. It is suggested that our physicians subscribe for at least one copy for placing on the reading table in their offices.

The printer said "Good morning" and Dr. Downing said "Good night."

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ORIGINAL COMMUNICATIONS.

SOME INADEQUATELY RECOGNIZED TEACHINGS OF HAHNEMANN.*

BY JOHN P. SUTHERLAND, M.D., Boston, Mass.

Page upon page, essay upon essay, volume upon volume have been written on homœopathy, and yet it cannot reasonably be claimed that the last word has been said. Even when this method of treatment shall have come fully into its own as the universally prevalent system of pharmaco-therapeutics there will be the necessity of presenting its teachings to new generations of men. Clever writers and erudite scholars have expounded its cardinal principles,—*similia similibus curentur*, the proving of drugs upon the healthy human organism, the single remedy, the minimum dose and the totality of symptoms. Its less essential doctrines of vital force, dynamization and psora, have been the subjects of essays and polemics, but with each generation of physicians these principles and doctrines come up with perennial freshness and demand attention. Statistics have been compiled to demonstrate the superiority of homœopathy over other methods of treatment. Clinical experience has been related to convince the doubter and strengthen the confidence of its practitioners. Its institutions, hospitals, societies, colleges, literature have been topics of discussion. Analyses and prophecies, criticisms and adulation have been penned and published. "Sectarianism" and "exclusive dogma" are familiar terms as used by its opponents. Its glorious and vital efficacy has been set forth in addresses without number. Its founder has been proclaimed a reformer of the first magnitude, and Hahnemann the Man, the Scholar, the Physician, the Reformer has been toasted at innumerable banquets.

In the face of all this one might be judged presumptuous in the extreme who would attempt to present any novel ideas con-

*Address by the Chairman of the Bureau of Homœopathy. Read before the American Institute of Homœopathy at Denver, Colorado, July 10, 1913.

cerning any of the features or interests characteristic of homœopathy. Yet it may be useful occasionally to review its teachings and refresh our minds as to their practical value.

It is a time-honored custom which has become a duty for the Chairman of a bureau to prepare and present an address on some subject which naturally is related to the work of the Bureau. In deference to this custom I ask you to consider with me during the brief time which is at my disposal a subject which certainly is appropriate at a time when much is heard concerning propagandism and publicity. The subject which has occurred to me as a timely one is "The Organon of the Art of Healing," by Samuel Hahnemann. A Review in which Certain Inadequately Recognized Teachings of Hahnemann are Emphasized."

"*Die Milde Macht ist Gross,*" and it not infrequently is the case that the smallest and apparently mildest books are the mightiest and most epoch-making in their influence. It is not far wide of the truth to claim that the small book under consideration is more replete with wisdom, that is, with knowledge tempered with judgment, than most of the medical books that have been written. From its definite and striking beginning it marches steadfastly and with almost unassailable logic and with stately dignity from point to point, almost like an inspired book, to its end. From beginning to end there is nothing superfluous in it. Its statements are brief to the point of being dogmatic. Its analyses of experience manifest a phenomenally accurate observation. And it clearly outlines a system of medical treatment which is the result of many years of close study and original research and a courageous and profound common sense. Tradition is eliminated from its pages, and its author presents a rational art of healing that forms the greatest and most comprehensive reformation ever witnessed by medicine.

Hahnemann's views of Medicine are not narrow or circumscribed. He was not the intentional originator of a Sect in medicine. He did not exhibit an exceptional originality in the development of a *System of Practice*. Many of his predecessors had originated systems that endured for a time, but he realized more keenly than any of his disciples the scope and limitations of his system, and demonstrated with convincing power that the broad field of medicine was much bigger than that system.

A reasonably attentive reading of Hahnemann's "Organon" and "Lesser Writings" will convince one that he appreciated most clearly the value of a knowledge of Etiology; that he recognized the importance of Hygiene; that he believed Preventive Medicine should be a part of the physician's duty; that he considered Surgery not only a useful but a necessary Art; that he realized the efficacy of Psycho-therapeutics and advocated the same; that

he recommended a rational and humane method of treating the insane; that far in advance of his day he proclaimed the germ origin of Cholera and instituted a method of destroying its micro-organism; that he recognized also the pathogenic and therapeutic possibilities of diet; and all this in addition to his evolution of homœopathy, the establishment of which was his greatest achievement.

Does this indicate a narrow or restricted view of Medicine? Is it the attitude of one devoted to sectarian practice? Let us see what Hahnemann has to say for himself in his "Organon" as translated by Professor Conrad Wesselhœft, at one time president of the Institute. In that notable paragraph number 3 which deals with the knowledge necessary to the true physician we find an idea often overlooked by the practitioner of homœopathy who is herein urged to know "What is curable in diseases in general and in each individual case in particular." That is to say in spite of confidence in the efficacy of drugs or any curative agent, in spite of the optimism which leads some physicians to believe that the impossible may be accomplished by drugs, some diseases are incurable, and it is the physician's duty to know what it is reasonable to expect in the treatment of a given case. This demands a most intimate familiarity with the causes, the course, the pathology and the prognosis of diseases and is in itself a sufficient rebuttal of the criticism that homœopaths have no use for diagnosis.

In the same paragraph after insisting that the physician should *know* the curative power of drugs and how to adapt the curative property of drugs to what is curable in his patient, Hahnemann concludes with the profound and significant sentence, "Finally, when the physician *knows* in each case the *obstacles* in the way of recovery, and how to remove them, he is prepared to act thoroughly and to the purpose, as a true master of the art of healing." This certainly means that a knowledge of diseases, a knowledge of drug pathogenesis, and an ability to prescribe intelligently are not sufficient for him who would be a master of healing; that the prescribing of the drug in any potency is only a part of the physician's duty. To remove doubt on this subject Hahnemann goes somewhat into detail and gives examples in paragraphs 7 and 260 of obstacles which may prevent even the most accurate diagnosis and the most applicable prescription from having fruitful results. For instance, he says in his note 3 to paragraph 7 apropos of maintaining causes which may prove obstacles to recovery, "As a matter of course, every sensible physician will remove such causes at first; after which, the illness will generally subside of its own accord. He will remove from the sickroom flowers that may produce faintness

or hysteria by their strong exhalations; he will extract irritating particles causing inflammation of the cornea; reapply to a wounded limb a bandage threatening gangrene, too tightly applied; he will avert the danger of a hæmorrhage, by exposing and tying the wounded artery; he will endeavor to expel *Belladonna* berries from the stomach by emetics; extract foreign substances that may have penetrated into the apertures of the body (nose, œsophagus, ears, urethra, rectum, vulva), crush a calculus, and open the occlusion of the anus of a newborn child," etc.

Here we have given us, among other teachings, examples of the use of emetics and surgical procedures which many of Hahnemann's over-zealous disciples are wont to ignore in their ardent advocacy of the use of the *simillimum*.

When considering the treatment of chronic diseases, "the true touchstone of the physician's skill," Hahnemann goes more minutely into details in order to illustrate his point and remove all doubt as to his meaning. For instance, in paragraph 260 he says, "In chronic cases, therefore, it is especially necessary to search carefully for such impediments to cure, because these diseases are frequently aggravated by obscure noxious influences of that kind, as well as by errors in regimen which, being frequently overlooked, exercise a deleterious effect." And in the note to this paragraph he says, by way of illustration, "Coffee, Chinese tea, or other herb teas; beer containing medicinal vegetable substances unadapted to the condition of the patient; so-called cordials, prepared from medicinal spices; ail kinds of punch; spiced chocolate; scented water and perfumes of various kinds; highly odorous flowers cultivated in the chamber; medicated tooth-powder or washes; perfumes enclosed in bags or cushions; highly seasoned food or sauces; spiced pastry or ices; raw medicinal herbs in soups; pot herbs, tender shoots and roots possessing medicinal properties; old cheese and tainted animal food, or the flesh and fat of pigs, ducks, geese, or young veal, and acid food, etc., all of which produce collateral medicinal effects, are carefully to be kept from patients of this kind. Excesses at table; the excessive use of sugar and salt, as well as spirituous liquors; heated rooms; woolen clothing next to the skin (which, in warm weather, is first to be replaced by cotton and then by linen); sedentary habits in close apartments; passive exercise, such as riding, driving, rocking; protracted suckling of infants; the habit of sleeping in bed too long after dinner; nocturnal occupations; the enervating effects induced by perusal of obscene books; objects of anger, grief, and vexation; the passion for gaming, excessive exertion of mind or body; residence in a marshy locality; damp rooms; penurious living, etc.; all these

conditions and circumstances should be carefully avoided and removed, lest the cure might be impeded or rendered impossible. Some of my disciples appear to impose unnecessary restrictions on their patients by prohibiting a still greater number of quite indifferent things, a course which is not to be sanctioned."

Is there room for doubt that Hahnemann did not pin his faith solely to the use of drugs? Or that his method of practice included more than reliance upon and use of the similar remedy?

These few quotations plainly show that Hahnemann recognized the fact that not all diseases and not all cases of so-called curable diseases are curable by drugs alone:—that obstacles of various kinds, psychic, material, unhygienic, dietetic, etc., may prevent even the most homœopathic remedy from exerting its curative action:—that after the removal of an exciting or maintaining cause many diseased states will disappear without treatment:—that there are times when the use of an emetic is imperative:—that some conditions require surgical treatment rather than medicinal.

No physician of ancient or modern times appreciated more fully than did Hahnemann the importance of a knowledge of Etiology. References to the Cause of disease are very frequent in his writings. In the "Organon" such references are found in paragraphs 4, 5, 7, 78, 79, 80, 189, 194, 204, 206, 221, 224, 225, 226, 227 and 228. His twelve years study of chronic diseases resulted in his original classification of chronic diseases according to their assumed causes. His three miasms, Syphilis, Sycosis and Psora, were by him believed to be the chief causes of chronic diseases and the cause in each case was a significant factor in his selection of the remedy. His classification of drugs as Antipsorics illustrates this point.

To be more specific, however, in the substantiation of this point let me quote a few sentences. Paragraph 4 says, "He (the physician) is at the same time a preserver of health when he knows the *causes* that disturb health, that produce and maintain disease, and when he knows how to remove them from healthy persons;" and in paragraph 5 he says, "The physician in curing derives assistance from the knowledge of facts concerning the most *probable cause* of acute disease, as well as from the most significant points in the entire history of a chronic disease; aided by such knowledge, he is able to discover the *primary cause* of the latter." Paragraph 7 opens with this sentence, "In a disease presenting no manifest exciting or maintaining *cause* for removal," etc. Apropos of chronic diseases Hahnemann says in paragraph 80, "Psora is the only real, *fundamental cause* and source of all the other countless forms of disease." In paragraph 194 we read, "Acute local diseases * * * which

are not produced by violent external injuries, but by dynamic or *internal causes*," etc. Again, referring to psora, we read in paragraph 206 that it "*is by far the most frequent and fundamental cause of chronic diseases*," and the phrase is repeated later in the paragraph.

In the portion of the "Organon" devoted to a consideration of mental diseases and intermittent fevers are to be found many references to physical, psychical and miasmatic causes, but some quotations from these paragraphs will be made later for another purpose so they are here omitted. Enough has been said to prove that Hahnemann clearly and definitely recognized the very great importance of a knowledge of etiology, and also to demonstrate how puerile it is for critics of homœopathy to claim that its practitioners care naught for etiology and pathology but are concerned only with the "symptoms" of disease. It certainly is true that the "totality of symptoms" is the keynote of homœopathic prescribing, but it is also true that according to Hahnemann's teaching the *causes of disease* are by no means to be neglected.

That Hahnemann was an ardent advocate of preventive medicine, hygiene and sanitation can be proven by quotations from those parts of the "Organon" devoted to the consideration of chronic diseases, mental diseases and intermittent fevers. It naturally follows that one who is thoroughly acquainted with the *causes* of disease, which Hahnemann teaches in what has been said on the subject of Etiology is one of the essential knowledges of the physician, becomes thereby able in many instances to prevent the disease. In regard to hygiene and sanitation emphasis is laid (paragraph 77) on "marshy localities," "excesses in eating and drinking," "want of the necessaries of life," "unhealthy dwellings," "cellars or other confined places," "fresh air and exercise," clothing, food, "unwholesome habits" (paragraph 204), "proper hygiene and psychical regimen" (paragraph 288), etc.

Who can doubt, after familiarizing himself with these teachings of Hahnemann, that his views of medicine were all-comprehensive and included a much wider horizon than that bounded by the "totality of the symptoms" and the "simillimum?"

It was especially during his transition stage or pre-homœopathic period (1792-1795) that Hahnemann gave to the world most of his noteworthy teachings on preventive medicine, dietetics, hygiene and sanitation. Since these subjects are only briefly alluded to in the "Organon" it is not consistent with our purpose to refer to them at length at this time. It would well repay anyone, however, who cares to know Hahnemann's views concerning these all-important matters, and no one else should

attempt to criticise him, to read his articles in his small book entitled "The Friend of Health" on "Protection against Infection in Epidemic Diseases," on "Things that Spoil the Air," on "Plans for Eradicating a Malignant Fever," on "Suggestions for the Prevention of Epidemics, especially in Towns," "On the Satisfaction of our Animal Requirements," and on "A Nursery." It is quite justifiable to claim that these articles give evidence that Hahnemann possessed a mind untrammelled by tradition, an independent and sound judgment and a faultless common sense that would do credit to any of the scientific writers of modern days on these and kindred subjects.

To turn our attention for a moment to Hahnemann's teachings concerning Surgery we may find a few references in the "Organon" which show unequivocally, despite the claims to the contrary made by his critics and some of his disciples, that he fully acknowledged the usefulness and necessity of surgery. We must bear in mind that surgery in Hahnemann's time was in a barbarously crude and undeveloped state, that its mercifully life-saving and beneficent evolution had not really begun before his death. If in its then crude state he could recognize its utility, we may imagine what would be his attitude to-day if asked to express his opinion on this most wonderfully and brilliantly developed Art. His open-mindedness and clear perception leave us in no doubt as to his answer.

In paragraph 13 of the "Organon" we read, "Hence disease (not subject to the manual skill of surgery) * * * is a nonentity * * *" which undeniably suggests that Hahnemann recognized certain organic conditions which *are* "subject to the manual skill of surgery." But to be more specific he says in note 3 to paragraph 7 (already quoted) that "every sensible physician * * * will extract irritating particles causing inflammation of the cornea; reapply to a wounded limb a bandage threatening gangrene, too tightly applied; he will avert the danger of a hæmorrhage by exposing and tying the wounded artery * * * extract foreign substances that may have penetrated into the apertures of the body (nose, œsophagus, ears, urethra, rectum, vulva), crush a calculus, and open the occlusion of the anus of a newborn child," etc. And in paragraph 186 he says, "Affections of external parts requiring mechanical skill properly belong to *surgery alone*; as, for instance, when external impediments are to be removed that prevent the vital force from accomplishing the cure. Examples of this kind are: Reductions of dislocations, the union of edges of wounds by bandages, the extraction of foreign bodies that have penetrated parts of the body, the opening of cavities, either for the removal of cumbersome substances, or for an outlet to effusions, the approximation of the fractured ends

of bones, and the retention of the injured parts by proper bandages, etc. But frequently the entire organism is affected to such an extent by injuries as to require dynamic treatment, in order that it may be placed in proper condition for the performance of the curative operation. Where, for instance, an active fever produced by severe contusions, lacerations of muscles, tendons, and vessels is to be subdued by internal administration of medicines, or where the external pain of corroded or burnt parts is to be removed, there the dynamic effect of homœopathic treatment is *imperatively* called for."

It is evident from these quotations that Hahnemann not only approved of but advocated surgery, and those of his followers who claim that surgery is needless, that the simillimum is all-sufficient for the cure of disease, do but scant justice to the wisdom, the intelligence and the teachings of this truly great physician.

Psychopathic hospitals, psycho-analysis, psychotherapeutics are terms which, by the majority of people, are supposed to refer to innovations of this brilliant twentieth century in which we live, but the old adage, "there is no new thing under the sun," is as applicable here as it is to most of the other affairs of mankind. At all events it is quite true that Hahnemann was considerably in advance of and not behind his contemporaries in his recognition of the significance of psycho-pathology and psycho-therapeutics, and also that in some cases he considered psycho-therapeutics of greater importance than homœopathic prescription to his patients. As examples of his teaching in this matter citations might be made from paragraphs 208, 224, 225, 226, 228, and 229 of the "Organon," where we read:— "*** Neither should the physician overlook the patient's state of mind and temperament, and observe if it inclines to prevent the cure, or whether it might be necessary to direct or modify his mental condition by psychical means."

"*** Mental disease may not be fully developed, or there may be some doubt as to its origin from physical disease, or from educational errors, bad habits, corrupt morals, neglected mental training, superstition, or ignorance. In these cases the following will serve as a means of distinguishing the *cause*: if the mental affection is based on the last named class of *causes*, it will yield and improve under the influence of sensible admonition and consolation, or of serious arguments and remonstrances; while real mental disorders arising from physical disease are rapidly aggravated by the same measures. Thus, melancholy patients will be still more depressed, plaintive, disconsolate, and retiring; the malicious maniac will be still more embittered; and the silly prattler will become more foolish than ever."

“There are, nevertheless, some mental diseases which are not the result of physical or bodily affections, but which, notwithstanding tolerably good physical health, originate in, and proceed directly from the mind. They are often caused by protracted grief, mortification, vexation, insult, and frequent occurrence of intense fear or fright.”

“When this kind of mental affections, bred and nourished by the soul itself, *are of recent date, and have not yet undermined the physical health too seriously*, they admit of speedy cure by *psychical treatment*: gentleness, kind admonition, appeals to reason, and often skilful deception, will soon restore health and comfort to the mind, while careful regulation of habits will re-establish the health of the body also.”

“Although diseases of the mind and temperament, of physical origin, are only to be cured by antipsoric homœopathic medicine, combined with carefully regulated habits, it is necessary also to unite this treatment with proper hygiene and psychical regimen of the mind, to be strictly enforced by the physician and attendants of the patient. Raving madness should be met with a calm fearlessness and firmness of will; painfully plaintive melancholy should be soothed by silent compassion conveyed by gestures and expression of countenance; silly loquacity should be listened to in silence, but with some degree of attention; indecent behavior and obscene language are to be treated with indifference. The destruction and injury of objects should be simply prevented by placing them out of reach, *without reproaching the patient for his conduct*; furthermore, the treatment should be conducted with a view to absolute avoidance of corporal punishment or torture. The administration of medicine would alone justify coercion; but this is easily to be avoided on account of the smallness of the dose, and absence of taste of homœopathic medicines. These do not excite suspicion, and may, therefore, be given to the patient, mixed in his usual drink, without his knowledge, thus obviating every kind of compulsion.”

“The physician and attendant should always treat such patients as though they regarded them as rational beings.”

Surely one may claim, on the strength of these quotations, that Hahnemann was able to differentiate between psycho- and pharmaco-therapeutics and that he had no difficulty in assigning to each its proper place.

Apropos of the scope and limitations of Homœopathy it is easily shown that Hahnemann taught us not to rely solely on the law of similars, for, as he points out, some diseases vanish of their own accord under improved sanitation and habits of life, while still others need something in addition to the simillimum to

bring about a cure. For instance, when speaking of "epidemic diseases" in paragraph 73 he says "**** but *if left to themselves* they will, within a limited period, terminate in recovery or death, as the case may be." When classifying diseases in paragraph 77 he says of certain conditions of ill-health "which are produced by constant exposure to *avoidable* noxious influences," "Provided there is no other chronic miasm pervading the organism, unhealthy conditions like the above, will *vanish of their own accord*, under an improved method of living ****" He says also in paragraph 238, "Perfect recovery, therefore, can be secured alone by avoiding this exciting cause; that is, by removing the patient to a mountainous region, if the fever occurred in a marshy district." And again he says in paragraph 261, "The proper regimen to be enjoined during the use of medicines in chronic diseases, consists in the removal of all obstacles in the way of recovery, and in the substitution of a wholesome mode of life, such as innocent recreation of the mind, active exercises in the open air in all kinds of weather (daily walks, light manual labor), proper nutritious food and drink unadulterated with medicinal substances."

There is one more of Hahnemann's teachings that has been too frequently overlooked. The question of dose has caused many bitter discussions and the widest variations of opinion. It has even caused a split in the ranks of Homœopathy, and prevented the solidarity which might have resulted in a more universal acceptance of its doctrines. The "infinitesimal" has been the great stumbling block in the way of the investigator and the novice, and yet this need not have been the case had Hahnemann's teachings been taken in their totality. This obstacle is not as formidable as it once was, for the potency of the infinitely small is recognized in bacteriology, in chemistry, in physics and in therapeutics. Limited time will not permit us here to present any extended arguments in support or in refutation of high-potency doctrines. Instead let us ask what did Hahnemann actually teach in regard to this subject? The principle which forms the answer is found in paragraphs 157-158-159-160-249-279-280 and 282 of the last edition of the "Organon" and is summed up in paragraph 279 as follows:—"Experience proves that *the dose of a homœopathically selected remedy cannot be reduced so far as to be inferior in strength to the natural disease, and to lose its power of extinguishing and curing, at least, a portion of the same, PROVIDED that this dose immediately after having been taken, is capable of causing a slight intensification of symptoms of the similar natural disease (slight homœopathic aggravation).*" The doctrine is repeated in paragraph 280, which reads: "This incontrovertible principle, founded on *experience*,

furnishes a standard according to which the doses of homœopathic medicine are invariably to be reduced so far, that even after having been taken, they will merely produce an almost imperceptible homœopathic *aggravation*," and reiterated in paragraph 282, where we read: "The smallest possible dose of homœopathic medicine, *just strong enough to create the slightest homœopathic aggravation* * * * will operate chiefly, etc."

Why discuss the divisibility of matter when so plain a principle is given as our guide to the dose? Hahnemann was sane and practical on this point, as he was in his other teachings, and it would have been wise for his disciples to have sedulously followed his example and his teachings.

There is one other matter to which I wish briefly to direct your attention although it is not included in the "Organon." It is not inappropriate to refer to it however since it furnishes one more proof of Hahnemann's originality, of his phenomenal power of close and accurate reasoning, and of his thorough observation of facts and his searching analysis of the experience of himself and others. It was upon such observation and analysis that he invariably based his opinions.

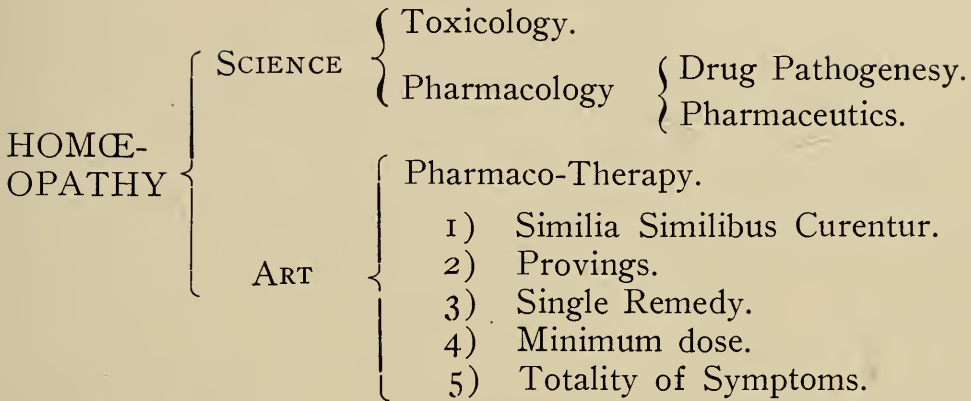
The matter to which I refer might be called Hahnemann's recognition of the germ theory of disease and the germicidal properties of camphor. We know that it was Koch who, in 1884, discovered the comma bacillus, the cause of cholera, and that the germ theory of the origin of disease was not enunciated and established until some years later. More than half a century before Koch's discovery, viz., in 1832, Hahnemann published a seven page pamphlet, entitled "The Mode of Propagation of the Asiatic Cholera," in which he emphatically insisted that cholera was caused and spread by "minute living organisms" and not by an "odorous effluvium" or by means of the atmosphere as was then believed. Hahnemann never saw the comma bacillus and was unacquainted with the bacteriological technique which to-day is one of the crowning achievements of medicine, but his conviction that cholera was due to the pernicious activity of a micro-organism was as firmly rooted as if he had discovered the bacillus itself. Let us note what he says on the subject in the translation found in the "Lesser Writings." After arguing that cholera is not spread by means of the atmosphere he makes the following assertion:—"On board ships—in those confined spaces, filled with mouldy watery vapours, the cholera-miasm finds a favorable element for its *multiplication*, and *grows* into an enormously increased *brood* of those *excessively minute, invisible, living creatures*, so inimical to human life, of which the contagious matter of the cholera most probably consists—." And again, "The cause of this is undoubtedly the invisible cloud that hovers closely

around the sailors who have remained free from the disease, and which is composed of probably millions of those miasmatic *animated beings*, which, at first, developed on the broad, marshy banks of the tepid Ganges," etc. Later he says, "For such physicians and nurses * * * * now take away with them in their clothes, in their skin, in their hair, probably also in their breath, the invisible (probably *animated*) and perpetually *reproductive* contagious matter surrounding the cholera patient they have just visited * * * * " etc. Hahnemann speaks of such physicians and nurses as "miasm-bearers;" we call them "carriers;" he claims that the earlier in the disease camphor is used the more effective it is; he also says, "If physicians would but take warning, and, rendered *uninfectable* by taking a few drops of camphorated spirit," etc.; we talk of "immunity;" and, finally, we read "but by the cure of the disease with pure camphor, they would, at the same time, eradicate and annihilate the miasm (that probably consists of *innumerable invisible living beings*) in and about the patient, about themselves, even in the clothes, the linen, the bed of the patient," etc. Is it not fair to interpret these statements as anticipations of the modern doctrine of infection, of artificial immunity, of antiseptic, of germicidal treatment, etc.?

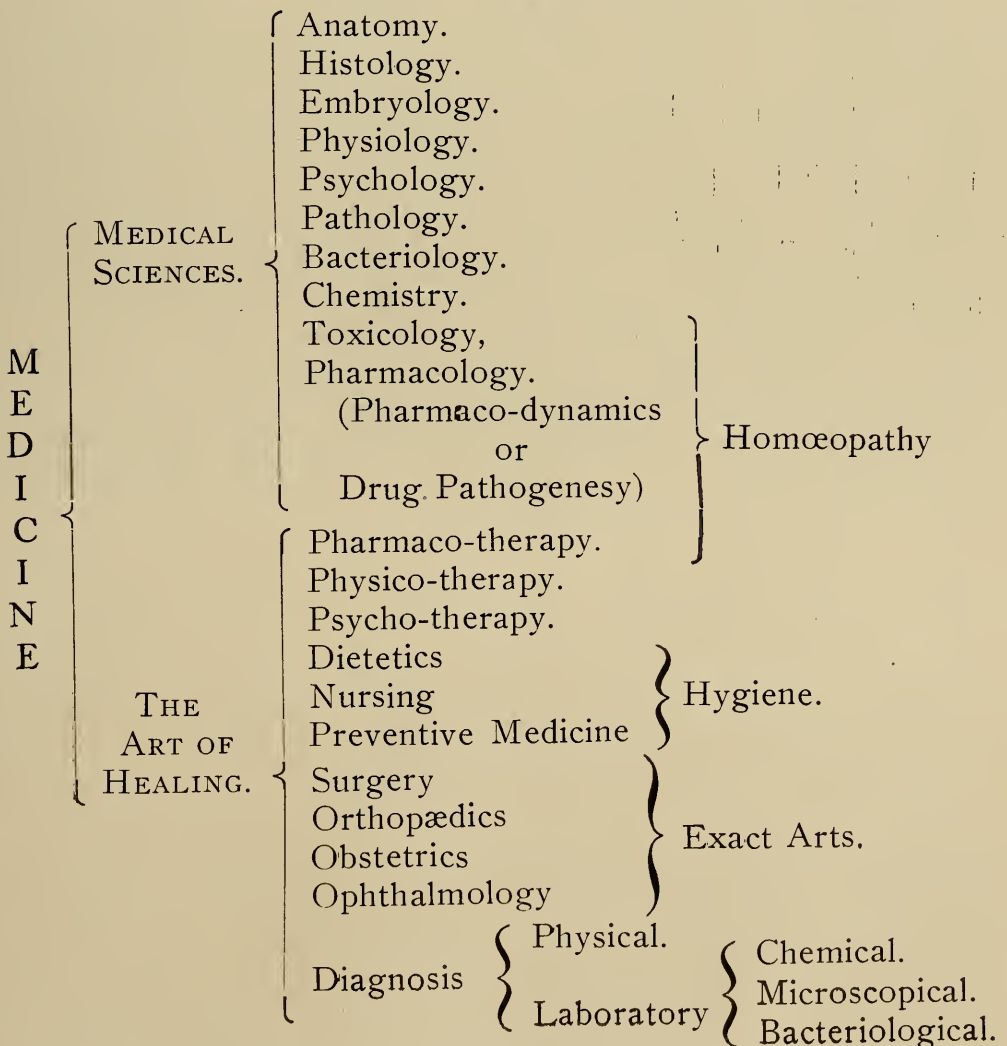
To say the least it is astonishing and to be marveled at that even before the brilliant work of Schleiden and Schwann (1837) developed the fact that the cell is the essential unit in all forms of animal and vegetable life, Hahnemann, by an equally brilliant piece of inductive reasoning, should have so accurately determined the real cause of cholera and the means by which it is propagated, and so definitely have taught us how to prevent and cure the disease.

It is not derogatory to the doctrines of Homœopathy, which are so plainly set forth in the "Organon," and which are here intentionally omitted, to attempt to show the relationship of this specialty in therapeutics to medicine, as a whole. The Institute has officially defined the term "A Homœopathic Physician" and in that definition we find reflections of the teachings of Hahnemann who claims that Homœopathy is not the *all* of medicine, while claiming and demonstrating that it is the only *direct* method of curing by means of drugs. The accompanying charts display this relationship and there is nothing in the "Organon" that teaches anything to the contrary.

Homœopathy is a method of treating the sick in accordance with the formula "*similia similibus curentur*;" it is a specialty in pharmaco-therapeutics, a specialty in the great Art of Healing, and as a special art is based upon certain knowledges or Sciences as indicated in the chart.



But Homœopathy is only a part of the great field of Medicine which in its entirety is THE Art of Healing based upon the recognized medical sciences. The sciences included are independent departments of human knowledge, each complete in itself and capable of many uses, but the art of healing with all its subdivisions is the highest use to which they can be put. The position of Homœopathy in this complex field of sciences and arts, its relationship to the latter, may be shown by a simple schema as follows:—



It has been my purpose in this incomplete study of the teachings of Hahnemann, as found chiefly in the "Organon," to show that his conception of Medicine was something much more comprehensive than his conception of Homœopathy; that he realized the importance to the physician of something more than a knowledge of drug-pathogenesis; that his teachings included more than the value of the law of similars. Hahnemann sets before us in his "Organon" ideals of the true master of the Art of Healing that it would be well for all his followers to take seriously to heart;—for themselves to hold up such ideals the attainment of which is worthy the most persistent, consistent and strenuous effort.

THE HEROIN HABIT.

J. Phillips, Cleveland (*Journal A. M. A.*, December 14), calls attention to the danger of heroin as a habit-forming drug. Even physicians are not sufficiently alive to this danger, and he refers to cases observed or reported that illustrate this fact. The special purpose of his paper, however, is to call attention to the fact that heroin is being used extensively by the method of snuffing among the disreputable classes in the large cities. Inquiry has shown to him that the practice is quite common. One of the three patients whose cases he reports from his own observation told him that he knew at least of twenty of his associates who used the drug in this manner. They have no difficulty in obtaining the heroin, but buy it in bottles of a hundred tablets each, paying 60 cents for the same. The method of use is to take three or four tablets and crush them in a piece of stiff paper and snuff the powder from the paper or from the hand. The symptoms resembles closely those of chronic opium poisoning, except that heroin poisoning causes a chronic rhinitis similar to that sometimes caused by cocain. Some patients who are addicted to the use of morphin substitute heroin because it is more easily obtained and is advertised as harmless by some manufacturers of nostrums. —*Western Medical Review*, March, 1913.

THE USE OF ALCOHOL IN MEDICINE.

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Alcohol in some form or other has been used since time immemorial. Old Chinese manuscripts contain records of drunkenness, the Egyptian monuments show the use and abuse of wine, and the Old Testament gives ample record of its widespread use; in fact, throughout the ages it has played a part in the rites of almost every religion. Insatiable man has gone on strengthening this intoxicating beverage until through the process of distillation he can obtain to-day a practically pure alcohol. It is not the purpose of this paper to take up the so-called temperance question, or the value of alcohol in religious rites or in politics. As practitioners of medicine, we are continually brought face to face with the evil effects of intemperance, and the importance of the subject in preventive medicine; but we will not touch upon the moral aspect of the question except in so far as it influences us in the use of alcohol as a therapeutic measure. As such we must consider it from the standpoint of a drug and of a food.

The alcohol which we have to consider here is ethyl alcohol, which is a waste product in the activity of the yeast plant. This yeast plant, which is air borne and almost omnipresent, produces a ferment which acts especially on certain sorts of sugars, splitting them up into alcohol and carbon dioxide. This process is, however, self-limited, for when the alcohol has reached a definite strength in the warm, sugary solution, it in itself prevents the further activity of the yeast. Therefore, in order to obtain a beverage which shall contain more than the 13 per cent it is necessary to resort to another process known as distillation, which is familiar to all.

The different alcoholic beverages may be classified into three groups:

Beers,—containing 4 to 7 per cent; the various flavors, colors and strengths being due to the different methods, and substances used in brewing.

Wines,—containing 5-22 per cent, in which the ethers brought about by processes of aging and the sparkling qualities play a very important part. Red wines contain tannin, white wines tartaric acid.

Spirits,—containing 40-56 per cent, in which the aldehydes play a part. Fresh spirits contain a greater per cent of the higher and more toxic alcohols, which, however, become destroyed by aging. Cheap whiskies formerly contained a very dangerous ingredient, that of methyl or wood alcohol, but our present laws prevent this adulteration.

Having thus briefly mentioned the various forms in which alcohol is commonly given and the various biproducts to be considered in its administration, let us for the time being disregard these biproducts and devote ourselves to the action of alcohol.

Recent investigators teach us that alcohol is a food as well as a drug. It is agreed by all that the disturbances caused by excessive amounts far outweigh any nutritive value, but such indeed is the case with any food. We have to consider therefore its pharmacological action, and what its nutritive value is in small or moderate amounts.

Alcohol acts on all protoplasm; in other words, it is in sufficiently large doses a true poison to every living animal or vegetable cell. The more complex the cell is,—that is, the more highly it is developed,—the more rapid and the more marked its action. A 1 per cent alcoholic solution immediately produces in the simple amœbæ a narcosis which lasts several hours. When increased to 2 per cent it stiffens them, and at 4 per cent they die. If we examine cells immersed in a medium containing minute quantities of alcohol, we immediately see a retraction of the hyaloplasm which is followed by an agglutination of the granules, and if the strength of the solution be increased we have a complete cessation of activity within the limiting membrane followed by disintegration. Taking up the effect of its prolonged action as a whole on the living organism, we find that in weak solutions it retards the growth of plants. Especially is this true of seedlings.

In animals we have a common and striking example of this action in what is termed by dog breeders, "dwarfing puppies," where puppies are given whiskey in their food in order to check their growth and thus alter the breed. Prof. Rauber of Vienna, Dr. Richardson of London and several others have by repeated and extensive experiments shown that alcohol is a narcotic and paralyzing agent to protoplasm in all forms, and that this is apparent in solutions of 1:1000.

The inference from all this work is that this same marked action on cell life in plants and animals takes place in the human body, where by means of the rapid absorption into the blood stream the alcohol is carried to the various tissues and organs. Moreover this is confirmed by the fact that the pharmacologists of all countries assign alcohol by the side of ether and chloroform to the group of narcotic poisons.

The first effect of alcohol on the mucous membranes,—or subcutaneous tissue when given hypodermatically,—is a local irritant action which gives rise to reflexes as with all other irritants. Let us now take up the general action as briefly as possible in order that we may have an understanding of this drug before discussing its therapeutic uses.

On the nervous system alcohol acts as a depressant from the start. Now the action of any drug is selective, certain cells being affected more rapidly and more profoundly than others. Accordingly we find that the cerebrum, cord and medulla are acted upon successively. In the cerebrum we have a depression of the controlling centers resulting in incoördination. Certain pharmacologists still maintain that the excitement and exhilaration following the ingestion of alcohol is due to a primary stimulation, but the theory advanced by Schmiedeberg and others that this is due to a selective depressant action on the controlling centers, thus liberating the stream of consciousness from the normal inhibitions is more satisfactory, especially since the careful experiments of Kraepelin have definitely shown that a dram dose of alcohol always reduces the power of reasoning, the capacity to judge and memorize and the emotional control. Kraepelin, however, claims that in the early stages alcohol truly stimulates the motor functions of the brain, admitting that even small doses dull all reactions which require nicety of judgment.

On the other hand, such increased psychomotor activities as the fluency of speech are explained by the followers of Schmiedeberg to be due to the blunting of the sense of fear and usually to a true nervous stimulation from the environment, an explanation which seems far more reasonable. A very interesting point brought out by Kraepelin's work is that the person on whom the experiment is made always feels and believes that he has done more and better work under the influence of alcohol, while as a matter of fact, he has not. As regards the special senses, Kraepelin's experiments with small doses show a constant impairment in the accuracy of vision, hearing, smell, taste and touch. The results of Kraepelin's work have been repeatedly confirmed by other observers with the exception that the average minimum dose from which a depressant effect can be observed is nearer two drams.

The circulatory system is very promptly influenced, as shown by the flushing of the skin and a feeling of warmth. This is due either to a stimulation of the vaso-dilators, or a paralysis of the vaso-constrictors. Whichever is the case, it makes little difference from a therapeutic standpoint, for whether it is a direct action on the muscular coat or an indirect action through the nervous system, the result is the same. The dilatation of the capillaries gives a sensation of warmth, accompanied by increased radiation of heat from the body and a fall of body temperature from one to two degrees and in large doses from five to nine, the temperature of the skin being greater than that of the rectum. Most observers find that this dilatation of the peripheral blood vessels after small doses is not accompanied by any alteration in the blood pressure,

although theoretically we should expect a fall; moreover, they find no stimulation or depression of the heart's action.

The foundation for the view that alcohol is a circulatory stimulant is the acceleration of the pulse during the excitement of intoxication, which may be readily explained by the increased muscular effort in the singing, laughing or the kittenlike playfulness invariably seen in the first stages of a convivial evening at the shrine of Bacchus. To the finger the pulse may seem fuller, but the sphygmograph shows tracings of a similar type to those seen in aortic regurgitation.

Jacquet has shown that the pulse rate is unaltered in man providing there is no excitement produced by the environment and that in animals alcohol has no effect on the pulse rate until sufficiently large doses are given to affect the heart. The effects produced on the heart are similar but proportionately milder than those produced by chloroform, namely "weakening of the auricular systole and later of the ventricular, with distention of both cavities and slowing."* The advocates of the theory that alcohol is a cardiac stimulant try to get around the fact that the rate is not increased, by claiming that the force of the contraction is augmented, but as yet the evidence brought forth is so unscientific and so flimsy that it is unworthy of attention, (one man not even stating the dose used in his experiments, *i.e.* Hammeter.)

It has already been said that the dilatation of the peripheral blood vessels has been found by most authorities not to be accompanied by any alteration in blood pressure, but in order to be fair to the minority I will take up the experiments of Kochmann, who found with a 50 per cent solution of 15 per cent alcohol a rise in blood pressure reaching its maximum of 15 mg. mercury twenty to thirty minutes after ingestion, returning to normal sixty to seventy-five minutes later. 70cc. of a 20 per cent solution gave a slight rise followed by a fall. 50cc. of a 50 per cent solution gave a fall from the beginning reaching 10 mg. mercury, returning to normal after sixty minutes. He claims that in the first experiment the increased blood pressure may be maintained by repeating the dose every thirty minutes. He found, however, that the frequency of the pulse remained constant unless sufficiently large doses were given to produce a fall in blood pressure. Moreover, he does not explain this rise as being due to increased force of cardiac contraction, but to a contraction of the splanchnic vessels, which overcompensates the peripheral dilatation. Larger doses, he shows, dilate the splanchnic vessels, lowering the blood pressure besides acting as a depressant on the cardiac muscle. Rosenfeld and others, however, with careful experiments found at no time any increase in blood pressure. The increased blood pressure demonstrated in Kochmann's experiments is simply the rise in pulse observed after

* Cushney.

a cocktail, and is considered by most authorities not to be due to any direct stimulation of the circulatory system but to a reflex brought about by the irritation of the mucous membrane of the mouth, pharynx, œsophagus and stomach.

The same dispute arises about the use of alcohol on respiration, which no doubt is increased in the excited stage. Experiments, however, show that without excitement the amount of air inhaled is greater than before the drug was administered. Nevertheless this does not necessarily mean that the respiratory system is stimulated, for the increase is no greater than that following an ordinary meal. Therefore, it may be attributed to increased activity of the stomach; moreover the local irritant action of alcohol must be taken into consideration, which alone could easily account for the increase by an indirect or reflex action on the respiratory center. The results of various experiments show that there is no evidence that the respiratory center is directly stimulated. The question might be thought to be of purely theoretical interest, but this is not the case, for it makes a considerable difference whether the activity of the respiratory center is increased only to cope with the increased activity of the alimentary tract, or whether the inspired air is augmented beyond this ratio, which has been sufficiently demonstrated not to be the case.

Alcohol is considered by some to have aphrodisiac powers, but the increased sexual desire sometimes observed in intoxicated persons is probably due to a weakening of self-control rather than to any direct effects on the generative organs.

As to the diuretic effect, it is unknown whether alcohol acts on the kidneys or not. Some spirituous liquors such as gin produce an increased diuresis which is due to other constituents and not to the alcohol.

In those accustomed to the moderate use of alcohol as a beverage, the appetite is increased by the pleasant taste, especially by those containing bitters. Alcohol stimulates the flow of saliva and increases its solids and amylolytic powers. This is a purely local effect, because when injected directly into the stomach this function is in no way altered. A 10 per cent solution, however, retards the amylolytic powers.

On the stomach a one-half per cent solution has no influence, but beyond this dilution the gastric secretions are greatly increased both in quantity, total solids and total acidity. This action is not purely local because it is seen even when alcohol is injected into the rectum. When the alcohol reaches between 5 and 10 per cent the proteolytic powers of the gastric juice are interfered with. Alcohol itself is absorbed very rapidly, and its presence seems to favor the absorption of other substances; the motility of the stomach is increased.

The action on the intestine is less marked because most of the alcohol is absorbed by the stomach, but experiments show that the proteolytic powers of the pancreas are retarded by two-three per cent alcohol. It is here that the acid substances of wines and spirit liquors have a more detrimental effect than the alcohol.

To conclude, moderate doses, therefore, would seem to favor an increase in the digestive processes, but after repeated consumption the digestive processes become perverted and diminished.

We now come to the effect of alcohol on metabolism. Alcohol, as you know, is oxidized in the body to CO_2 and H_2O , in fact any amount under 100 gms. daily is all burnt in this way, except 2 per cent which escapes in the urine and expired air. A living organism obeys two great fundamental laws which govern the universe, namely, the laws of conservation of matter and energy. Energy transformation in the body may be measured by means of a calorimeter. It is in this way that the food value of alcohol is tested.

It has been shown that when insufficient carbo-hydrates or fats are supplied to the body, the proteids are drawn upon to make good the deficiency, and the nitrogen eliminated rises; on the other hand, with superfluous carbo-hydrates and fats the body economizes its proteids and the nitrogenous out-put falls. Atwater, Benedict and Neumann have definitely shown by their classical experiments on metabolism that alcohol can replace a chemically equivalent amount of fat in a minimum diet and that alcohol given with an already sufficient dietary leads to a further economy of the proteids, just as a superfluous amount of fat would do, and to a protection of the body fats. It was, however, also shown that alcohol does not tend to economize proteids during the first three to four days of administration, as it takes a certain length of time for the body to accommodate itself to this new food stuff. Having accommodated itself, however, the oxidation of the tissues as measured by the oxygen absorbed and the carbonic acid exhaled is only affected as it is by other foods. On the other hand, alcohol lessens the oxidation of metabolites as shown by an increased excretion of uric acid and ammonia nitrogen at the expense of urea. This is considered by Paton, Eason and Beebe to point to a modification of the functions of the liver.

To conclude, alcohol by undergoing combustion gives up energy to the body and therefore is considered technically a food. It is here that opposition arises. Does not the alcohol require an amount of energy for its absorption greater than that liberated by its combustion? And, again, does not its action on the nervous centers produce a greater waste of energy than it supplies? In reply to these two questions, Zuntz, Berdez and Geppert claim to have shown by their experiments that such is not the case. One en-

thusiast even goes so far as to assert that it is superior to other foods in that it requires no digestion.

So far so good, but does the fact that a substance which liberates energy in the body by undergoing oxidation necessarily imply that it is a food? The answer to this question is to remind you that poisons such as morphine are also oxidized in the body, nor do they require digestion, but as yet no Atwater has unintentionally encouraged the opium habit by proclaiming that morphine is a food.

Let us go back a moment to the experiments of the late Prof. Atwater and his associates. He asserts after careful tests with fats, carbohydrates and proteids that a man at rest must have daily an energy intake of 2,500 calories. Five hundred calories or one-fifth of the total energy requirement at rest may be given in the form of two and one-half ounces of absolute alcohol or seven ounces of whiskey or one quart of claret or one and one-half quarts of beer. Throughout the whole series of experiments Prof. Atwater used this amount on the assumption that it was a moderate amount. Moreover, he claimed that no symptoms or ill effects whatever were seen, even in total abstainers. As regards muscular energy, he maintained that muscle cells can burn alcohol as they do other food stuffs, but he also demonstrated that from the standpoint of ability to do strenuous muscular work, a man cannot do as much work in the long run with alcohol as he can with carbohydrates. Alcohol may by diminishing the sense of fatigue allow a greater spurt during fatigue than could be made without it, but this increased muscular output of energy is very soon followed by a decrease in muscular energy below normal, in exact ratio to the temporary increase. Moreover, the depression is of much longer duration.

What is the modern conception of a food and in what respect does alcohol meet the requirements? Physiologically, a food is a substance that can be utilized by the tissues of the body in such a way as to yield energy, or to furnish material for the production of living tissue, but it must not affect injuriously the normal nutritive processes of the tissues when taken in proper amounts. According to Atwater, alcohol meets these requirements, but according to almost every pharmacologist of repute, alcohol does not and cannot meet the above requirements. Atwater's proper amount was seven ounces of whiskey daily, from which he noticed no ill effects.

In the first place, Kraepelin has effectually shown the ill effects of alcohol in dram doses in experiments as elaborate and careful as any of those carried out in the State of Connecticut, where, to repeat, no ill effects were noticed with what corresponds to two and one half-ounce doses. In the second place, Atwater demon-

strated a diminished endurance for strenuous muscular work when alcohol was used in a liberal diet, and finally he most strenuously contradicted himself by advising against the use of alcohol in the diet of a normal healthy individual; in other words, Atwater recognized the injurious effects of alcohol on the normal nutritive processes of the tissues when taken in what he termed moderate amounts.

A food as defined above does not mean necessarily an article of diet but an elementary food stuff such as water, carbohydrate, fat, proteid and the salts, all of which meet with the above requirements, while many articles of diet do not, such as prunes, green apples, etc., which have together with their elementary food stuffs substances which have a definite pharmacological action. The bi-products of alcoholic beverages have been disregarded throughout this discussion and we have been considering whether alcohol is an elementary food. The conclusions reached are that alcohol has as yet not been satisfactorily proved to be such.

It is said that alcohol has a nutritive value which is its direct action, and a drug value which is its indirect action. The nutritive value is claimed from the energy derived from its oxidation. I maintain that the drug action is the effect of the alcohol before it is oxidized, therefore, the drug action, although imperceptible in minute doses, always precedes this nutritive action. But this oxidation is a protective process on the part of the body. We know that morphine fiends are capable of oxidizing enormous amounts of morphine and that alcoholics can burn more alcohol than abstainers, in other words, their power of oxidizing or resistance is increased. The energy thus liberated is made use of by the body and so far as the calorimeter shows is the same as that derived from other foods and can thus be used to replace them in this respect. But energy derived in this way is the result of a protective process on the part of the body and not the result of normal metabolism. I therefore repeat that alcohol is a drug and a drug only and never a food in any complete sense of the word. As a drug, it protects the body fats by liberating energy, and in this way it is of value in diabetes, but in acute or long continued fevers this possible value must be outweighed by its property of lowering the resistance and acting as a depressant, or at least the value of alcohol in these cases must remain decidedly doubtful until sufficient and proper clinical research comes to our rescue.

The common theory, that alcohol is a stimulant, a tonic, an invaluable medicine and always a safe beverage in reasonable amounts is now obsolete and has no support from the modern scientific studies in the laboratory and the majority of clinical tests. It is a deplorable fact that the laboratory results have guided the vast

majority of clinicians either to abandon or to use alcohol, instead of prompting them to test its value at the bedside. Certain physicians prompted by strong temperance motives look upon alcohol as an invention of the devil and accordingly refuse without exception to call in the aid of his satanic majesty. Others guided solely by a few laboratory results place alcohol with prussic acid as a terrible poison of no practical use in therapeutics. On the other hand, we find many men prescribing alcohol ruthlessly with the general idea that as a food and a stimulant it always does good, and what is more, they take it for granted without watching the patient, as they would with digitalis. Such men frequently attribute the symptoms of alcoholic poisoning to the disease when they are really due to the treatment, and with blind zeal they push the alcohol still further.

At the bedside of the patient we have to consider not only the action of alcohol in health, but also its effect on the reactions of the body to the disease. Dr. Richard Cabot asks "Have we a right to assume that the action of alcohol on lower animals or on healthy human beings is similar to the action in disease?" My answer is that the properties of alcohol remain the same, but we must be guided by our knowledge of its action on the healthy organism and the probable results of this action on what we know of the reactions of the body in disease. This is all we have to rely on in the use of most drugs, and is all we should rely on in the use of alcohol until sufficient clinical research will enable us to disregard such laboratory experiments.

Let us now turn to the various diseases which are said to be benefited by alcohol. In the first place, the acute infectious and contagious diseases. There is no experimental evidence that it ever increases the antitoxic or bactericidal powers of the blood. On the contrary it has been amply and repeatedly shown that small doses of alcohol in animals increase the susceptibility to infectious diseases and lower the resistance. This is borne out by the common experience of "catching cold" after partaking liberally of alcoholic beverages. The leucocyte count as well as the opsonic index is reduced by alcohol. In pneumonia, for instance, Laitinen has shown a decreased leucocytosis after its administration. Since a leucocytosis and a high opsonic index are signs of resistance on the part of the body, we should certainly do nothing to reduce them. For clinical evidence, Kellogg of Battle Creek reports 82 cases of pneumonia treated without alcohol, obtaining a mortality of 4.9 per cent.

Dr. Townsend, after careful observations on a large number of cases of acute lobar pneumonia in children and infants, states that he is convinced that these cases do better without alcohol.

As regards other pyogenic infections such as septicæmia, in

surgical and obstetrical patients, alcohol is frequently given to excess in these conditions with the idea of sterilizing the blood. Wurtz and Hudel made a series of animals drunk and then examined the blood which was found to contain streptococci, colon bacilli and other bacteria. From this we have the right to infer that alcohol has no bactericidal influence in human blood and that even if it did, any good which might theoretically be done would be far outweighed by the lowering of the resisting powers. Delcarde of the Pasteur Institute found that rabbits to which he administered alcohol in his experiments in immunization against anthrax, died of the disease, while the control animals which were given no alcohol could be vaccinated successfully.

Whiskey and brandy have long been advocated in the treatment of snake bite. Snake venom is excreted into the stomach. Alcohol above seven per cent destroys toxins and enzymes. Therefore, why not give alcohol? It is only the excess of the toxin molecules which are excreted into the stomach where they remain inert. The presence of alcohol would tend to destroy them, but it would also favor the reabsorption of what it did not destroy. It is the toxin molecules which have already found their complements that are doing the damage. Hence, alcohol in the stomach is not only useless, but may be dangerous. The researches of Flexner, Sachs and others have shown that the toxic properties of snake venom are due to hæmagglutins, hæmolysins, hæmorrhagins and neurotoxins. Calmette produced antivenins by which he enabled animals to stand lethal doses without any effect. If we could get a strong enough percentage of alcohol in the blood we might be able to destroy the toxins but we should also check the formation of antivenin and destroy what had already been formed. Moreover, alcohol in doses necessary for this purpose would increase the hæmolysis, and not only depress all the body functions, but would also augment the depressant action of the neurotoxin. Many are the victims of snake bite who have died from overwhelming doses of whiskey.

As regards typhoid fever, Dr. N. S. Davis treated 1,100 cases without alcohol with a mortality of five per cent. In 1864, A. L. Loomis treated 600 cases of typhoid fever without alcohol with a mortality of six per cent, the previous record with alcohol being twenty-two per cent. The absurdity of considering alcohol as an internal antiseptic in this disease is shown by a recent epidemic of typhoid in Germany due to infected beer.

In diphtheria, Dr. Rotch, Dr. Holt and Dr. Jacobi all advise the administration of alcohol in large quantities with some vague idea of enabling the body to better withstand the injurious effects of the toxin. This idea is either an assumption from individual observation, not backed by check cases without alcohol, or it is

merely an accepted statement from former text books. I realize that this remark is a bold one, but in this case I am not only backed by the laboratory experiments but by no less an authority than Dr. Place, who considers alcohol useless in the treatment of diphtheria. The mortality of diphtheria at the Boston City Hospital was tremendously reduced by the introduction of antitoxin, but it was still further reduced by the abandonment of alcohol.

In tuberculosis alcohol was thought to have similar powers by the same illogical reasonings as those ascribed to it by the above named pediatricians. Fortunately, the leading authorities have for some time recognized this fallacy. Dr. Vincent T. Bowditch maintains that alcohol does no good in tuberculosis, but that it does distinct harm. Dr. Osler has the same views.

In the treatment of infantile diarrhœas, drop doses of brandy are frequently used as an "adjuvant" to other methods. An instructor in pediatrics was asked after a clinic what good the brandy did. His reply was somewhat as follows, "Well alcohol isn't a stimulant and it may or may not be a food, but it's a damn fine thing for babies." Such a logical and scientific explanation admits of no opposing arguments; nevertheless opposite views are held on this subject. Dr. Townsend advises against the routine use of alcohol in infants. He says that the treatment of diarrhœal diseases is in brief, first, to obtain a cleansed and unirritated gastro-intestinal tract and secondly, to give a bland and unirritating food that can be easily assimilated, and that any food or drug including alcohol which interferes with these two factors is distinctly a handicap.

The continued use of brandy as a therapeutic measure in the treatment of infants and children is one of the most pernicious practices of this age. In hospital wards I have seen infants and children who at first revolted against this medicine gradually acquire a taste for it to such an extent that they would enjoy their doses of brandy. Is it not reasonable to assume that these children as they grow up should crave to satisfy this acquired taste? The majority of these children are predisposed to intemperate habits by their inheritance. We should certainly not make this inherited burden harder to bear by administering alcohol in continued doses during the early years of life under the pretext of scientific medicine. It is a striking example of that inane inconsistency which has always pervaded the medical profession. Pediatricians who are airing their individual notions regarding the niceties and delicacies of infant feeding, and stirring up the legislators to take steps to decrease infant mortality are developing candidates for our asylums and prisons by their unscientific and irrational use of alcohol.

An argument brought forth by the advocates of the use of alcohol in acute infectious diseases is that these patients rarely

show signs of alcoholic intoxication even after heroic doses. This fact only proves that alcohol may act differently in disease than in health, but it in no way can be inferred that for this reason it is doing good. Dogs given sugar with alcohol do not get so drunk, but their organs suffer the same changes both in acute and chronic alcohol poisoning.

Dr. Richard Cabot in his studies on the action of alcohol in disease gives the following summary and conclusion:—

“1. In forty-one patients mostly typhoid fever . . . neither the maximum nor minimum blood pressure showed any variations that could reasonably be referred to the action of the alcohol. . . . The action of alcohol upon the circulation was nil.

“2. The same neutrality and apparent inertness of therapeutic doses of alcohol in relation to temperature, pulse rate, respiration rate, appetite, sleep, delirium and secretions (renal and cutaneous) of 309 patients suffering from a great variety of diseases was the total impression derived from 2,160 observations in these cases.”

He goes on to say that these observations are not interpreted as proving that alcohol is useless or useful in disease. Technically, Dr. Cabot is right in this statement, but from a practical standpoint he is wrong. He used the common methods of observation on the sick, observations which we are taught guide us as to the condition of the patient. His patients showed no improvement; accordingly alcohol was useless so far as could be ascertained by our common methods of observation. Moreover, alcohol costs money. Therefore, if we prescribe alcohol in private practice the patient is put to a useless expense. This never does the patient good but does him harm in inverse proportion to his income. For hospitals, the use of alcohol, according to Dr. Cabot's observations, would indicate the useless draining of funds which could be better utilized for such remedial agencies as we have far more reason to believe do benefit the sick. Most hospitals have economized in this respect. In 1899 the Massachusetts General Hospital spent \$3002, for alcohol, while in 1906 the bill was reduced to \$738.

In 1862 the seven large London hospitals together spent £8000 for alcohol and £3000 for milk. In 1902, only £2800 was spent for alcohol and £9300 for milk.

To summarize the action of alcohol in acute or chronic infectious and contagious diseases, we have no reason to believe that alcohol acts as an antitoxin, that it protects the tissues in any way from the toxins or that it acts in any way as a stimulant in such diseases.

It is not the purpose of this paper to represent either side of the question. We are concerned with the present place of alcohol in therapeutics. So far we have not found a place for it, but as a well studied and easily obtainable drug it qualifies in antipathic

or allopathic therapeutics as a condiment, a stomachic and as a depressant.

In diabetes alcohol may play an important role. The diabetic does not form sugar from alcohol, and moreover the oxidation of the alcohol appears to protect the body fats. Prof. Naunyn, the greatest authority on this subject, advises the use of alcohol in this disease, but states that when more than 50 gms. are taken daily the toxic action on the protoplasm outweighs any value it may otherwise have. He brings out the importance of caring for the appetite and digestion, and points out that light wines usually increase the appetite and improve digestion. Port wines, champagne, sherry and all liqueurs should be avoided, as they contain too much sugar, and beers especially, as they contain readily absorbable maltose. Rum, cognac and whiskey, according to him, may be given. More clinical observations are necessary to absolutely establish whether these cases do better in the long run under such treatment. We have become skeptical of therapeutic conclusions drawn from calorimeter experiments with alcohol, but we are bound to respect the conclusions of such an eminent authority, even if we prefer to practice differently from him.

As a mild narcotic alcohol is often beneficial. A hot toddy has long been recognized as a valuable measure to quiet a restless or anxious mind and induce sleep. This does not mean that alcohol should be given for chronic insomnia. Occasionally in acute fevers a moderate dose of alcohol, to one accustomed to it as a beverage, will sometimes diminish the cerebral excitement, and in this way slow a turbulent heart and give peace and comfort to patient, nurse and doctor.

In so far as alcohol is capable of soothing the incurable patient and giving him a passing sensation of well being, it should be allowed without hesitation, even though in other respects it may be detrimental.

It still remains a question whether alcohol should be withdrawn from a patient accustomed to its excessive use. Delirium tremens is the threatened danger of suddenly withdrawing alcohol from these patients. But the withdrawal is not usually the entire cause, for it must not be forgotten that the patient has also been deprived of his daily activities. I find no cases reported where sudden withdrawal has been followed by delirium tremens provided his usual activities are kept up.

In regard to the treatment of delirium tremens when it has once started, Dr. Lambert of New York, after observations on several thousand cases treated with and without alcohol, maintains that in every case it should be immediately and absolutely withdrawn.

Unfortunately, alcohol is a drug which produces a habit. This

is of little importance except in those cases where the family history would most strongly contra-indicate its use. Lonely and childless women seem to be particularly predisposed to drift into habits of intemperance. In the past, physicians by unwise prescribing and injudicious statements have done much to promote alcoholism, and it is well for us to bear in mind that alcoholism is more prevalent and more of a menace to this country than any other disease, even including tuberculosis and syphilis.

Externally alcohol cools the skin by its rapid evaporation and is a mild irritant. Its antiseptic properties are self-evident from the fact that it is a poison to all forms of life. Moreover, when applied directly it destroys toxins as it does enzymes.

To conclude, alcohol is in no sense a stimulant and should never be used with the idea that it is. It lessens the natural protective powers of the organism against infection and increases the tendency to bacterial invasion. It is not a food in the sense of an elementary food stuff. The impression received from hospital statistics in regard to the use of alcohol in acute and long continued fevers is that it is not only useless but does distinct harm. Whether it should be withdrawn from alcoholics suffering from acute disease remains doubtful. In delirium tremens ample observations indicate an immediate and absolute withdrawal. As a local irritant and a peripheral vasodilator, a small dose may possibly be useful when used with other measures in bringing about a better circulation in such conditions as chill or fainting, but any simple hot drink accomplishes the same purpose just as well, if not better. Any predisposition to intemperance is a strong contra-indication to its use. In pharmaceutics, alcohol is of the greatest value since it takes up other drugs in solution, and serves as a preservative of their medicinal qualities. As a condiment, a stomachic and true depressant, alcohol holds its proper position in pharmaco-therapeutics. With these meagre qualifications alcohol as a remedial agent is justly falling into disuse among the scientific members of the medical profession.

A CASE OF TENDON TRANSPLANTATION TO OVERCOME DEFECT RESULTING FROM POLIOMYELITIS.*

BY E. P. MILLS, M.D., Ogden, Utah.

In the course of the discussion of a paper on acute poliomyelitis presented before another section of this Society last year, one of our prominent men said of tendon transplantation, "It really does not accomplish very much." Nevertheless this report is presented to show that this procedure can be used to help overcome some of the deformity resulting from this disastrous disease.

No attempt will be made to go into the very interesting history of tendon transplantation in general, or the use of the various fascias in supplying defects, however fascinating that would be, but will proceed at once with a report of my case.

M. L., aged now seven years, was two years old when she had, early in December of 1908, her attack of acute poliomyelitis. Temperature was never high, 101 F. being the maximum on my history sheet. During the first few days the swallowing was very difficult and no movement of skeletal muscles was detected. The usual course of the disease was followed and muscle control recovered gradually.

The defects observed when the patient was up were a weakening of the right leg, the knee giving way and falls being very frequent, and a deltoid paralysis on the left side. During the next two or three years the leg function was almost entirely regained, no difference in the strength of the two limbs being detectable and the measurements being equal.

The arm did not come along so well. It wasted away—the head of the humerus tended to drop away from the socket and no form of treatment seemed to avail, except that a course with some manipulator overcame to a large degree the tendency toward the relaxation of the shoulder joint.

In June, 1912, the little girl's condition was as just outlined. Her trouble was all gone except in the left arm. She could use her fingers, flex and extend the forearm and could swing the arm to and fro by the side of the body, but could not adduct it in the least.

At this time the operation was undertaken. An incision was made beginning on the neck and extending down over the point of the shoulder to just below the greater tuberosity of the humerus. The skin was well retracted. Search for the deltoid failed to bring

* Read at the Denver Meeting of the American Institute of Homœopathy.

to light any fibres of this muscle. The aponeurosis was recognized, but the trophic changes were so profound that the muscle had disappeared. The tendinous attachment of the superior fibers of the trapezium muscle was then severed from the outer third of the posterior border of the clavicle and the insertion of the middle fibers severed from their attachment into the inner margin of the acromion process and the adjacent surface of the crest of the spine of the scapula.

These attachments were then gathered together, the arm elevated to an angle of 110 degrees, and were stitched to the lowest point possible on the capsule, and the aponeurosis of the deltoid was then whipped over these fibres and the skin closed.

The arm was dressed on an angular splint which maintained the angle above referred to, and was lowered gradually as healing progressed.

The results show a very decided improvement. The arm has developed a good deal—the shoulder has filled out—the biceps is firm and has increased. The right arm is now about an inch longer than the left, but this last year the development of the left has kept pace with the right. The little girl can put her left hand up to her head and can hold the arm out nearly to a right angle.

The only other cases similar to this that I have found reported are those of Kaliani in *Annals of Surgery*, 1910, in which article reference is made to two German reports, in all five cases, and by Dean Lewis in the *Journal of the A.M.A.*, 1910 and 1911, three cases. All of these have been on older persons than my patient, and it is our hope that the use the arm will have in growing period will cause it to develop and the ultimate results be better than if the operation had not been performed until the body had its full growth.

THE BUFFALO CONGRESS.

Foreword.

“And a little child shall lead them.”

No man or woman could have left the International Congress of School Hygiene held at Buffalo, August 25-30, without being deeply impressed with the fact that the world at large is acutely interested in the welfare of the school child. There was no phase of school life, from the psychic impression of auto suggestion to the cut of the small boy's pants that was not considered. There were present the old-time school teacher, teacher with the steel-rimmed spectacles, and the most modern type of medical school inspector, with an intermingling of gradations of experts and “commons” who at any point touched school life.

One could hear papers read in English, German, French, Italian or Spanish, according as he was interested or could understand. But the summing of it all spelled just one thing, namely: the physical, mental, moral, and spiritual betterment not alone of the school child but of the school child's father and mother, yes, and his cousins and his sisters and his aunts.

We were fortunate enough to secure about a dozen of the best papers and will serve two or three of them each month as a sort of dessert or after-dinner coffee to the heavier medical meat course.

WHO IS MENTALLY DEFECTIVE—HOW MANY ARE THERE —AND HOW CAN THEY BE DETECTED?

BY DR. HENRY H. GODDARD, Vineland, N. J.

A prominent American is quoted as saying, “the trouble with this problem of the feeble-minded is that there are so many of us.” This remark suggests at once the necessity for discussing the question—Who is feeble-minded?—and at the same time the difficulty of answering it.

The feeble-minded do not constitute a distinct species of the human family, nor is feeble-mindedness a disease characterized by definite symptoms which one can diagnose and declare are present or absent. It must be understood that the term is a relative one, and there is no doubt, as Binet has well said, that the man who is normal in the rural districts of France might well be feeble-minded if you put him in Paris. This further agrees with the common expression “that we are all a little feeble-minded or feeble-minded along some lines.” Such being the case it might be asked—why is it necessary to define the term at all since it seems to be indicative

of a condition that is universally present? One can only reply that if you choose to apply the term in this way it becomes necessary to say, the important question is—how feeble-minded is one? As a matter of fact the term has been defined in a practical way for a practical purpose. The universally accepted definition is that formulated by The Royal College of Physicians of London. This definition was adopted by The Royal Commission appointed to study the problem of feeble-mindedness and is quoted by Tredgold. He says "amentia," which is what we mean by feeble-mindedness in the generic sense, may be defined as "a state of mental defect from birth or from an early age, due to incomplete cerebral development in consequence of which the person affected is unable to perform his duties as a member of society in the position of life to which he is born."

They define a "feeble-minded person" in the specific sense, or what we call a moron, as "one who is capable of earning a living under favorable circumstances, but is incapable from mental defect existing from birth or from an early age, (a) of competing on equal terms with his normal fellows, or (b) of managing himself and his affairs with ordinary prudence." We see from this that while we all may be a little feeble-minded there is a degree of feeble-mindedness below which the condition becomes significant, and the line is drawn at the point where an individual ceases to be capable of competing with his fellows on equal terms, or of managing his own affairs with ordinary prudence. The importance of drawing the line at this point consists in the social consequence. Any person who is unable to compete with his fellows in the struggle for existence, or who cannot manage his own affairs with ordinary prudence, is bound to be sooner or later a burden to the community.

To the utterer of the witticism with which we began, we may then reply, "you need not worry unless you are so feeble-minded that you cannot manage your own affairs with ordinary prudence," for it is only those who fail in this who become a problem. It is important to note that the definition says, "those who are incapable because of mental defect existing from birth or an early age," and in that connection it is important to realize that most of such incapacity is due to a mental defect that has existed from birth or an early age.

This is a proposition that at first glance will be questioned, and perhaps even permanently rejected by many, but the truth of it is coming more and more to be realized. Perhaps the matter may be made clearer by putting it in another form.

We may say that the human family is composed of individuals of all grades of intelligence, from the lowest to the highest, but the particular grade of intelligence is characteristic of the family pos-

sessing it and is transmitted. If human matings always took place between persons of the same level of intelligence we should have generation after generation of children of the same intelligence as their parents. As a matter of fact this comes much nearer being the case than is easily believed by those who look at individual families of their acquaintance and discover how different from either parent are the children in intelligence. But we have only to look back into history a little to discover families of superior intelligence where the level has been maintained through three, four, perhaps six generations. One thinks at once in America of the Adams family and the Edwards family and many others. These high levels of intelligence grade down to the average man, where again, we find very much the same thing occurring; the great majority of people are what we may call of average intelligence, and we may trace them generation after generation, in any particular family, and find the level is pretty fairly maintained. We are now learning that the same thing holds true when we go down below the average to those of very low intelligence. Now if we follow this descending scale of intelligence from the Adams and Edwards families down to the imbecile level we come somewhere in the scale to a point or degree of intelligence that is just about sufficient to enable a person to compete with his fellows and manage his affairs with ordinary prudence. It is in this border zone that we find those people who would be considered normal in intelligence under simple conditions, such as the peasant life of France or the simple farmer's life of our own country, whereas if you put them into the city under the complex conditions that exist there they would inevitably fail of success and be unable to manage their affairs under such complicated circumstances and would therefore become a burden and a menace and be properly called feeble-minded.

We have said that some might object to admitting that those who are incapable of competing in the struggle for existence or of managing their own affairs with ordinary prudence, show this incapacity by reason of a mental defect; in other words, it is a somewhat new thought to most people that these individuals who do not get along, are actually incapable of getting along. The popular idea is that they could if they would; that they are careless or lazy, or vicious, or have some other peculiarity of mind which they could easily change if they were so inclined. Still more frequent is the notion that education could have changed it. If these people had only been to school and had had good training they would have been capable of taking care of themselves. No one denies that this is true in a certain percentage of cases of these failures in life, but the important contention and thing to be borne in mind is that a vastly larger percentage of these people than has ever been realized are actually feeble-minded. Indeed, so large is the percentage

that the burden of proof has shifted, and we have come now to the position where the first thing we must think of in all such cases, is, perhaps they are feeble-minded. That is to say, perhaps they could not possibly help being as they are, because they were born with a mental defect, or acquired it at an early age. Our answer to the question "who is feeble-minded?" reduces itself to this: every person who is incapable of competing on equal terms in the struggle for existence, or is incapable of managing his own affairs with ordinary prudence, is possibly a feeble-minded person, and it is probably safe to say that unless we can demonstrate that there is some other adequate reason for his incapacity, it is correct to regard him as a feeble-minded person and to treat him accordingly. The actual determination of this point will be discussed in the third part of our paper.

How many feeble-minded people are there?

In the census of 1890 one of the questions that was asked was, "are there any idiots or imbeciles in your family?" The result of that inquiry showed that one in five hundred of the population was feeble-minded—idiot or imbecile. It is difficult to guess what proportion of the true number of those who are incapable of managing their own affairs with ordinary prudence was obtained by such a question, but certainly it must have been small, both because people naturally object to designating members of their family as idiotic or imbecilic, unless they are very marked cases and the fact cannot be concealed; and second, because the ordinary person does not recognize the people of whom we are speaking as being mentally defective. For some years it has been concluded by those who are familiar with the problem of feeble-mindedness, that at least one in three hundred was a safe estimate. Still more recently and based upon more careful studies, we have said one in two hundred and fifty, and sometimes someone has dared to say, one in two hundred of the population.

The Royal Commission above referred to, found for England one to every two hundred and forty-two of the population. Recent careful survey of one fairly average county of the State of Michigan has given one to every one hundred and eighty-seven of the population as feeble-minded.

Our study of the mentality of an entire school system of a thousand children resulted in finding two per cent of these children feeble-minded. A number of smaller studies in different places have shown at least this number.

Dr. Terman of Leland Stanford University tested a small system of eight hundred children and found twenty-five feeble-minded; this would be a little over three per cent. Since the school population is roughly one-fifth of the general population, "two per cent

of the school children," and "one in two hundred of the general population," mean the same thing, approximately, and there is every indication that this is a conservative estimate. There are some who question this high percentage, but no one has as yet demonstrated that it is incorrect, and those who have begun to investigate have quickly discovered that this estimate is not too high. For example, the writer himself questioned the percentage when applied to New York City. The seven hundred and fifty thousand public school children there would give on the basis of two per cent fifteen thousand children in the public schools as feeble-minded. It was almost unbelievable. But a careful investigation (see the author's report on Ungraded Classes, in the New York School Inquiry) showed that the estimate was probably an under, rather than an over-statement of the fact. A prominent educator in a personal letter to the writer said, "I used to think your estimate that two per cent of school children are feeble-minded was ridiculously high, I now, after an investigation of the school children, am convinced that it is conservative." Whether we may yet be compelled to place it somewhat higher than we do now, I believe we are perfectly safe in considering that one in two hundred of the population, or two per cent of school children, are so mentally defective as to be incapable of competing with their normal fellows in the struggle for existence; incapable of managing their own affairs with ordinary prudence. The significance of this state of affairs, for society in general, the writer has pointed out elsewhere.

How can the feeble-minded be detected?

Every one knows how to recognize the idiot and the low grade imbecile. They show it in their faces; they show in their talk if they talk at all, and in many other ways the condition is manifest. But the real problem comes when we consider the high grade imbecile and the moron; these people that, to the casual observer, are like the rest of us but who, if allowed to go on and attempt to take their places in the world soon show that they are incapable of competing on equal terms and are incapable of managing their own affairs with ordinary prudence. As yet we have done very little toward detecting these people, except by the cumbersome method of experiment; that is to say, we have allowed them to go on and try to take their places in the world and when they have failed we have of late been asking the question—"are they feeble-minded?" and we are learning that it must many times be answered in the affirmative. But such a procedure is wasteful, unjust and cruel, and we must have something better.

It is of the utmost importance that these defectives be recognized early before they have made shipwreck of life, before they have become a menace to society and have done the damage which

they surely will do if they are not protected and cared for. As already stated, we have now learned that this condition does not manifest itself in the bodily condition, at least not to any degree that can be recognized easily. It remains then to discover some method of detecting the quality of the mentality in these cases, and of detecting it early. Thanks to the work of the Child Study people and the child psychologists we now know fairly well what is the normal rate of development in childhood and what mental processes are ripe at the various years of life, and thanks to the great work of Professor Binet we now have a method of determining the condition of any particular child in relation to this standard, and the Binet-Simon Measuring Scale of Intelligence is eminently satisfactory in the hands of one who understands its use. In certain doubtful and borderline cases one's judgment of an individual may be confirmed by certain other tests, but in most cases the Binet scale itself is ample for the purpose. While some people object to the scale the objections are theoretical and hundreds of users the country over are daily demonstrating its practical value in the solution of this problem, and so far as the writer knows there is no one who has used it enough to get expert with it, who is not enthusiastic in its support. The universal comment is, "the more I use it the more wonderful I find it."

In concluding this paper I may sum up the case and show its significance at the same time.

1. *Vast numbers of people whom we have heretofore thought vicious or ignorant are actually mentally defective and cannot do better than they do.*

2. *The proportion of these in the population is so large as to constitute a most serious problem in our social life.*

3. *If we recognize the situation, and admit the facts, we can thoroughly and easily detect these cases in early childhood, and then by a proper treatment reduce to a minimum the seriousness of the problem.*

EDUCATION OF SCHOOL CHILDREN IN THE PRINCIPLES OF HYGIENE.*

BY LEE K. FRANKEL, PH.D., Sixth Vice-President, Metropolitan Life Insurance Company.

No attempt will be made in this paper to present the subject of the education of school children in the principles of hygiene from a general standpoint. Following the suggestions of the Secretary of Congress, the consideration of this topic will be limited to a presentation of the work which has been done by the Metropolitan Life Insurance Company for school children along educational lines.

One may well wonder what interest an insurance company may have in the education of school children. To understand this fact thoroughly it should be stated here that the Metropolitan Life Insurance Company in addition to carrying on the business of so-called ordinary insurance has for many years been actively engaged in transacting industrial insurance. Its policy-holders in this department, numbering to-day approximately nine millions, are composed of men and women and of children from one year of age upward. Roughly speaking, about two-thirds of these industrial policy-holders are adults and one-third are children under sixteen years of age. Approximately two and one-half millions of its policyholders are children of school age, that is, between the ages of six and sixteen years.

Various reasons may be advanced which would prompt an insurance company to entertain activities for the improvement of the general welfare of the children whom it insures. From the purely business standpoint it may be urged that any campaign which teaches children the principles of hygiene would have a tendency to make children better safeguard their health. Such a campaign would necessarily result in less frequent illness among children and perhaps also in a lower mortality. Both population and insurance statistics show quite clearly that there has been a marked reduction in mortality among children in the past few decades. This reduction is even more pronounced, as you know, among infants. Even among children of older ages, it appears that the improvement in general conditions has had its effect in lowering child death rates.

The motive assigned above for the activity of the insurance companies is, however, a minor one. There are other and better reasons. The most important is the realization that insurance to-day is no longer recognized as a purely commercial enterprise. Nothing better indicates this fact than the term which is applied to the various forms of governmental insurance in Europe, namely, social insurance. Twenty-five years ago, when the first Inter-

* Read before the Fourth International Congress on School Hygiene, Buffalo, New York, August 27th, 1913.

national Congress on this subject was held in Paris, the association at that time, not fully realizing the possibilities which lay in the future, was called the International Congress on Industrial Accidents. The remarkable spread of all forms of workingmen's insurance since that time and the recognition that insurance was simply a phase of social activity has brought about a change in the name of this International Association, so that to-day it is known as the International Congress on Social Insurance.

It is only natural that the social significance of insurance should have been recognized by private insurance companies in the United States. Fundamentally, any insurance organization is not more than a piece of machinery which gives individuals the opportunity to protect themselves against the hazards of life. In the past, this machinery has been applied largely to compensating or indemnifying individual members of such an insurance organization for the results of these hazards. The modern tendency is in the direction of preventing or minimizing these hazards, if this is at all possible. That this is of benefit to the insurance company cannot be gainsaid. It is even more obvious that the preventive measures are of the greatest value to policyholders in the resulting reduction of sickness, accident, invalidity and premature death. Under any theory of conservation, it is desirable that the working life of the individual units in a community should be maintained to the furthest limit. The time to begin the education of citizens in prevention is not when they have reached maturity, but during the impressionable age of school life.

Various means of educating school children in the principles of hygiene at once suggest themselves. The simplest naturally would be the method of the school, namely, through the personal instruction of the teacher and the use of the text-book. Unfortunately, the average teacher of school children to-day has herself not had sufficient training to impart much knowledge to her charges. It is highly desirable that in our high schools and normal schools more stress should be laid upon the subject of hygiene, that we may soon have sufficient instructors qualified to give courses in hygiene to their classes.

Another difficulty has been the comparative lack of good text-books, etc., dealing with the subject of hygiene. It is true that many writers have attempted to prepare literature for this purpose, but in the main their attempts have been unsatisfactory. Most of the texts are not adapted to the child of tender years; neither the phraseology nor the manner of approach is of the kind that can readily be comprehended by children. But little attempt has been made to apply the daily activities of children as object lessons in educating them in hygiene. To the competent and sympathetic teacher there is a vast field of opportunity in the things that hap-

pen daily in the school room, in the street, in the home, and in the daily life of the child to enable her to give instruction to her class in the rudiments of hygiene.

Largely owing to this lack of any concrete and definite scheme of instruction in the school, the Metropolitan Life Insurance Company has attempted to reach the child in the home. To this end, it publishes a magazine which is distributed at periodical intervals and reaches the homes of practically all its industrial policyholders. There are various fine possibilities in the distribution of a magazine of this kind by an insurance company. Every policyholder is distinctly aware of the fact that he pays premiums; the receipt, therefore, of a publication from his company is accepted by him as an additional return for the money which he has invested. It is common knowledge among advertisers that magazines which are distributed gratuitously or in any way excepting through paid subscriptions have not great advertising value for the reason that they are commonly unread. We have every reason to believe that the magazine which we distribute is eagerly sought for by our policyholders and that its contents are read by all members of the family. It has been our particular aim in this magazine to adapt it to the educational attainments of our readers. In order to meet the various racial strata the magazine is published in ten languages. Articles contained in the magazine are purposely short and written in a popular style. The illustrations both on the cover pages and in the text have been selected with a view to their value as object lessons. Frequently the instruction in hygiene which we wish to impart has been conveyed in the shape of a story.

May I burden you for a few moments with a list of some of the articles which we have published in order that I may convey to you our manner of approach?—

A short article on "School Children and Their Needs" gave examples of meals best adapted for children.

"Johnnie's Shoes" told in story form the disobedience of a boy in not following his mother's suggestion to change his wet shoes. The resulting cold and subsequent pneumonia were pointed to as a warning against such disobedience.

"Some Books to Buy for the Children for Christmas" gave a carefully selected list of juvenile publications.

"Fathers and Sons" was an appeal to parents to ascertain what was in the hearts and minds of their children, and to try and enter into their lives more thoroughly.

"Our Glorious Fourth" given in story form, advocated a safe and sane Fourth of July. In connection with this story the Company offered cash prizes for the best description of a safe and sane Fourth, written by a boy or girl who was a policyholder of the Company.

"How Johnnie Spent His Summer" was a story describing a boy's activities developing a vegetable garden.

"Ten Commandments of Spotless Town" gave instructions to the children for the preservation of the beauty of the cities and towns in which they live. Here, too, cash prizes were offered for actual work in the above direction done by boys and girls.

Many other articles on similar topics relating to health have appeared from time to time.

In addition to this magazine the Company has published special brochures and pamphlets directed to specific matters in connection with the health of children. One pamphlet entitled "Teeth, Tonsils and Adenoids" has had a circulation of nearly two million copies, and the demand for it still continues. This pamphlet has been distributed in the homes of policyholders and lays particular stress on the care of children's teeth and the necessity for the removal of adenoids and tonsils. The value of this pamphlet is indicated by the fact that parents have written us that until the booklet came into their hands they were unaware of the troubles from which their children might be suffering. Subsequent visits to their physicians brought out the fact that in many instances adenoids were the cause of the difficulty, and these were then removed.

Another pamphlet which the company has issued is one entitled "The Child." Primarily, it is intended to teach the mother how to care for her infant. Subsequent chapters, however, deal with the care of older children, particularly those of school age. The book describes in simple terms the best and most wholesome foods for children and the illnesses to which children are liable. It goes without saying that the booklet lays particular stress upon the necessity of having competent medical advice in case of illness.

We believe, however, that the most important work which we have done in the attempt to educate school children in hygiene is the Health and Happiness League. Admission to this League is dependent upon the signing of a pledge by the child, who is a policyholder of the Company. When this pledge is received by us a certificate of membership is awarded and a League button presented to the member. The pledge indicates the purposes of the League. The child who subscribes to the pledge among other things promises:

1. To do all in his power to preserve his own bodily health;
2. To destroy every house-fly he possibly can;
3. Not to throw rubbish in the streets;
4. Not to spit upon the public streets or in public places;
5. Not to permit any rude or offensive word to pass his mouth, even when provoked, and
6. To keep himself clean and to try to do every kind act that he can.

Only children who have become members of the Health and Happiness League are permitted to enter in contests for prizes which we award. These prizes, as stated above, are given for essays written by the children. It has been very gratifying to us to learn that both the League and the subjects assigned for prize essays have been considered of sufficient value by school teachers throughout the United States to warrant them in using the competitions for class instruction. Instead of regular class composition and essay work, teachers have substituted our prize essays and permitted their children to write these essays as part of their class work. We have attempted as far as possible to combine the theoretical with the practical. The essays, as a rule, have been descriptive of something actually done by children along the lines of hygiene. I have spoken above of the prizes for essays describing vegetable gardens grown and cared for by children, the best plans for a safe and sane Fourth, and what each member can do to assist in the city-cleaning campaign. In addition to these, we have offered prizes for essays on "How to Prevent Fire," on "Outdoor Sports," "Flower Growing," "The Right Attitude in Home Life," "Good and Bad Milk," "How to Avoid Accidents," etc. The essays presented by the children in many instances show considerable knowledge and much interest in the tasks assigned to them.

During the past summer we have instituted a rather novel method of bringing the children together in various points throughout the United States. Outings and pageants have been arranged to which the children are invited. Sports of various kinds are arranged for their entertainment, and amusement and prizes are offered for the winners. In these contests only the members of the Health and Happiness League are permitted to participate. Our idea in limiting these contests of members of the League is to inculcate in the minds of the boys and girls the idea that membership is something to be desired and that the pledges which the children are required to sign should play an important part in their lives.

We believe that the possibilities of the Health and Happiness League are many. As yet the organization has not crystallized sufficiently to bring the boys and girls together in groups in their respective communities. This we believe to be the work of the future and we are at present engaged in mapping out plans to bring about such an organization. To keep the interest of our members it will be necessary to give them a definite program of work not as individuals necessarily, but as groups. We hope through the medium of the League to arouse their interest in civic matters pertaining to health and cleanliness and to develop a spirit of mutual helpfulness among the members which shall benefit not only themselves but their parents and others as well. We believe it possible to make an appeal to the average boy and girl which will guide

them in directions of usefulness, cleanliness of body and thought and in service to others. The fact that this is done by an insurance company in which the members are policyholders gives at once a point of contact which it is difficult to find in other ways. Agents of the Company visit the homes of these children practically every week, and in this way we have the machinery to get into ready touch with the children and to bring to their notice and attention things we desire them to do.

While the bearing on the subject of this paper is somewhat indirect, yet mention should be made here of the visiting nurse service which we extend to our industrial policyholders. We have found in our experience that a large percentage of the patients whom the nurses care for are children of school age. I need not say here that the visiting nurse service as it has developed in the United States does more than merely curative work. Primarily, the efforts and activities of the nurse are educational. In the care which she gives to the children and to their parents, the opportunity is given to her to teach the principles of sanitation and hygiene. Many valuable lessons would not be learned were it not for the presence of the nurse and the instruction which she gives.

In the time allotted to me it has not been possible to do more than touch upon the various activities in which we are engaged to educate school children in hygiene. I hope, however, that enough has been indicated to you to make you realize that the campaign of education in which we are engaged should in due time produce distinct results. If, as a result of our efforts, we can feel that we have been instrumental in making boys and girls grow up to be better citizens, better fitted to take their places in community life, better equipped physically and mentally to engage in the business or professional pursuits which they will eventually take up, we shall rejoice in the thought that our campaign has not been in vain.

CLINICAL DEPARTMENT.

Conducted by A. H. RING, M.D.

Case 9—D. Diagnosis: Morphomania.

There is perhaps no type of patient who presents more difficulties, both to the family and to the physician, and also few for whom more can be accomplished provided the right conditions and the family's co-operation can be secured, so far as immediate results are concerned. The end results, however, are not so encouraging, for we are told by authorities that not more than 10 per cent stay cured.

We must distinguish at the outset between morphenism and morphomania, though the line between the two is frequently not so clear as some authors would have us think. The term morphenism should be applied to those who are for practical purposes sane apart from their unwarranted use of opium, or its derivatives. Morphomania should be used only for those who have developed mania, whether because of the drug or during its use but because of other cause. The distinction is after all simply of use in epitomizing the leading symptoms, since it is now clear that both the continuance of the narcotic habit and mania is based upon the failure of the body cells to eliminate poisons; i. e., they are both toxæmias and the kind and degree of mental symptoms which may be produced in either case is dependent upon the degree of stability of the particular nervous organization. Our patient had developed this toxæmia to a marked degree and she had beside a so-called highly organized nervous temperament. She was musical, artistic, and poetical; had a pleasant, convincing manner, and a ready vocabulary, but on the whole her life had been pleasure-loving, unproductive and self-indulgent. Gifted by nature, she had enough of "this world's goods" to have what she wanted, and like many of this type, believed herself to be much misunderstood and maltreated. This is just the type which finds bodily comfort and mental stimulus in a narcotic.

Had the removal of the morphine been the only problem presented by this patient and had she been anxious to co-operate in her cure, the riddle would not have been difficult of solution, but in my experience such an ideal situation is rare. More often the drug addict has deluded himself into the belief that if the pain could be cured he could stop the drug voluntarily, not realizing, or at least not acknowledging, that the drug has so lowered the threshold of consciousness to painful stimuli that his tolerance to pain has been greatly diminished. In the erratic and perverted mental state which most of these patients present it is impossible to reason with

them. Their critique and power of logical deduction are anæsthetic, they are usually vivacious and possess high animal spirits, the ethical nature is numbed, and they are hence commonly untruthful and morally unstable. Of course, the degree to which these various traits develop will depend upon the neural ground work of the particular case, but they are fairly constant though rarely acknowledged by the patient.

In addition to all of these the patient insisted that morphia had nothing to do with her sickness. Her extreme mental and motor restlessness, coupled with her antagonism, made treatment very difficult, and it was necessary to procure Inebriate Drug Commitment papers from the court in order to proceed properly. This is a step which should be more often taken than it is. It is difficult to convince many families that these patients are not mentally responsible, but such is too frequently the fact.

In this case the gradual reduction method was adopted at first because of the extreme depletion. She was taking about four grains of morphia in twenty-four hours. Following the usual custom, her physiological demand i. e., just that amount which will satisfy the craving, was found to be about two grains a day, and here she was held for five weeks in an attempt to build her up. During this time she was given prolonged warm bath, (she refused to get into the electric cabinet, which is really much better) and forced feeding. She was an excessive cigarette smoker, and this was permitted in moderation, (a box a day). Strychnia sulph. one-sixtieth was administered hypodermatically t. i. d. Her mental state grew rapidly into an active mania. She refused to eat except most unusual things, and at unreasonable times, and only if she could have champagne with the meals. Her diarrhea, which she had had for years, persisted. She did not gain, but on the contrary lost ground, and after five weeks it was decided to withdraw the morphia and substitute hyoscin. This was done without any annoyance to the patient, but her mania deepened. She refused food, and tube feeding was resorted to for about a week, after which she was willing to eat. Nature continued to do its own catharsis, which is a most important part of the treatment of drug habits, and usually calls for active purgatives. I have found nothing which relieves the muscle pains and restlessness of morphine habitués like purgatives, hot baths and hyoscin, separately or together.

One of the most annoying features of this case was the rapid heart action, the pulse staying between 100 and 130 and very tumultuous. This was purely a nervous error, the muscle and valves being or appearing intact. Since treating this case there has been published an excellent book on the treatment of narcotic

drug diseases by Dr. George E. Pettey. In it he discusses at length the importance of the care of the heart in the removal of morphia and says that in his experience (over 3,000 cases) no drug has proved so useful as Spartein sulphate. He thinks that the reason the drug has been so little used is that it has been given in too small a dose. He advises from one to two grains by mouth or hypodermatically every six hours, and says that it is the best of all the heart tonics, and has the advantage of being a non-irritating diuretic, thus further aiding elimination. He believes in rapid withdrawal of the morphia with active catharcis and hyoscin and hot baths, but warns against the careless use of hyoscin, as some persons have an idiosyncrasy for the drug; he begins with a 200th every hour or two till he gauges the patient's tolerance.

Our patient's delirium gradually improved so that after about three months she was comparatively normal, but her unreasonableness has never entirely cleared up. She also continues to have some insomnia and tachycardia. After eight months she returned home and so far (five months) has remained abstinent, but has again taken up cigarettes.

This was an unusually difficult case, and though the results justified the means there was a time when one was tempted to give up the fight because of the desperate condition of the patient. There are few conditions which require more courage and persistence in the treatment than morphomania.

Case 9—D for Diagnosis:—

The patient is a man of about forty-five. His paternal grandfather, though a very successful business man, was peculiar and eccentric—over scrupulous about his clothes, imported his shoes from Paris, etc. His father, a very bumptious, important little man, and a good deal of a dandy, has never done any business, being content to live upon his inheritance. He has always been sickly, though now well preserved and in advanced years. His mother was a kindly woman though not well, and addicted to alcohol. The patient is one of three children. The other two appear normal enough but are odd.

The patient was a sickly boy; finished preparatory school and started at college but dropped out during the first year. Went to work for a short time, but in less than a year his mother dying, he went home and has not attempted to do anything remunerative since. This was over twenty years ago. For a long time he has been subject to periods of mental depression. Ten years ago he had a severe nervous breakdown for which he was placed in a private hospital. At this time he is said to have been suicidal. After eight months he recovered and went abroad, where he is said to have been unduly extravagant. Upon his return, things not

having gone to his liking, he became suddenly ill and thought he had been poisoned. He was committed to a State Hospital but was shortly removed to a private hospital and later to private family care. About this time he began to have periods of inebriety and being restrained during a lapse, he escaped for some days and was finally found in a New York hospital. From here he was taken to another private hospital where he remained for over a year, making a good recovery. Appearing trustworthy, he was permitted to go to the city, where he had another spree; and three months later he repeated this. Then a remission came in which he was well enough to do a little clerical work, but upon another severe lapse he was formally committed for inebriety. At this time he was apathetic, somewhat retarded, and mildly deluded. He insists that it is only when he gets blue and run down that he drinks. He does not know that he also has periods of mild exhilaration.

I saw him first last summer. At that time he was emaciated and rather weak so that he stayed in bed. The skin was muddy, the deep reflexes all exaggerated and he had a much dilated heart. He smoked incessantly and had little ambition to help himself. However, he rapidly improved under appropriate treatment, and was doing well when he made the acquaintance of two men who drank and smoked much. He was observed to be more quiet and secretive for a few days, then disappeared and next day returned fairly sober, but with a scalp wound.

What is the matter with this man, and how would you treat him?

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the *GAZETTE* only and preferably to be typewritten—personal and news items should be sent to *THE NEW ENGLAND MEDICAL GAZETTE*, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business should be sent to the Business Manager, 80 East Concord Street, Boston, Mass.

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ARTHUR H. RING, M. D., Editor Clinical Department

THE ATTITUDE OF THE PROFESSION TOWARD ALCOHOL.

In any question pertaining to the welfare of the human body the physician becomes the high priest, and his word and attitude goes far toward moulding public opinion upon that question.

The physician's attitude has ever been on the side of physical betterment for the race in so far as his knowledge permitted him to go. True, he has erred many times through tradition, prejudice, and ignorance, but a persistent determination to reach rock-bottom truth has ever characterized his actions.

There is one subject today upon which his attitude has much to do with the physical welfare, the sanity, and even the normal perpetuity of the human race. That subject is alcohol. Until recently his attitude upon this subject has been clouded by a mist of verbiage in trying to say whether alcohol was a food or a poison. That question can now be swept aside entirely in the practical determination of the matter. If the eating of frankforts were adequately proven to cause physical, mental, and moral deterioration, defective progeny, and a numerical death rate in excess of typhoid fever, what would it avail to prove that frankforts were a food? It would be a food like the Scotchman's fiddle with a "heavenly croak." Thanks to our painstaking pathologists, laboratory workers, chemists, clinicians and specialists, we have at last reached some semblance of unanimity upon the question of alcohol.

The questions which now seem settled are: (1) That alcohol has no place in medicine. (2) That whether food or poison, its consumption is productive of physical and mental degeneracy. (3) That its effect upon the higher moral centres is the one great productive factor in criminality. (4) That its baneful influences are inherited to the extent of producing mental defectives, idiots, imbeciles, epileptics, and lunatics. With a practical unanimity of opinion upon these four points, what is the duty of the medical profession towards alcohol?

True, there are some men yet in the profession who will question the statement that alcohol has no place in medicine, but it is up to them to show what that place is. Certainly its old time

"habitat" as a "stimulant" has been cleaned out; utterly routed. Instead of being a preventive of *any* disease, statistics and the lantern slides show conclusively it is the best possible "persuader" of *all* diseases because it lowers the opsonic index and the body resistance. That it hastens a fatal termination of all brain, pulmonary, kidney, liver, circulatory diseases is equally proven.

Where, then, has it a place in medicine except to occupy the nurse in rubbing it on the outside of the body? Another misunderstood phase of the alcohol question seems also of immediate solution; that is, the damaging effects of even *small* doses of alcohol. As guardians of the public health there is but one attitude for the medical profession to take upon this question of alcohol, that is, its prohibitive use. No compromise will effect the desired end.

In an experimental study of racial degeneracy in mammals treated by alcohol, Stockhard says in the "Archives of Internal Medicine" October 12, 1912, that alcohol acts directly on the germ cells of animals to a sufficient degree to render them incapable of producing normal offspring. He has demonstrated that alcoholizing pregnant females acts upon the embryo so as to modify its structures. His studies and experiments show to a surprising degree that very small doses of alcohol produce demonstrable effects upon the germ cells. In experimenting upon guinea pigs which had been alcoholized he found that out of fifty-five matings but forty-two pregnancies reached full term, and of these but seven young survived, of which five were unusually small. He tested the effects of alcohol upon the spermatozoa of the males who mated with normal females. Out of twenty-four such matings fourteen aborted. There were five stillborn litters and five litters totalizing but twelve young,—a pretty sorry showing for the fruitful guinea pig. Four matings of normal males with alcoholized females showed three living litters. Two of these had but one young each, and the third was a premature delivery of three young, all of which died. His controls showed nine matings with nine living litters, totaling seventeen young, all of which survived as vigorous guinea pigs. It is highly interesting to note that all of the guinea pigs which died of alcoholic parents succumbed in convulsions.

In the light of these experiments, is it at all surprising that alcoholic fathers and mothers are bringing forth defective children which become our burdens in the asylums, poor houses, jails, penitentiaries and execution chambers?

A word as to the death rate. Phelps, the life insurance actuary and an expert in mortality statistics, places the number of deaths from alcoholism in the registered area of the United States at 38,288, and the number of deaths in the unregistered area at 27,609, making a total of preventable deaths 65,897, all due to

alcoholism. Dr. Rankin, Secretary of the State Board of Health of North Carolina, in his bulletin of December says that liquor is to blame for one out of twelve adult deaths in the United States. That it is to blame for one out of ten male deaths; that it is to blame for twice as many deaths per year as typhoid fever; that it is to blame for more deaths in four years than occurred during the four years of the Civil War. In other words, we are sustaining a Civil War death rate every four years just from alcohol alone. If that be true what is our great fighting machine, "preventive medicine," doing that its guns are not trailed upon this great enemy of the human race, a greater destroyer of life than war?

All of our leading alienists are of one mind, namely, that alcohol is the greatest single independent cause of insanity.

There is still another side of this alcohol question, and perhaps the most important side, and that is its effect upon the higher moral centres. Society can only exist by virtue of a full and normal recognition on the part of each individual of the mutual rights of one another. When a large number of individuals through the influence of a drug environment or heredity begin to have a lessening of the perceptions of right and wrong then the real foundations of society are in jeopardy. One of the early effects of alcohol upon the novice is a lessening of that appreciation of the right relation of things which makes him a normal being. He then commits errors of judgment, has a lessening of the will power, commits infractions of social laws, disregards authority, and ultimately commits crime. Then come in his wake the alcoholic offspring, who are born with a warped judgment, and a perverted moral sense. Thus is the criminal class created.

The use, either moderately or in excess, of alcohol is no longer a question of temperance or of sentiment. It is no longer a question of personal privilege. It is a question of social economics. There is no question of sentiment or personal privilege in allowing the leprous patient to mingle with normal beings, because his presence there is a menace. A man cannot claim the personal privilege of taking alcohol when by so doing he runs the risk of becoming a greater menace to the public than a leprous patient would be. It is the duty of the profession to begin a campaign of education with that end in view:—to give the public a full knowledge backed by the endorsement of a united profession that alcohol even in moderate doses will produce cell irritation, in proportion to its continued use, which ultimately for the body, will produce increased blood pressure, impairment of the arterioles, deranged function, destruction of tissues, premature death; for the brain perverted judgment, moral obliquity, diminished will power, crime; for the offspring, physical instability, mental deficiency, idiocy, epilepsy, insanity; for society at large, the needless expenditure of millions of money;

for hospitals, asylums, poor houses, potters' fields, criminal courts, policemen, jails, penitentiaries, executioners; and, finally, poverty, misery, and a hell on earth for millions who might find it a heaven.

SOCIETIES.

THE CONNECTICUT HOMŒOPATHIC MEDICAL SOCIETY.

The Connecticut Homœopathic Medical Society has arranged its sixty-third semi-annual meeting for Tuesday, October 21, at the Winthrop Hotel, Meriden, at eleven o'clock. Besides the work of members there will be an address by Dr. J. B. Garrison, of New York, discussing the present aspects and status of organized Homœopathy, and an essay by Dr. S. H. Blodgett, of Boston, on the manifestation of certain abnormal conditions of the pancreas. An itemized program will be announced later.

HOMŒOPATHIC MEDICAL OF THE COUNTY OF KINGS.

The four hundred and sixty-eighth meeting of the Homœopathic Medical Society of the County of Kings was held at the Medical Library Building, Brooklyn, on September 9. In the absence of the President, Dr. Roy Upham, and the Vice-President, Dr. John F. Rankin, Dr. Orlando S. Ritch presided. The Bureau of Diseases of the Chest, Dr. M. Louise Turton, chairman, presented two papers. Dr. Mary E. Richards read a paper entitled: "A Case of Dilatation of the Heart." Dr. George H. Ding, read a paper entitled "A Case of Pneumonia Successfully Treated with Antimonium Tartaricum." These were discussed by Dr. Walter S. Rink, Dr. T. C. Wiggins, and Dr. Augustus Von der Luhe. Dr. Wiggins spoke of the method of treatment known by the name of Spondylotherapy, which is being studied by Dr. Abrams of Chicago. The method is a percussion of the spinal processes of the vertebra, the percussion being made by a small, hard rubber hammer. Rapid percussion will contract the blood vessels, slow percussion will dilate them. Percussion over the seventh cervical vertebra will have that action upon the heart. The Bureau of Homœopathy and Materia Medica, Dr. H. D. Schenck, chairman, presented four short papers, one by Dr. W. H. Aten, "Chininum Sulph. in Auditory Vertigo," and three by Dr. W. H. Freeman, "Lac Caninum in Follicular Tonsillitis," "Natrum Sulph. in Chronic Nasopharyngeal Catarrh," and "Natrum Sulph. in Chronic Catarrhal Colitis." These papers were discussed by Dr. Alton G. Warner, Dr. A. Von der Luhe, Dr. Schenck, Dr. Aten, Dr. Ding, Dr. Edward Chapin, Dr. J. W. Fox, Dr. W. L. Love, Dr. R. L. Wood.

L. D. Broughton, Secretary.

BOOK REVIEWS.

Malaria. By Graham E. Henson, M.D., with an introduction by Charles C. Bass, M.D., St. Louis, C. V. Mosby Co., 1913. Cloth bound. 190 pages. Price \$2.50 net.

The book begins with a disappointment, because when a distinguished man writes an introduction to the work of a colleague the reader expects to get a learned discourse on the subject at large or at least on certain aspects of the subject. Dr. Bass, by his successful cultivation of the malarial plasmodia, has won immortal fame. It is natural that those interested in the subject of malaria should be eager to hear the ideas and opinions which such an introduction gave opportunity for expression. To anyone who is prompted to buy this book because of the advertised introduction by Dr. Bass a bitter disappointment is in store. The introduction does not fill a page and its contents are the same as occur in the opening paragraphs of the numerous articles on malaria found in medical journals throughout the year. Dr. Bass covers what the author says in the preface, and then throws roses at Dr. Henson in those same terms which one hears in medical meetings with which those who are asked to discuss a paper begin their remarks.—The reviewer dwells on the disappointment of this introduction, because as advertised in

the journals it gives the impression that the introduction by Dr. Bass is an addition to the book. We eagerly await the publications of this eminent professor of New Orleans, but we dislike to see his name used as a decoy.

The book itself offers a compact consideration of the etiology, pathology, diagnosis, prophylaxis and treatment of malaria, and will be of value to physicians practicing in malarial districts who wish to become familiar with the disease. The author dwells very briefly on the historical side of the subject, falling into some of the usual errors which occur with regularity among authors who give historical introductions not based on original sources. Torti is referred to as usual as writing "his paper" in 1753. (The paper consists of a volume of many pages, published in 1712. Torti lived from 1658-1741.)

Dr. Henson gives very clear definitions of terms used in discussing the morphology of the plasmodium, and puts forth a consideration of the life of the parasite in a way which will be both comprehensive and interesting to those not versed in the terms of parasitology. The etiology of the disease is well portrayed, and a table for differentiating the four types of plasmodia will be found useful for laboratory reference. Prophylaxis is gone into in a very practical way, this being the strongest part of the book, and by far the most original. In dealing with the diagnosis and treatment the author takes up briefly what Craig, Deaderick and Ziemann devote many pages to. In fact, we are forced to remark that we see a reflection of the much more complete works of Craig and Deaderick in this little volume than any originality on the part of the author, and we also notice an absence of any reference to the recent researches of Rowley-Lawson, Brown and others.

Henson goes into the treatment briefly, giving us nothing new or even recent. He remarks: "the enormous doses of the drug that have been advocated by some, in even recent years, have never been found necessary, and it can safely be stated, without fear of successful contradiction, that a fever that will not respond to thirty grains given within twenty-four hours in divided doses is not of malarial origin, or at least is accompanied by some complicating process." His whole dealing with the treatment is so narrow, and represents so little familiarity with the writings of Manson, Nocht, Rosenbach, Plehn, Ziemann and others that it detracts from the rest of the book. As a true follower of the Galenic school of medicine he advises a routine purge of 5 grains of calomel, followed in a few hours by a saline. He uses the following shot gun combination in convalescence, without offering any excuse for so doing;

Quinine sulphatis one ounce and a half
 Ferri reducti one half ounce
 Strychninæ sulphatis one grain
 Arseni trioxidi one half grain
 Misce et fiant capsulæ No. XXX
 Sig:—Take one three (or four) times a day.

In spite of this irrational and utterly unscientific procedure, the author has come to the fractional dosage of quinine at regular intervals, (5 grains every four hours).

Except for certain tabulations, condensed definitions and compact summaries the book is hardly justified in the American market where one can get the much superior works of either Craig or Deaderick, and which, in spite of being earlier publications, are practically more up to date.

C. W.

A Compound on Bacteriology, including Animal Parasites, by Robert L. Pitfield, M.D., Pathologist to the Germantown Hospital; Late Demonstrator of Bacteriology at the Medico-Chirurgical College, Philadelphia; Visiting Physician to St. Timothy's Hospital and Chestnut Hill Hospital, Philadelphia. 2nd. Edition with 4 Plates and 85 other illustrations: P. Blakeston's Son & co., Philadelphia. Price \$1.00 net.

This is the latest addition to the series of Quiz-compendis. It consists of 270 pages, an index and the illustrations above noted.—The very nature of

the subject with which this volume deals lends itself readily to a complete presentation of the subject in relatively small space. The chapter on Immunity is especially well written; a very full elucidation with illustration of Ehrlich's side-chain theory is incorporated into this chapter. The technic of staining of bacteria together with methods histological, and cultural are well presented. This is followed by the consideration of the different bacteria. These are considered under the usual heads: Name. Morphology and Stains; Oxygen Requirements: Temperature and Vital Resistance; Chemical Activities; Cultures; Habitat; Pathogenesis; Immunity. A very readable and valuable addition to the quiz compend field.—

PERSONAL AND GENERAL ITEMS.

Dr. Orren B. Sanders of Boston, was thrown from his automobile on September 24, as the result of a collision, and was so badly injured that he died at the Quincy, Massachusetts, Hospital the following day.

Dr. Sanders was fifty-seven years old, and since 1905 had lectured at Boston University School of Medicine,—of which he was a graduate of the class of 1879,—on Venereal Diseases.

Dr. Ida F. Barnes (B. U. S. M. 1893) formerly of Somerville, has removed from Attleboro, Massachusetts, to 16 Chestnut St., Peabody, Massachusetts.

Dr. Nathaniel W. Emerson has removed from 244 Newbury Street to 295 Commonwealth Ave., Boston. After a long term of service as Professor of Surgical Gynæcology in Boston University School of Medicine, Dr. Emerson has been made Emeritus Professor and has retired from lectureship.

Dr. J. Arnold Rockwell, Jr., of Cambridge, Lecturer at Boston University School of Medicine on Diseases of the Stomach and Intestines, has been appointed Medical Adviser at the Massachusetts Institute of Technology.

Dr. G. B. B. Larkeque, formerly of Athol, Massachusetts, is now located at Rio Hache, Colombia, South America.

Dr. Edwin M. Kent, class of 1909 B. U. S. M., now in medical missionary service at Changli Hospital, Changli, North China, writes that work there is going on finely and that the hospital has an average of about twenty in-patients and about ten or fifteen in the daily out-patient department.

Dr. James F. Cooper, class of 1910 B. U. S. M., was married on September 17 to Miss Ruth I. Quimby of Dorchester, and is to go out to China as a medical missionary under the American Board of Commissioners for Foreign Missions.

Dr. Frank C. Richardson has removed his office from 244 Newbury St. to 295 Commonwealth Ave., Boston.

Dr. Wilson F. Phillips (class of 1898 B. U. S. M.) of Dorchester has been appointed assistant in the course in Theory and Practice, under Dr. Sutherland, succeeding Dr. Geo. H. Wilkins, retired. Dr. Phillips will give a course of lectures on Infectious Diseases.

FOR RENT.—An unusual opportunity for a young doctor to rent the office of an old established physician in a beautiful, growing, New England city. Address "F. D. W.", c/o N. E. Medical Gazette, 80 East Concord St., Boston.

Dr. John H. Payne has removed his office from the Pierce Building, Copley Square, to 352 Commonwealth Avenue, Boston.

Dr. Chas. A. Powell of the 1913 graduating class of B. U. S. M., left the East on September 27, with Mrs. Powell, for the Pacific Coast en route for the mission field in China. He expects to sail from Vancouver for Shanghai, then proceed to Nanking. The first year will be spent in the study of the Chinese language and in work in the Christian Mission Hospital in Nanking. At the end of the year he expects to be stationed a hundred and fifty miles into the interior, to begin medical work at a new post, Chao Hsien, where he is engaged to remain for six years.

Dr. Henry W. Cain, class of 1890 B.U.S.M., has removed from Upton, Massachusetts, to Falmouth, Nova Scotia.

Dr. Arnold W. Moore of the 1913 graduating class of B. U. S. M., is practicing in Concord, New Hampshire.

Practice for sale.—For sale in a town near Boston, population over 10,000, a good location; low rent. Present occupant has the position of medical examiner. Price reasonable. Address "A.B.S.," c/o New England Medical Gazette, 422 Columbia Road, Dorchester, Mass.

BOSTON UNIVERSITY SCHOOL OF MEDICINE.

The forty-second annual session of the School opened on Thursday, October 2, at 10 o'clock, with the largest registration in the Freshman class since 1898. The enrollment includes students from Cuba, South America, West Indies, England, Italy, Greece, Russia and China.

The many friends of the School will be interested in the progress made in raising the permanent Endowment Fund upon which the Committee has been at work. As is well known, the Trustees of Boston University have promised \$50,000 for this fund when the School shall have raised an equal amount, and the indications are that the Committee will be successful in raising the necessary amount before January, 1914, if the friends and alumni of the School continue their interest and loyal support. The Finance Committee will gratefully appreciate any donations made to the General Endowment Fund of Boston University School of Medicine. These should be sent to J. Emmons Briggs, M.D., Treasurer of Finance Committee, 477 Beacon Street, Boston.

Extensive preparations are being made for a *Bazaar and Fete* for the benefit of the Endowment Fund of the School to be held on Thursday, Friday and Saturday, November 13, 14 and 15, at the Copley-Plaza Hotel, Boston, under the direction of Mrs. Stanley T. Clemens; Dr. George B. Rice, Chairman of Bazaar Committee. Many attractive features are being planned, and it is hoped that the effort will yield large returns.

The ball-room foyer and the whole of the state suite in the hotel have been engaged for the three days, and the following program is planned:—

Thursday, November 13, luncheon 11.30 to 2; bridge whist, 3 to 5; afternoon tea, 3 to 6; chafing-dish supper, 6.30; cabaret show, 8.30.

Friday, luncheon 11.30 to 2; bridge whist, 3 to 5; afternoon tea, 3 to 6; supper, 6.30; Mother Goose Pageant in costume, 8.30, one hundred and thirty in the cast. Following the pageant, a grand ball.

Saturday, luncheon, 11.30 to 2; musicale, with noted professional talent, at 3.30; tea, 3 to 6. 6.30 table d'hote dinner, Bombay style, and café chantant.

One of the special features of the Bazaar will be the children's department, in charge of Dr. Mary E. Mosher, Mrs. Frederick L. Emerson and Mrs. Walter J. Graves, and conducted by ladies of Roxbury, Dorchester, Jamaica Plain and West Roxbury. This department will include a creche where children may be cared for by the hour, also suitably amused and entertained.

Dr. Willard F. Paul is to have a country store. Cities and towns have been organized to take charge of special departments of the Bazaar,—Newton, Auburndale and Wellesley for household supplies; Natick, Wollaston and Quincy, pin cushions; Framingham, Marlboro, Southboro, Westboro,

Northboro, Middleboro and Worcester, a men's department. Dedham and neighboring towns have charge of the candy tables; Melrose, Wakefield, Reading and Medford, infants' wear; Winchester, handmade neckwear and handkerchiefs. Arlington, under direction of Dr. Barbara T. Ring, is to have a pottery table, Chelsea an apron table, Cohasset,—Dr. H. E. Fernald, chairman,—a department of handmade underwear.

Dr. Clara E. Gary is to have charge of the Boston fancy goods table; Dr. Lucy Appleton, the Boston household table; Dr. Eliza B. Cahill, bags and sofa pillows; Dr. Eliza T. Ransom, art table. New Bedford will have a basket table, under the direction of Mrs. Charles R. Hunt and Mrs. W. H. Thayer; Salem a linen table. Mrs. George R. Southwick will have charge of a table for cake and confections.

The co-operation of the friends and alumni of the School is earnestly hoped for to the end that the Bazaar may be a success in every respect.

Dr. Herman Ulrich (1911), house physician at the Robert Dawson Evans Memorial, is to give a course on Hematology and Urinary Sediments, to the Junior class, under the department of Pathology.

The highest rank obtained by any candidate at the July examinations by the Massachusetts State Board of Registration in Medicine was obtained by a graduate of B. U. S. M. The School is charged with only 3.3 per cent of failures before all the State Boards of the country, the average of other medical schools being 18 per cent. Boston University's record in this respect is better than all the other medical schools of the country.

INTERNATIONAL HOMŒOPATHY IN COUNCIL.

The Ghent Meeting, August, 1913.

BY GEORGE BURFORD, M.D., London, England.

The latest page in International Homœopathic History, written at the Ghent Council, is a colored and resplendent record full of human interest. There in Assembly were the chief personalities who have been thinking and working to make Homœopathy a World-Homœopathy—something more living and moving than ever this great cause has known yet. The Prime Minister of Homœopathy and President of the Council, Doctor James H. McClelland, eager and resolute to be in the van, dowered the meeting with his inspiring spirit, although bodily illness inexorably chained him to his home. So also the homœopathic chief Secretary of State, Dr. John Preston Sutherland, animated the proceedings by his words of wisdom, though the claims of Boston and the duties of Denver retained his personality. But, alive and potent in the Council room were those leaders of men to whom the International Idea in Homœopathy has come as an inspiration. Courtly and dignified is the chairman of the assembly, Dr. Theophile Mende of Zurich, known all over the world as the trusted adviser of the great. Master of various languages, quick to grasp and generous to appreciate, Dr. Mende stands for progressive Homœopathy in Switzerland.

His right-hand supporter is that fervid and persuasive American spirit. Dr. Petrie Hoyle—erstwhile of San Francisco, now of London—busy in every European country in getting a move on for that homœopathic cause which is more to him than his life. Who does not know Petrie Hoyle? Let such make good the defect by looking him up, now in Berlin, now in St. Petersburg, now in Stockholm, but always busy about the dominant *motif* of his existence—Homœopathy. Associate Secretary is that accomplished and powerful mind Dr. Kranz-Busch of Wiesbaden, whose genius embraces esperanto as a universal language, peace as a universal relation, and Homœopathy as universalized medical practice. The delegates sit as representatives from most countries where Homœopathy is a power. England sends Dr. Hawkes of Liverpool, the grand old man of British Homœopathy, sagacious in council, and rich in homœopathic achievement. (His latest success is to obtain permission for the British Homœopathic Congress to meet in September in the Medical School buildings of the Liverpool University). His active and enthusiastic colleague, Dr. Edwin Neatby of London, much travelled and

many-sided, a specialist of renown, brought his experience in the formation of the London Ladies' Guild of Homœopathy to the service of the Council. The writer of this paper also represented Great Britain on this occasion: and present by invitation was Dr. Granville Hey, a rising surgeon in the homœopathic sphere in England, giving his Flemish colleagues excellent advice to establish a homœopathic hospital without delay. France had delegated Dr. Bernard Arnulphy of Paris to speak her voice at the Council table: and, one of the most cultivated men in the Assembly, Dr. Arnulphy created much appreciation by undertaking to interest the medical students of Paris, in their hours of relaxation, in the subject of Homœopathy.

Two of the delegates present were specially accredited by their respective governments to the International Council. First we mention Dr. Rafael Barrantes of Madrid, who addressing the Council in Spanish, took the Assembly by storm as an orator and produced a marked impression by his fire and fervor. Dr. Barrantes occupies a distinguished position in Madrid, and was the bearer of State credentials. So also was another of the great personages among the delegates—Dr. de Vasconcellos of Brazil, who took a leading part in the deliberations of the day. Dr. de Vasconcellos is a State official of considerable distinction, and it is a reproach to Homœopathy that such a personality of first importance has not sooner been discovered. Another Spanish physician of mark was there, not as a delegate but as a visitor—Dr. Cahis of Barcelona—whose original work on Toxins in dilution is attracting much attention. Dr. Joan Sole-Pla completed the category of representatives who had Spanish and Portuguese as their mother tongues: and, all considered, the Latin races were represented by as notable a body of men of light and leading as any cause could wish.

Time and space fail to allow the designation in deserved detail of Dr. Axell of Sweden, the model strenuous homœopathic pioneer: of Dr. Grouleff, also of Sweden, born fighter in the great cause; of Dr. Thorsen of Denmark, fresh from volunteer work in the Balkan wars, honored by a decoration at the hands of the King of Servia, and foremost in bringing about a new hospital in Copenhagen; of Dr. Samuel Van den Berghe, accomplished, ubiquitous, the chief among our Belgian hosts, and the flag-bearer of Homœopathy in Ghent: of Dr. Tuinzing, who represented Holland in the conclave and who deftly interwove the three official languages into his brilliant speech: of Dr. Keghel and Dr. Coomans, the latter of Bruges, and orator of the assembly: of these delegates, and of other non-delegated physicians, notably Dr. Perkins of Princeton, whose speech was International in character, but American in point—their work will amply repay full study in the official records.

Such was the personnel of the Council, and most notable were its widely representative character and its high consultative power. Remarkable, too, was the sustained and increasing interest dominating its proceedings. The Executive had scheduled four sessions; but eight would have been no superfluity; the end of proceeding came more as an unwelcome time-closure than the natural termination of debate. It was the sheer force of deeds recounted by their doers, of Homœopathy as an inspiration, that held with increasing power the Council from first to last. Tension was high: surprises were constantly being sprung on a stimulating audience. It fell to Dr. Axell of Sweden to describe the state of Homœopathy in his country and the efforts for its extension and development. The recount was not inspiring in nature: only five homœopathic physicians in the whole country, an actively antagonistic professional feeling, and threatened restrictive Government legislation. Now came the anticlimax. "What is being done to stem this opposition?" The speaker produced an array of pamphlets, some fairly bulky. "I have written these myself from time to time, and circulated them freely." More was to follow. "Have you not also written and published a standard *Materia Medica* in Swedish for the use of physicians?" "Yes," was the response. And, knowing something of the pleasant pastime of writing and publishing, the question followed, "Who has financed all this propagandism, and what has it cost?" The answer came only on pressure, "I have been responsible for it myself—it has cost me about £1,000."

Of such human interest were the Council proceedings compact. Den-

mark, another Scandinavian country, was recounting in the person of its representative, Dr. Thorsen, the history of a new homœopathic hospital just opened at Copenhagen. For twenty years this has been the fixed object of the Danish homœopathic physicians—to have a hospital of their own in their capital. They have during this period worked for it, collected funds in and out of season for it, planned and arranged for it, and with any encouragement from outside have finally achieved their object. Such stories of grim determination, of fighting uphill contests without friends, and yet without fear, came unexpectedly and spontaneously from speaker after speaker, until curious expectation heralded the remarks of each delegate as he rose in his place. Almost all had something unknown or unsuspected in homœopathic history to relate: and this real first-hand dealing with things that count kept the interest of the assembly at standard pitch.

To give necessary coherence to the deliberations of Council, an introductory address was given by the Vice-President specifying six cardinal points requiring notice by each delegate:—

Concerted action for more physicians.

The preparation of authoritative information for the educated laity.

Scientific statement for the profession.

Organized research into homœopathic problems.

The multiplication and maintenance of public homœopathic institutions.

The establishment of a statistical department.

The delegates discussed these and other matters from the point of view of each separate country's requirements

An important innovation, introduced at the London International Congress, was the delivery of a public lecture on Homœopathy during the session of the Council, as part of its program. The invitation to the friends and adherents of Homœopathy was by card, and a well-attended drawing-room meeting, presided over by Baron d'Kerchove the Governor of the province, numbered some two hundred ladies and gentlemen as auditors. A powerful address, on the Statistical Results and the Public Homœopathic Institutions of the World and prepared by Dr. Petrie Hoyle, was delivered in French by Dr. de Coomans. The address was copiously illustrated by lantern slides, was listened to with breathless interest, and raised, as it was intended to raise, the question of a homœopathic hospital for Belgium. For in that country there is no homœopathic hospital. But our Belgian colleagues, having had World-Homœopathy introduced to them, are preparing a plan of campaign. Unlimited power to its elbow!

Of the intellectual digestion of the array of topics on the agenda paper; of the issues of debate on the numerous and various subjects considered: of the instructions given by the Council to the Executive for further work; of the new ideas that were welcomed and considered: of these and more topics of interest I understand the editor will give ample information in the next issue of the "*Gazette*."

Meanwhile let American colleagues rejoice that the Americanization of World-Homœopathy is proceeding apace; that the leaven of the International Council is mainly American, and that the Public Institutional establishments of Homœopathy in America constitute the most effective persuasive force in the Council's work. Whence, let American Homœopathy flourish, and God speed to her onward progress!!

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ORIGINAL COMMUNICATIONS.

THE AGE OF CREDENTIALS.

By DAVID W. WELLS, M.D., Boston, Mass.

By tacit assumption it becomes the duty of the annual orator, to review the progress of medicine during the year that has passed, to call attention to new triumphs in medical science, discoveries in etiology, pathology and therapeutics.

Though this paper touch somewhat lightly on these matters it must not be presumed that developments along these lines have been slower than in former years. Dr. Nowell's original work on carcinoma deserves first mention, and we all await with keen interest the report of the committee which is testing the therapeutic value of the serum.

This year has given us unmistakable evidence of the value of antityphoid vaccination. In the United States Army vaccination was begun in 1909 but not made compulsory until the last quarter of 1911. Previous to vaccination the lowest rate ever attained under sanitary measures alone was in 1906, when for each 1000 men there were 320 cases and 27 deaths, while for 1912, for each 1000 men there were 31 cases and 4.4 deaths.

Dr. McClintic, working in Montana, has discovered the cause of Rocky Mountain Fever to be a tick which infests the "Spotted Fever District," and inaugurated a plan for eradicating the pest by clearing the land and pasturing it to sheep. It is pathetic to relate that he contracted the disease and died—adding another name to the long list of medical martyrs.

Dr. Wright's experience* with the complement fixation test for gonorrhœa in one thousand cases at the Massachusetts General Hospital shows conclusively that this means of diagnosis is soon to take rank with the Wasserman for syphilis.

The House of Delegates of the American Medical Association has acted favorably upon the invitation of the American Institute of Homœopathy for a joint laboratory and clinical test of the truth

* Boston Medical and Surgical Journal Sept. 4, 1913.

of the homœopathic principle. They have voted to request the committee to submit a scientific proposition over their signatures. If this is carried out it ought to settle the question in the minds of all who are capable of weighing evidence, were it not for the recognized difficulty of establishing therapeutic verities.

Instead of reciting to you these achievements at greater length, your attention is asked to the study of the temper of mind which has taken possession of not only the medical fraternity but of the community at large.

In the days when we had a "West" a new comer to any community was always advised, if he had no title, to assume one, and so "Colonels," and "Judges" and "Doctors" were very much more numerous than common "Misters." As the country grows older people begin to discriminate between Colonels, Judges and Doctors, recognizing that in some cases the title carries with it guarantee of qualifications. This healthy skepticism of all unverified pretensions has greatly increased during recent years, and we are now passing through a period which may be called the Age of Credentials. This feeling is not in any case confined to a professional inquisition. We see it bearing fruit in the Pure Food and Drugs Act, in the requirement that the label tell the truth about the contents of the package. It seems incredible that it should have so long been possible for the public to be the innocent victims of deceitful preparations of narcotics and alcoholics under a lying label. It would have been more to the credit of the manufacturer and producer had this change been voluntary. All honor to Dr. Wiley for his noble service!

Each of us looks out upon the universe from the loop hole of his own experience, and it may appear to you that this limited view has made this phase of the landscape loom large. Nevertheless it is here affirmed that the habit of telling the truth is the most notable achievement of the recent times.

The philosophers tell us that among the virtues which mark developing civilization, veracity is a late adornment. Someone has said that "In a nation of angels there need be no scrapping," but until that time comes laws are necessary. For the same reason we must, for some time to come, demand credentials of all persons occupying responsible positions, like the pilots who steer our ships, the milkmen whose food or poison we drink, the plumbers whose carelessness poisons us with sewer gas, and the engineer and the chauffeur to whom we entrust our lives. The list is a long one and will be an ever increasing one.

Dr. Jacobi tells us that in New York City eight times as many confinements are attended by midwives as by physicians, and yet New York *and* Massachusetts and thirteen other States have no

laws relating to their training, registration and practice,—certainly a great lack of credentials.

For some years the public has recognized that those who are trusted with its health should of all others be required to supply credentials. It is doubtful if any term intended to indicate the necessary qualifications has been more abused than that of Doctor. Not until 1894 did this Commonwealth of Massachusetts establish a Board of Registration, with power to examine and license physicians. Previous to that date anybody was at liberty to set himself up as a doctor. The title M.D. was supposed to distinguish the qualified physician from the fakir, and this credential conferred a desirable prestige, the institution which granted it in return for the smallest amount of time and money was most popular with the unprincipled. Competition became so keen that the price was reduced to five dollars. Many of us are old enough to remember the campaign of exposure of bogus diploma factories. About 1880 when living in a town of 8000 inhabitants, the community was startled to find the name of one of its recognized doctors published in a Philadelphia paper as holding such a certificate. The doctor vindicated himself in a local paper by saying that "as soon as he discovered the character of the institution he took lectures elsewhere." He was not required to locate the "elsewhere" and could show no diploma except the bogus one, and yet he continued to command a lucrative practice,—such was the sluggishness of the public conscience.

The 1894 law was not retro-active and the Board was therefore obliged to license all as doctors who could show that they had been in practice three years. Although nineteen years has not sufficed to eliminate the names, time will ere long clean the slate. It is a disgrace that Massachusetts should be one of the three States of the Union in which a degree from a recognized medical school is not required of the applicant before the State Board. We can never expect reciprocity until this stigma is removed.

You are all familiar with the illuminating pamphlet published by the Carnegie Foundation in 1910, giving the credentials of the medical schools of United States and Canada. Probably it was not a perfect document, but there can be no doubt that it was intended to be truthful. Boston University School of Medicine was proud of the commendation there received, but recognized the fairness of some of the criticisms.

First, we had no experimental pharmacology. It may have been true at the exact time of the official visit, but both before and since experimental pharmacology has been our pride. The proving of Belladonna under the direction of Prof. Bellows was with the co-operation of some fifty of our students. As the printed report of six hundred pages shows, this was the most exhaustive example of experimental pharmacology ever consummated.

An elaborate study of Cratægus was made by our students last year under the guidance of Dean Sutherland, the chemical tests being in charge of Prof. Rowe. The special feature of this investigation was to determine the effect of the drug upon the heart. The material is nearly ready for publication, and is held up only for lack of funds, as the reproduction of the numerous charts is quite expensive. The recently published work of Dr. Conrad Wesselhoeft on the action of Quinine in Malaria* is one of the most carefully conducted pharmacological experiments on record. The Evans Memorial has taken care of this need.

Second:—The entrance examination was not up to the standard of a first class high school graduate and was not set by the University. The examination is now set by the University and is therefore presumably sufficiently severe.

Third:—"Students do not make laboratory examinations of patients whom they see in the wards." Our students examine a patient before the class and are given the data of urinalysis, blood analysis and pathologist's report. The diagnosis is then criticised by the class and defended by the student making the examination. Arrangements have been made this year, so that the individual student will make the urinalysis and blood analysis. As far as can be ascertained, no school except Johns Hopkins has as yet found it possible to carry out this suggestion completely.

The criticism of Harvard's clinical facilities was quite as severe. The report says: "There is no question but that an institution of this rank ought to work in the most intimate co-operation with the hospital." This was 1909, and now the Peter Bent Brigham Hospital and Dispensary is nearing completion. It *adjoins* the Medical School. The buildings and land cost \$1,350,000 and the fund remaining for maintainance is \$4,500,000.

The report showed beyond dispute that the country was burdened with a surplus of low grade schools, many of them money-making institutions, and was a world-wide advertisement of credentials. For more than ten years the Council on Medical Education of the American Medical Association has been conducting a critical examination of the existing conditions. It has published numerous reports and graded the schools according to their conformance to its own advanced standards. Every year the lines have been more sharply drawn until there are now four grades, A+, A, B and C.

All this information has doubtless saved many a prospective medical student from matriculating in an institution which lacked the credentials of making him a good physician. In 1907 there were one hundred and sixty-two medical schools in the United States, good, bad and indifferent. The effect of this publicity was most astounding. The "*profitable*" institutions could not stand the lime-

* New England Medical Gazette July 1913.

light. They failed to attract students, and business sagacity compelled them to close. Many ethical schools, lacking in certain requisites, merged with others and by thus combining their resources, didactic and clinical,—secured the necessary credentials. During the last year fifteen have ceased to exist and the number is now one hundred and six. That is, over one-third have admitted that they lacked the necessary credentials. There are still left twenty-nine in Class C—“colleges requiring a complete re-organization to make them acceptable.” Undoubtedly the end is not yet.

It is frequently remarked in homœopathic circles that this is a deep laid scheme on the part of the American Medical Association to expunge homœopathic schools, but a rather careful study of the tables shows that of the fifty-six which have become extinct since 1906, thirty-five were regular, nine homœopathic. Since our definition of a homœopathic physician is “one who *adds to his knowledge of medicine a special knowledge of homœopathic therapeutics.....*,” it ill becomes us to attempt to maintain schools lacking the credentials required of the others, lest we *take from* the student’s knowledge of the medical sciences.

Although it is undoubtedly true that many eminent practitioners have received their degree in second rate schools, no one would presume to deny that the school with the necessary credentials will produce the higher type of doctor.

Suppose we admit for the sake of argument that this whole movement is a blow at Homœopathy. What are you going to do about it? Can we appeal to the public on this issue? If we cannot exhibit the necessary credentials to teach scientific medicine can we expect to attract students to our doors?

Another potent factor in requiring these credentials is the attitude of State Boards of Registration. Many of these Boards are composed of regulars, homœopaths and eclectics. In twenty-five States an applicant with a diploma from a Class C school is not eligible. In thirteen States the degree must be from a medical school requiring one year of college as an admission requirement. Excessively arbitrary! In league with the American Medical Association! It may be true, but absolutely authoritative.

The people have created legislatures and the legislatures have created the Boards of Registration and clothed them with the necessary authority. Only this year a bill was before our Massachusetts legislature to empower the Board to examine all candidates for *admission* to medical schools, to ensure that entrance requirements be rigidly enforced. The report of the committee this year even goes so far as to prescribe the high school course preliminary to college and insists that on and after Jan. 1, 1914

the one year of college shall include "eight semester hours each of Physics, Chemistry, Biology, German or French."

This demand for credentials has entered the domain of the specialties. The degree of M.D. is no longer to confer upon its possessor the right to practice a medical specialty. There has just been created the American College of Surgeons which will in time enroll all those who are recognized to possess the necessary surgical skill, based upon a sufficient interne service and apprenticeship. If the plan works, the surgeon of the future, and not a very distant future, will need to write after his name, in addition to his M.D., F.A.C.S.,—Fellow American College of Surgeons,—in order to possess the necessary credentials.

At the last meeting of the Oto-Laryngological Society it was voted that "the time has arrived to standardize the degree of scientific attainment and of clinical training which shall qualify those who wish to begin the practice of oto-laryngology, that other oto-laryngological societies be invited to co-operate so that the standards finally adopted shall represent the consensus of American and Canadian opinion."

In 1912 the American Homœopathic Ophthalmological, Otolological and Laryngological Society adopted a report from a committee which had been at work for a year to determine the best place in this country to secure the necessary training for the practice of its specialties. The report recommended the course offered at the New York Ophthalmic Hospital. This institution has been conferring the degree Ophthalmic and Aural Surgeon for nearly twenty years. Oxford has for several years given a special course for which it confers the degree Doctor of Ophthalmology. Two years ago the Section of Ophthalmology, American Medical Association, devoted a whole session to a discussion of the importance of this special training. Dr. Jackson presented the subject in detail and this year the Denver College of Ophthalmology has conferred on three physicians its first degree of Doctor of Ophthalmology. No doubt the same need is felt in all the specialties, and the time is at hand when every doctor must be able to show his credentials for the *line* of practice he proposes to undertake.

Some diffidence is felt in delivering this preachment, treating as it does of a topic about which you are all probably better informed than the writer, but if one reads aright the signs of the times, the age of credentials is upon us, and Boston University School of Medicine must measure up to the full standard or it cannot long survive. We all felt the humiliation of being turned down by the New York Board of Regents because we did not have six full-time salaried professors, and we protested that the faithful, loyal service of our Faculty with little or no remuneration, had

given the world over eleven hundred physicians much more competent to heal the sick than would have been the case had a salary commanded the service. The word has, however, gone forth, and will receive public approval. It is strictly Biblical—"The laborer is worthy of his hire." The salary of the teacher has never been a great magnet. In all other departments of education we recognize that the honor of the office, and the love of the work have been sufficient to induce men of highest ability to devote themselves to teaching. The ministry is certainly not an overpaid profession. Can we for a moment admit that the noblest of all callings,—healing of the sick and the eradication of disease,—shall lack for men who are willing to give their whole time to teaching and research even though the remuneration be less than one might expect in practice?

Only recently one of the brightest men on our own underpaid Faculty said, "I only wish this teaching would support me! I enjoy it." Prof. George H. Palmer has said,—“Harvard College pays me for doing what I would gladly pay it for allowing me to do. No professional man then thinks of giving according to measure. Once engaged he gives his best, gives his personal interest, himself. His heart is in his work, and for this no equivalent is possible. What is accepted is in the nature of a fee, gratuity or consideration which enables him who receives it to maintain a certain expected mode of life.”

As an evidence of the irresistibility of this movement let me quote to you from a recent editorial. “. . . .the trustees of Dartmouth Medical School, the fourth oldest medical school in the United States, have voted to discontinue clinical teaching and the granting of the M.D. degree, recognizing that the limited hospital and dispensary material at Hanover is no longer adequate to furnish modern physicians with a satisfactory clinical training. Such action as this is necessarily drastic, especially in an institution which has granted medical degrees year after year for more than a century; but the decision is characteristic of institutions like Dartmouth, which have at heart not only the interests of education and of the students individually, but also the welfare of the public. That medical education at Dartmouth will be bettered is certain, since the resources formerly expended in a four-year course will hereafter all be used to develop the equipment and teaching of the laboratory subjects. With its entrance requirements of two or more years of collegiate work, all the medical students will leave Dartmouth holding baccalaureate degrees, and will therefore be alumni of that institution, even though the medical degree is no longer granted. These men will carry with them *credentials* of having taken two years of medical work. With the further development of the equipment of the teaching and of re-

search—and in this respect Dartmouth has an exceptional opportunity—the medical credentials held by these students will undoubtedly make them eligible to complete their medical courses in any of the best medical schools where ample clinical facilities are available. This action by the trustees of Dartmouth College furnishes another example of the magnificent decisions which, in the last few years, have marked the campaign for better-trained physicians in this country.”

In the grading of medical colleges Boston University School of Medicine was assigned to Class A—“Colleges lacking in certain respects but otherwise acceptable.” It is possible that it is not known to you all that twenty-four medical colleges have been rated A+. To show wherein we failed to receive the highest rating let us read the ten heads under which the data were arranged.

1. Showing of graduates before state boards and other evidences of the training received. Our rating A+ as you all know.

2. Enforcement of a satisfactory preliminary educational requirement, granting of advanced standing and the character of records. Our rating not satisfactory on preliminary requirements.

3. Character of curriculum, grading of course, length of session, time allowed for matriculation and supervision. Our rating A+.

4. Medical School buildings; light, heat, ventilation, cleanliness. Our rating A+. As proof the Carnegie Report is submitted: “This school has an excellent building, admirably kept and well equipped.”

5. Laboratory facilities and instruction. Our rating A+. Carnegie Report: “. . . attractive laboratories for pathology, bacteriology, physiology, chemistry and anatomy.”

6. Dispensary facilities and instruction. Our rating A+. Carnegie Report: “Connected with the hospital is a large, thoroughly modern, and systematically conducted dispensary, in which laboratory work and physical examination are more closely connected.”

7. Hospital facilities and instruction, maternity work, autopsies, specialties. Our rating A+. Carnegie Report: “The school adjoins a hospital of some 230 beds, of which 125 are available for amphitheatre and ward clinics. The material is fairly abundant and varied.”

8. Faculty, number and qualifications of trained teachers, *full time instructors*, and assistants, especially of the laboratory branches, organization, and extent of research work. Our rating not satisfactory; deficiency, “full time instructors.”

9. Extent to which the school is conducted for properly

teaching the science of medicine rather than for the profit of the faculty directly or indirectly. Our rating A+. Carnegie Report: "The institution is mainly dependent on fees (\$12,762 estimated), but these have been consistently used to develop its facilities."

10. Possession and use made of libraries, museums, charts, stereopticons, etc. Our rating A+. Carnegie Report: "It possesses a library in charge of permanent librarian, a beautifully mounted collection of pathological material, an excellent refrigerator plant, and other features indicative of intelligent and conscientious effort."

Now for our shortcomings. "Enforcement of a satisfactory preliminary educational requirement." For several years the catalogue has announced that in 1914 one year of college or its equivalent would be required for admission. This will make Boston University School of Medicine eligible to membership in the Association of American Medical Colleges. Hahnemann, of Philadelphia, is the only homœopathic school which has so qualified, and that only this year. As soon as this is in operation, it is presumed that the Faculty will vote to extend the admission requirement to two years of college. Our rating will then be A+. The optional hospital year will probably soon be made obligatory.

Our only real trouble comes with Head 8. The detailed requirement is as follows: "At least six expert, thoroughly trained professors in the laboratory branches, salaried so that they may devote their entire time to instruction and to that research without which they cannot keep up with the rapid progress being made in their subjects. These professors should have a definite responsibility in the conduct of the college, and their first and chief interest should be in the training of the medical students. It is advised that four of these professors be placed in charge of the departments of (a) anatomy, (b) physiology, (c) pathology and bacteriology and (d) physiologic chemistry and pharmacology. The other two may be assigned, one to the laboratory course in histology and embryology under the department of anatomy, and the other to the department of pathology and bacteriology, possibly, to the course in laboratory clinical diagnosis. There should also be a sufficient number of assistants in each department to look after the less important details. For colleges having sixty students or less in each class, there should be at least one full-time salaried assistant for each of the four departments mentioned, and at least one additional assistant in each of these departments should be provided for each additional thirty students enrolled. This represents a low average of the full-time assistants already employed by the accepted medical colleges."

(Since the chair of Ophthalmology is omitted in this salaried list, there should be no suspicion of log rolling in this plea.)

Here is our deficiency: Six full-time professors. Four full-time assistants.

To be acceptable to the New York Regents professors must receive at least \$1200 per year, assistants \$1000. That is, annual salaries of \$11,400 must be paid to the ten persons specified. There must be added to this the present running expenses.

The drastic action of the New York Board of Regents has forced the issue, so that there is something more at stake than the honor of being one of the best. We cannot attract or keep students unless the degree which we grant is a credential recognized by every State Board. Quite a number of otherwise acceptable schools like Dartmouth have been obliged to close because it was impossible for *them* to supply the needed credential of clinical facilities.

The Faculty met this dilemma by promising to pay the necessary salaries and thus Boston University School of Medicine became reinstated as an acceptable college by the New York Board of Regents.

Most of you are aware of the indefatigable work of the finance committee, and many of you have responded generously. Before the beginning of 1914 it is certain a \$100,000 endowment fund will be to our credit. This will tide over the crisis, but \$1,000,000 is needed to establish on a permanent basis our credentials as an A+ medical school. This finance committee recognizes that it has simply made a beginning.

Many of us cherish Boston University School of Medicine as our Alma Mater, but it is incumbent on every member of this Society to help by his time and his money and his brains to put on a lasting foundation the only medical school in New England teaching Homœopathy. How long do you think it would have taken Dartmouth to qualify if simply *money* had been the only credential lacking?

On November 13, 14, and 15 there is to be held at the Copley-Plaza Hotel a grand bazaar and fête under the auspices of the Alumni Association. This we must all attend and, what is more important, invite our patients and friends. While this is primarily a money making scheme, it is also intended to advertise our needs to the public.

You will hear from the finance committee quite frequently for years to come. They expect you to secure bequests by explaining to your patients the interdependence of the Hospital and Medical School. If you have read the circulars sent you by the committee, you must feel proud of what Boston University School of Medicine has accomplished with practically no income but students' fees. Our clinical facilities are unlimited.

The pocket catechism which was sent to all alumni furnishes

in condensed form all the information one should need for securing present funds or bequests.

Flexner says that medical education in the United States requires only thirty-one medical schools, each with two to five millions endowment. The others are asking it and getting it. This financial campaign is not unique with Boston University School of Medicine, "Everybody's doing it."

Some people were speculating on the amount of the estate of a well known deceased individual, when one of the group remarked, "I know exactly how much he left,—all he had." Massachusetts alone has over three hundred millionaires who must ere long "leave all they have." Many of these people are your patients and would thank you for showing them how they could render a great service to humanity by a bequest to Boston University School of Medicine, which you can easily prove has every qualification of an A+ school except *money*. What nobler monument could one wish than a professorship bearing his name? Boston University will confer this honor on the donor of \$50,000.

It has been said that it is incumbent on every member of this Society to help by his money, his time and his brains. It is common knowledge that the medical profession is not overburdened with money, but we are not charged with lacking brains, and every one of us knows that he has time for anything that he really wants to do. It is important that every one of us should contribute some money, as it would seem illogical to ask others to give to an institution which we had not already helped ourselves, and the total of our contributions is a worthy sum, but this undertaking is laid out on a large plan. By your brains you must conduct a campaign of education. We have reached a time in this great Republic when it is no longer ethical to plunder the soil, to slash the forests, to denude the mountains. Conservation of our resources is the watchword. It is recognized that the present generation, which has inherited richly, owes something to posterity and so there has grown up a loyalty to institutions which are qualified to transmit benefits to future generations. In no sphere is this better shown than in education.

It is pathetic to realize how little any one of us can accomplish during a lifetime, how quickly the wave of oblivion rolls over his sinking form.

"For some we loved, the loveliest and the best
That from this vintage rolling Time hath prest,
Have drunk their cup a round or two before
And one by one crept silently to rest."

But if we can mass our efforts in building an institution on such a solid foundation that the places of the founders are easily

supplied from the ranks of the recruits, the mass effort will survive. What better service can any one of us do than to give sufficient of his individual time and brains to the common purpose of putting Boston University School of Medicine on a permanent foundation, feeling certain that we are passing on to posterity an institution with the credentials "for the healing of the Nations"?

THE SURGICAL TREATMENT OF TUBERCULOSIS.*

By ROBERT F. HOVEY, M.D., Springfield, Mass.

The subject of this paper is such an extensive one that my allotted time as well as personal experience will permit me to speak only briefly of a few tubercular lesions that are considered surgical.

Perhaps the most common form of tuberculosis that comes under the care of the surgeon is that affecting the lymphatic glandular system.

There are in all about eight hundred lymph glands in the entire human body, and about three hundred of these are situated in the tissues about the neck.

These cervical glands are the first to appear in embryonic development, and they are nearly always the first to become infected with tuberculosis.

It was formerly believed that when tubercular adenitis developed it meant a secondary development of a general tuberculous infection, but later studies of the lymphatic system prove this to be a primary and local disease, rarely if ever being secondary to other forms of tuberculosis.

The direction of the lymph current is downward and not upward. The sub-occipital group of glands is fed by vessels that drain the occipital portion of the scalp, and empties into the sub-sterno-mastoid glands. The mastoid group drains the temporal region of the scalp and ear, and empties into the sub-sterno-mastoid group.

The parotid group, comprising about twenty glands, situated in and about the parotid gland, drains the anterior part of the scalp, ear, eyelids, root of nose, nasal fossæ, and pharynx, and empties into the deep cervical chain.

The sub-maxillary glands, three to six in number, drain the upper and lower lip, cheek, nose, side of the tongue and gums, and empty into the deep cervical chain. Sub-mental glands lying between the anterior bellies of the digastric muscles, drain the lower

* Read before the Massachusetts Homœopathic Medical Society at Springfield, October 8, 1913.

lip, floor of mouth and tip of tongue, and empty into the sub-maxillary.

Retro-pharyngeal glands drain the naso-pharynx, and empty into the deep cervical chain.

The deep cervical chain extends from the tip of the mastoid process to the juncture of the internal jugular and sub-clavian veins, receiving the drainage of all the above named glands. The vessels from these groups unite on either side of the neck into one or two large lymph vessels called the jugular trunks, and these empty on the right side into the internal jugular or sub-clavian vein, and on the left side directly into the thoracic chyle duct.

Therefore we can see from this very brief description of the anatomy of the cervical glands, that there is no connection whatever with the lymph glands lying within the thorax, and that infection does not come from that source.

The occurrence of cervical adenitis is most common between the ages of three and fifteen. The cause or source of infection is still not well understood. The bacilli may be found on an enlarged tonsil, in a decayed tooth, or diseased nasal passages, and some cases follow suppurative otitis media, but more often the source of infection cannot be determined. It is quite a common fact, however, that cases showing glandular enlargement, at the same time and previously show hypertrophy of the tonsils and post-nasal adenoid tissue, and at the same time will give a tuberculous family history.

Two conditions exist which can affect these glands,—a simple adenitis (non-tubercular), and the tuberculous infection.

The two give the same early clinical appearance, and a positive differential diagnosis can only be made with the microscope, the tubercle bacilli showing at some point in the tubercular gland.

In speaking of the treatment of these conditions, it is only fair to speak first of what can be done with medicine, diet, hygiene, etc. The same advice you will give a case of pulmonary tuberculosis regarding fresh air, food and environment, will hold equally good here. Locally, the painting of the enlarged gland with tincture of iodine, is denounced by some and advised by others. I have used it many times and believe it is beneficial. Our "old school" friends advise the use of the syrup of Iodide of Iron. Our homœopathic friends can give even better reports from the use of some carefully selected remedy. *Calcarea carb.* and *calcarea iod.* have been my favorite remedies, and have in many instances apparently cured my patients. Then I ask myself this question:—did the patient have tubercular adenitis or a simple hypoplasia? I must say that I am inclined to think that the cases so readily cured by medicine are not tubercular, or if so, only in a slight degree. There are, however, a great number of cases

that will not get well under medical treatment, either because they did not get the proper treatment early, or because they show less resistance. These are the cases that should receive surgical treatment. The throat and nasal passages should be carefully examined, and all hypertrophied glands removed, thereby removing the most probable source of infection. Decayed teeth should be extracted or filled. The enlarged glands should then be excised, and the wound closed. If any of the glands are broken down and the wound becomes soiled, drainage will be necessary, and this is best done through a stab incision below the wound, as this favors better healing. If an open sinus has already formed, it is best to simply curette away all broken down tissue, and swab out the wound with equal parts carbolic acid and tincture of iodine. After the sinus closes, should any of the adjoining glands become enlarged, they should be at once excised.

Holt claims that as a patient nears puberty, there is a tendency towards spontaneous cure. There are, however, some cases where the infection tends to extend even after this period, and it may become necessary to excise the entire deep cervical chain to stop the progress. The chief objection to radical excision is the resulting scar. If one is careful to make the incision parallel to the natural creases of the neck, and in closing the wound to suture the platysma muscle separately, the wound will heal without a very objectionable scar, when compared with the ugly irregular holes left from the natural sloughing of a neglected gland.

I will now pass on to manifestations of tuberculosis upon the urinary tract. The disease here is practically always secondary to some other tubercular development. The kidney is the first organ to become infected, and the trouble may start from traumatism, either from external injury, or from a stone within the pelvis of the kidney, the infection coming through the blood supply.

The condition may exist for some time unnoticed, particularly when the tubercular foci are near the cortex. When these foci become enlarged and broken down, they will discharge into the pelvis of the kidney, and then the urinary current will carry the pus and tubercle bacilli down along the urinary tract, infecting the various parts in passing. The bladder and urethra may become infected, and in the male, the prostate gland and testicle as well. Rarely the disease may begin in testicle and ascend to the bladder, but usually the primary lesion lies within the kidney.

The first indication of disease here is an irritable bladder, with an acid urine containing pus and blood, and a low specific gravity. The pus may be in abundance or only microscopic, according to the extent and location of the lesion, and likewise the blood may be sufficient to color the urine red, or only microscopic.

Urination is frequent and with tenesmus. Pain of a dull, aching character is felt over the affected kidney. To the general practitioner, a cystitis that is not gonorrhoeal or traumatic, or due to a calculous or enlarged prostate, should make him suspicious of a lesion of the kidney, probably tubercular, and the entire genito-urinary tract should be given the benefit of a thorough examination by a competent cystoscopist.

An early diagnosis is quite essential, as the disease may exist for an indefinite time before producing symptoms, and if we are to offer any hope of a cure, we must diagnose early and advise early operation.

Fortunately both kidneys are rarely affected at the same time, unless the disease is far advanced. By aid of the cystoscope, a sample of urine can be drawn from each ureter, and positive information of conditions in each kidney obtained.

An X-ray should also be taken to show if there be stone in the kidney. Stone will cause pus and blood to appear in the urine, but if tuberculosis exists, the tubercle bacilli will also be present.

In the treatment of tubercular kidney, surgical operation offers the only hope. Before advising operation, however, one must be absolutely sure that the disease extends to only one kidney, and that other lesions throughout the body are not active or very extensive.

The operation should consist of removal of the affected kidney if the best results are desired. Mayo recommends sterilization of the ureter, after the kidney has been removed, by injecting into it a few drops of pure carbolic acid. The acid passes down into the bladder, destroying all bacilli in the ureter, and becomes diluted with the urine sufficient not to cause trouble. The ureter is then ligated with catgut, and dropped back into the wound, and the wound is then closed.

The results of this operation are very satisfactory when done early in the course of the disease.

I will next mention tuberculosis as it effects the peritoneal cavity.

Primary tuberculosis is very rare, and that it ever occurs is denied by some good authorities. However, an occasional case is reported where no other focal lesion can be determined.

This affection may occur at any age, is quite common in childhood and relatively rare in old age. Statistics give the age of most common occurrence from twenty to forty. The pre-disposing factors are the same here as with the disease elsewhere, a tuberculosis family history, poor hygienic surroundings, and a constitution of low resistance. Osler claims that chronic intestinal catarrh is a pre-disposing factor especially in children.

The disease usually begins in the appendix in males, and with

females either in the appendix or fallopian tube. Tuberculosis of the other female genitalia often exists, but I believe is considered secondary to diseased tubes.

The symptoms of tubercular salpingitis are very indefinite. There are usually signs of a mild degree of inflammation, with slight pain or discomfort and tenderness across the lower abdomen. There may or may not be a slight degree of fever. Pain may be felt on defecation. The menstrual function may be disturbed, usually diminished. On examination of the pelvis one is often surprised at the extent of the involvement. The tubes may be felt much enlarged; in fact a tumefaction may be felt to entirely fill the cul-de-sac, giving much the same appearance as an extensive pyo-salpinx with pelvic cellulitis.

The condition will be entirely out of proportion to the clinical history of the case.

In tubercular affection of the appendix, there are no symptoms to distinguish it from simple appendicitis until the disease has extended and involved the peritoneum.

Tubercular infection of the peritoneum occurs in two forms, acute and sub-acute or chronic.

The acute type may set in suddenly, in an individual previously free from abdominal symptoms, and the diagnosis is most difficult. These cases are usually diagnosed appendicitis, and come to early operation and the real nature of the disease discovered then. The most common form met with is the sub-acute or chronic type. Here we have quite a definite picture. The onset is more gradual, there is abdominal discomfort and tenderness, and tympanites more or less marked, due to loss of muscular power of the intestinal walls. A low continuous fever may simulate typhoid fever. A diazo-reaction is frequently obtained; however, the Widal test is always negative. Examination of the blood shows a mild secondary anæmia, and as a rule the leukocytes are not increased. With these facts before us, and the presence of a tuberculous lesion elsewhere, our diagnosis is quite positive. It is stated by Johnson of Richmond, "that simultaneous inflammation of any two serous sacks of the body is almost always tuberculous."

If the disease has existed long, there will be present a variable amount of serous exudate, which may be free in the abdominal cavity, or become encysted and localized by intestinal adhesions. These encysted areas may sometimes be felt through the abdominal wall as small or large tumors scattered throughout the abdomen.

The presence of ascitic fluid with tumor formation are considered the two most valuable signs of tuberculosis of the peritoneum.

Halstead recommends the use of tuberculin as a most valuable diagnostic procedure, and says he has never known it to fail. I have had no personal experience with this agent.

There is still another type of the disease described by some authors as a latent form, in which not the slightest suspicion of tuberculosis is entertained, and the diagnosis not made until exploratory incision is made.

I recently had such a case. A young lady about twenty-five years old had been indisposed for several years, but gave no definite symptoms that would lead one to suspect tuberculosis. She was seen by several of our best physicians and surgeons, and I understand not one of them ever came to any definite conclusion. She later went to a New York hospital, and there remained one month under observation. Her surgeon wrote me that after most thorough examinations and various blood tests, he was still unable to tell what her trouble was, and he decided to make exploratory incision. The appendix, cæcum, and ascending colon were found tuberculous, and were removed. The patient has recovered from the operation and returned to her home, but is still far from being well. She has, however, greatly improved in many ways.

The treatment of tuberculous peritonitis is, I think, generally conceded to be operative, and the form that yields best results is that in which there is free ascitic fluid with few intestinal adhesions. In the fibrous and ulcerative forms the results are less encouraging.

The simplest surgical procedure that has been adopted consists of opening the abdomen, removing any effusion that may exist, and closing the wound without drainage.

Many operators wash out the abdomen with saline solution, or some mild antiseptic, and some dust iodoform freely over the peritoneum. I have seen many cases treated this way, with excellent results. Still Lawson Tait says "that drainage, irrigation, and medication of the abdominal cavity in these cases are not only useless, but positively undesirable,"—and Treves has shown from the analysis of three hundred cases that the best possible results are obtained when neither flushing nor drainage are employed.

Mayo believes that in all cases of tuberculous peritonitis the appendix and pelvic organs should be examined. If the tubes or appendix are diseased, they are to be removed if we expect a cure. Walls of abscess cavities should be dried and rubbed with sterile gauze, and the abdomen closed without drainage.

Care should be taken not to injure the peritoneum more than necessary. Extensive adhesions should not be broken up, only when necessary to liberate pus or to relieve a constriction of the bowel.

REPORT OF THE 1913 TYPHOID FEVER EPIDEMIC IN PALMER, MASS.*

By H. C. CHENEY, M.D., Palmer, Mass.

The recent epidemic of typhoid fever in the town of Palmer is now a thing of the past, and, as is the custom of physicians the world over, we are about to hold a post-mortem of the epidemic for the benefit of the profession, and the enlightenment of the general public who look to the profession for some degree of assurance that we are making some progress in the handling of these epidemics.

More and more is it becoming recognized that typhoid fever is a disease that should be prevented. The reading public have before them in the daily print, at frequent intervals, the statement that it is a disease that can and should be prevented, and that such and such an epidemic should not have been allowed to occur. Here is an editorial of recent issue to the point. I quote from the "Boston Post" of the past month:

"If there still exist those who have lingering scepticism as to the relation of typhoid fever and an unclean milk supply, the experience of South Norwalk, Conn., ought to show them the way of truth.

"It seems that a violent typhoidal epidemic broke out in that town recently, and the board of health absolutely traced all the cases to one milkman's milk, and an investigation of the source of his supply caused a sensation. The milk-cans were being dried on a farm-yard heap with decaying fish-heads and garbage on all sides. One of the hands on this farm died recently of typhoid.

"Eternal vigilance is the price of freedom from typhoid. But it is worth all it costs and more. It is a shame to have so preventable a disease occur at all."

Any disease in the epidemic form is a dreaded thing and viewed by the community with alarm. This alarm is increased in proportion to the facts concerning the cause and the probable control of the disease which the medical men in charge can give to them.

What will a study of a recent epidemic show for our encouragement over similar epidemics twenty years ago? The answer to this question will go a long way from the public standpoint toward the passage of the needed legislation. The best way to acquaint the public with this progress is to hold post-mortems of each epidemic and publish the findings.

The editor of the "Post" was on the right track in enlightening the public as to the cause of the Connecticut epidemic. Probably his article names the cause, perhaps not in the fish-heads and barn-

* Read before the Mass. Homœo. Medical Society at Springfield, October 8, 1913.

yard heap as much as in the statement that recently one of the helpers on the farm died of typhoid. At any rate the editorial tells us that there was a carrier present as the cause of this fever whether it was a human carrier or the terrible fly. It seems to me that the first news that ever impressed me concerning the human typhoidal carrier came through the daily press, in the account in the New York daily papers of one so-called, "*Typhoid Mary*," who was kept under the surveillance of the New York health board for several years. You all remember the accounts of the trail of typhoid she left behind in the families she served as cook. Since that time we have come to believe that there are a great many people who are carriers, that is to say, people who recover from the fever but continue to harbor and dispense the germs for many, many months thereafter. The milk supply is but the favorite media, and its mode of infection is through the handling by a human carrier.

A study of the epidemics of this State for ten years tells the story of the usual method of infection through the milk supply whether it be one of typhoid, septic throats or scarlet fever. Let me add in passing that the Massachusetts Milk Consumers' League is authority for the fact that in ten years just passed from this source alone, we have had seventy-six epidemics traced directly to the milk supply. Seven thousand two hundred and ninety-six people have been infected in this time.

This covers typhoid, septic throats and scarlet fever. This does not purport to be all the cases but is merely those reported.

With such figures before us and the press at intervals saying, "It is a shame to have such a preventable disease occur at all," I feel there is need for some controlling body with efficient laws to bring about that time of immunity.

It has been my pleasure for a number of years to serve on the local health board, and I have become somewhat familiar with our State laws concerning health matters. They are excellent and fairly comprehensive, but they do not sufficiently cover the production and sale of milk. This has been widely recognized by consumers. Witness the demand for milk that has some extra trade mark of being especially carefully handled. Consumers of the wealthy class pay willingly as high as twenty-five to fifty cents per quart.

Certified milk for those who can afford it brings readily twelve to eighteen cents per quart. Hardly an institution of the hospital type in the State that does not safeguard its milk supply in a manner that produces safe milk. What then is done for the protection of the general public who are outside the wealthy class and the institutional inmates? Are they safeguarded sufficiently? The continued milk-produced epidemics would seem to contend not.

With the foregoing as an introduction to the report I have

been asked to give today, I will briefly tell of the epidemic referred to.

About the middle of July of the present year there began an epidemic of typhoid fever in Palmer. The cases developed at the rate of about three daily until a total of thirty-nine was reached.

The disease was of an especially virulent type of infection, and the indications were that the disease had such a widespread distribution among our people that we had the beginning of a very bad epidemic to contend with. The local Board of Health, ably assisted by the State Board, at once began the investigation for the source of the infection.

The water supply was eliminated from the fact that at least three supplies furnished the families of the afflicted, and it was not likely that all of these were contaminated. The majority of those sick did use the same milk supply, which was a large one of about two hundred quarts distribution daily. In a short time it was possible to trace all the cases to this one supply through the soda fountains, hotels and sale of milk to other dealers.

Of course it was now obvious to all that the source of infection was corralled, but there is a great difference between tracing an epidemic to its source by eliminating the other possibilities and tracing an epidemic to its source by absolutely nailing the carrier by the blood test. It is this difference that causes the loss of so much valuable time in the prevention of fresh infections and it is here that there is such a glaring deficiency in our State laws.

Our experience in Palmer with this particular condition is worth stating, and is the point that it seems to me makes this report worth the time of this State Society in listening to.

As physicians we said freely to our patients that we believed this milk to be the source of the disease. We advised that they *avoid* the use of it. As a board of health we could say nothing until we had definite test proof of positive infection. That is to say, legally we could not stop this milk supply from being sold, and the State Board was also entirely helpless to act.

Of course our warning as physicians practically ruined the sale of the milk and the producer was very willing to stop the sale until the cause was found, the State agent being at work at this time taking blood tests of all persons coming in any way in contact with the supply.

This farm was without the limits of our town and therefore outside of our jurisdiction in so far as the producing of the milk was concerned. This very frequently happens and always is a source of trouble and a very good argument why the State Board should have definite control.

Some of the former customers now demanded that the dealer supply them with this milk again for public use, as they felt that

the local physicians were much too alarmed. It is very hard to convince some people that a thing is so if it inconveniences them. The milk went on sale again in a limited way, that is to say, many were not afraid of it and began its use. Meanwhile the epidemic was growing.

I wish to say at this point that not many days of this condition of affairs followed, for, legally or illegally as the case may be, but entirely reasonably, the local board backed by the State Board ordered the milk sale stopped and it did stop.

The cause of the epidemic was then discovered in the person of a farm-hand who left some ten days previously and went to a nearby town. At the time he left he was employed as milker. He left because of an ulcerated tooth. A blood test by State inspector was positive and soon the man came down with the bed type of typhoid, he having been sick with the walking type or having resisted the infection for a long period of days previous to his taking the bed.

The premises of the dealer were subjected to a thorough cleaning, the milk cans sterilized and he was given permission to sell.

It is needless to go into detail of the cases, neither is it necessary to show the detailed methods of care of the same. Sufficient to say that the cases were cared for in about equal numbers at the hospitals and at home. Some were cared for by trained nurses, others by efficient mothers. Some were given liberal diet, others were restricted to milk and albumens. Some had their temperatures reduced by ice baths, others by cool sponging and others by drugs like asperin, phenacetin.

So far as I was able to judge, the results as far as eventual recovery was concerned, were equally good. I must conclude then that any sensible method that embodies good nursing is productive of a large per cent of recoveries. I am very strongly convinced, however, that it is a mistake to suppose that a ward can be filled with typhoid patients and the same orders left for all, and so carried out with any great success. The cases must be treated as individuals requiring careful individual study.

The deaths in this epidemic were four,—one from meningitis, two from hæmorrhage, one from nephritis.

Up to this point it is the same disease today as it was twenty years ago. What then has changed in respect to this present epidemic that was not true twenty years ago?

FIRST. The cause. It was discovered by a reliable blood test in the person of a helper who was the agent of infection. This is new in that most of our milk epidemics are found to be so started.

SECOND. We now have a system of immunization by vaccination.

THIRD. This vaccine is said to be very efficacious in clearing the germs from the bodies of the typhoid carriers.

FOURTH. This vaccine used early as a therapeutic measure in selected cases shows a marked control of the fever and prevents complications.

The Palmer epidemic was traced to its source by this modern blood test and the public mind put at rest.

The possible victims of the infected area were reduced by vaccinating and about one hundred and fifty people who would be likely to become infected were given immunization with the State vaccine in divided doses ten days apart.

No bad results were noted and with three exceptions all continued at work. It is quite likely that many were saved from the fever by this method. I said above, as far as recoveries were concerned, there was little to choose between treatments as carried out at this time. As to comfort and control of fever and complications, I have a very decided opinion that there is a great deal of choice. I believe that the intelligent use of the typhoid vaccine as a therapeutic measure, beginning early in the disease, made a very decided gain over all methods.

Speaking from my own observation of the past epidemic I feel that but for some errors in feeding the patients, the record of control of complications and fever and the general good condition of patient at end of disease, would have made a contrast most remarkable over the same fever twenty years ago.

In regard to the need of new legislation. I outlined in the introduction what was the need found in our epidemic just passed. And I have tried to hint at the way we were handicapped for lack of a comprehensive law.

Personally I am not so particular as to the breed of stock that produces my milk supply if they are healthy. I am not even fussy that the man who milks shall be encased in a freshly laundered white suit. I do not require that the animal shall have an antiseptic bath before milking. I am particular that the man who milks shall have clean hands, that he milk into a pail that has most thoroughly been steamed or scalded clean, that he take out the animal heat from the milk by chilling and then deliver me the milk in a scalded receptacle.

I do not read into the Ellis Milk Bill that the backers of that bill demand more than I demand for my private supply. I do not read into it that they intend to make the raising of milk a hardship. I *do* read in it that there will be a controlling body with a comprehensive law to protect the milk drinking public. That any producer who faces the same sort of a condition as did our local dealer will be recompensed for his milk while it is under suspicion

and he will thus be encouraged to continue his business and the public safeguarded while the investigation proceeds.

When I realize that this bill meets with so much opposition from the producers, am I to conclude that they do not wish to meet the requirements of producing safe milk, or are there objectionable features in the bill that must be eliminated? If so let's get it right very soon.

I desire in closing to copy the statement of the backers of this bill:

"It should be made very clear that we are not asking for certified milk conditions but only plain, ordinary cleanliness such as perhaps six or seven producers out of every ten are now living up to. It is the three or four careless producers in every ten that we wish to compel to be as clean as the others. It should also be remembered that we are asking for supervision over all handlers of milk up to the time it reaches the consumer. Certainly such legislation is in the interest of the majority of producers who now have to compete with the negligent minority and who are also oftentimes blamed for the carelessness of subsequent handlers of their milk. Of course, to the consumers it is a matter of life and death.

MASSACHUSETTS MILK CONSUMERS' ASSOCIATION."

VERTIGO.*

By HAROLD L. BABCOCK, M.D., Asst. Aural Surgeon, Massachusetts Homœopathic Hospital, Boston.

It is my intention to present to you this evening some of the facts and recent theories regarding the subject of vertigo.

Vertigo may be described as that sensation of confusion which results from a false perception of one's relative position to space or motion in space. Vertigo and dizziness are practically synonymous terms, although the latter is usually applied to a milder degree of disturbance. The sensations of vertigo may be divided into two broad classes: first, objective vertigo, in which surrounding objects move in one or all of the three planes of space, and second, subjective vertigo, in which the patient himself seems to revolve or to be out of plumb with his environment. All vertigoes are accompanied by more or less marked disturbances of equilibrium, while the reverse is not true; that is, disturbances of equilibrium are not necessarily accompanied by vertigo.

Vertigo may be produced through any one of the three peripheral sense organs having to do with orientation and equilibrium. These are:

- I. The static labyrinth in the internal ear.

* Read before the Alethian Club, June 13, 1913.

2. The eyes, including intrinsic and extrinsic muscles.

3. The so-called kinesthetic sense organs; the joints, deep muscles and sensory nerve endings all over the body.

As all the centripetal impulses governing equilibrium are collected in the cerebellum, that organ may be considered as its center, and it is through the proper correlation of all the impulses from these three end organs that our equilibrium is maintained, both when at rest (static) and during motion (dynamic).

The cerebrum plays a very subordinate part in maintaining equilibrium. This has been demonstrated in dogs by removing it without resulting vertiginous symptoms, while the removal of one-half of the cerebellum causes decided disturbances. The connections by nerve tracts between these three sensory organs and the center have been carefully worked out, but just how the impulses from one share with the others in maintaining our equilibrium is a difficult matter to determine. All seem to work automatically and establish perfect balance. If a discordant factor enters there is a disturbance of balance and, if temporary, the disturbance of balance lasts until the normal state is re-established; if permanent, until the function of the destroyed organ is performed vicariously or the centers accommodate themselves to the absence of the normal stimulus.

Meniere was the first to describe the symptom-complex known by his name,—deafness, dizziness, distressing tinnitus, a staggering gait, nausea and vomiting—and to definitely show that the seat of the trouble was in the internal ear. Since his time a great advance has been made in our knowledge of the internal ear, especially that part known as the static labyrinth, and this latter organ has come to be considered as the chief organ of equilibrium and consequently the one with which vertigo is usually associated. Automatically the static labyrinth consists of the three semi-circular canals and the vestibule. The semi-circular canals are situated in the three planes of space, each at right angles to the other two. There are two vertical canals called the superior and the posterior, and one horizontal, called the external. According to Schoenemann, the planes and angles between them are somewhat inconsistent. Each canal comprises about two-thirds of the circumference of a circle. On cross section they are elliptical and each canal has a slight enlargement at one end, called the ampulla. The canals are a little over 1 mm. in diameter and the ampullæ $2\frac{1}{2}$ mm. Contained within the bony canals are similar membranous canals which have, however, only about $\frac{1}{8}$ of the diameter of the former, according to Alexander. In each of the membranous ampullæ is a nerve end organ containing hair cells, called the crista ampullaris, which occupy an elevated ridge protruding into the lumen of the ampulla, lying at

right angles to the axis of the canal. Contained within both bony and membranous canals is a thin fluid called endolymph. The stimulation in these semi-circular canals comes from the movement of the endolymph over the hair cells in the ampullæ, from changes of position of the head or body.

It has been established that destruction of the static labyrinth causes only a temporary loss of equilibrium. Ewald demonstrated that pigeons, both of whose labyrinths had been destroyed several months, behaved in a perfectly normal manner as regards their equilibrium when subjected to certain tests, and he concluded that the destruction of both labyrinths entailed ultimately a complete loss of vertigo; that is, animals with destroyed labyrinths could no longer become dizzy. It has also been shown that deaf mutes, whose labyrinths were destroyed by disease in early childhood, are able to maintain their equilibrium almost as readily as normal individuals.

If an impulse is aroused in the labyrinth so strong that the central mechanism can no longer control it, we have, first, disturbances in our perception of position, sensation of turning, with disturbances of the eye muscles, called nystagmus, disturbances of body muscles, and finally a radiation from the central vestibular nuclei in the floor of the fourth ventricle to the vagus, causing nausea and vomiting.

A word as to this symptom called nystagmus. This is a to-and-fro movement of the eyeballs consisting of two components, a slow movement in one direction followed by a rapid movement in the other. The importance of nystagmus from a diagnostic standpoint lies in the fact that the eye movements are in the plane of the canal stimulated. This nystagmus is not to be confounded with the nystagmus resulting from looking out of a window of a moving train. Nystagmus always accompanies irritation of the static labyrinth, whether experimental or pathological.

Vestibular vertigo, that is vertigo originating in the static labyrinth, can be produced experimentally by:

- (a) turning the patient, with eyes closed, in a revolving chair;
- (b) caloric irritation of the static labyrinth;
- (c) galvanism with one electrode applied to the region of the ear and the other applied to some other part of the body, as the hand.

These first two methods have been elaborated to a considerable extent and are of special value in the diagnosis of diseases of the internal ear. The galvanic test was considered of value until an experimenter obtained the normal reaction in an animal whose labyrinths had been destroyed.

According to Mackenzie, vestibular vertigo is produced pathologically by:

(a) any lesion in the non-acoustic labyrinth, including congestion, circumscribed irritative or destructive lesions, diffuse serous or suppurative inflammations, toxæmias, growths, etc.;

(b) any lesion in the vestibular nerve: tumors, basal fractures, meningitis, etc.;

(c) any intracranial lesions involving the nuclei or tracts to the cerebellum or the cerebellum itself.

Barnhill and Wales add to this list:

(d) chronic mastoiditis;

(e) chronic suppurative otitis media;

(f) chronic catarrhal " " ;

(g) sinus thrombosis.

Kerrison says there are but two definitely characteristic types of labyrinthine vertigo: (1) the vertigo of vestibular irritation and (2) the vertigo of vestibular paralysis. The vertigo of vestibular irritation is always accompanied by a characteristic form of ataxia, or disturbance of equilibrium which also bears a constant relation to the nystagmus present. The patient falls, tends to fall, or sways in the direction opposite to that of the quick nystagmic movement; and since this relation of the falling direction to the nystagmus is maintained in whatever position the head may be, it is obvious that he will exhibit a tendency to fall in different directions in accordance with the changes in the position of the head. In this connection the hopping and standing tests worked out by Von Stein are of great value.

The vertigo of vestibular paralysis might be called the sense of uncertainty of orientation following the loss of the functioning labyrinth. This form gradually subsides as the other organs accustom themselves to the loss. All labyrinthine vertigoes are rotational.

The second variety, ocular vertigo, may be characterized as a confusion of sense of space and balance due to abnormal visual impressions.

According to Freidenburg, in labyrinthine vertigo the phenomena of stimulation and motor response is definite and limited. The terminal reacts to only one mode of adequate stimulation, that of rotation; has one definite sensation, that of subjective turning, and a specialized motor accompaniment, fixational nystagmus. This is not so in ocular vertigo. Visual impressions depend on a light-conducting as well as light-perceiving apparatus. Disturbance, then, in any one of these functions from cornea to retina, may and does cause ocular vertigo. Even minimal errors are more productive of eye strain and consequent dizziness, than marked anomalies. High degrees of myopia and astigmatism cause dim vision which is accepted with a subconscious philosophy. Small degrees invariably produce a state of tension depending on

an effort to correct by accommodation or other means, the indefinite disturbance of function. Continued over-exertion of accommodation, gradually leading to tonic spasm, is a most prolific source of dizziness. These low degrees are easily overlooked without cycloplegics; therefore complete paralysis of accommodation should be induced for accurate determination of refraction. Disturbances of ocular motility play an important part in ocular vertigo.

Physiologically it may be induced by muscle strain incidental to rapid eye motions; *e.g.*, rapid fixation on objects seen from a car window. Small errors here again are most annoying, and lateral anomalies are more easily corrected, and less often a source of trouble than imbalance of vertically acting muscles. Ocular vertigo is not rotational but may be severe, obstinate and prolonged. It is almost always associated with malaise, nausea and vomiting, which suggests a diagnosis of nervous indigestion, liver trouble or neurasthenia. The symptoms of ocular vertigo to arouse suspicion are dizziness coming on after prolonged near work, reading or writing under electric light, after the theatre, or vertigo which is relieved after closing eyes or resting in a dark room.

Pathologically, ocular vertigo may be caused, according to Mackenzie, by

- (a) sudden irregular swelling of the lens, as sometimes found in incipient cataract;
- (b) sudden blindness in one eye from a lesion in the perceiving apparatus, retina or optic nerve;
- (c) lesions especially in the short optic tracts;
- (d) sudden paralysis of accommodation from a lesion in the ciliary muscle itself, similar to that produced by mydriatics;
- (e) sudden paralysis of one or more of the extrinsic eye muscles.

Ocular vertigo usually improves upon closure of the eyes.

Vertigo caused by disturbances of the muscles, joints, etc., called kinesthetic, is not common, but can occur with such organic nervous diseases as tabes dorsalis, Friedrich's disease, multiple sclerosis of the cord, affections of the columns of Gall and Burdach, etc. It is rarely severe, owing to the slow progress of those diseases, which allows the patient time to accommodate himself to the changing conditions.

There is also a large class of cases of vertigo caused primarily either by disturbed circulation or toxæmia, known as the central vertigoes. This vertigo may occur with any appreciable circulatory disturbance and has been observed in cerebral congestion, cerebral anæmia, syncope, following severe hæmorrhage, aortic stenosis and insufficiency and in functional disease of the heart

which interferes with the flow and pressure of the blood stream. It is a common symptom of arterio-sclerosis and of brain tumors, especially lesions of the cerebellum. In this latter condition the hearing symptoms are usually absent, there is a tumbling gait toward the affected side, and closure of the eyes has no special effect on the gait or vertigo.

Vertigo as a symptom of some toxæmia is observed in the acute infectious diseases, uremia, acute or chronic poisonings of such drugs as lead, arsenic, quinine, alcohol, tobacco, ether, etc. There is a well fixed doctrine that vertigo may be caused from so-called auto-intoxication, resulting from disease of the liver, stomach and intestines, and many cases have been reported to prove the contention. While this doctrine is not universally accepted the writer is inclined to lean toward it from the fact that he suffered intense vertigo and nausea during an attack of acute catarrhal jaundice two years ago. Much scepticism exists regarding "gastric vertigo." There is less intoxication resulting from stomach than from intestinal diseases. Senes, of Paris, discussing this subject, reports that of 828 patients suffering from stomach trouble, fifty-five complained of gastric vertigo, but in thirty of these the symptom was traced to aural defect, renal disease, arterio-sclerosis or tabes; in fifteen it was dependent upon neurasthenia, intoxication, circulatory disease or gout; in only ten did the dizziness appear to arise from the stomach.

Mackenzie believes that the irritation to the stomach causing vomiting is merely a symptom of the vertigo, and that toxic substances ingested would produce vertigo, even though the patient did not reach the stage where vomiting resulted. He further says, "If irritation of the pneumogastric were the cause of the vertigo, then it must follow that all substances which are capable of producing emesis should at the same time produce vertigo. Since this is not the case, but the converse is true, then it follows that nausea and vomiting are the results and not the cause of vertigo." Hysteria and epilepsy are diseases in which vertigo is often a prominent symptom. Sea-sickness and car-sickness, the former resulting from the constant irritation of the cristæ ampullare by the endolymph in the semi-circular canals, and the latter by the necessity for continuous and rapid ocular adjustments, both exhibit vertigo as a leading symptom.

There is a striking individual difference as to the effects of intoxicants upon equilibrium. This is seen in the remarkable susceptibility exhibited by some individuals to the action of alcohol, quinine, the salicylates, etc.

Vertigoes in general are made worse by some changes of position, especially those of a circulatory origin. This may be illustrated by referring to a case recently under observation by the

writer, in which the patient, who was suffering from an attack of acute mitral insufficiency, could lie with comfort on his back or left side, but on being turned to his right side, experienced severe vertigo.

In regard to the treatment of this unpleasant symptom, the three so-called end organs; *i.e.*, (1) static labyrinth, (2) eyes and extrinsic muscles, and (3) kinesthetic sense organs, should of course first be examined and if found defective, remedied if possible. The central vertigoes (*i.e.*, circulatory and toxic) are associated with so many etiological factors that an attempt to generalize a treatment would be futile. Vertigo as a symptom of arterio-sclerosis with hypertension, can usually be relieved temporarily with glonoin. Charcot found that in obscure vertiginous cases the administration of quinine or salicylic acid in sufficient doses to produce tinnitus aurium, brought about decided improvement, although the symptoms were at first exaggerated.

Bromides and other depressants have been used to excess by many physicians and, as would be expected, have afforded no permanent relief. Such drugs as agaricus, arsenicum, belladonna, china, cocculus, cuprum, gelsemium, nux vomica, tabacum and mercury should, if their pathogeneses have been correctly observed, be considered and carefully used. The majority of vertiginous cases seen in the writer's aural clinic, have been of the central variety, and the drug producing the most constant and permanent results has been gelsemium.

THE HYGIENIC AND PEDAGOGICAL IMPORTANCE OF PLAY DURING SCHOOL LIFE.*

By ERNST HERMANN, Supt. of Playgrounds, Newton, Mass. Director of Physical Education, Cambridge and Boston.

From whatever point of view we study the value of play as a part of every child's school education we will find it is of such great importance both pedagogically and hygienically, that we cannot any longer look upon it merely as a valuable substitute for the spanking rod or a kindness and special concession on the part of the teacher who finds herself at the end of her powers for keeping up interest and deportment. Nor do we meet the needs of our High School scholars by a tolerance of athletics as a kind of moral enema for congested scholarly ambitions.

The nearest approach to a real understanding of the pedagogical value of play we find in Froebel's methods. But unfortunately his kindergarten system is very badly applied to present day needs

* Address before the Fourth International Congress on School Hygiene, Buffalo, September 1913.

of the twentieth century child and the present physical and mental make-up of children. As Froebel's methods are being taught today in the school room they are used about two years too early. The Montessori method is pedagogically as well as hygienically much nearer the actual needs of the average American city child of three, four and five years of age. But neither of these methods will meet the physiological needs of the children unless more out of door *free play* with proper equipment is added.

Our one morning and one afternoon recess and our artificial system of schoolroom gymnastics, relief drills, breathing movements, fancy calisthenics, corridor promenading, change from so-called purely intellectual to semi-intellectual or manual training lessons are absolutely insufficient for the daily physiological needs of children. Two or three physical training lessons a week are necessary for the development of special skill and the acquisition of knowledge of good poise, forms of exercises, and for training in military discipline and for the training of perfect and instant reactions. Such lessons should be classed with all other pedagogical means and must be subject to the same recreational variations.

But all these things do not insure the best possible functioning of the child's whole physical system. Without the perfect functioning of all the vital parts of the mechanism good and really efficient *mental* processes are impossible. If *under these conditions* forced pedagogical means are employed to secure attention and deportment the child's powers of *concentration* and *attention*, *discrimination* and *logic*, *interest* and *enthusiasm*, are systematically wakened, and, in a few years, deteriorate beyond recovery. The prolonged forcing of mental processes is always in itself a serious offense in education. With children not in perfect condition, due to slower circulation of blood and lymph and respiration, with increased presence of waste products of metabolism, due to the growing process plus sedentary work, such forcing means a constant nerve waste which must finally result in breakdown.

It is hardly necessary for me to point out to this audience our rapidly increasing knowledge of the real function of the lymphatic system, nor do I need to emphasize here the fact that the lymphatic system does depend upon the muscular system for its proper functioning even more than the blood system.

From birth on the child unconsciously shows us the way nature proceeds. It is alternately active and at rest, apparently busy at all times. Yet there is alternation of activity and repose. Always it grows in spurts. A period of growth is followed by a period of settling down. Nature in all its processes proceeds rhythmically. To force (not necessarily by physical means) a young child of four years to a continuous mile-walk will very seriously affect his usuro-muscular system, since the powers of en-

duration mature very late in life. Prolonged severe exertion will result in a stunted growth of the physical body. *How much more dangerous are our present day school methods of long continued and forced attention under lowered physiological efficiency!*

My first contention therefore is this:

The periods of forced attention under sedentary indoor conditions must be shortened.

With children of four and five years, fifteen minute periods of directed and spontaneous activities should alternate.

Six, seven and eight year old children should have half hour periods. The periods should alternate indoors and outdoors.

From there on throughout the rest of the grammar grades the child should have at least twenty minutes in every sixty minutes devoted to wholesome outdoor physical recreation.

Germany made a step in the right direction when five years ago they ordered a fifteen minutes outdoor recess in every sixty minutes of school, instead of the up to that time optional ten or fifteen minutes recess in every hour. They proved the value of five extra minutes in the physiological economy of growing children.

I do not care how much we alter the study plan in our primary and grammar schools in order to lessen physiological strain. My twenty years of experience as director of physical training has shown me the utter inadequacy of such relief measures as drills and breathing movements. Again I fail to see the need here of quoting from my experience the fact that present day schooling does interfere with perfect physical growth. This congress will get the figures from special investigators who can quote convincing figures. My experience comes from many years of school work and the actual examinations of tens of thousands of children of all grades of public as well as private schools.

Nothing can possibly be as beneficial as an outdoor period of fifteen to twenty minutes every hour with the opportunity for actual relaxation, perfect change of environment, and its vigorous and spontaneous physical actions and the mental tonic which comes from wholesome children's play.

I am first and last a firm believer in the efficacy of systematic physical training throughout our grades. But in the schools I would treat the subject like any other pedagogical subject. But to insure daily and hourly physiological efficiency in the schools I found nothing as effective as outdoor play recesses.

Our high school plan of daily seven hour session with five minutes between periods and one-half hour recess for lunch and relaxation is to my mind the greatest and most deplorable folly in American school hygiene. In these schools we deal mainly with adolescence or post-adolescence when heart and lungs

have their most rapid growth. If we want to make real progress in the fight against consumption and against the increasing nervous disorders the question of high school hours should receive our very serious consideration. I do not know of any more important phase except maybe that of the adolescent factory and shop worker. Unrelieved sedentary work during adolescence means undersized lungs and undeveloped hearts. Beside this question the matter of school luncheons falls into insignificance, especially since the two session plan would solve the matter of luncheons by giving the home a chance to provide breakfast and luncheons at reasonable hours.

The hygienic importance of play as a part of our school education is, however, overshadowed by its great and ever increasing pedagogical value.

We can only realize this if we study the environment and the conditions of the children below seven years. Every one here will admit that the first seven to nine years of a child's life are of the utmost importance as brain-making years. The physical growth of the brain is practically completed at nine years. The development and the modification of the motor areas of the brain during these years determine to a very large extent the future mental capacity and characteristics of the child. If the motor life of the child is a limited one during the first years of its existence his capacity for future mental training will be limited. To quote Dr. Stanley Hall,

"The motor areas are closely related and largely identical with the psychic, and muscle culture develops brain centres as nothing else yet demonstrable does. Muscles are the vehicles of habituation, imitation, obedience, and of character and of manners and costumes. For the young motor education is cardinal and has now come into due recognition. All education is incomplete without a motor side."

Herein lies the whole foundation of our education. But this foundation is practically laid before the children come to school. For twenty years I have observed our pedagogues putting into our schools one new thing after another in an effort to make our school education more effective. All kinds of physical and manual training has been added and still we hear that our children are not well versed in the three R's, and that our schools are overloaded with fads and fancies. Why is it that our children do seem to lose interest after a few years of schooling? Why is it that even in our upper grammar grades practically one-half of our pupils need an intellectual forcing process? Why do we have so many young precocious children who soon fall below the average?

The reason lies in the poor motor-life of the child before it comes

to school, and consequently in a too early application to purely mental training when it enters school.

The kindergarten and the primary schooling is today in the greatest need of our profoundest attention. If we can correct this we can do away with many of the so-called fads and fancies during later school years.

In my opinion no other age of childhood is more largely handicapped than the pre-schooling age. The home environment of a child up to seven years of age is our greatest drawback today.

"Ashbarrel backyards and clothes-line rear porches" are the training grounds of young America. The streets are now unsafe. The houses are overstocked with ready made furniture. Stairs, alley ways and narrow sidewalks are all that is left. Even in the better homes the child has no room to play. Creeping among fancy furniture and bric-a-brac, dressed up like dolls, hours a day in perambulators, and not even a mother's lap for first leg-work possible.

Where do our boys get their opportunities for chores and occupation play? The father is never at home and the old-fashioned doing of things in the home and for the home have disappeared. Everything is ready made.

Even if a young child does now get valuable sense stimulations from his environment, where is the chance for him to react upon them with his muscles? There is no educational value in sense stimulation without motor reactions. How then can he have a well developed motor brain when he comes to us in the schools? Is it wise under these conditions to submit him at once to intellectual training? Is it wise to submit him to long periods of sedentary training? Is it wise to demand application and concentration?

Would it not be better to give him for several years more an environment where spontaneous application is possible, where his motor brain will have time to mature and where his social instincts can be cultivated by means of free and wholesome mingling with other children? Let us postpone our intellectual education a number of years and let us start a few years earlier to provide for him a playground where his imagination may be stimulated and where his spontaneous enthusiasm may find wholesome and diversified motor outlets.

My second contention therefore is that we must cut off at least two years of our primary school desk education and substitute for these playrooms and playyards, and that we must get hold of the children at least two years earlier than we do by providing baby-playgrounds in every primary school district.

By playgrounds I do not mean only a ball field or a place filled with swings and other apparatus, but a place where the child

can get in touch with "mother" earth, a place resembling an old-fashioned back yard and garden and farm, a place full of opportunities for doing things, for caring for things, for testing latent powers of muscular control; a place filled with opportunities for occupation play and for imitation of everything that moves and acts.

The Social Value of Play.

All students of social conditions must be convinced by this time that a mob spirit is very rapidly developing in all our cities and towns. We must concede that our American "mobs" are made of very young people, and we must further, to our shame, admit that these young people have received their education in our American schools. True, many of them live in a home environment which is still elementally foreign.

It is truly astonishing to observe the rapid deterioration of the manners of our young people almost as soon as they leave the school building. It is remarkable how soon even the school-youngsters degenerate during vacations when they are out of their glad school clothes. They very soon seem to turn into a crowd of young unmannerly rowdies with nasty speech and nasty manners. Those who are students of social conditions and those who have come into contact with the "gangs" in our parks and playgrounds are astounded by the fact how rapidly boys and girls, who have only recently graduated as "angels" turn into a tough lot of loafers; not all of them by any means, and not even a majority of them, but enough to make us wonder what is wrong with our school system.

The real culture which a boy and a girl get in school will show itself best if he turns into a self respecting wage-earner, if he turns into a self respecting citizen, if he becomes an honest voter and a law abiding citizen.

What is wrong then with our schools? Is it perchance the hard-working teacher or is it the system? Is it that the teacher has no real chance to know the boys and girls sufficiently long to let her sweet example bear fruit? Can it be that the average teacher has lost her or his hold over the boys and girls because the disciplinary powers have been taken away from them and the "bad" boys do not get spanked sufficiently because the father may have a political pull? This is all more or less true. It all has more or less contributed to the ineffectiveness of overcoming insubordination and vicious habits. But the greatest fault lies in our ridiculous system of marshalling the children in the schools from the first minute to the last. It is a straight-jacket discipline with the desk as the jacket, the room as the cell, and the magnificent "aesthetically" furnished building as the prison, where no boy may shout nor step alone from one room to another, where they

are marched two by two in lockstep to the basement and finally out of the building; where the teacher comes a half of an hour earlier than the children and where they leave a half of an hour after the children have left, and where the children come noiselessly and on tiptoe into the class room to step into the straight jacket for the day;—never a chance for the teachers to see their pupils in a truly uncontrolled state.

There is to-day hardly need for more arguments in favor of more outdoor school work, but there is still much need of a better understanding by the general public of the high educational value of motor-activities in the development of an efficient central nervous system, and the great influence which organized play may exert in the building of character. Organized recess exercises not only insure an equal opportunity for every child, be he weak or strong, but give the teacher an opportunity to know the real child, the child as he unbends during spontaneous action, as he unfolds during intense application and when close to nature. *The school-room child is a product of an artificial environment. The playground child is a product of fundamental emotions and hereditary instincts.* To get hygienic results with normal children no means can possibly surpass in value such vigorous outdoor activities as running, leaping, skipping, bending, twisting, and reaching, especially if they are the result of spontaneous interest and unconscious application. We have, therefore, in the plays and games of children and the sports and athletic activities of youth a most excellent agent in maintaining physiological efficiency during school hours.

Play, then, as a method of recreation and of physical training is unsurpassed, because it uses established co-ordinations and fundamental muscles, especially if a variety of games are practiced. It develops vital and functional strength rather than mere muscular strength, on account of the large extent to which the majority of the big groups of muscles are involved. It is at least equal to gymnastics as far as these are used as preventive measures, because play and games are a fundamental demand in the life of young children, and it is only because school interferes too much with these fundamental elements of child-life that later corrective measures become necessary. If our educational methods and laboratories and machinery conformed more to elementary child life, less corrective measures would be needed.

But we appreciate also, since the advent of experimental psychology and pedagogy, that a rational, wholesome, safe and sane motor-life throughout childhood affects beneficially not only the child's health, in the commonly accepted sense of this term, but that it affects equally as favorably the intellectual and moral life. We appreciate more than ever that moral strength is dependent upon physical health, that character is in the main a "plexus of

motor habits," that "Man is what he does." In other words, we know that in order to be really efficient men, we must not only be healthy in body but must have healthy and rational minds. Rational, safe and sane mentality is the outcome of a rational motor-life, *i.e.*, rational play-life. The motor experiences of childhood determine to a large extent our habits and our character.

Plato said, "The play of children has the mightiest influence on the maintenance or non-maintenance of laws. It is this emphasis on the benefit of play, this great ethical force, which the judges of juvenile courts see in the playground activities, and it is for this reason that I believe in making play a part of our school education. Unlike other cultural agencies, for the development of the moral side of man, we return to the fundamental activities of the body to get the highest type of character. If we once appreciate that mind, body and soul are interdependent, we shall see that the soul can best be reached through well directed and organized physical activities in which the whole child is interested. Physical education offers more opportunities for ethical culture than any other ethical agency because it never separates these three parts. Through play, the mind accumulates knowledge; by learning to abide by rules and laws of the game, we strengthen the will; by playing "fair" we develop character; by conquering odds, we grow in courage; by supporting our mates, we foster coöperation. It is by "playing the game" that one acquires chivalry, fosters civic virtue, and develops loyalty.

Self-management of play is the only management worth having. To bring this about, our play teachers must not only have the right point of view, but also the right capacity for organization. To organize the children into self-managing group units around various and diversified activities must be our main purpose. This will insure the broadest possible ethical influence. If our play leaders are merely teachers, if they merely direct the entertainment of the children, without bringing them hourly nearer the goal of self-management, they fail to attain the ultimate goal. If the sociability of the children and the enjoyment of play implements, etc., depend upon constant direction of teachers or leaders, if plays and games depend for their successful termination upon "umpiring" of instructors, if our present school methods of constant marshalling prevail on the playground, yes, even if the behavior of younger children is constantly controlled by older children we have simply a modification of a police force.

Our school recesses offer a splendid opportunity for the development of good habits of play. To be sure, the large number of children which have to be accommodated makes this a hard problem during school hours, yet I find that organized recesses lead up to better free play and to good habits of recreation. *It is the teacher's*

principal means of reaching the whole child. It helps the child by counteracting the evil effects of sedentary occupations, it fosters character and civic virtue, it develops the motor brain, makes intellectual training easier and the whole school life more attractive, it makes the teacher more attractive to the children, becoming as much a boon to the one as to the other, and, last but not least, it helps in the development of rational habits of recreation and of a wholesome physical life.

We are more than ever learning that education for service demands on the part of the teacher a knowledge of the whole child and not a knowledge of his capacity for academic training alone. How are we going to know about the "wrinkles" in a child's character and how can we find out the "queer" habits he may be developing, unless we give him a chance to expose them? It is a teacher's business to iron out the wrinkles and to train away the queer habits.

One recess every morning and afternoon are, however, not enough for growing children. We have undoubtedly taken a decided step towards better school hygiene in the establishment of two organized recesses. I would most earnestly recommend the establishment of fifteen minutes with every forty-five minutes of sedentary work, for both grammar and high schools. If we had these hourly recreative intermissions, we could devote one recess to organized recreation and one to free play, and spontaneous relaxation. A forty-five minute period of close application to intellectual work, with insufficient muscular activity, is the limit to which children should be subjected. If this were done in our schools it would soon be found that these hourly recreative intermissions would lead to a much more effective intellectual capacity, owing to greatly improved physiological efficiency. For this purpose it would be wise to lengthen the session both morning and afternoon, in order to retain the requisite time for book work. A growing child has but very limited powers of endurance, either purely physical or mental. It is incapable of a prolonged passive or semi-passive position of the body, and continued sitting postures are bound to put an unequal strain upon tender and undeveloped tissues. The central nervous system is as yet undeveloped and quite easily exhausted. Only frequent changes with wholesome and vigorous general muscular recreation can possibly bring about a safe and sane school life. It has been proved that even an additional five minutes added to ten minutes hourly recesses will result in greater mental efficiency.

CLINICAL DEPARTMENT.

Conducted by A. H. RING, M.D.

Case 9-D. Diagnosis: Periodic Alcoholism.

The subject of alcoholism is such an extensive one that my discussion will have to be limited to the case reported. Here again we find the typical neuropathic background upon which drug habits commonly develop. Not only was this man handicapped by a most unstable, over-refined inheritance, but as a further outgrowth of this same factor he was raised in an atmosphere of indolence and self-indulgence. Beside all this he was not otherwise physically strong.

A few years ago this patient would have been classed as neurasthenic, but in the light of our more recent psychiatric knowledge we have learned that this type of neuropath is one who readily develops manic depressive insanity. He might therefore be said to have a pre-manic depressive temperament.

Jelliffe and others have pointed out the close relation between periodic inebriety and manic depressive insanity, which is also a periodic disease. Both subjects have susceptible nervous systems, especially in the emotional realm. The periodic drinker usually has a few days of restlessness and insomnia and "the blues," all of which betoken a disturbed metabolism;—or he may have, as this man occasionally did, a period of exhilaration, equally a manifestation of an irritation of the cortical arcs. During early life these patients suffer with transient blues or exhilaration, but as life advances joy and interest more readily fade. Frequently they have tested all that life offers and become satiated and must have a false stimulant before existence can be made rosy. Whiskey or wine are readiest at hand and best known, and they turn to them for solace, not realizing that they have a real disease calling for careful physical, as well as psychic care and treatment. They are often lonely drinkers and will take a quart to bed with them or drink secretly for days, at the same time denying it. They are seldom convivial drinkers. I know of a young actress who at intervals would lock herself in her room and remain in an alcoholic stupor for two or three days when her depressions came on, because she so dreaded them, a sort of temporary suicide.

An interesting thing which I have observed in several of these periodic drinkers is that they eat much candy or sugar between times and that candy can take the place of the alcohol for a time. In the case under discussion this fact has been used as a safety valve with much benefit, and I believe might be made to play an important part in the treatment of this form of inebriety, as well as of manic depressive insanity. The relations of metabolism and auto toxins to both of these serious diseases is most important.

It can readily be deduced from what has been said that moral discussions and the condemnation of these unfortunates as weak and lacking in manliness and self-control not only discourages the patient but reflects most unfavorably upon the intelligence of the physician. I have had few more grateful patients than these periodic inebriates. Invariably they have come carrying the opprobrium of friends and relatives, yet knowing within themselves that if they were to blame they were yet wholly unable to control the outbreaks. They grasp eagerly at an explanation of the physical (nutritional) basis of the desire, and gladly carry out preventive measures.

The most useful thing I have found when "the blues" are coming on is regular doses of soda bicarbonate and a laxative. I like milk of magnesia because it is alkaline and bland, but any salient aperient might do as well. For the sobering up, various things may be used. The first thing usually is to secure sleep, and bromide and chloral hydrate are efficient and safe; five grains of malonal repeated once in an hour may help out. A hot bath (99° F.) for fifteen to thirty minutes, or a Turkish bath should be given once or twice a day. The bowels should be thoroughly emptied by combined laxative and aperient, getting two to four movements for a day or two. In fact, active elimination through all channels is most important.

The stomach is commonly very irritable, and nothing sits so well as hot tomato soup with plenty of red pepper.

Many specifics have been suggested. The Lambert mixture works very well. It consists of—

Fluid Extract of Belladonna	2 parts
" " " Prickly Ash	
" " " Hyoscyamus aa	1 part

This he gives in ascending hourly doses until he gets dilated pupils, dry mouth, etc., but I have never pushed it to that extent.

If there is extreme restlessness bordering on delirium tremens, a 1/30 of apomorphia will usually control it. In conjunction with this desultory discussion I would urge that the scholarly article and editorial on Alcohol in last month's number be read.

Case 10-D: For Diagnosis.

The patient is a woman 33 years old, born in Massachusetts of New England parents. There is some tuberculosis on the maternal side, and her mother was of a very capricious, unstable temperament, and had some mental trouble for a year or more before she died. The father, on the other hand, is of a patient, plodding temperament and is in good health.

The patient is said to have been a healthy girl, plump, jolly

and fond of music, dancing and dramatic work. She graduated from high school at 18. Her domestic life, however, was unhappy because of her mother's peculiarities, and she was brought up by an aunt. She early undertook to support herself on the stage and kept a good balance until two years ago when she had tonsillitis. Then while riding on an elevated train one day she had a sudden intense desire to throw herself off. This frightened her so that she has not dared to be alone much since, and many other fears appeared. She would not cross a bridge because she might jump off. She found it increasingly difficult to make decisions—doubt crept in everywhere. However, she kept up her work till last spring, when she came home tired out. She wanted to rest but could not decide to do so and kept on doing things about the house. Got an insistent idea that the family must go to the beach, and hired cottages though she was told it was impossible to go—showing a stubborn, unreasonable persistence upon an illogical idea. Then she got angry. Through the summer she remained a semi-invalid, notional, unreasonable, fearful. The doctor treated her for "nervous dyspepsia."

She tried to read Christian Science and said it was a "lovely idea" but she could not understand it. She was hypersensitive and disturbed by ordinary noise. However, she improved somewhat.

Now she is in much the same state but has added the idea that she is going to kill herself—she visualizes herself at times suddenly even when she is at her best as lying stretched out with her throat cut, and this naturally terrifies her. She dreads to be alone and thinks she may become insane. In spite of all this she can be reasoned out of her fears and made very happy. She is a charming young woman of pleasant address and appears entirely normal.

Physical examination shows considerable postural asymmetry, with some spinal curvature—slightly rounded shoulders and protruding lower abdomen. The stomach is low and splashy. Skin is dark and muddy, and she has a constant sour sweat. There is some soreness over McBurney's point, with slight resistance of the right rectus. Heart is regular, but there is a slight blow at the aortic valve. Urine and blood are negative. What is the matter with this woman, and what would you do for her?

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the *GAZETTE* only and preferably to be typewritten—personal and news items should be sent to THE NEW ENGLAND MEDICAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business should be sent to the Business Manager, 80 East Concord Street, Boston, Mass.

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HOW TO JOIN THE AMERICAN INSTITUTE OF HOMŒOPATHY, AND WHY.

An unfilial child has somewhere in his makeup an abnormal streak. He may excuse and justify his conduct however he pleases, the fact that he is, or has been unfilial, cannot be blotted out from against him. The American Institute is the parent of Homœopathy in this country. No physician who is or has been enjoying the fruits of a successful homœopathic practice could have thus succeeded had it not been for his professional mother, the American Institute. She has made possible his very existence and is as actively defending today his inalienable right to practice his special therapeutics as she was three score and ten years ago. The demise of the American Institute would be the death blow of Homœopathy in this country. But a few years would be required to legislate out of existence our homœopathic institutions, were it not for the vigilance and effectiveness of this well organized institution of offense and defense.

What, then, Dr. Homœopath, are you doing for the maintenance and perpetuity of your own mother? Are you the unfilial son or daughter, selfishly receiving the benefits of a good and safe practice, when this professional mother of yours is seriously in need of your sympathy and active support? What the Institute could accomplish for every practitioner and institute of Homœopathy would be difficult to estimate had it the energetic and enthusiastic support of all homœopathic physicians in this country.

Is there a hospital in your town which will not allow you, a homœopath, on its staff? Have you been cheated out of your just rights, through old school supremacy and dominance? Have you been kept from any professional appointment by virtue of being a homœopath? If so, what is your obvious remedy? Tell mother, sure! and if mother had the active support of her fifteen thousand children in this country, instead of but two thousand seven hundred, there would be something doing whenever one of her children, however insignificant or distant, was discriminated against.

Stop and think a moment what a tremendous power we could wield, if we had the support of our ten thousand graduates.

The A. M. A. has a membership of thirty-six thousand, and has not until last year increased in numbers by one member for several years. Can you realize what it would mean to your individual practice to have a fighting engine composed of ten thousand virile units looking after your personal rights as a physician? Take the one item alone of the public press. Let ten thousand wide-awake men and women demand that their daily paper give them occasional items of news concerning homœopathic institutions of the country. Think what that would mean to you individually, in a small town especially. The Associated Press will send out any legitimate item of news for which there is a demand created. The Institute will supply the Associated Press with such news, but you must create the demand for it.

Now why not support your professional mother, and do it so ardently that she will in turn do ten times as much for you as it is possible for you to do for her?

If the attendance at the next meeting of the Institute at Atlantic City were a round two thousand, and the new members added were an even thousand, it would do more to energize our Cause, than all the propagandistic work we have ever done. Moreover, it would advance every homœopathic institution of the country, and accentuate the work done during the past seventy years. The impact on the public mind of such a tremendous meeting would make itself felt on every individual practitioner of Homœopathy. All this can be done by just a little individual sacrifice and effort.

Firstly,—join the Institute *now* if you are not already a member. To all physicians who have graduated from a medical college within the past three years there is a special inducement to join the Institute now. Do it in this way:—Write to the Editor of the *New England Medical Gazette* for an application blank. He will secure the necessary endorsements after you have filled this in. Instead of sending five dollars, the regular fee, send one dollar. This will entitle you to membership and pay your dues for one year. If you want the "Journal of the American Institute of Homœopathy," send two dollars, which will pay dues and subscription for one year. Every year add one dollar to your yearly dues until the amount is five dollars, to pay dues and Journal subscription.

If your graduation was prior to 1910 admission to the Institute must be in the regular way, that is, by filling out application blank, duly endorsed, and sending it with two dollars for Journal subscription and three dollars for membership dues. Fees thereafter will be three dollars per year for membership, and two dollars for Journal subscription.

Do it *now*, and together we can boom our cause so effectively as to startle ourselves and to forever strangle the annual gasp that Homœopathy is dead or dying.

A NEW USE FOR THE PULMOTOR.

There are few occasions in the practice of medicine wherein the physician feels more deeply the throb of real joy radiating through his whole being than at that moment when he assures the expectant father and mother that all is well with the little new-born stranger. Modest though he may be of his personal prowess he cannot but feel a deep sense of satisfaction in the accomplishments of his obstetric skill. Conversely there are few occasions in which his sorrow is deeper or more genuine than when he must needs perforce tell those same parents that the patiently awaited event has culminated only in disappointment;—the baby is dead.

The physician welcomes most eagerly any measure or device which will in any degree lessen the chances of such a disappointing ending to so joyous an anticipation.

There have been much fewer still births recorded in those hospitals and in the practice of those physicians wherein there has been a prompt recognition of cerebral hemorrhage of the new-born and the proper remedy applied. There can be no doubt that a goodly percentage of still births is due to such hemorrhage, especially where the child has been delivered with forceps.

The remedy is to refrain from swinging the child head downward or subjecting it to any violent motion. Then if respiration is not quickly established to open the skull and endeavor to remove the blood clot.

Now comes another helpful agent, the Pulmotor. This is a comparatively new instrument and was devised for the purpose of resuscitating the asphyxiated, whether from gas, chloroform, ether, drowning or other causes.

A mouth piece connected by a rubber tube to an oxygen tank supplies oxygen or a mixture of oxygen and air with the same rhythm as in normal respiration. Not only is the oxygen forced into the lungs sufficiently to dilate all air cells, but it is sucked out again, thereby taking with it certain of the noxious gases or material which is causing the asphyxia. The strokes of the Pulmotor can be adjusted to the capacity of the lungs, thus making it possible to use it on an infant or on an adult. It can be used with such power and rhythm that a corpse can be forced to "breathe" even though his heart does not respond. The first attempt to use the Pulmotor for the resuscitation of an asphyxiated new-born has been so exceedingly gratifying that its future use must certainly commend itself to all physicians practicing obstetrics.

The report of this first case appears in the "Medical Council" for September 13, and is written by Dr. C. C. Stauffer of Harrisburg, Pa.

"July 26, 1913 (I mentioned the date because of an article that appeared in the *Philadelphia Press* of August 1, 1913, stating a

similar case, and claiming that to be "the first of the kind in which the Pulmotor had been used), Dr. R. L. Perkins, of Harrisburg, called the writer in to see a case in labor.

The woman, a primipara, had then been in active labor about thirty hours. The pelvis was normal but small and the child's head large. Forceps were applied and the delivery completed in about an hour. The child's head was considerably elongated, especially the brow, and a caput succedaneum was decidedly in evidence. There was no sign of life except a faint fluttering of the heart. Dr. Perkins and the writer practiced all the different methods usually employed to encourage the respiration—the extraction of mucus from throat and fauces, slapping of the buttocks, application of hot and cold water, and the different forms of artificial respiration, mouth-to-mouth insufflation—all were, in turn, resorted to, but with very little benefit.

After working forty-five minutes or more with only four or five grunts to repay us for our labors, we decided to try the Pulmotor. It was rushed across the city from the Gas Company's office in a remarkably short time and was at once put into use. The Pulmotor was first applied, but the face mask was too large (having heretofore been used only on adults for gas asphyxiation, drowning accidents, etc.) Some time was spent in padding up the mask so that perfect suction might be had. I might add that the mask must fit perfectly on the face in order to draw the oxygen out of the lungs. Apropos, I might also add that the manufacturers of the Pulmotor should send out different sized masks with each instrument.

The child was forced to breathe pure oxygen, and in a comparatively short time very shallow but regular breathing started. After a few minutes with the Pulmotor the mask was removed and the child continued to breathe. Then it was allowed to breathe pure oxygen direct from the tank for ten or fifteen minutes. The breathing grew deeper and less labored. The color of the skin also improved; it was at first pallid, then livid, and finally, after the use of the oxygen, it became a normal red.

The child did not cry for two and a half or three hours after birth, but, according to the nurse's report, it is making up for lost time. The child at this writing, one week after birth, is perfectly normal in every respect save the caput succedaneum and the shape of the head. These conditions are both improving."

It is gratifying to note that Dr. R. L. Perkins is a homœopathic graduate and a son of Dr. Nathaniel R. Perkins of Boston, a member of the State Board of Registration in Medicine. As an index of the interest which this case has aroused the following letter from the British Consulate at Philadelphia will indicate.

British Consulate, Philadelphia,
September 17th, 1913.

DR. R. L. PERKINS

Sir:—I have been in communication with the Department of Health of the Commonwealth of Pennsylvania at Harrisburg in regard to a case which I understand you attended, the apparently dead born baby of Mr. and Mrs. Edward W. Weaver of Harrisburg, in which you brought the infant to life by use of a Pulmotor.

I venture to ask you whether you would be so good as to furnish me with full particulars of this case, as to the length of time that had elapsed from the child being born and the use of the Pulmotor and how long it was used and any other information which you think would be of use in regard to your treatment of this infant.

I should add that my reason for addressing you is in consequence of an Official communication addressed to me on the subject and a copy of your reply to this letter, if you should be so good as to furnish me with one, will be transmitted to His Britannic Majesty's Government.

Thanking you in anticipation of your courtesy in this matter,
I have the honor to be Sir,

Your obedient Servant,

WILFRED POWELL,
H. B. M's Consul General.

GRAND BAZAAR AND FETE FOR BOSTON UNIVERSITY SCHOOL OF MEDICINE.

The most attractive and amusing event of all the Copley-Plaza festivities this fall will take place when Bay State blue bloods and the medical profession join hands in a huge bazaar and fete to be held November 13, 14 and 15.

Boston University has promised the School of Medicine \$50,000 for the Endowment Fund, provided a like sum is raised by the School, hence the elaborate entertainment with its varied program. Homœopathic doctors all over the State have been working enthusiastically for their alma mater.

The chief feature of the opening day is the Cabaret Show to be held in the evening. Dancing and singing by the best amateur talent about the Hub will boost gaiety to a high pitch—and incidentally it is hoped will loosen purse strings.

Miss Grace Lockwood and Miss Elizabeth Bigelow have both offered their services as head waitresses, and among their assistants will be many debutantes and Vincent Club girls.

A Mother Goose Pageant and Ball to be held Friday evening, November 14th, will be the most popular feature of the whole affair. The Pageant has a cast of one hundred and thirty. Miss Marie Lee will be "Queen of Hearts." Miss Charlotte Reed, "Mother Goose." Miss Dorothy Hooper, "Daughter of the King," Miss Marion Waters, "Mistress Mary," Miss Stevens, "My Lady Wind," and Miss Doris Bliss, the amusing "Jill." Most of the debutantes of this season will be seen as fairies. Many Harvard students will also have their share in the fun.

Admittance to the Ball is by subscription only.

The matrons for the Ball, which represent different towns, are as follows:

Mrs. S. Parker Bremer, Mrs. Frederick Bancroft, Mrs. Willis Curtis Goss, Mrs. Frank L. Young, Mrs. Charles Peabody, Mrs. Frank Partridge, Mrs. Edward Ver Plank, Mrs. Arthur L. Devens, Jr., Mrs. Albert W. Bliss, Miss Elizabeth Flint, Mrs. Rufus Hinkley, Mrs. Oren C. Sanborn, Mrs. W. H. Rothwell, Mrs. Joseph G. Thorpe, Mrs. Ronald Worthington, Mrs. George W. Wheelwright, Jr., Mrs. Eugene Carr, Mrs. Samuel McCcomb. Assistants, Miss Louise Colburn, Miss Marjorie Bowe, Miss Priscilla Riddle, Miss Elsie Page.

Other features of the Bazaar are the Luncheon, Pivot Bridge, Afternoon Tea, Chafing Dish Supper, Musicale, Table d'Hote Dinner, Café Chantant, and a White Elephant Sale.

Physicians living in Boston are giving their best efforts to the entertainment for the first day designated "Boston Day" and are furnishing luncheon, afternoon tea and chafing dish supper. Mrs. Stanley P. Clemens is the chairman of this committee.

Friday, November 14th, is Brookline Day, and the physicians of that town under the direction of Mrs. Frederick B. Percy will have charge of affairs.

Somerville, Arlington, North Cambridge and Cambridge will furnish the food for the third day. Mrs. J. Arnold Rockwell and Mrs. E. A. Whitman, both of Cambridge, are the chairmen.

The patronesses are: Mrs. Oliver Ames, Sr., Mrs. H. C. Ahlborn, Mrs. Copley Amory, Mrs. Thomas Aspinwall, Mrs. Reginald W. Bird, Mrs. Harrison P. Bridge, Mrs. William W. Blackmar, Mrs. Arthur Blake, Mrs. S. Parker Bremer, Mrs. E. W. Burdett, Mrs. Paul Butler, Mrs. F. B. Carpenter, Mrs. Arthur Cheney, Mrs. Arthur E. Childs, Mrs. Russell Codman, Mrs. William Coolidge, Mrs. Albert I. Crool, Mrs. Nelson Curtis, Mrs. J. Sumner Draper, Mrs. Ezra Fitch, Mrs. A. P. Gardner, Mrs. John L. Grandin, Mrs. Rufus L. Greeley, Mrs. Henry L. Hall, Mrs. Arthur W. Hart, Mrs. Edwin Hawthway, Mrs. Clement S. Houghton, Mrs. Mary Morton Kehew, Mrs. Holmes Kincley, Mrs. Frank Gair Macomber, Mrs. Eliot B. Mayo, Mrs. John H. Morison, Mrs. H. Staples Potter, Mrs. Henry Ware Putnam, Mrs. James Purden, Mrs. Waldo Richards, Mrs. Orin Sanborn, Mrs. Nathaniel S. Simpkins, Mrs. William G. Seeley, Mrs. Henry Spooner, Mrs. E. W. Stearns, Mrs. Charles A. Stone, Mrs. S. P. Stratton, Mrs. H. C. Thacher, Mrs. Augustus L. Thorndike, Mrs. J. S. Thorp, Mrs. F. A. Turner, Mrs. A. R. Whittier, Mrs. T. S. Whitwell, Mrs. P. W. Wrenn, Mrs. Frank L. Young.

FAIR COMMITTEE.

Dr. George B. Rice, Chairman, Dr. Harold Babcock, Dr. A. J. Baker Flint, Dr. Clara E. Gary, Mrs. E. A. Whitman, Dr. Lucy Appleton, Dr. Eliza B. Cahill, Miss H. Alma Cummings, Mrs. Stanley P. Clemens.

PROGRAM COMMITTEE.

Dr. Horace Packard, Dr. John P. Sutherland, Dean of B. U. School of Medicine, Dr. William O. Mann, Dr. J. Herbert Moore, Hon. Henry F. Bothfeld, ex-Mayor of Newton, Dr. Dana Downing, Mr. William M. Wood, President American Woolen Co., Mr. Lowell T. Clapp.

Mrs. Stanley P. Clemens of the Hotel Westminster is manager and organizer.

COLLEGE OF SURGEONS.

The Committee appointed by the American Institute to confer with the Regents of the American College of Surgeons has sent the following notice to all the surgeons of the homœopathic school, who are in any sense eligible to fellowship in said College.

It has been the aim of this Committee to secure the same recognition for the American Institute of Homœopathy as was given the American Medical Association. There has been no disposition on the part of the Regents of said College toward debarring any of our reputable surgeons. In fact, the Regents have urged them to make application for membership. But there has been a very strong aversion on the part of those same Regents to recognize anything that had the word Homœopathy in it.

The next Meeting of the Regents occurs in Chicago, November 13, at which time all of the members of the Committee appointed by the Institute are invited to attend. The next Chapter will be given after this coming meeting.

My dear Doctor:

The undersigned constitute a committee of the American Institute of Homœopathy appointed for the purpose of recommending names for membership in the recently organized American Congress of Surgeons. We have the honor of informing you that you have been nominated by the committee for such membership. We are herewith enclosing a little prospectus of the College, giving its aims and its objects.

It will, of course, be necessary for the Board of Regents of the College of Surgeons to act upon your application after our recommendation. You will receive at an early date the necessary application blanks from Dr. Franklin H. Martin, Secretary of the Congress. We most earnestly urge that you avail yourself of this opportunity of becoming a member of the Congress, believing it to be an official recognition of your ability and moral worth.

Kindly return your application, properly filled out and signed, to the chairman of this committee, Dr. James C. Wood, 816 Rose Building, Cleveland, Ohio.

JAMES C. WOOD, Chairman,
DEWITT G. WILCOX,
WALTER G. CRUMP,
HERBERT D. SCHENCK,
C. E. SAWYER,
CHARLES E. KAHLKE,
JAMES W. WARD,

Committee.

Whatever else the new formed American College of Surgeons may accomplish, it will be rendering the profession a very valuable service if it succeeds, as no doubt it will, in bringing all physicians and surgeons up to the standard set forth in the declaration herein printed. This is as it should be, and no surgeon, whether a fellow of the College or not, should hesitate to sign such an agreement.

The line of demarcation between professionalism and commercialism should be so distinct that he who runs may read.

AMERICAN COLLEGE OF SURGEONS.

At the meeting in Washington when the American College of Surgeons was founded, the question was asked whether the College would positively exclude surgeons who were suspected of fee-splitting or paying commissions in any form whatsoever. The President declared that no one should be admitted who was suspected of being guilty of this pernicious practice. This declaration was received with universal and most enthusiastic applause.

It does not seem possible that many men who would otherwise be eligible can belong to the class of fee-splitters, but the fact that the matter

was so much emphasized has induced the Committee on Credentials to prepare the following positive declaration, which will be filed in connection with the credentials of each Fellow.

If the College succeeds in eliminating this evil, the public will be enormously benefited.

Very respectfully,
Committee on Credentials.

DECLARATION.

I hereby promise upon my honor as a gentleman that I will not, so long as I am a Fellow of the American College of Surgeons, practice division of fees in any form; neither will I collect fees for others referring patients to me; nor will I permit them to collect my fees for me; nor will I make joint fees with physicians or surgeons referring patients to me for operation or consultation; neither will I in any way, directly or indirectly, compensate any one referring patients to me; nor will I utilize any man as an assistant as a subterfuge for this purpose.

SOCIETIES.

The seventy-third semi-annual meeting of the Massachusetts Homœopathic Medical Society was held October 8th, 1913, at Springfield, Mass.

The meeting was called at noon by the President, Plumb Brown, M.D., and consisted of the following papers:—

A. TUBERCULOSIS.

1. Etiology, Pathology, Prophylaxis, of Tuberculosis. George N. Lapham, M.D., Rutland.
2. Homœopathic Treatment of Tuberculosis. Maurice W. Turner, M.D., Brookline.
3. Surgical Treatment of Tuberculosis. Robert F. Hovey, M.D., Springfield.

B. TYPHOID FEVER.

1. Etiology, Pathology, Immunization, Vaccine Therapy of Typhoid Fever. William H. Watters, M.D., Boston.
2. Homœopathic Treatment of Typhoid Fever. John Hutchinson, M.D., New York.
3. Report of Palmer Epidemic of Typhoid Fever. Harry C. Cheney, M.D., Palmer.

These were discussed by Drs. Herbert C. Clapp, DeWitt G. Wilcox, H. R. Sackett, J. H. Carmichael, and others.

About one hundred members were present at the meeting which was held in the Mahogany Salon of the New Auditorium of Springfield, a magnificent new municipal building. A pleasing luncheon and a fine dinner were served in the same building.

After the dinner Dr. David W. Wells presented the annual oration, "The Age of Credentials." There is no need of expatiating on the excellence of Dr. Wells' paper, for all members are well acquainted with the common sense and the sound ideas which he always presents so prettily clothed in literary garb.

His paper was a fitting finale to a most pleasant and profitable day. There was a good proportion of men present from Boston and vicinity, but we wish more members would make a strenuous effort to attend these meetings held by the Districts of the Society. There is always a hospitality and good will present at these meetings which engenders a true affection for our Society.

Dr. S. E. Fletcher's Report on the work of the Board Appointed to act upon Disputed Bills in connection with the Working men's Compensation Act.

"Nearly two years ago the bill was passed striving to give to injured working men somewhat better compensation than they have had in the past. The law is as yet an experiment, but it is proving a very great advantage to the working public. There is some question about the benefit accruing to the medical profession, but I believe it to be very great. It bids fair to render the work of physicians very much more remunerative than heretofore.

"The Industrial Accident Board consists of seven men, and these men were to decide questions between the insurance man on one side and the physician on the other. It found itself unable to solve many problems without the aid of the physicians, and so representatives were invited from the medical society. But the large number of members present at this meeting made it difficult to reach a conclusion, and so they chose a committee of two to work with the committee of the accident board. The two members were Fred Cotton and myself. The Insurance Companies are represented by Drs. Allard, Rugey, and Donahue. These men work in the utmost harmony and are backed up by the other members.

"This committee was appointed for one meeting only, but after that it was felt that these problems would continually be coming up and so the committee was requested to serve as an advisory board to settle differences between the physician and the Insurance Company.

"They recognize bills of the physician so long as they are reasonable. There are, however, many incompetent men in practice. A meeting of the leading liability companies was called and the companies felt that they should not surrender their right to call medical advice. This has now been approved. They will still recognize bills of regular physicians if they are reasonable and the service rendered competent. A number of differences have arisen, based upon a narrow conception of the insurance companies and often because of narrow minded and grafting physicians. The committee has tried to act in a manner fair to both sides.

"One important question is whether or not the hospitals admitting patients at seven or eight dollars a week should expect to be paid ward rates. A certain number of recommendations have been made.

"While the insured operative is the ward of the insurance company, the medical profession must recognize the fact that this is an industrial law and must be on an industrial basis. I believe that if the physicians of the State would recognize the fact that control of the situation lies with the insurance companies themselves, and that physicians should be allowed compensation as a sort of privilege, they will try to render service as little irritating to the other side as it is possible."

Homœopathic Medical Society of the State of New York.

The forty-seventh semi-annual meeting of the Homœopathic Medical Society of the State of New York met in the Onondaga Hotel, Syracuse, October 14 and 15, with Dr. B. W. Sherwood in the Chair. Dr. John E. Wilson made an extensive report on Medical Legislation, reporting in full on the proposed bill obliging physicians prescribing cocaine, morphine, or any of its derivatives, to write a prescription for the same and have it registered, even though such prescription may be made at a physician's office. The bill is not likely to become operative.

The papers read were:

Acute toxic polyneuritis. C. L. Bailey, Albany.

Auto-intoxication in diseases of the nervous system. John E. Wilson, New York.

Upper and lower neuron diseases. F. L. Mosser, New York.

In the evening a banquet was given, after which the Bureau on Public Health reported by two addresses, one given by Charles W. Birtwell of Boston, on Sex Education; and Dr. DeWitt G. Wilcox of Boston, on Physical Efficiency.

Following are the papers read:

Treatment of puerperal infections. G. T. Moseley, Buffalo.

Pyelitis as a post-operative complication of abdominal section.

Frank T. Bascom, Rochester.

Modern management of Nesserian salpingitis. A. R. Grant, Utica.
Report of a case of vesico-cervico-vaginal fistula, utilizing catheters
in the ureters and bladder in the operation. (Illustrated) E. G.
Tuttle, New York.

SURGERY.

A group of cases diagnosed by the cystoscope. Louis Reme Kauf-
man, New York. Discussor, E. G. Tuttle.

Syphilitic and genito-urinary diseases demonstrated by the kinema-
color moving pictures. Sprague Carleton, New York.

My experience with removal of the appendix. G. W. Roberts,
New York. Discussor, S. R. Snow.

PHYSICAL THERAPEUTICS.

Non-surgical treatment of malignant neoplasms. Wm. H. Diet-
fenbach, New York.

Report of a case of post-diphtheretic paralysis. (By request)
Isabel Caldwell, Brooklyn.

CLINICAL MEDICINE AND PATHOLOGY.

The present status of the Mayo bismuth meal, and the characteristic
findings in duodenal ulcer. Roy Upham, Brooklyn. (Illustrated
by lantern slides.) Discussed by M. W. Johns and G. C.
Dominick.

A few points in the treatment of old age. E. D. Rudderow, New
York. Discussed by W. L. Love and E. P. Swift.

OBSTETRICS.

Inertia uteri. Loomis Danforth, New York.

Treatment of retained membranes. E. P. Swift, New York.

Report of three freakish cases. C. E. Lane, Poughkeepsie.

The increasing frequency and decreasing mortality of cesarean
section. L. S. Loizeaux, New York.

MEDICAL JOURNAL REVIEWS.

The Clinique, September, 1913.

1. The Effect of Baptisia in the Production of Typhoid Agglutinius.
R. R. Mellon, M.S., M.D., and B. J. Sanford, M.D. Reviewed in GAZETTE,
August, 1913, p. 449.

2. Résumé of Poliomyelitis, A. Cameron, M.D.

3. Surgical Diphtheria, G. M. Cushing, M.D.

4. Annual Address, A. E. Smith, M.D.

5. Surgery of the Typhoid, D. D. Culver, M.D.

6. Some Doctors Journey to the Top of the World, W. H. Wilson,
M.D.

The North American Journal of Homœopathy. September, 1913.

1. Remedies in Stubborn Cases of Pneumonia. P. E. Krichbaum,
M.D.

2. Indications for Remedies in Pneumonia. F. P. McKinstry, M.D.

3. The Modern Treatment of Syphilis. E. E. Rowell, M.D.

4. Management of Recent Infections of the Middle Ear. W. F.
Beggs, M.D.

5. The Scope of Manual Therapeutics. N. D. Mattison, M.D., D.O.
S. B. H.

The Clinique. October, 1913.

1. Thirty Practical Points in Clinical Urinology. C. Mitchell, M.D.
The most practical and essential of these pithy remarks are that the total 24-hour amount *must* be collected properly in a *clean* receptacle, preserved carefully in a *cool* place, and examined immediately after the completion of collection. A freshly voided sample is often essential for a proper examination of the sediment, especially for tube-casts. Negative laboratory findings as reported from one examination should never be interpreted as meaning absence of disease.
2. Tuberculosis Among Children. A. V. Fuller, M.D.
3. A Peculiar Case (Intestinal Obstruction from a mass of twine). W. H. Remer.
4. Bedsores and Varicose Ulcers. P. Rudolf, M.D.
5. The Sequence of La Grippe. Report of Case.
6. Prolapsus Uteri et Recti. Report of Case. H. A. Pattison.
7. The Repertory as an Aid to the Study of Materia Medica. E. A. Taylor, M.D.

S. B. H.

The Hahnemannian Monthly. September, 1913.

1. Skin Manifestations of Disease in Children. C. E. Burt, M.D.
2. Is Diagnosis a Necessity in Order to Apply the Remedy Homœopathic to the Case? E. P. Mills, M.D.
3. Transactions of the New Jersey State Homœopathic Medical Society. Sixtieth Annual Session.
A Clinical Study of Pneumonia in Children. C. S. Raue, M.D.
Remedies in Infantile Pneumonia. W. MacGeorge, M.D.
These two articles offer a very interesting and comprehensive presentation of the diagnosis and therapeutics of pneumonia.
The Reasonableness of Homœopathy. E. Rushmore, M.D.
The Care of the Woman Post Partem. H. L. Maps, M.D.
The author emphasizes the value of elevating the head of the bed to promote drainage of the parturient canal. In his opinion the use of the binder is an obsolete practice.
Some Observations in the Treatment of Tubercular Joint Disease. A. H. Bingham, M.D.
Comparisons in Anæsthesia. G. H. Allen, M.D.
High Frequency Electricity as a Means of Controlling High Blood Pressure. A. W. Westney, M.D.
The title of this paper is malapropos and highly misleading. The only reference made to high frequency is contained in a very few lines at the end of the article, and this merely consists of a statement that he has seen the blood pressure fall coincidentally with the use of the high frequency current; and that in seven years use of the current he has not had a case of apoplexy. Nothing is said of the kind of machine used, the amperage, the duration and frequency of treatment, or of any forms of treatment presumably employed at the same time, except in the discussion which follows.
Personally we think it essential that the titular inscription, especially one at the head of an article bearing on medical subjects, should be a distinctive designation which describes or explains the nature of the substance of such an article.
Eyestrain. L. E. Hetrick, M.D.
The Mosquito. T. J. Headlee, M.D.
An interesting discourse by the State Entomologist upon the habits, habitat, and methods of extermination of this pest.

S. B. H.

Medical Century. September, 1913.

1. "Homœopathic Limitations, or Where Are We At." E. V. Baldwin, M.D.
2. Internal Remedies in Gynæcology. A. S. Phelps, M.D.

3. Is the Homœopathic Materia Medica a Scientific Quality? S. P. Crutcher, M.D.
4. Treatment of Infantile Fermentative Diarrhœa with Lactic Acid Bacillus. By A. H. Seibert, M.D.
5. Tobacco and Cholera. J. W. Hodge, M.D.
The author consistently maintains his uncompromising antagonistic attitude toward the use of tobacco. Overuse of invective may impair the force of his arguments, at least in the minds of some readers.
6. Placenta Prævia. T. H. Wilcoxon, M.D.
7. The Report of a Case of Hydrocephalus in the New Born. E. A. Condon, M.D.
The Hydromechanics and Sanitation of the Bladder. O. S. Runnels, A.M., M.D.
9. Vaginismus. F. C. Stewart, M.D.
10. Retinoscopy. B. C. Catlin, M.D.
11. Guiding Symptoms to the Remedy with some Examples. B. Johnson, M.D.
12. Dietary in Pregnancy. M. Lyon, M.D.
13. A Case of Affective Indifference. Sheldon Leavitt, M.D.
14. The Galvanic Current. J. A. Burnett, M.D.
15. Hyperchlorhydria. J. C. Danforth.
16. Pasteurized Milk. N. V. Wright, M.D.

Medical Century. October, 1913.

1. Proving of *Aragallus Lambertii*; or Loco Weed. W. A. Dewey, M.D.
2. The Influence of the Thyroid Gland in Nervous Conditions. L. B. Askenstedt, M.D.
3. The Incandescent Therapeutic Lamp. J. A. Burnett, M.D.
4. Helpful Hints in the Care of the Baby. J. H. Peterman.
5. Successful Prescribing. J. D. Varney.
6. Erysipelas. J. B. Shoemaker.
7. An Aneurism of the External Iliac Artery. J. E. Cummins, M.D.
S. B. H.

The British Homœopathic Journal. September, 1913.

1. Neurasthenia—Treated by Isotonized Injections of Sea-Water. A. G. Sandberg, M.D.
A discussion of the ailment, and reports of ten cases successfully treated.
2. Mental Factors in the Treatment of Neurasthenia. G. F. Goldsbrough, M.D.
Contains many suggestions worthy of the attention of any physician. The article is followed by discussions.
3. Multiple Sarcomata—Cases. T. Miller Neatby, M.A., M.D.
S. B. H.

British Homœopathic Journal. October, 1913.

1. The Work of the International Homœopathic Council for the coming year. George Burford, M.B.
2. The Hospital of Tomorrow. Wm. Cash Reed, M.D.
This article sets forth the imperative need of co-operation between the hospital and social workers.
"I know of no greater tragedies than those hidden in the lives of patients admitted to hospital, because the human element at home has been left unnegotiated, and further burdens are being prepared for the hospital for the want of co-operation of social work." . . . If we would, to any great extent, be healers of the body we must never for one moment lose sight of the spirit.
3. Homœopathy for the Children. J. R. Day, M.D.
4. The Acute Abdomen. James Eadie, M.B., Ch.B. Glas., F.R. C.S. Eng.

As an excuse for treating of such a hackneyed subject the author aptly states that "it is in medicine as in finance—much poverty and much paper may coexist."

S. B. H.

The Homœopathic World. October, 1913.

1. A Discursive Report of the Ghent Conference of the International Homœopathic Council.
2. The Liverpool Congress.
3. Some Pacific Coast Medicines. W. Bœericke, M.D.
4. Colloid Selenium in the Treatment of Cancer.

The Medical Advance. September, 1913.

1. History, Study and Treatment of a Case (Psychoneurosis). M. W. Turner, M.D.
2. Typhoid Carriers. J. B. S. King, M.D.
3. Homœopathic Remedies in Obstetric Practice. C. S. Middleton, M.D.
4. Partial Involuntary Proving of Vesta. H. A. Cameron, M.D.
5. Flies. J. B. S. King, M.D.
6. Practical Points. H. Farrington.
7. Epiphegus. R. Morden.
8. The Genius of Our Materia Medica. C. M. Boger, M.D.

S. B. H.

Journal of Ophthalmology and Oto-Laryngology, September, 1913.

Some Cases Illustrating Ocular Disturbances Due to Diseases of the Nose and Accessory Sinuses. John E. Weeks, M.D., Sc.D., New York.

In the practice of the ophthalmologist, cases are frequently encountered which clearly demonstrate the interdependence of diseases of the eye, ear, nose and throat, among which may be mentioned: Neuro-retinitis, papillitis, choked disc, retro-bulbar neuritis, atrophy of the optic nerve, exophthalmos, and, in addition, affections of the third, fourth, fifth, sixth, and seventh cranial nerves. These various pathological conditions, when dependent on diseases of the ear, nose and accessory sinuses and throat, are, with the exception of choked disc, usually monocular, but may affect both eyes. Ten cases are reported in detail with Dr. Coakley's reports of sinusitis or ethmoiditis, perfect restoration of vision being secured in all but one, after the nasal and sinus operation.

SCHOOL FOR HEALTH OFFICERS, CONDUCTED BY HARVARD UNIVERSITY AND THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

Beginning this fall Harvard University and the Massachusetts Institute of Technology are maintaining in co-operation a School for Public Health Officers. The facilities of both institutions are available to students in the School, and the Certificate of Public Health (C. P. H.) is to be signed by both President Lowell and President Maclaurin.

The object of this School is to prepare young men for public health work, especially, to fit them to occupy administrative and executive positions such as health officers or members of boards of health, as well as secretaries, agents, and inspectors of health organizations.

It is recognized that the requirements for public health service are broad and complicated, and that the country needs leaders in every community, fitted to guide and instruct the people on all questions relating to the public health. To this end, the instruction of the new School will be on the broadest lines. It will be given by lectures, laboratory work, and other forms of instruction offered by both institutions, and also by special instructors from national, state, and local health agencies.

The requirements for admission are such that graduates of colleges,

or technical and scientific schools, who have received adequate instruction in Physics, Chemistry, Biology, and French or German, may be admitted to the School. The medical degree is not in any way a pre-requisite for admission, although the Administrative Board strongly urges men who intend to specialize in public health work to take the degree of M.D. before they become members of the School for Health Officers.

The Administrative Board which will conduct the new School is composed of Professor William T. Sedgwick, of the Massachusetts Institute of Technology; Professor Milton J. Rosenau, of Harvard; and Professor George C. Whipple, of Harvard. Professor Rosenau of Harvard has the title of Director, and the work of the School will be under his immediate supervision.

PENNSYLVANIA NOTES.

Fiftieth Annual Session of The Homœopathic Medical Society of The State of Pennsylvania met at Bedford Springs, Pa., Sept. 2, 3, 4, 1913. The session was called to order on Tuesday morning, Sept. 2, at 10.30 o'clock, by the President, Dr. H. I. Nicholson of Pittsburg. Dr. E. H. Pond of Pittsburg read the report of the Secretary. Dr. Ella D. Goff presented the Treasurer's report, showing a substantial balance in the treasury. Then followed the reports of the various standing committees.

The second business session was called to order on Wednesday morning, at 10.15, by President Nicholson. The Board of Censors reported favorably on the names of five applicants and they were unanimously elected to membership in the Society. On motion of Dr. H. T. Schmitz, the Society voted the sum of fifty dollars to the International Propaganda Committee of the American Institute of Homœopathy.

Dr. H. D. Elliott, of Philadelphia presented a communication on behalf of Dr. Wm. M. Keim, of Philadelphia, regarding the neglected condition of the grave of Dr. Pemberton Dudley, former president of the Society. On motion of Dr. Dinsmore, the sum of fifty dollars was donated by the Society as a part of the fund to erect a suitable memorial to Dr. Dudley.

The nomination of officers for the ensuing year was then taken up, the following nominations being offered: President, Dr. Leon T. Ashcraft, of Philadelphia; first Vice-President, Dr. J. M. Heimbach, of Kane; second Vice-President, Dr. H. M. Gay, of Philadelphia; Secretary, Dr. I. D. Metzger, Tyrone; Treasurer, Dr. Ella D. Goff, Pittsburg; Board of Censors, Dr. Edward Krusen, of Norristown; necrologist, Dr. Wm. F. Baker, Philadelphia; associate editor, "Hahnemannian Monthly," Dr. Gilbert J. Palen, Philadelphia.

The third business session was called to order by Dr. Pond, on Thursday morning, September 4.

The first matter of business was the election of officers; there being one candidate for each office, motion was made and carried that the secretary be instructed to cast a ballot electing those nominated at the previous meeting.

A committee was appointed to consider the amendment of Article Seven, Section One, of the By-Laws, reported in favor of changing the word "Five" to the word "Two" as provided for in the amendment offered by the Society in 1912. The report of the committee provided that every new member pay two dollars the first year and three dollars every subsequent year. This does away with the initial payment of five dollars on becoming a member of the Society. The report of the committee was accepted and the amendment carried. Dr. Pond made a motion that a vote of thanks be given to President Nicholson for his efficient work as an officer of the Society. The motion was seconded and carried. Dr. Heimbach then made a motion thanking Dr. Pond for his efficient and faithful work as Secretary of the Society for five years. The motion was seconded and carried.

The meeting adjourned at 10.05 P.M. The scientific program contained many interesting papers covering the entire field of medical science and

these were received and discussed with considerable interest by the Society. The social features consisted of a musical entertainment on Tuesday evening, in which the members participated, and on Wednesday evening in the form of a banquet, Dr. W. W. Speakman, toastmaster. One hundred and fifty members and guests were present at the banquet, which was a very successful and enjoyable affair.

The Hahnemann Medical College of Philadelphia held its opening session of 1913-1914 on Monday evening, September 22, at 8.30 o'clock in Lecture Room No. 1. The Rev. Floyd W. Tompkins pronounced the invocation and gave a few words of welcome from the Trustees, after which Prof. John E. James, Jr., made a short address, which was followed by remarks made by the Dean, Dr. William B. Van Lennep. It is highly gratifying to the alumni and friends of the college to know that the student body has been showing a healthy increase, and that the Freshmen's class this year is almost double that of last year.

PERSONAL AND GENERAL ITEMS.

Owing to the resignation of the Secretary-Editor of the American Institute of Homœopathy, the Trustees will be obliged, at their next meeting, December 6, to appoint his successor. Applications for this office will be received by the Secretary, Dr. J. Richey Horner, 659 Rose Building, Cleveland, Ohio, not later than December 6, 1913, from such persons as feel qualified to act in any one or all of the capacities of Secretary, Editor of the Journal, or Field Secretary.

DeWitt G. Wilcox, M.D., President.

Dr. C. S. Rounsevel has removed from Nashua, New Hampshire, to 622 Summer Ave., Springfield, Mass.

Dr. Fred S. Piper of Lexington (B. U. S. M. 1890) has been made a life member of the Lexington Historical Society in recognition of invaluable service rendered the Society in the compilation and publication of the History of Lexington.

Dr. Francis H. MacCarthy, B. U. S. M. 1900, has removed from 11 Pinckney Street to the new McGaw Apartments, 19 Joy Street, Beacon Hill, Boston.

Dr. Florence H. Tresilian, B. U. S. M. 1895, has removed from Columbus, Ohio, to 19 Greenough Avenue, Cambridge, Mass.

Dr. Mary Dorothea Lummis Moore, class of 1884 B. U. S. M., has removed from New Haven, Connecticut, to 3 Craigie Circle, Cambridge, Massachusetts.

Dr. Harry E. Davey, class of 1913 B. U. S. M., has succeeded to the practice of Dr. F. D. Worcester, Keene, N. H., Dr. Worcester having retired.

Dr. Merle H. Paull, class of 1912 B. U. S. M., has located in Barre, Massachusetts, having taken the practice of the late Dr. Ernest P. Bixby.

Dr. Edward P. Colby has removed his office from 220 Clarendon Street to Trinity Court, Dartmouth St., Boston.

Dr. Nathaniel W. Emerson has tendered his resignation as a member of the Trustees of the Infirmary Board of the City of Boston.

Dr. Belle J. Allen (B. U. S. M. 1904) now in medical missionary service in India, has been in Boston recently and took part in the memorial exercises for the venerable Mrs. William Butler,—“Mother Butler,”—held in Tremont Temple, Boston, in October.

Drs. Charles S. Gleason and Laurence F. Keith have been reappointed school physicians for the town of Wareham, Massachusetts.

Dr. Bernice A. Bartlett (1911 B. U. S. M.) has been appointed to service at the Homœopathic State Hospital, Allentown, Pennsylvania.

After a long illness from typhoid fever, Dr. E. B. Coleman of Nantucket, Mass., has returned to his home and has resumed his practice. He was a patient for several weeks at the Evans Memorial. During his illness his practice was taken by Dr. H. E. Davey.

Miss Florence E. Caldwell and Miss Sarah G. McCormack, graduates of the Mass. Homœo. Hospital, have established a registry for hourly nursing, at 56 Westland Avenue, Suite 2. Telephone, Back Bay 21891. They are prepared to furnish service by the hour, day or week.

RECENT DEATHS.

GEORGE W. SPEARS, M.D.

Dr. George William Spears of 252 Huntington Avenue, Boston, died at the Evans Memorial, Massachusetts Homœopathic Hospital, on Oct 30, at the age of sixty years.

Dr. Spears was born in Welland, Ontario, in 1853, but received most of his education in the public schools of Boston. He graduated from Boston University School of Medicine in the class of 1876 and had been in practice in Boston ever since. Dr. Spears was closely associated with the late Dr. David Thayer of Boston, one of the most widely known homœopathic physicians of his time.

Dr. Spears' practice has been taken over by Dr. Albert S. Briggs ('92 B. U. S. M.) of 535 Beacon St., Boston.

EDWARD R. MILLER, M.D.

Dr. Edward R. Miller, died at his home in Leominster, Mass., on October 17, at the age of 54 years. His death was caused by septicæmia, after an illness of ten weeks.

Dr. Miller was born in Boston on September 26, 1859, and graduated from Boston University School of Medicine in the class of 1887. He had been in practice in Leominster ever since his graduation, and has been actively interested in all the efforts for public and social betterment of the town of his adoption. He leaves a widow and one son, John R. Miller, a graduate of Williams College in June last.

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ORIGINAL COMMUNICATIONS.

AUTO-INTOXICATION.*

By J. E. WILSON, M.D., Professor of Neurology,
New York Homœo. Medical College.

In the early years of my medical experience, it was a common statement that when a pathological condition was somewhat obscure, it was designated malaria, further inquiry ceased, and the patient was given an anti-malarial treatment in the hope that something of benefit might result. I sometimes feel that we are passing at this time through a not dissimilar experience in which very many conditions are denominated auto-intoxication and removed from the field of further investigation for no better reason than that their proper identification demands time and care. We all know that under the former assumption many a case of tuberculosis went unnecessarily to its grave because a periodical fever gave the malady a resemblance to the malarial infection. In like manner many grave organic nervous diseases have been dismissed to the limbo of auto-intoxication on account of imperfect examination, and, be it remembered, the converse is equally true. Because of my own clinical experience I am led to take some of the time of this meeting to point out some apparently organic diseases of the nervous system which were proved to be functional disturbances from auto-intoxication and that certain others were attributed to auto-intoxication when they were in reality organic and fatal. I wish it to be understood at the outset that the deficiency or excess of any of the glandular secretions is competent to produce an actual auto-intoxication, but that on account of the vastness of the subject and the necessary limits of this paper I shall confine the term to the effects produced by the presence of toxic substances in the blood as a result of the imperfect digestion of food anywhere in the gastro-intestinal tract. The body is always generating poisons as a by-product of the vege-

* Read before the Homœopathic Medical Society of the State of New York, at Syracuse October 14, 1913.

tative processes, and intermittently as a result of a derangement of the gastro-intestinal activities. They are the result of the activities of bacteria in the presence of organic matter, and the consensus of opinion at the London Congress of this year (Connellen) was that it could not be proved that the toxins were actually formed in the intestines, but that it was more probable that as the result of the perversion of their function the blood became loaded with amido-acids which acted upon the other constituents of the blood, finally producing the toxins. These poisons have been isolated by Brieger, Harnack and others, and have been found to closely resemble vegetable alkaloids. One of them showed the physiological action of digitalis, and gave rise to a pulsating pain, and a slow, full pulse; another resembled belladonna and produced a flushing of the face and a hot dry skin; a third produced the pallor, faintness and feeble pulse of aconite. Bacteriologists have isolated forty-four varieties of these bacteria, and Vignault and Suckdorf estimate that each day the body gets rid of thirty-nine to fifty billions of them. Gilbert and Domenici put the number at twelve billions, while other observers far exceed this computation. Although only two per cent are voided alive, their toxins are still potent and we have to deal with a mass of nearly two drams by weight every day of our lives. We can now better understand what a menace to health, and perhaps to life itself, rests in any disturbance of body equilibrium which will favor an excessive proliferation of these bacteria, or weaken our defenses against these toxins.

Tolerance comes from the defensive action of special organs. They act in two ways. First: they may be able to transform noxious substances into innocuous ones, as do the liver, spleen, lymph-nodes, adrenals, thyroid gland, etc., or, secondly, they may simply cast them out of the body, as do the intestines, kidneys, lungs, and skin. Given now an hereditary nervous instability, and many diseases of the nervous system will arise from the action of these substances. They act by lessening, retarding, preventing, or arresting the functional capacity of the nerve-centres by interference with the transmission of nerve-impulse. This disturbance involves both the central and peripheral neurons. Repeated or prolonged intoxication may lead to structural alterations in nerve-cells and fibres.

Peterson (Church & Peterson, pg. 76) has pointed out that the accumulation of deleterious agents in the blood, in such quantity as to effect the nervous system,—*e.g.*, carbonic acid, and the poison of diabetes and uremia,—has long been known to medical science; but the more mysterious poisons produced by disease in various parts of the body, by fermenting or putrefying substances in the alimentary tract, and by some of the infective fevers, have only of late taken an important place in the etiology of the psychoses. We

do not yet know how frequently auto-intoxication from absorption of intestinal poisons determines insanity, but the facts thus far collected point to the origin of a considerable number of cases from this cause. These cases are usually of the depressed type, but are sometimes maniacal.

Fifteen years ago I had a case of acute mania, lasting in all its phases eight or nine months, which had been preceded for a long time by symptoms of chronic gastric and intestinal indigestion. Recovery was apparently complete, but after two or three years the patient began to show symptoms of depression amounting to mild melancholia, with the same digestive symptoms, and a very pronounced indicanuria. Upon the correction of the indigestion the indican very largely decreased, and the mental symptoms promptly disappeared, and have not recurred in ten years. Another case was Mr. H. M. L., 35, married, a young man of fine physique and good habits. He had suffered a very severe financial loss by the failure of a man with whom he had been connected in business. He had always been optimistic and courageous, and gave himself no rest in his attempts to save the situation. On account of the conditions he gave little heed to nature's demands for food and rest, he lost his appetite, and became obstinately constipated. At length he took to his bed, and refused to rise, to dress, to eat, or to concern himself about his family, or his affairs. He displayed all the symptoms of the depressed stage of a manic depressive psychosis. He was certainly resistive, and possibly suicidal. With no treatment but the most active purgation and feeding by persuasion, he cleared up mentally in a few days, and after a week's rest at Atlantic City took up the burden of life with all his former courage and ability, and to my certain knowledge has shown no sign of mental aberration since then.

How many of the organic nervous diseases are caused by auto-intoxication is not as yet known, but after prolonged investigation and the abandonment of one theory after another there is pretty general agreement that multiple sclerosis is thus caused, although the intoxicant cannot certainly be said to be intestinal in origin. These intestinal toxins unquestionably are the cause of the severer types of headache, and possibly of migraine. The gastric crises of tabes have been ascribed to this cause. Tetany is very certainly autotoxic, and epilepsy probably. Arterio-sclerosis has among its accepted etiological factors auto-intoxication. Hartwig has described a periodical paralysis with a loss of electrical excitability, which after lasting for a period of from hours to days passes entirely away. This has been seen after malaria, infectious diseases, and even, he says, after the ingestion of certain foods. Only yesterday a case came to my notice where a young married woman, shortly

after parturition began to show muscular weakness with no other symptoms. At the present time the asthenia is particularly marked in the region of the eyes. As one looks at her the eyelids will fall from sheer weariness, and diplopia comes after a short attempt at fixation upon an object. Similar symptoms were present for a time after a previous parturition. Jolly has ascribed this periodic weakness of the whole body as a condition resembling the combined action of protoveratrine and fatigue. He terms the condition *myasthenia gravis pseudo-paralytica*, and ascribes it to auto-intoxication. Thomsen's disease, or *myotonia congenita*, is supposed to be another instance of an organic nervous disease due to auto-intoxication.

Jay G. Roberts (*Med. Record*, Sept. 14th, 1913) declares it to be the constant basis of neurasthenia, in the light of which assertion the following case is of interest. Within the last two weeks, I saw Mrs. K., 37, married, no children. She developed a colitis about eighteen months ago, from which she suffered about an ordinary amount of pain and distress, with some additional strain from the fact that she was treated for about every condition except the actual one. She, however, in the main retained a very fair amount of strength and optimism, and under favorable conditions made quite considerable gain for a time. With no accession of new symptoms and no unfavorable external conditions, she developed a high degree of neurasthenia almost in an hour, and from that time suffered a pronounced loss of strength and appetite, developed insomnia, and an intense mental depression. A careful examination of her history leaves no room for doubt that she succumbed to a sudden flood of toxins which acted with all promptness and certainty of any of the selective nerve poisons, with which these substances seem to be allied.

As has been said, if a person be exposed to the prolonged influence of these self-engendered poisons he is liable to very severe forms of functional trouble, and if the victim be of a neuropathic heredity structural changes may ensue. Neuralgias are a common result. A young gentleman in New York developed what was diagnosed as *tic douloureux* and was extensively treated for it with no favorable result. In some way he fell into the hands of a man, who, not knowing what else to do, experimented upon him by administering cultures of the live *bacillus bulgaricus*, having been led to do this from the high degree of *indicanuria* present. The cure was most prompt and has been lasting.

Professor Carl Van Noorden, (*J.A.M.A.* Sept. 1913) calls attention to a form of polyneuritis which he refers to intestinal intoxication. In many patients pains occur in various regions of the body. Sometimes they affect the occipital nerves, or appear in the

area of the trigeminus, sometimes in the arms, or the back, or in the area of the sacral or the crural nerves. In some cases anomalies of the heart's action are noticed, and in some there is a rise of temperature, and the degree of variability between the daily maximum and minimum is abnormally great. The clinical data from which he concludes that intestinal auto-intoxication is the cause of this syndrome are these: the patients complain of some irregularity of digestion, and are constipated, although they may have daily insufficient evacuations. Far up in the sigmoid flexure hard fœcal masses would be found, and a certain point at the left side of the abdomen is sensitive to pressure, indicating irritation of the sigmoid. There is a full feeling in the stomach, which is increased with every meal, loss of appetite, and emaciation, and hyperacidity. The urine is diminished, with a sediment, not uric acid, but arising from a lack of the water necessary to retain the solid materials in solution. Quite frequently an unusual excretion of indican is found, which shows an abnormal degree of bacterial decomposition of albumin in the intestine, and a relatively large absorption of the products of putrefaction. Actual health is only obtained in these cases when the intestine is again regulated. In some cases a milk diet, in others a mixed diet, vegetable or farinaceous, in others again for some days nothing but a solution of sugar. The aim must be to give a one-sided diet only for a short time, and then accustom the intestine to a mixed diet. Any laxative, or other drugs, purgatives, including enemata, only hide the pathological condition of the intestine.

Mrs. E. V. Z. L., aged 53. married, family not rheumatic, one child, always large, strong, and well, has fenced a great deal, and ridden horseback always. She has shown a tendency to localized tendinous strain. Long standing will make the knees stiff and painful, so that walking after it is difficult. Had a lame right knee one year ago without any assignable cause. Four to five years ago a fencing teacher forced down her shoulder in trying to teach her to bend, from which she got a lame left knee, which has been relatively permanent. She has a slight pain in the left hip joint when in any strained position. In June, 1911, she began to have a pain in her left wrist. It was bandaged, strapped, and rheumatic remedies helped it, but upset the stomach, and it has been steadily tender, and painful periodically during the day ever since. An examination of her urine Oct. 9th, 1912, showed an acid urine with a very high indican content. On Oct. 22nd, there was a faint trace of albumin, low specific gravity, low urea output, and an extremely heavy indican and skatol reaction. On Nov. 8th, an acid urine, urea increased, and an extremely decided indican reaction. The patient then sailed for Europe, with the wrist in the same condition as when she first saw me, and returned the next spring in the same condition, having re-

ceived the same diagnosis of tendo-synovitis from physicians in several countries. The point which I wish to bring out is this: while she had headache only when she left off her glasses, and kept her weight, she had a muddy complexion, and a feeling of depression, physical and mental to a moderate degree. I placed her in a hotel with a nurse, and every night had a colon flushing of three pints of water, taken in the knee-chest position with face on the bed, rest on the left side for the first part of the night, wheat bran a tablespoonful in half a glass of water after each meal; this treatment was continued for a week. Two points are to be observed: first that the indican reaction was approximately as heavy after the treatment as before, and I cannot say that the synovitis was more than moderately improved, but the patient after a day or two began to void scybalous masses and on her departure for Europe she assured me that she did not think that I had improved her joint a single bit (I believe I did improve it a great deal), but that she felt so much lighter physically, and brighter mentally and enjoyed life so much more keenly, that she felt more benefited than by any treatment which she had received for years. I still believe that the trouble is auto-toxic, and will be very greatly improved by persistence, for a very considerable time, in a treatment directed toward the intestinal toxemia. It is to be noted also, that the indican was not particularly diminished. In view of the prompt and great benefit resulting from the unloading of the bowels, while the indican still persisted, it seems to me to be a proof that while the presence of indican is the greatest evidence of albuminoid putrefaction that we have at present, great weight is hereby given to the view previously stated that that is only a preliminary step, not always carried out to the production of intestinal toxins.

A case was reported to me by Dr. Sidney F. Wilcox of a single young lady of 22, Miss M., who developed a fever, prostration, coma, rigidity of the limbs, Kernig's sign, tache cerebrale; the optic discs were not examined. In fact, it appeared to be a typical case of meningitis. In three days she was perfectly well, barring a normal amount of exhaustion from such a febrile condition. It was a case of meningism, or ameningimus, often seen in children or the serous meningitis of Quincke, which is an actual meningitis, but the process does not go beyond the initial stage of serous effusion, and is always the result of intestinal toxemia.

Up to this point I have engaged your attention with conditions of a varied kind which had been diagnosed as psychoses or as organic changes in the nervous system, while in fact they were functional disturbances arising from intestinal toxemias. The result is the restoration to health of patients apparently doomed to death or invalidism. In such cases the doctor loses prestige, as a diagnosti-

cian but his error is often overlooked in the joy of recovery. There is, however, another side to the picture, and that is discovered when a supposedly toxemic condition proves to be organic.

I saw Mrs. S., on Nov. 29th, 1912, at the request of Dr. James R. Bramley, of Summit, N. J. She was a married woman of sixty years of age. Her habits had been above reproach, and her health good, up to about six months previous to my visit. She had then shown some tendency to headache, with numbness of the right hand. The headache was never very prominent, but was existent, and she became generally weak, most pronounced on the right side. Examination showed she had mental dullness, and for a long time vomiting attacks at intervals. Sensation was lost on the right side, and there was some headache. She was moderately paralyzed on the right side, with the mouth drawn to the left. Knee-jerks were exaggerated, right equal to left. R. Babinski. Ankle clonus, right equal to left. For two months she had had a tremor of the right leg. Pupils clear and respond to light and accommodation, but sluggishly. There was a slight choking of the disc on the left side. A diagnosis was made of a Tumor, subcortical, and protruding into the median fissure, and situated on the left side. She was subsequently seen by a consultant who pronounced it auto-intoxication. Then by another, who diagnosed it some similar malady. Then by a third, who by that time found a definite choking of both (?) discs, and united with me in pronouncing it a case of cerebral tumor. During the last three weeks of life she had convulsions. The lady died on Jan. 22nd, 1913, and an autopsy on the same afternoon revealed numerous necrotic areas scattered throughout the brain, with a larger one in the posterior limb of the internal capsule. Auto-intoxication certainly could not produce a condition unchanged for weeks, and in fact months, marked by such evident signs of organic change as choked discs, ankle clonus, and Babinski's toe-sign.

On March 4th, 1912, I was called by Dr. Doremus, of Arlington, N. J., to see Mr. S. M., 34, a mechanical engineer of good habits but having had a gonorrhœa seven years ago. He was delicate as a child. In December of 1911 he began to have headaches in the vertex with a sensation as if the skull were being lifted up, and accompanied by vomiting. He was attended at this time by a former physician as he had the headaches every three or four days, and he said the pain was the most terrible that he could conceive of. On Feb. 21st, he was attended by this physician during an attack who said that he had an irregular pulse of 76 and he had a cerebellar vertigo. His pulse had been 110-130 from a goitre. This physician assured him that if his appetite could be improved and his bowels regulated he would be well. He consulted an oculist at this time with no relief. On March 4th I saw him again with Dr.

Doremus, who suspected cerebral tumor. At this time he displayed a slight Romberg, no ataxia, knee-jerks exaggerated but right equal to left, ankle clonus left greater than right; slight indication of a left Babinski; abdominal reflexes equal, upper reflexes equal but the left face was weak. All the cranial nerves were competent, pupils stiff but responded to light and accommodation, right better than left; right disc choked. Diagnosis was cerebral tumor. I saw him again on the fifteenth, when all his symptoms were worse, pains atrocious; was brought home often because he was so ataxic that he would fall in the gutter while coming home. On April 16th he was seen by a prominent neurologist of New York who pronounced the case one of auto-intoxication; said that a couple of weeks in the Hospital or on shipboard would cure him and he elected the ocean trip. He was taken off the ship as too ill to sail, was operated on in a New York Hospital for a cerebellar tumor which was not found; he died the next day and autopsy revealed a large tumor in the occipital lobe.

I have endeavored to present clinical cases exemplifying the various phases of the problem; whether much of this is paralleled in your experience or is somewhat novel the same questions will occur to all of you; Can a diagnosis of auto-intoxication be made with reasonable certainty? How can it be done, and how, granting that a state of auto-intoxication be present, can a simultaneous disease of the nervous system be demonstrated to be organic and not a functional result of the auto-intoxication? A large amount (and kindly note that I say a large amount) of indican or skatol or both are evidences of the putrefaction of albuminoids in the intestines and are the necessary preliminaries to the production of toxins. When we find a urine containing a high percentage of indican and the patient suffers from a daily frontal or occipital headache on rising, which improves as the day goes on, has scintillations before the eyes without ocular defect, mental dullness and depression, a foul tongue and evidences of indigestion, we are warranted in assuming that he has auto-intoxication and that in the absence of other evident cause his disease of the nervous system may have had this as a cause. If he merely have the indicanuria without these associated symptoms it must be kept in mind that he may still have an auto-intoxication, although the common range of symptoms may be wanting since his toxin may be a selective one. When we come to the last question you will recall that I quoted a case of meningismus. I do not believe that we can do more than give a tentative diagnosis in such a case, for we are dealing there with a process which does not seem to go beyond the irritative stage. I do not believe that the final test, *viz.*, discovery of choked disc, can be invoked either, since it is not present in more than one-half the cases of undoubted meningitis. Leaving that process out of the question, I feel that

no error should be made in these cases, since auto-intoxication, in the sense in which I am using the term, is not competent to produce the somatic symptoms of organic nervous disease of more than temporary duration, *i.e.*, inequality of reflexes on the two sides of the body. Babinski's toe-sign, inexhaustible ankle-clonus, inequality of pupils, or choked disc. Errors have seemed to me to have always arisen from lack of care in examination of patients or from a readiness to pass over as negligible an organic symptom which stood in the path of a preconceived diagnosis.

NON-SURGICAL TREATMENT OF MALIGNANT NEOPLASMS.*

By WILLIAM H. DIEFFENBACH, M.D., New York City.

As a preface to this summary it is desired to quote from a recent article by William A. Pusey, M. D., in August 23rd, 1913, Journal A. M. A., entitled, "What can be done in Cancer with Roentgen Rays."

Dr. Pusey, after citing a number of remarkable cures with Roentgen rays, draws the following conclusion: "What is the practical bearing of such facts? And in view of them, what use should be made of Roentgen rays in cancer?"

In the first place, I would point out that the selective destruction of cancer tissue by Roentgen rays and radium is a unique thing. It is something that has never been done before and that no one can now do in any other way. And such cases as I have referred to show that some practical effect can be produced in cancer after all has been done that is possible by mechanical or other methods of gross destruction. Many cases cannot be helped, but some can be saved, and until a specific remedy for cancer is found, of which there seems little promise now, patients are entitled to the unquestionable prospects of benefit that Roentgen rays offer in many cases. From such a point of view I have used Roentgen rays in cancer for many years, and I am sure that the agent has saved a good many patients from an impending death; it has added in the aggregate, many years of life in comfort to patients when it has not cured, and it has saved much suffering to many others whose lives it has not prolonged. On the other hand it has often failed; but I believe it has not added to the misery or made worse the lot of any patient. An agent of which these things can be said in so wretched and intractable a disease as cancer is entitled to respect and is worthy of a better opinion than the skepticism with which it is now considered by many minds.

* Read before the New York State Homœopathic Society, Syracuse, N. Y., Oct 15, 1913.

For example, surgeons as a rule, I believe, fail to appreciate the value of Roentgen rays as an adjuvant to surgery in the treatment of cancer cases.

Roentgen rays are useless in many cases of cancer; therefore the method is condemned as useless in all cases, and operation or nothing insisted upon always, just as though operations were not useless, or worse than useless in many cases also.

"The Cancer Campaign Committee of Surgeons of North America" in its public statement on cancer says: "Cancer can be successfully treated by the knife—there is no chance of recovery except in surgery."

This last sentence is not true. The first sentence also is true for the most part only of cancers situated superficially in the body, and many cases of that sort have been cured for a hundred years by other destructive measures than surgery.

Surgery is the method of preference for most cancers, and it is well for surgical organizations to teach the public that fact. But if there is anything that surgery should be humble about, and alert for help in, it is cancer.

SUMMARY.

The effect of Roentgen rays on cancer tissues and clinical experience indicates its use of the agent in cutaneous epitheliomas, and in localized inoperable cancers near the body surface; and further I believe that the same facts constitute a logical demand that Roentgen rays be used as a measure of prophylaxis after operations on localized cancers near the surface of the body. I specify localized cancers near the surface because experience has shown that in cases in which the disease has been widely disseminated and in cancers in the deep cavities in the body, Roentgen rays are practically without avail.

Dr. Pusey's conclusions state the sentiments and experiences of many physicians who have given this agent careful study and have tested it for years.

Recent literature has contained many references both as to etiology and treatment of malignant neoplasms. Fibinger's recent discovery of a nematode host in the cockroach which responds to the postulates of Koch and has produced malignant neoplasms in mice, has been corroborated by several observers and may prove to be of more than passing value. The question of the bacterial or traumatic-cellular origin of cancer (Author's paper, *Medical Record*, Dec. 8, 1906) is still being investigated, and until Fibinger's claims are proven true, without question, prophylaxis must remain partly unsettled. In the battle against cancer many treatments are constantly heralded as of apparent efficacy against this disease.

Some are short-lived, others are persisted in by physicians who have reason to believe in their value.

The methods of treatment, aside from surgery, which have survived the past decade and which are of increasing value, are the use of the *Roentgen ray and radium*—the latter including radium-mesothorium.

Methods which have had transitory publicity and some of which are still on trial are the following:

I. Coley's fluid (toxines of streptococcus erysipelatis and bacillus prodigiosus.

II. Otto Schmidt's (Cologne) cancer serum.

III. Beard's trypsin and pancreatin injections.

IV. Doyen's neoformans vaccine.

V. Czerny's tests with salvarsan and neosalvarsan.

VI. Bier's Blood Injections and Transfusions.

VII. Wasserman's eosin-selenium injections.

VIII. Trinker's use of colloidal selenium.

IX. Gaube du Gers use of colloid albuminate of copper—"Cuprase."

X. Werner; Cholin and cholin salts,—which have been given the proprietary name of "Encytol" and are used in combination with radio-therapy.

XI. Feller: Potassium and Sodium silicate given internally in moderate doses with arsenical pastes used locally.

XII. Hodenpyl: Injections of supposedly immunized ascitic fluid.

XIII. Crump: The use of animal oils—plain and radio-active.

XIV. Rivière and DeKeating Hart's combination of fulguration with surgery.

XV. Numerous trials of auto-therapy (Duncan) and autolysis by various investigators.

XVI. The "De-Mineralization" theory and the administration of combined tissue-salts to combat the presumed constitutional cause of the disease.

XVII. Nowell's cancer toxine treatment. Dr. Nowell's serum treatment is the most recent of all and is summarized in Boston Medical & Surgical Journal June 5th, 1913, as follows:

I. A procedure has been developed whereby a substance may be isolated from carcinomata, the method precluding the presence of organic life, in the end product.

II. This end product has been shown to be of a highly toxic character.

III. The peritoneal exudate produced by a fatal intoxication is far more toxic than the original substance.

IV. The tumor substance has been shown to possess not only a general, but also a specific toxicity, since an injection into rabbits in doses of less than lethal amount will produce well defined, well-characterized carcinomata, the site of the primary lesion being different from and independent of that of the injection.

V. The appearance of the primary lesion is followed by the development of numerous metastatic foci in different parts of the body, while the characteristic cachexia manifests itself.

VI. The poisonous tumor preparation has been shown to be characteristic of carcinomata.

VII. By the repeated injections of very small doses a large number of rabbits have been immunized.

VIII. The serum from the animals thus immunized possesses the power of antagonizing the toxic action of the tumor substance. This has been demonstrated by injections of serum, either previous to or simultaneous with that of the tumor poison. In both events no effects are observed from quantities of the poison, which, if injected alone, would produce a rapidly fatal intoxication.

IX. With the simultaneous injection of poison and antibody it has been shown that one part of the latter will effectually antagonize 99 parts of the former.

With the reserve and modesty of the true scientist, Dr. Nowell disclaims having discovered any specific cure for cancer at the present time. He claims to have apparently influenced cachexia, relieved pain in some cases and to have noted recession of hyperplastic tissue in others. As nearly all new treatments report similar results, time alone can prove or disprove the value of his discovery, which is being fully tested at the Massachusetts Homœopathic Hospital.

My own efforts in the treatment of cancer have been largely directed during the past eleven years in testing the value of radium in this disease.

After many failures and a series of startling successes, I am prepared to summarize the results as follows:

I. Radium (also radium-mesothorium which emits identical rays) in *massive dose* is a positive inhibitive agent upon cellular growth. Its action upon the skin, blood vessels and glands has been carefully noted, and pathological studies made for the writer by Dr. Louis Heitzmann shows destructive action upon sarcoma, carcinoma, as well as upon epithelioma.

Wickham and DeGrais have demonstrated that the highly penetrating gamma rays apparently have the selective curative action in radium treatment and filtration of these rays through glass, platinum, silver or lead-foil, with *massive doses*, ranging

from two hours to five days, has lately produced unvarying favorable results, which in previous years were noted only in isolated cases. These isolated cures by radium served as incentives to continue in spite of criticism, and in the clinics of Europe, the pioneer work done here is now being constantly corroborated, so that the demand for radium and radium mesothorium exceeds all possibility for supply in the near future.

II. The neoplasms which respond to massive radium radiation are:

(a) Superficial epitheliomata, excepting about the orbit, where massive dosage is dangerous to the optic nerve and where heretofore divided doses have been given with only occasional good results. In all other epitheliomata of a superficial character radium acts as a *specific*, the tumor being replaced by a whitish hard scar.

(b) Fungating and deep epitheliomata: Here surgical aid is desirable in many cases, excision being followed by radium or filtered Roentgen ray treatment.

(c) Uterine-cervical and vaginal recurrences, or primary inoperable carcinomata of the uterus. When operable, it has, in my judgment, been wise to excise and follow same with radium exposures of *many hours* duration. My records show a number of cases of cervical and vaginal recurrences which are alive after, eight, six and five years following post-operative radium treatment.

Lesions, which ordinarily are assumed to be inoperable, can now be treated with surgery and radium combined with hope of favorable outcome in some cases. A case of cancer of the bladder reported by Dr. B. G. Carleton (Journal of Am. Institute of Hom. Feb., 1913) is illustrative of a hopeless, inoperable cancer of the bladder apparently cured and well after two years. Another case of cancer of the bladder treated in conjunction with Drs. Stella Q. Root, Stamford, Conn., and Walter G. Crump, New York, has also after one year shown no sign of recurrence. A case of recurrent fungating epithelioma involving the whole left vulva with metastasis in both groins, operated upon by Drs. E. Lothrop of Buffalo and Walter G. Crump of New York and in medical charge of Dr. A. E. Austin, received before and after operation *massive doses* of radium rays and at present writing is free from recurrence although presumably a hopeless surgical case.

(d) Mammary tumors.—Early surgical removal followed by post-operative radiation of either the filtered Roentgen ray or radium has been the choice of treatment.

In advanced cases it is also desirable to remove as much malignant tissue as possible and follow promptly with filtered Roent-

gen or radium rays. In recurrences these same measures are the only agents which personal experience recommends.

Efficient massive filtered rays must be applied and *weak dosage* avoided, as moderate radiation merely stimulates tissue proliferation.

Where operation is refused or impractical, the use of massive filtered Roentgen rays or radium will, in most cases, prolong life, relieve pain and in some instances cause fibrosis with latency of lesion.

(e) Internal neoplasms—non-operable. In these lesions "Evantration" as advocated by the late Dr. Carl Beck, exposure of the tumor (after incision through the tissues) and massive dosage directed upon the exposed malignant tissues, is employed. This method has been tried in inoperable cases of cancer of the stomach and spleen, and there are several patients reported apparently cured at the Czerny-Heidelberg Clinics after use of this procedure.

(f) Cancer of the Rectum: Radium has been tested in a number of cases of cancer of the rectum. In lesions where operations had been performed and post-operative radium treatment given, there has usually been subsequent metastasis to the liver. In operable cases my records show one patient who lived for six years after persistent radium treatment given for three years (once a week), and another patient, a prominent politician who is still actively engaged in business five years after the use of radium. Both of these cases had been pronounced inoperable and both received massive radium treatment covering respectively three and one years.

In conclusion, it is desired to express the conviction that the medical weapons in the battle against cancer are not as confined and as hopeless as many physicians believe. There is abundant evidence today,—patients living after eight, six and five years,—that in the Roentgen ray and in radium and radium mesothorium aggressive agents are at hand to control riotous tissue proliferation and in many cases cause disappearance of cancer cells.

Something besides these agents is evidently involved in the factor of cure—for it often happens that while one patient rapidly responds to one or more massive doses of gamma rays, others fail to react, and their lesions are simply controlled, or in some cases, slowly increase. It is here that medication, in my judgment, plays an important role, and the assistance of indicated constitutional or tissue remedies should be invoked as an aid to better progress.

STUDIES IN REGARD TO THE ACTION OF QUININE ON THE
MALARIAL PLASMODIA—II.

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Since my first report on this work,* four attempts have been made to grow the malarial parasites in the presence of quinine. At present I am not ready to report on these experiments, because, in the first place, the results are not sufficiently conclusive in the way of proving either that the parasites are directly influenced by the presence of the drug or that they are not; and because, in the second place, certain modifications of the technic used by Bass and Johns in their successful cultivation of the parasites are being tested as opportunity is afforded. It has seemed advisable, however, to report on certain experiments which have been incidental to this work.

The objections to my previous experiments with hanging drop preparations have been to a great extent obviated by the use of sterile fresh coverslip preparations sealed with paraffin. While discussing my former work, Professor Allan W. Rowe, of the Chemistry Department of this institution, suggested that I seal my hanging drop coverslips with paraffin rather than cedar oil. The value of this suggestion was especially appreciated when I recalled the rather strong odor of the cedar oil about the microscope table when the slides were being cleaned. It seemed possible that if this oil was so easily perceptible by the olfactory sense one or two feet away, the oil must have volatilized within the hanging drop chamber and impregnated the drop of blood, thus adding one more objection to these experiments.

Another great objection to the hanging drop method was the drying within the chamber, as shown by the condensation of moisture on the concave surface of the slide. In order to overcome this, the common fresh coverslip preparations were used with the added advantage of being able to obtain a thin film. In Rosin's experiments, the edges of the coverslip were kept moist with filter paper soaked in the quinine solution. This necessarily involves the objectionable factor of haemolysis which, in my previous work, I tried unsuccessfully to obviate by means of isotonic solutions:

After defibrinating blood drawn from the basilic vein of a malarial patient for the purpose of cultivating the plasmodia according to the Bass and Johns method,† and after adding the corpuscles to our tubes containing serum dextrose and ascites fluid dextrose, we placed some of the left-over corpuscles on sterile slides. This left-over blood had been standing protected from the air for about

* See New England Medical Gazette, February, 1913.

† In this instance the defibrinating process caused air bubbles to form in the blood, this being a breach in the technique which the authors warn against.

one hour in the laboratory at room temperature (21 C.) before this side issue experiment was begun, owing to the fact that we were engaged with the cultivating tubes. The procedure from here on was as follows:

TECHNIQUE.

A slide cleaned with alcohol is held over the top of the flame of a Bunsen burner to insure sterilization. Care must be taken not to allow the slide to get red hot, as this causes unevenness of the surfaces which distort the refraction. The slide is then placed across two parallel glass rods an inch and a half apart and allowed to cool. While this is cooling, a similarly cleaned coverslip is held over the flame. Here the danger of getting the glass red hot is greater, and frequently one or two coverslips are ruined before one is obtained both sterile and intact. The points of the holders are sterilized in the flame before picking up the coverslip. A drop of the defibrinated blood about 2-3 mm. in diameter is then allowed to drop on the cooled slide, and the cold coverslip placed over the drop, which spreads into a thin film both by the weight of the coverslip and capillary attraction. With practice the right size drop can be judged which will just spread to the edges of the coverslip. Melted paraffin is then spread around the edges of the coverslip. This can best be accomplished by means of a glass tube drawn to a point. As the point is drawn along the edges, it cools off the paraffin, which hardens within the lumen and ceases to flow. With the finger over the large end of the tube, the point is held for a brief moment over the flame until the paraffin is liquefied, when the process of sealing may be continued. The heat of this hot paraffin only destroys those parasites directly under it, and does not interfere with the parasites which are in the center of the square. Should the drop be much bigger than 3 millimeters, the film is too thick throughout, making it difficult to find a parasite which is neither under nor over a red blood corpuscle. On the other hand if the drop is smaller than this, the film does not extend under the entire surface of the coverslip, thus allowing air to be sealed in by the paraffin. The presence of air in these preparations is to be avoided, as it hastens hæmolysis and the death of the parasites. In such a preparation as described above, providing the greatest care has been observed throughout and no infection of the blood has occurred, the red blood corpuscles may be found intact, or only slightly swollen, or only slightly crenated at the end of three weeks when left on the laboratory table by a north window. At the end of this time, however, there are always areas where complete hæmolysis has taken place. When placed in the incubator the hæmolysis is rapid. This may be explained by the sudden changes in tempera-

ture incident to their being put in and removed, which could easily create enough decrease or increase in the pressure within the sealed blood to account for the destruction of the corpuscles.

When left in the room temperature the polymorphonuclear neutrophiles gradually begin to swell. One was seen at the end of 48 hours to be almost three times its original diameter. The nucleus remains clear, becoming slightly more opalescent, while the cytoplasm becomes highly granular. These granules are bright and glistening, with a fine motion throughout closely resembling Brownian movement. The granules, however, never change places from one part of the cytoplasm to another. If any pigment derived from the metabolic activity of malarial parasites becomes ingested, this pigment takes on the fine motion of the granules but never dances from one part of the cytoplasm to another, as it does in or on the cytoplasm of the living malarial plasmodium. This is a fact which may be used as a point of difference in distinguishing a living plasmodium from a degenerated neutrophile containing malarial pigment granules. A year ago I confused such neutrophiles with plasmodia, but was kindly corrected in this error. Since then I have studied the granular degeneration of neutrophiles and lymphocytes with the result of being able to make the above distinction in regard to the motility.

Such a sterile paraffin preparation constitutes a control. Where one of the salts of quinine or arsenic is to be added, the dry crystals are placed with aseptic precautions on the sterile slide, and the drop of blood is then put over the crystals. The coverslip is then superimposed, and the preparation sealed with paraffine as in the control. The preparation is then placed under the oil immersion lens of a microscope, and a malarial parasite is brought into the centre of the field. By employing a different microscope for each preparation, parasites from the same blood may be observed simultaneously in the presence of several different salts with one or two controls. It is essential that the microscope be fitted with a mechanical stage in order to keep the parasites within the field. Notes are then kept by the side of each microscope regarding the appearance and motility of the respective parasites. In recording an observation the time is given to the minute. Observations at varying intervals are made with a No. 5 and a No. 10 eye piece, with Bausch and Lomb microscopes, and with a No. 2 and a No. 4 with Zeiss instruments. The use of a No. 15 Bausch and Lomb eye piece giving a magnification of 1530 times was not found to be of any particular practical value in making observations.

RESULTS.

The blood used in the two series of sealed paraffin preparations was obtained from patients suffering from double tertian malaria who had been kept for control purposes under observation in the wards of the Hospital at least two days. During this time they were kept in bed and allowed a full "house diet" during the apyrexia. In both cases the blood showed very large numbers of parasites of two generations, or, in other words, of two distinct stages of development. At the time of withdrawal of the blood, neither patient was under quinine. One had never received any, and the other had had none for five days previous to his admission to the hospital. The blood from the first patient was that used in Series I, the results of which are given as follows:—

SERIES I (Started October 5, 1913).

Control I. Preparation made at 2 P.M., Oct. 5. The parasites were very numerous and grew more and more active. The height of activity appeared to be after one hour and forty-five minutes. This activity consisted of a slow amœboid movement of the entire plasmodium by which it changed its shape or outline, and a violent dancing motion of the granules in which they moved from one part of the plasmodium to another, as described by Rosin.¹ The large granules were spasmodically active, and quite independently so; *i. e.*, active in some parts and quiet in others. At 6.05 P.M., the field was shifted to bring two active parasites which were close together into the field. In one of these motility could not be made out after 10.40 P.M. In the other activity continued and was last observed at 6.40 P.M. on October 12th, one week after the preparation was made. This activity was different from that of the plasmodium during the first three hours, because it had gradually become opalescent in parts. The small granules agglutinated to a certain extent and became motionless. On the second day motility of a few of the larger granules only could be observed, and finally, when the last record of motility was made on October 12, only two medium sized granules were dancing about each other in a sort of encysted portion of the otherwise motionless plasmodium. These two granules were of the brownish color observed in the granules of parasites when fresh from the patient's blood. The other motionless granules were darker or even black. No amœboid movements were noted after twelve hours.

At 8.45 P.M., on October 12, after complete cessation of motility, the preparation was removed and cleaned with xylol. After

cleaning the oil immersion lens new cedar oil was applied and the preparation studied further. Malarial parasites were readily found, but they were distinctly less numerous than when the preparation was first put under the microscope. These were of two varieties: the first being round, with well defined border, about the size of a small lymphocyte, opalescent, with five or six large, motionless, dark pigment granules near the center, and usually one small highly refractive granule near the border, resembling fat; the second variety being about the size of a red blood corpuscle, with an irregular border, a granular opalescence throughout, containing numerous large and small dark pigment granules scattered irregularly over it. This last variety is contained within a swollen red blood corpuscle, the outline of which can just barely be seen. The dead plasmodium occupies about two-thirds the area, and the cytoplasm of the corpuscles which formerly contained "Schuffner's dots" throughout has become as clear and colorless as the surrounding serum. This irregular variety is the most numerous and by far the most resistant, if motility is any indication. Two flagellated forms were observed. Here the protoplasm presented an opalescence. The granules were large, dark and irregularly scattered over the surface, although they were most numerous towards the center. The red blood corpuscles in certain fields were apparently in the same condition as when removed, but the majority were more or less crenated, more or less swollen, or in places the whole field was hæmolized. The polymorphonuclear neutrophiles were scarce, and when found were swollen and undergoing disintegration. Some had apparently ingested malarial pigment, as this was mingled with the degenerated granular cytoplasm. The lymphocytes were swollen but not in the same proportion as the neutrophiles, and their outlines were well defined. The cytoplasm of these cells was fairly clear and frequently,—although by no means constantly,—contained pigment.

On October 26 the preparation showed the red blood corpuscles to be in good condition in some fields. In others crenated and swollen corpuscles could be observed by the side of apparently normal corpuscles. About half the preparation showed complete or well advanced hæmolysis.

Control II. Preparation made at 2.10 P.M., Oct. 5. (An air bubble got into the preparation.) This preparation was not kept under the microscope throughout. It exhibited much the same picture as Control I. until 3.40 P.M., when the parasite under the field became motionless. At this time hæmolysis was very evident along the margin of the bubble and had extended through the preparation. At 11 A.M., Oct. 6, hæmolysis had extended through-

out and no active organisms could be observed. On Oct. 12 the hæmolysis was complete except for one area farthest from the air bubble. Here the outlines of the red blood corpuscles could still be distinguished. The parasites were very scarce and the irregular forms were apparently free in the serum, as the outline of the red blood corpuscle could not be made out. In several instances recently disintegrated parasites were observed. On Oct. 26 hæmolysis was practically complete throughout except for one area where the outline of the corpuscles could be distinguished.

Quinine, anhydrous salt. I. Preparation made at 2 P.M., Oct. 5. At 2.30 the parasites were intensely active. One which was very active was kept under the field until 4.35, when it was observed to be opalescent and motionless. The field was then shifted about to observe the condition of other parasites. A few were motionless, but the great majority were exceedingly active, even though in the same fields with crystals of the alkaloid. At 4.40 P.M., an unmistakable malarial parasite, exhibiting motility throughout the large and small granules, and occupying about two-thirds the area of a swollen red blood corpuscle, was placed in the center of the field, where it remained in position under observation until 9.40 A.M., Oct. 10th. This organism continued active throughout the evening of Oct. 5th, exhibiting varying degrees of activity. At 7.50 P.M. the large motile granules were clumped in the lower left quadrant. At 9.45 P.M., these seemed to spread out in line near the upper border. This change may have been due to amoeboid motion or simply to a change in the position of the organism by currents in the serum. This parasite remained actively motile throughout the night. At 2.24 P.M., Oct. 6th, it became sluggish and was distinctly more opalescent. At 3.15 it had resumed its former activity, but this was only confined to a few of the smaller granules. Two or more of these granules continued to be active until 11.45 P.M., Oct. 9th, when activity was last seen,—the next observation having been made at 9.40 A.M., Oct. 10th,* when it was seen to be somewhat shrunken. On Oct. 26th, at 9 P.M., the erythrocytes were swollen, sometimes twice their original diameter and were pale, although clearly outlined. Two motionless organisms were found.

Quinine, anhydrous salt. II. Preparation made at 2.10 P.M., Oct. 5th, several crystals were seen under the microscope. At 2.42 P.M., excessive activity was present. This continued until 5.45 P.M., when the motion of the granules had become less violent. At 6.07 the organism showed a tendency to become opal-

* The last observations in this preparation and Quinine II. were made by Dr. S. B. Hooker.

escent. At 8.40 P.M., it was sluggish and was found in the same condition at 9.45 P.M. At 10.30 vigorous activity had been resumed by a few granules. Without going into further detail, this parasite was last seen to show activity of the granules on Oct. 9th, at 11.47 P.M. At this time the activity was slight, being less marked than in Quinine I. On Oct. 6, at 6.15 A.M., the field was carefully shifted vertically by the mechanical stage until three other organisms were brought into view. One of these was motionless and the two others active. On Oct. 10th, at 9.45 A.M., the granules were motionless, and the parasites were partially disintegrated. There was a moderate crenation of erythrocytes in the field. On Oct. 26th there was marked hæmolysis throughout, but the outlines of the erythrocytes could be distinguished. A few motionless organisms somewhat shrunken and highly granular were seen.

Arsenic Trioxide I. Preparation made at 2.10 P.M. Oct. 5th, at 2.37, the parasites were exceedingly active, exhibiting as violent dancing motility as I have ever observed, together with what I took to be amœboid movements. One parasite in the same field with a crystal of arsenic continued to show activity until 2.55 P.M., when this began gradually to decrease. At 3.57 P.M., it was distinctly less active, and at 4 P.M., only a sluggish movement of the granules was observed. At 4.30 the parasite was motionless and was somewhat opaque. The field was then shifted. About half the organisms were found to be motionless, the others sluggish except for one which was displaying the violent activity observed in the first parasite. This organism was in the same field with a small crystal of the arsenic. At 5.23 P.M., the motion of the granules was sluggish, and at 5.30 all motion had ceased. A further study of the field showed a very marked granular degeneration of the leucocytes. No hæmolysis was apparent. On Oct. 26, at 9 P.M., the preparation showed about half of the corpuscles to be intact. The other half were either crenated or had undergone hæmolysis to varying degrees. Rough crystals of arsenic could still be found, and in the very same field red blood corpuscles could be found, some of which were almost intact, others crenated and others swollen. A few lymphocytes were found. These were enlarged. The granulation in one large lymphocyte was very marked, the individual granules being very large. The lymphocytes contained no malarial pigment. A very few parasites were found. These were the round variety described under Control I.

Arsenic Trioxide II. Preparation made at 2.10 P.M., Oct. 5. It was attempted to make this a weaker solution of the trioxide than Arsenic I by knocking off the crystals, thus leaving only a very few fine ones which might cling to the surface of the glass.

One crystal was found under the microscope. Very much the same findings were recorded as in Arsenic I, including the very marked primary stimulation during the first hour. At 9.44 P.M., active granules were still present, but the organism had within the past hour contracted to the round form. At 11.45 P.M., doubtful motility of the granules was noted, but these granules did not change places. At 11.50 P.M., all motility had absolutely ceased. Strange to say, when the preparation was examined on Oct. 26th, at 9.25 P.M., the hæmolysis was much more marked than in Arsenic I, although in one area the corpuscles could be clearly distinguished. Careful examination revealed a mass which I took to be a partially dissolved crystal of the arsenic. One organism only was found. This was apparently a somewhat disintegrated form of the round variety.

SERIES II.

All three preparations made up at 2.30 P.M., October 19, 1913. *Control*:—The maximum activity was apparent during the first hour and again at 6.03 P.M., when the entire organism showed a violent dancing motion of all the granules together with a slow amœboid motion. Activity of about half the granules persisted for the following two days, although on Oct. 22 the protoplasm was granular and opalescent in that portion where no activity could be seen. In that portion where activity continued the granules danced about each other, but they did not go from one side of this portion to the other, as is seen in parasites fresh from a patient's blood where—as has already been stated—a granule is frequently seen to migrate from one side of the organism to the other. On Oct. 26, at 8.30 P.M., the preparation was again examined. After one half hour's search a parasite was found in which one small granule was seen in violent activity within what I have termed an encysted area. This area extended under an opalescent portion, as the granule would occasionally dart under this and then appear again in the clear area. This granule was light brown in contrast to the dark brown motionless granules. Further examination of the preparation showed the erythrocytes to be intact except in a few small areas where hæmolysis had taken place. In some fields one or two crenated corpuscles and one or two swollen corpuscles were mingled with others which were apparently intact. Many motionless parasites of both types were seen, but they were considerably fewer than on Oct. 19. Several disintegrated neutrophils were found and two swollen lymphocytes which might have been originally either small or large.

Quinine Sulphate:—The maximum activity was noted within one hour from the time of making up the preparation. Varying de-

degrees of activity continued throughout the afternoon and into the evening. On Oct. 20, at 1.27 P.M., the original plasmodium was found motionless, but on shifting the slide an active parasite was promptly found. This had assumed the usual opalescent appearance and was of the irregular type. The granules in the upper half only were active. No more observations were made until the following morning, when the organism was found absolutely motionless. On Oct. 26, at 8.40 P.M., the slide showed almost complete hæmolysis throughout except for a few areas where the erythrocytes were swollen and slightly pale. The lymphocytes appeared markedly swollen. During the half hour that this preparation was being examined only one parasite was seen. This was of the round type and motionless.

Quinine Hydrochloride:—Hæmolysis was already apparent at 2.40 P.M., but two active organisms were found in this hæmolysed area. These remained active until 4.22 P.M. At 4.35 no active parasites could be found in this area, and the number of motionless ones was apparently much less than at the time of the first observation. This field was then shifted until an active organism was found among erythrocytes which were intact. This organism which was first seen at 5.05 P.M., continued to show activity of the granules until 3.05 P.M., on Oct. 21, when activity was confined to only one granule which bobbed about in what looked like a cystic portion of the protoplasm. On Oct. 26 a good half of the preparation showed complete hæmolysis with rare parasites, while the other half showed disintegrated and crenated corpuscles among which the motionless parasites were in the same condition as those described in the control.

DISCUSSION.

It has long been considered that the sexual forms or gametes are much more resistant to quinine than are the asexual forms or schizonts. In this connection I will say that I am under the impression that the organisms which exhibited motility so long were schizonts. They were not microgametocytes, as they had no filaments. Fragments containing motile pigment from disintegrated microgametocytes, were in evidence in the preparations and were quite different from the organisms under observation. Moreover, these organisms could not have been microgametes on account of their size. The fact that the pigment was motile and was not in a wreath formation is rather against their being microgametes.

The plasmodia in the control showed changes after 12 to 24 hours just as they did in the presence of the anhydrous quinine. Moreover, in the control the number of parasites decreased during the first seven days as they did in the presence of the drug, but to

a less extent. Hæmolysis of the red blood corpuscles from air, quinine sulphate, and quinine hydrochloride were accompanied by death and disintegration of the parasites. The disintegration was more marked in proportion to the hæmolysis under these two salts than in the presence of air, although the presence of air caused cessation of motility earlier than the presence of these two salts.

It is difficult to explain why we found red blood corpuscles both swollen and crenated in the same field. Such a condition would seem to preclude the idea that the presence of the drug altered the isotonicity of the serum, except where marked hæmolysis occurred. It suggests that there must be a difference in the resistance of the individual erythrocytes. The same is true of the parasites, because where two similar plasmodia are observed in the same field, one usually succumbs before the other.

Neither arsenic trioxide nor anhydrous quinine showed the hæmolytic effect in these preparations which we should expect from the statements made in text books on materia medica and pharmacology. This was a sufficiently interesting point to prompt me to make up similar preparations with normal blood. In the subsequent experiment larger amounts of arsenic and the anhydrous quinine were used in proportion to the drops of blood. After 24 hours hæmolysis was more marked about the particles of quinine than about the crystals of arsenic, but in neither case was the hæmolysis more than slight. After 69 hours, hæmolysis was complete in the preparation containing quinine, while in that containing arsenic the only evidence of hæmolysis in most fields was the yellow tint of the serum, the erythrocytes being practically intact.

The last granules seen in motion are of a lighter brown than the motionless ones. After an organism is two days old, the motionless granules are almost black and are imbedded in the granulated light gray protoplasm, while those which continue to show activity are of a light brown, offering a marked contrast, and are seen flitting about in clear spaces which seem to be encysted. This suggests that parts of the organism are dead while in other portions the protoplasm remains alive and active. This phenomenon occurs in the controls as well as in the presence of drugs.

From the accompanying table of the laboratory experiments it will be seen that the plasmodia succumbed most rapidly in the presence of arsenic and that they succumbed more rapidly in the presence of quinine than in the controls. So far, this is quite in keeping with the parasiticide theory of the action of quinine advanced by Binz. A further analysis of the table, however, reveals the fact that the organisms may remain active in a saturated solution of anhydrous quinine for 105 hours and 45 minutes, whereas

*TABLE SHOWING THE EFFECT OF DRUGS ON THE PLASMODIUM
VIVAX OUTSIDE THE BODY.

PREPARATION	Solubility of drug in water	Estimated solution of drug in preparation	Height of activity during	Effect on erythrocytes throughout	Duration of motility
SERIES I Control I			Second hour	Slight variable	174 hours 45 min.
Control II			First hour	Marked hæmolysis	3 hours 35 min
Anhydrous Quinine I	1:1750	Saturated	First hour	Slight hæmolysis	105 hours 45 min.
Anhydrous Quinine II	1:1750	Saturated	First 2½ hours	Slight hæmolysis	105 hours 37 min.
Arsenic Trioxide I	1:100	Saturated	First hour	Very slight variable	3 hours 12 min.
Arsenic Trioxide II	1:100	Saturated	First hour	Very slight variable	9 hours 35 min.
SERIES II Control I			First and third hours	Slight variable	174 hours
Quinine Sulphate	1:720	Saturated	First hour	Marked hæmolysis	22 hours 57 min.
Quinine Hydrochloride	1:18	1:18	First half hour	Very marked hæmolysis	48 hours 35 min.

*The weight of the drop of blood in the preparation is .0004 G. The weight of the anhydrous quinine added is .0005 G. Anhydrous quinine is soluble in 1750 parts of water.¹³ Since I can find no record of the solubility of quinine in blood serum, and as we do not know the form in which it would be in this preparation, we are left to assume that it is a saturated solution, especially when the quinine was not entirely dissolved. For similar reasons the arsenic trioxide was in a saturated solution, although probably the point of saturation was not reached until after the motility of the parasites ceased.

It will be noted that these figures are only approximate, but we have taken pains to have the error lie on the safe side.

*CLINICAL OBSERVATIONS.

PATIENT	Weight of Patient	Estimated solution of quinine in blood after 24 hours	Estimated solution of quinine in blood after 48 hours	Disappearance of Plasmodia from peripheral blood	Effect on approaching paroxysm	No. of paroxysms after quinine administration was begun
A Blood Used for Series I	57.5 kilo	1:200,000 or .00050%	1:150,000 or .00075%	Within 48 hours	Aborted	None
B. Blood Used for Series II	95 kilo	.000303%	.00045%	Within 67 hours	No effect	One

*Weight of patient A. is 57.5 kilo. Reckoning the amount of his blood to be 7.7 per cent, or $1/13$ of the body weight gives a total weight¹² of the circulating blood to be 4.427 kilo. The amount of quinine sulphate ingested during the first 24 hours is 0.6 G. The percentage of the alkaloid in this salt is 74 per cent. At the end of 24 hours at least half of the quinine is eliminated;^{13 14} therefore, at the end of this time he has retained at the most .3 G of the salt or .222 G. of the alkaloid. At the end of 48 hours there will only be .45 G. of quinine sulphate in the body or .333 G of alkaloid. The solution of quinine reckoned as pure alkaloid in the circulating blood would be .00050 per cent or 1:200,000 at the end of 24 hours; or .00075 per cent, or 1:150,000 at the end of 48 hours.

Weight of patient B. is 95 kilo. The total amount of blood is 7.315 kilo. Per cent of the pure alkaloid in the blood at the end of 24 hours is .000303 per cent; at the end of 48 hours it is .00045 per cent.

when one of the salts of quinine is used, hæmolysis is apparently an important contributing factor in causing a cessation of motility. This is borne out by Control II. where the presence of air caused rapid hæmolysis and the early death of the parasite. The fact that motility was observed after such a long period in the two anhydrous quinine preparations is significant in itself regardless of the observations in the control. Rosin* observed motility after 10 hours in a solution of quinine sulphate 1:5000. In my previous work I observed motility in a solution of quinine citrate after 28 hours and 10 minutes. Rosin remarks that his findings were contrary to all expectations. Sufficient idea of my own expectations is afforded by the fact that I remained in the laboratory throughout the first night with the idea that motility would cease before morning.

The most important bearing of the results of these laboratory experiments is not so much on the resistance of the plasmodia to quinine as compared to the duration of motility in the control, but on the relation of the laboratory to the clinical findings. The blood used in Series I. was from a case of double tertian malaria. This patient was kept under observation for four days without quinine

* Rosin made no more observations after 10 hours, as he was forced to leave the laboratory at the end of that time.

previous to the withdrawal of the blood. During this time the paroxysms showed no tendency to diminish in severity as evidenced by the violence and duration of the chill and the maximum height of the fever. After the withdrawal of the blood the patient was put on quinine sulphate (Merck) .05 G. (3-4 gr.) in capsules, every two hours. The expected chill which was to follow within sixteen hours of administration of the first capsule did not occur, nor were there any signs or symptoms of a paroxysm. The capsules were continued with regularity. Smears taken 21 hours after the withdrawal of blood showed numerous well developed organisms in fewer numbers than at the time of the withdrawal. Smears taken six hours later showed a marked diminution in the number of parasites, and these exhibited the usual changes seen during a quinine cure. Out of the eight parasites studied in fresh preparations only two showed activity. Eighteen hours later no parasites could be found in a stained preparation, although the search lasted a half hour. Furthermore, no parasites could be found in subsequent smears, and no further paroxysms followed this first one. Without going further into the details of the clinical observations, suffice it to say that the patient was allowed full diet from the time he was first put under research observation until his discharge, except when his temperature went above normal, during which time he received only liquids regardless of their dextrose content. In this case, then, no organisms could be found in the peripheral blood after 45 hours of quinine administration, whereas outside the body motility was observed for over 105 hours in the presence of quinine. The rapidity with which the dead parasites disappeared from the patient's blood was much greater than in the paraffin quinine preparation.

The strength of the quinine in the patient's blood at the end of 24 hours was computed to be about 1:200,000, and at the end of 48 hours about 1:150,000, while in the preparation the quinine may be said to have been in a saturated solution after 24 hours. This may be roughly estimated to be at least 1:2000, or probably more like 1:1500. The inference from this is that the administration of quinine to the patient exerts more effect on the plasmodia than does quinine itself when applied to them outside the body. Since this is the case the quinine must have an indirect action in the cure of malaria.

This is in keeping with clinical experience. Why is it that some cases of malaria recover promptly on very small doses while others of equal severity recover more slowly even when massive doses are used? Ross and Thompson¹⁰ report "A case of malarial fever, showing a true parasitic relapse during vigorous and continuous quinine treatment." Can we explain these irregularities in the action of

the drug as due to an acquired resistance to the quinine on the part of the parasite? This admits of the transmission of acquired characteristics, a possibility which is doubted by most zoölogists today; or it assumes that in the course of segmentation sports are produced which are resistant to quinine, and, through the survival of the fittest, these could, of course, transmit and intensify the characteristic of resistance. Strains of *Colpudia* may be thus bred which are resistant to quinine solutions strong enough to destroy the common variety.² In the case of trypanosomes certain strains have been found which are resistant to atoxyl. The impossibility of trying to make such theories answer our problem in malaria is shown by such cases as the one used for Series II., where large doses do not cure, where rest alone does not cure, but where small doses bring about a prompt and complete recovery. These cases are not uncommon. Physicians who use large doses of quinine as a routine in malaria have reluctantly seen cases which were obstinate in their hands brought to a speedy recovery under the milder treatment of a colleague. The opposite is also true. As was pointed out by Daniels³ in his presidential address before the Section of Tropical Medicine of the British Medical Society, the recovery of a patient from malaria depends far more on the resisting powers of the patient than on the degree of resistance of the parasites to the quinine in the blood.

In several of my research cases kept under control previous to quinine administration, the approaching paroxysm has been entirely prevented or greatly ameliorated when as few as three doses of quinine of .05 G each every two hours were given, although segmentation took place at the expected time, as shown by smears taken at intervals. The fact that segmentation took place implies without question the liberation of the toxin at the time of segmentation. Disregarding the effect of the quinine on the segmenting forms and on the liberated merozoites, we are forced to acknowledge that the drug in some way influenced the toxin. That such a toxin is liberated has been shown by Rosenau, Parker, Francis, and Beyer⁴ in those classical experiments which are of far more significance in this respect than the recent work of Brown⁵ on animals. The most plausible explanation to my mind of this effect of the quinine on the toxin is that the drug stimulates a specific antitoxin, or, in other words, an excess of receptors which neutralize or combine with the free toxin before it can bring about a paroxysm. Such an explanation accounts to some extent for the superior efficacy of small doses over large doses in certain cases as borne out by recent researches along the lines of anaphylaxis in other diseases. If the molecule of quinine can do this, it follows that it is similar to the

toxin molecule of malaria in this respect. This similarity need not necessarily be manifested by exactly the same pathogenesis of the toxin and of the drug,—that is, the drug and the toxin do not always have to produce the same symptoms to produce the same receptors, although I take decided exception to von Behring⁶ by stating that after careful review of the literature on quinine I find certain striking points of similarity in the symptoms of quinine poisoning in sensitive subjects to the symptoms of malaria.

The Ehrlich theory as it now stands insists on the absolute specificity of antitoxin. One antitoxin only protects against one specific toxin. This may be so, but it has yet to be proved that two different but similar substances cannot produce the same antitoxin. To those who oppose the homœopathic use of drugs, citing this clause of specificity in the Ehrlich theory as the ground for such opposition, the familiar fact may again be cited that cow-pox is only similar to and not identical with small-pox, although the former is generally considered to confer immunity against the latter.

To infer that the quinine stimulates the formation of an antitoxin to the toxin liberated at the time of segmentation of the malarial plasmodia is not sufficient. It must also directly or indirectly promote the production of a specific parasitolyisin which causes the destruction of the parasite while the antitoxin element neutralizes the toxin. Without this parasitolyisin, the patient would die of anæmia through the continued multiplication and subsequent consumption of red blood corpuscles, although the toxin were rendered inert. It might be well to remark here that Ziemann⁷ has suggested that the parasites in the course of their growth may produce a substance which inhibits its own growth beyond certain limits, just as the yeast spores inhibit their growth beyond certain limits by the formation of alcohol. The antitoxin of diphtheria injected into the patient does not of itself account for the disappearance of the membrane from the throat; consequently the action on the bacilli must be indirect. The administration of quinine to the malarial patient produces certain definite effects on the plasmodia, especially the younger forms, as may be observed by smears. These effects have been repeatedly described by various authors such as Golgi,⁸ Thayer, Craig⁹ and Rieux¹¹ but always with the idea that these changes in the parasite are the direct effect of the quinine. In the light of the evidence at hand, is it not possible that the influence of quinine administration on the malarial parasites as seen in smears taken from the peripheral blood is due to a stimulation of the

natural specific resisting forces of the body rather than to a direct parasiticidal action of the drug on the plasmodia? This is especially pertinent when we consider that quinine is the admitted specific for malaria par excellence, yet it is a parasiticide outside the body to many other lower forms of life, such as trypanosomes, etc. A further discussion of the modus operandi of quinine in malaria will be taken up in detail in a further publication.

SUMMARY.

1. Pure quinine dissolved in defibrinated blood has a definite influence on the plasmodium vivax outside the body when in a solution of approximately 1:2000, causing the cessation of motility as determined by the pigment granules to occur earlier than when the drug is omitted.

2. Outside the body a saturated solution of anhydrous quinine in defibrinated blood, which is approximately not weaker than 1:2000, causes a cessation of motility in the plasmodium vivax in twice the time required to cause the disappearance of these plasmodia from the peripheral blood of the patient, where, by the oral administration of fractional doses of quinine sulphate, the alkaloid is approximately not stronger than 1:150,000.

3. The presence of anhydrous quinine in defibrinated blood outside the body does not cause the disintegration and disappearance of the parasites to anywhere near the same degree as takes place in the patient's peripheral blood during the administration of quinine sulphate G.05 every two hours.

In view of these facts we conclude that the action of quinine on the plasmodium vivax outside the body is distinctly less marked than the action of quinine on these parasites when administered to the patient.

The evidence at hand suggests the theory that the curative action of quinine in malaria is dependent on an indirect action of the drug, whereby the specific resisting forces of the body are stimulated to greater activity, rather than to a direct parasiticidal action on the plasmodia.

I wish to express my gratitude to Doctors Helmuth Ulrich and Sanford B. Hooker, and to Mr. Nathan H. Garrick for their invaluable assistance in these experiments.

References.

1. Rosin, H. Einfluss von Chinin und Methylenblau auf lebende Malaria-parasiten. Deutsch. Med. Wochenschr. Nov. 2, 1893, No. 44, p. 1068.
2. Lathrop, S. P. The Charlotte Med. Jour. N. C., April, 1913, p. 223.
3. Daniels, C. W. The Persistence of Protozoal Tropical Diseases in Man.

- Presidential address before the Section of Tropical Medicine. *British Med. Journal.* Sept. 18, 1909, p. 767.
4. Rosenau, M. J., Parker, H. B., Francis, E., Beyer, G. E. *Experimental Studies in Yellow Fever and Malaria at Vera Cruz, Mexico.* U. S. Yellow Fever Institute, Bulletin No. 14, 1905, p. 75.
 5. Brown, W. H. *Malarial Pigment as a Factor in the Production of the Malarial Paroxysm.* *Jour. of Experimental Med.* 1912, XV, June 1, p. 579.
 6. Von Behring, E. *Einführung in die Lehre von der Bekämpfung der Infektionskrankheiten,* Berlin, 1912, p. 65.
 7. Ziemann, H. *Handbuch der Tropenkrankheiten,* Edited by Carl Mense, Leipzig, 1911.
 8. Golgi. *Über die Wirkung des Chinins auf die Malaria-parasiten.* *Deutsch. Med. Wochenschr.,* 1892, No. 29, p. 663, No. 30, p. 685, No. 31, p. 707, No. 32, p. 729.
 9. Craig, C. F. *Malarial Fevers,* New York, 1909.
 10. Ross., Sir R. and Thompson, D. *A case of Malarial fever, showing a true parasitic relapse during vigorous and continuous quinine treatment.* *Annals of Tropical Med. and Parasitology,* Liverpool, 1911-1912, V. p. 539.
 11. Rieux, J. *Mode d'action de la quinine sur Plasmodium vivax de la tierce et de la double-tierce benigne de rechute.* *Bulletin de la Societe de Pathologie Exotique,* Paris, March. 12, 1913, VI, No. 3. p. 153.
 12. Nagel, W. *Handbuch der Physiologie des Menschen,* 1909, Vol. I, p. 741.
 13. Deaderick, W. H. *A Practical Study of Malaria,* Phil. 1911, p. 334-341.
 14. Brault, J. *Elimination de la Quinine chez les paludeens.* *Malaria. Internat. Archives.* Bd. II, Heft 3. July, 1910, p. 137.

THE HOMŒOPATHIC TREATMENT OF TUBERCULOSIS.*

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In outlining the homœopathic treatment of tuberculosis the question arises, can the treatment of tuberculosis conform in all parts, and in every respect, with the teachings of homœopathic philosophy and homœopathic materia medica, or are modern ideas, as to diet and hygiene, to be followed irrespective of their agreement with Homœopathy?

In the early days of Homœopathy the tendency was to avoid everything that savored of Allopathy. As the hygienic, dietetic, and medicinal treatment of disease by the old school, at that time, was outrageous, such a reaction was but natural. Now we find just the opposite tendency, that is, acceptance of old school dicta, as to diet and hygiene, without question, and seldom a thought given as to whether they agree with Homœopathy or not. In fact, it has evidently been forgotten that Homœopathy has principles which apply to anything outside of therapeutics.

Modern research in hygiene, dietetics, and climatology has ap-

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parently placed these departments of treatment on such a firm and rational foundation that it would seem that no question could be raised as to homœopathic acceptance of their teachings. Nevertheless, if I mistake not, homœopathic principles *are* applicable here as well as in therapeutics. With this in mind I will now take up the

Homœopathic Treatment of Tuberculosis.

The præ-tubercular, or earliest tubercular stage, as it is now properly called, does not need separate attention, as the homœopathic principles governing its hygiene, diet, and therapeutics will be covered in the general outline. Neither is it necessary, for the same reason, to divide the disease into stages and speak of the treatment of each stage in detail. Therefore I will begin with some of the questions relating to the

Hygiene of Tuberculosis.

In this, and the other divisions of the subject to be covered, one naturally desires some guiding principle which will direct harmonious co-operation in the various parts of treatment. Such a principle is not difficult to find. It has lain at the very foundation of homœopathic treatment from Hahnemann's time to the present. Whenever Homœopathy is practiced it should ever be uppermost in the mind of the true homœopathic physician.

This basic principle—that of *individualization*—upon which homœopathic therapeutic application rests, may logically extend to everything relating to the care of the patient. How? Let us examine, for part of the answer, the question of

Temperature and Weather.

Is it advisable always to expose tubercular patients to extreme cold during the winter? We know the answer, that "cold air, no matter how cold, retards the formation of tubercle, and inhibits the growth of tubercle bacilli, the patient, on the whole, being stimulated and the appetite increased."

This may all be true in the Iodine case, where the patient likes cold, extremely cold air, and cannot get enough of it; but what of the Arsenicum iodide patient? In this remedy the Arsenicum modalities, in general, rule, and the aggravation from cold is marked. Cases that I have observed have progressed favorably,—when the indications for this remedy, including general aggravation from cold, were present,—when plenty of fresh air was provided which was modified, as to extreme coldness, by using a porch with a southern exposure, or in some other suitable way. I do not doubt that in Arsenicum iodide cases, extreme cold will at least delay upward progress. It may even prevent any gain.

With the Kali carbonicum patient, as suggested by Dr. Timothy Field Allen, dry cold especially aggravates, while in the case calling for *Calcarea carbonica* there is aggravation from cold, wet weather. So the Kali patient does best in a climate which is moist though warm, and the *Calcarea* case in one which is dry and warm.

Thus moisture, an important element in the climatological treatment of tuberculosis, together with warmth and cold, can be decided for or against, when laying out the hygienic instructions for a patient, according to the remedy required in the case.

Windy weather, in which the *Lycopodium* patient is worse, also warm moist weather, which distresses the Iodine case, are to be considered, and so on.

Climatological elements and combinations, ameliorations as well as aggravations, noted in taking the anamnesis, all serve to point to the medicine the patient's constitutional condition requires, and, furthermore, to indicate the appropriate hygienic treatment. The same holds true in regard to bathing, altitude, seashore or mountains, etc.

Diet.

The loss of appetite, in tuberculosis, is not helpful in prescribing, as it is an ordinary symptom characteristic of this morbid state. Of more importance are curious desires and aversions for certain articles of food and drink, present in some cases. The aversion to, and intolerance of fats, usual in tuberculosis, is not to be grouped in this category, as this, like the loss of appetite, is a common tubercular symptom.

The help in arranging the diet of the tubercular patient, of which we may avail ourselves, comes through the remedy indicated in the particular case.

The appropriate medicine having been selected, one finds in its pathogenesis desires and aversions in the way of food and drink, and articles of food which agree and disagree. From these may be arranged a diet list most likely to suit the patient, supplementing satisfactorily the customary stuffing with eggs and milk. These latter may disagree, or become distasteful, and so their overuse can thus be avoided.

Take as an example when Phosphorus is indicated. Here though the desires, aversions, and foods which agree and disagree are not many, yet they are marked and make a respectable list, including

Aversion to,—beer, bread, cereals, coffee and tea, fat food and butter, meat, milk, puddings, sweets, tobacco, and

Desire for,—acids, salt, spiced food, refreshing things, and particularly cold food and drink. There is—

Aggravation from,—bread (rye especially) and butter, fat, fruit, milk, pastry, salt, sour things, sourkraut, sweets, tobacco, vinegar and warm food, and—

Amelioration from,—bread, cold food and drink, wine. Consequently, according to the irritability of the stomach, there are—

Available,—acids and salt in great moderation, some white bread, cold food and drinks, as ice cream if not too rich in cream, eggs, fresh fish, oysters, etc., ham and meats generally, particularly if cold, and vegetables *ad libitum*.

The foods to which there is an aversion, and those which aggravate, are to be avoided in general, except as I have indicated. This includes beer, and also tobacco, of which the patient cannot use much without aggravation, warm foods generally, butter, and much milk. Thus the use of stimulants and tobacco can be regulated appropriately to the patient.

When the idiosyncrasies of the Phosphorus patient's digestive apparatus are taken into account, it will be realized that this arrangement of the diet is logical and if carefully followed will be likely to avoid the stomach upsets so common in tuberculosis.

It will be noted that while eggs are allowed and agree, milk, in large amount, is to be avoided. The Phosphorus case is particularly intolerant of milk, and cannot digest it except in moderate quantities when cold, or mixed with something else. Of course it may be predigested, but that is not satisfactory, generally, for any length of time.

With a careful ordering of the diet, and the developing action of the remedy, the patient slowly becomes able to digest other things not in this list.

Therapeutics.

In the therapeutics of tuberculosis *individualization* stands out a prominent requisite.

Because it is usually such as is characteristic of the disease the mental state seldom gives anything useful in prescription symptoms. Hence the general modalities, such as those referred to under hygiene, are of prime importance upon which to prescribe. The aggravations or ameliorations from heat and cold, and their elaborations with moisture, wind, etc., if rightly interpreted, are not infrequently the basis of the prescription. It is senseless, to say the least, when prescribing for a patient, and including, in the prescription symptoms, such a strong modality as "predominant aggravation from cold," and then to ignore the desire for warmth in the hygienic instruction.

Routine has no place in the treatment of any disease, and particularly has it no place in the homœopathic treatment of disease.

In every respect the hygiene, and diet, and remedy, should conform to the needs of the patient as expressed by his symptoms. This is also true as to external applications of heat or cold. It hardly seems possible that anyone would make the mistake, in a *Rhus febrile* condition, of decreasing the patient's wraps or of applying cold externally! Yet I have known it to be done. Neither does the *Nux vomica* nor the *Arsenicum* patient desire cold. On the other hand the *Apis*, *Ledum*, or *Pulsatilla* case would be aggravated by heat.

These things being patent, not hidden, and not far to seek, they should be taken advantage of, not only because they carry logically the homœopathic law into all parts of the treatment, but because in making the treatment homœopathic throughout the comfort of the patient is increased, and because, above all, in this way, the whole treatment being in harmony, there is a more rapid restoration to health. It must of necessity be otherwise when discord exists.

A paper of this kind is hardly complete without details in therapeutics. The subject is so trite that I hesitate to touch upon it. Instead I will speak of the selection of the first remedy.

Unless one runs to routine prescribing there is always some difficulty in choosing the first remedy. Any method which is fairly simple and also accurate is a help. It must be accurate in fitting the remedy exactly to the individual needs as expressed in the symptoms. It must be simple in that it is not difficult to comprehend and apply, and takes but little time.

One way in which this can be done is by the intelligent and correct use of the repertory. To do this, in a tubercular case, take first the list of remedies under "Consumption." This list originally printed in Boenninghausen is also to be found now in Kent's Repertory. The varying type in which the remedies occur in it represents the relative frequency with which these medicines are applicable in tuberculosis. Thus Iodine, *Kali carbonicum*, *Lycopodium*, *Phosphorus*, *Pulsatilla*, and *Stannum* are most marked.

In a case seen some time ago where there was slight involvement of the left upper chest, with symptoms of weakness, a little loss of flesh, poor appetite, afternoon rise in temperature, sputum showing bacilli, there was also great desire for open air, and aggravation in the wind or when it blew at all hard even though the patient was in the house. These—the "desire" and "modality," together with the rubric "consumption"—were used as the foundation of the case study. There were fifteen remedies which occurred in all three rubrics. Of these two—*Lycopodium* and *Pulsatilla*—were most prominent. *Lycopodium* was selected after consulting the *materia medica*.

This patient required no second remedy, that is *Lycopodium*,

exhibited in rising potencies, completed the cure. The hygiene and diet were arranged to conform to the patient's needs.

Should a second remedy, and even a third, be required in a case, they can best be selected by means of Bœnninghausen's "Concordances." How to do this is outside the scope of this paper, except that I may say that the last homœopathic remedy that has acted favorably, no matter how it was selected, is the key by means of which the secret of the second is unlocked.

I have purposely made this paper short, and avoided, as far as possible, unnecessary explanations hoping to make clear the assistance that can be obtained from the materia medica in arranging, in the most favorable way for the patient, the diet, the hygiene, and the climatological part of the treatment in tuberculosis according to homœopathic principles.

As we have a Law of Cure it seems consistent to follow it to its ultimate extent.

CLINICAL DEPARTMENT.

Conducted by A. H. RING, M.D.

Case 10—D. Diagnosis: Anxiety Neurosis.

The classification of the various neuroses which used to be included under the general heading Neurasthenia is for the most of us somewhat difficult; yet if we are to apply the approved remedial measures to each, it is essential that we should have a clear understanding of the difference between simple neurasthenia, anxiety neurosis, obsessional neurosis (psychasthenia) and the psychoneurosis (hysteria).

It is rare indeed today for one conversant with these various types to meet with a typical case of neurasthenia which may be defined in brief, as a primary fatigue neurosis. It is to the nervous system what pernicious anæmia is to the blood stream. As most anæmias are secondary, so also are most neurasthenic states dependent upon an incipient paresis, an on-coming maniac depression or dementia precox or some other toxic or infectious condition. Neurasthenia in its pure state is found most commonly in students and business men. Freud thinks that it will practically always be found to be due to some form of onanism, coupled, perhaps, with overwork.

Obsessional neurosis, (psychasthenia of Janet) also has a definite symptom complex: *i.e.*, fixed ideas which persist in the face of reason; impulsive, irrelevant acts as if the patient has lost his self-control and is impelled by some external force; fears—(phobias) which though groundless are tenaciously held to and

form a groundwork for worry and indecision which is characteristic. In the obsessional neurosis the bodily functions often suffer much and should receive consideration in the treatment.

The psychoneurosis of which hysteria is the leading type is the outgrowth of a nervous tension or conflict in the mind of the patient, the result of an incompatibility between her inherent fundamental (sex) desires and the social code under which she must live. It is a form of poor adaptability to one's ethical environment in which the patient resists cure because it means facing her real self, a thing she dreads to do.

Anxiety neurosis, of which our last case is fairly typical, is also sufficiently well defined to warrant separate classification. The name was coined by Freud who sees in it a morbid anxiousness and apprehension which attaches itself loosely to one idea after another that can in any way justify anxiety. Sleep is almost always disturbed, insomnia and nightmare being frequent. There are many hypochondriachal symptoms. In the acute attack dread may be very intense and accompanied by a feeling of congestion in the head; fear of impending apoplexy or death. There is either rapid thinking or blank spells. In mild attacks there may be only confusion; patient cannot collect her thoughts at a critical moment. All the bodily concomitants of fear are exaggerated.—There is increased heart action, fluttering, etc., general tremor and sweating; nausea, diarrhoea or, in the more chronic cases, dyspepsia, strangury, seminal or vaginal emissions, sexual fears, vasomotion constriction, with coldness and blueness of the extremities and skin. Flushes are common and in women may lead to the idea that the climacteric is reached. This has been suggested as an explanation of our patient's condition, though she is only thirty-three. The bodily secretions,—salivary, gastric, sweat, may be much disturbed. Respiratory symptoms may be very pronounced, some cases having asthmatic attacks, oppression and suffocation. Ernest Jones gives Freud's conclusion as the cause of the anxiety neurosis briefly as follows: "Under certain circumstances sexual excitations arise that cannot follow their natural course of leaving, either in physical gratification or even in conscious desire for such; being deflected from their aim they manifest themselves mentally as morbid anxiety and physically as bodily accompaniment of this. With this sexual suppression it is a common occurrence for an outbreak of anxiety neurosis to be determined by any natural cause for apprehension as the illness of a relative, failure, fright, grief or mental strain. "But these," said Freud, "are all secondary, no anxiety neurosis will be found in a person whose sexual desires are being gratified."

With this etiology in mind, the treatment must be worked out as best fits each case. Radically the adjustment of the sexual life to one of normality is the thing to do. In those who are married this is generally possible and sufficient. Palliative treatment must at times be resorted to, and this consists in a rather rigid hygienic regime, together with frank instruction and education that will give the patient a comprehension of the difficulties to be overcome and courage to face them.

Case II—D. For Diagnosis.

The patient is a widow sixty years old, born in Massachusetts. Her mother is 81, living and well except for rheumatism. Her father died of pneumonia at 64, but was a vigorous, healthy man. There were eight children, all girls, of whom only three are living. One died early, of tuberculosis, two of rheumatism and anæmia, one of grippe and the other of undetermined cause.

The patient was a healthy, normal girl and married twice, having one healthy child by first marriage. Of late years she had much rheumatism. Seven years ago she had heat prostration and was in bed two months. During the first of this she had some delirium, but made a good recovery. Since then, however, she has had much occipital headache. Early last September she became very nervous and fearful; did not want to be alone. Visited her sister, who remarked that she was changed temperamentally. Usually cheerful and thoughtful, she now thought only of herself, complained of much headache, and followed her sister about the house; seemed to want to be guarded against herself and would not sleep alone. She returned to her home meaning to see a neurologist, but was somewhat better the next morning and the daughter left her to go across the street. Ten minutes later the daughter returned and found the patient lying on the kitchen floor very blue and breathing heavily and the gas (of the gas stove) turned full on. After resuscitation with oxygen, etc., it was found she could not see nor articulate clearly. Two days later she was taken to the Psychopathic Hospital, where the following abridged physical examination was made:

“On admission the patient is apparently confused and disorientated. Stares ahead in a peculiar manner. Seems weak, answers questions irrelevantly. Orientated somewhat for persons, but not for time or place. Formal mental examination impossible. Lies quietly in bed and repeats questions constantly. Asked how old she is says “twenty-five. I’m all right.” She is apathetic, listless, not interested in her surroundings, possibly preoccupied by delusions. She can give no coherent account of herself, no intelligible answers to questions regarding history,

memory or education. She is apparently blind, does not seem to know where examiner is, cannot count fingers before face. The answers she gives indicate a loss of memory and in certain respects seem focal and aphasic. Cannot repeat sentences nor find proper nouns.

The fundus is negative, but astereognosis and apraxia cannot be tested owing to her inability to understand questions. Spinal fluid and urine both negative. Since the patient has regained some strength and is up every day—vision is still very poor and orientation, though better, not normal. What is the matter with this woman, and what the prognosis?

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the *GAZETTE* only and preferably to be typewritten—personal and news items should be sent to THE NEW ENGLAND MEDICAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business should be sent to the Business Manager, 80 East Concord Street, Boston, Mass.

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LESSONS FROM THE CLINICAL CONGRESS.

When thirty-five hundred busy men drop their work for a week and travel the distance of half a continent, they expect to get something in return. As a body, physicians are eminently practical men. To them cause and result is a pendulum, the swinging of which they are ever watching with stop watch and meter in hand noting any variation between the beats.

When that formidable army of medical men journeyed to Chicago to attend the Fourth Annual Session of the Clinical College of Surgeons, they knew from past experience that they would get something of value.

What is the explanation of the amazing growth of this Congress? From an attendance of a few hundred surgeons in Chicago four years ago, it has grown to thousands in a night. There are other national societies of surgeons and specialists. Some have been in existence a few score years, but none have experienced any remarkable growth. The answer is "Clinical teaching vs. Essay writing," with the verdict in favor of the plaintiff.

When a man comes before an acutely attentive body of physicians and makes the patient before them the altar upon which he offers his remarks, the audience is pretty sure to get the incense of his real knowledge concerning the disease in hand. There can be no text-book, cullings and cribbings, no long dissertations on exploded theories, nor recitations of dead men's opinions. It must be himself which he is giving out, and his teachings will stand or fall according as they conform with the later discovered facts.

Clinical teaching is eminently practical. A man may be a brilliant essayist but an exceedingly poor physician, because impractical or incapable of applying his knowledge. Whereas a good clinician must be, in a degree at least, a successful physician.

Men would not go to this Congress in any greater numbers than they go to any other national medical gatherings, did they not receive what they feel they need. Herein lies a great lesson to our

institutions of medical learning, as well as to our officers of medical meetings. The multitude asks for bread and we give them "wind." Clinical teaching must become more and more the essential part of medical education, especially for the last two years of the college course. During the senior year it should supersede the didactic almost entirely. While the proposed compulsory hospital year is clinical, in fact, yet the student in the hospital should be able there to *apply* his clinical knowledge, whereas during the senior year he is *acquiring* his clinical knowledge.

This again demonstrates the imperative necessity of the closest relationship between the medical school and the hospital. That relationship must be both physical and institutional. The successful medical schools of the future will be those wherein the hospital and the out-patient department are so emphasized that they become the real essence of the educational plant. Again, the best manner of employing clinical material. The clinics which repeatedly drew the largest audiences in Chicago were not those where the longest list of operations were scheduled, but those where each case was studied to a *finesse*.

The most lauded were the jointly conducted clinics in borderline cases where an eminent internist and a surgeon jointly studied the case in hand and gave to their auditors not only their *opinions* but a good and defensible reason for the belief that was in them.

If any man went to that Congress with the idea that the day of the internist was passing, his conception must have received a rude jolt as he noticed the important part which such internist played in all the more complicated cases. As one man of eminence said, "This Congress has done more for the internist than for the surgeon." Here again we can apply this newly discovered mode of post graduate teaching to our medical schools. "Team work" such as this is more than doubly beneficial; it broadens the vision not only of the instructors, but of the students as well, and sends the latter into the world viewing the patient in his entirety, and not divided up into eye, ear, nose, throat, chest, pelvis, and joint sections, to be lugged off piecemeal for examination. Yet again did the Congress teach a lesson,—the return to a study of the bedside findings and the correct interpretation thereof. The clinician is still the Hamlet, while the bacteriologist is but the stage prompter. Time and again was emphasis laid upon the necessity of obtaining a careful history of the case; no detail so insignificant but that its bearing was considered. While no instructor belittled in any sense the value of the laboratory findings, yet the man who allowed the laboratory to make his diagnosis for him in any great number of cases, was making the double mistake of frequently reaching wrong conclusions and falling into careless habits of reasoning. Unfortunately this splendid

conception of post-graduate teaching shows signs of weakness from a rapidly developing "grantism." It suddenly got so big it could not get into the largest hospitals, nor sit down when it did get in. It could not see when it looked, nor hear when it listened; but it could feel! Oh, my, how it could feel after a long day of sitting, tramping, and street-car chasing!

In July, 1914, the Congress goes to London via special chartered steamship, to become the guest of the English surgeons. Here's hoping some "extract" may be given to lessen the grantism or increase the size of amphitheatres.

AMERICAN MEDICAL EDITORS' ASSOCIATION.

The following editorial from the Journal of the Medical Editors' Association is intensely interesting to every physician of America no matter what his practice, his prejudices, or his sympathies. It certainly impresses the reader as being a very fair and sane summing up of the whole matter pertaining to the suit brought against the A. M. A. by Dr. G. F. Lydston.

As the American Medical Editors' Association includes in its membership nearly all the editors of the better class of medical journals, this editorial appearing in its own journal would seem to express the sentiment of that great body of medical editors.

THE STATUS OF THE AMERICAN MEDICAL ASSOCIATION UNDER THE LAW.

Much interest has been aroused by the announcement of the decision of the Appellate Court of Illinois in connection with the *quo warranto* action recently brought by a prominent Chicago physician, Dr. G. F. Lydston.

This decision is to the effect that the American Medical Association as now conducted, is, in the abstract, an illegal or illegally conducted organization. While this has long been claimed in certain quarters, this verdict of the next to the highest court in Illinois is practically conclusive. Many grave questions arise at once and it certainly behooves the members of this great American institution to study the situation in detail.

Surely, if one were a trustee of a widow and her children, and the funds in his hands as trustee were invested in a definite piece of property, it would be a matter of vital interest to him, if the words "honesty, integrity and responsibility" mean anything, to obtain all possible information bearing on the rights and soundness of his action before placing, for instance, a first mortgage on that property. If his rights in the premises should be open to question in any way, and the trustee learn this through having the fact called to his attention repeatedly, he would hardly be considered a safe and responsible agent if he willfully opposed all efforts to show him his rights and privileges under the law—and failed to welcome a definite legal ruling on every point pertaining to the property under his care. There is a close analogy between the foregoing and the problem which confronts the management of the American Medical Association.

The property of the American Medical Association has reached enormous value. This is important, of course, but the integrity of the Association is the point at issue. The basis of its organization and its system of control—the direction of its affairs—present the fundamental problem, therefore, for the actual existence of the Association is threatened if its foundation be illegal in even the slightest respect. With this a matter of deep interest and concern to the individual members—as it certainly is—it surely should be no less so to those who are acting as stewards of the institution; certainly these stewards should welcome with enthusiasm anything and everything in the way of a definite, sound, legal judgment, which if they are secure in the consciousness of their fidelity and integrity, can only emphasize the correctness of their position and the faithful performance of their stewardship.

No honest man will persist in a definite line of procedure and then fight for the maintenance of that procedure after it has been shown to him beyond all possible question to be wrong and illegal. The honest man will call an instant halt, “box his compass,” ascertain “where he is at,” and direct his course accordingly.

Of course any man may inadvertently do something which others may object to. Everyone, however capable and honest, may make mistakes in good faith. But when it is called to the attention of an honest and responsible man that his acts are improper or contrary to his rights, that man will stop short and accept with gratitude, the proffer of sound, unbiased counsel from responsible sources. On the other hand if the reverse occurs, and the individual who is the trustee of vested interests refuses to allow his acts to be reviewed or questioned, and continues to pursue the same course regardless of opinion, *it is natural to turn to something besides stubbornness for the underlying or ulterior motive.*

Let us look the situation squarely in the face, as it concerns the American Medical Association. A little history may not be out of place.

It has been repeatedly suggested that the basis upon which the American Medical Association has been conducted, during the past few years is illegal. Notification to the parties in power although given repeatedly and in the most unselfish spirit, has, at best, received scant courtesy. Every effort in fact to obtain recognition upon the subject has been vigorously opposed.

All the usual channels having been blocked, the only possible avenue for the determination of a matter so vitally important was the courts. The American Medical Association being incorporated under the laws of Illinois, the courts of that state became the logical field of battle. To proceed properly, it was necessary to institute “*quo warranto*” proceedings. As generally understood, such proceedings are a matter purely of friendliness, undertaken to determine “the right” between parties opposed to each other.

Dr. G. Frank Lydston, one of the foremost medical men of the country and for many years a member of the American Medical Association, has chanced to be the champion of his colleagues in the Association in the justifiable and commendable effort to determine the true status of the organization and the rights of its members under the law. Unless those in the official control of the American Medical Association have had some ulterior object in combating every properly instituted effort to determine the legality or illegality of the present organization, it would seem absolutely indefensible that they should have fought the issue from every standpoint. It may or it may not be a coincidence, but it is at least unusual that the lawyers who represent the officials of the American Medical Association are the very men through whom a *quo warranto* action would ordinarily be brought in the State of Illinois. Dr. Lydston in seeking permission to serve proper papers upon those in control of the American Medical Association affairs not only encountered this situation, but was met by the most strenuous opposition at every turn. Why did the American Medical Association’s officials

fight so vigorously against—instead of graciously welcome—a decision which would eliminate all occasion for criticism, and establish the legality once and for all of the ground upon which they stood?

It is altogether proper and becoming, and far beyond the charge of captiousness, that we ask this question which is so fraught with significance to every member of the Association.

Fortunately, Dr. Lydston, a man with the heart of a lion, a keen brain and indomitable pluck, could not be squelched by the mere fact that the "*quo warranto*" officer of the State of Illinois refused to co-operate with him and preferred rather to support the Association officials. With grim determination he took the matter into the lower courts as best he could. We make no comment regarding the obstacles he met, or the decision there, except to say that the latter necessitated an appeal on the part of Dr. Lydston. This he cheerfully made, and though subjected to the most vicious treatment and opposed with every force that could be marshalled against him, he finally triumphed. The matter has now been decided by the Appellate Court and the salient points of that decision will be found elsewhere in this issue.

This decision is bound to prove deeply interesting to every member of the American Medical Association, and we hope that every journal represented in the American Medical Editors' Association will quote, at the earliest possible moment, the condensed opinion of the Appellate Court of the State of Illinois which appears on page 55, in order that the whole profession may become fully informed of the situation as it now stands.

Another phase of the matter that is of no less interest to the members of the Association, pertains to the *Journal of the American Medical Association*. This is a publication which belongs to the Association, with no member or group of members entitled to special rights or privileges in its pages. In other words, each member has rights in the *Journal* identical with those of every other member. Consequently no one should ever be denied a proper hearing through its columns, which should at all times be open to members of the Association for the statement of their views and opinions, and the free, above-board discussion of all questions that may arise. With this so true, why is it that nothing in reference to this suit of Dr. Lydston's, an affair which has to do with the very existence of the Association, has ever been referred to even remotely in any issue of the *Journal* of the Association?

Has it been the desire of those in control to hide the truth from the members? If not, then why is it that these problems, more important than all others to the members, should not have been freely discussed from all angles in the publication which is the Official Organ of the Association? This inquiry is also made in good faith, and we do not believe any one can reasonably question the fairness of our interrogation. In all fairness, what is the hidden motive that has been responsible for silence on this subject?

It is a shame that members who have a deep interest in the organization, a genuine sympathy with its avowed objects, and sincere hopes for its success, should have to learn of the serious situation that now confronts their Association, through the newspapers or from the pages of the independent medical journals. Up to the time of our going to press six issues of the *Journal* have appeared since the decision of the court was rendered, without the slightest reference having been made to it. How much longer will this policy of printing in the pages of the *Journal* only such things as the editor wishes to appear, be tolerated?

It would seem that the end of the present dynasty is in sight. In this land of ours there is no room for men-made institutions that are founded on principles or conducted in ways so far at variance with the fundamental or parent laws of the nation. One of two things always happens. If the institution is lacking, if its mission is doubtful and its purposes obscure, or if the men in control are dishonest or deficient, both

the institution and the men directing it will go down to oblivion just as soon as the truth becomes generally known. But if an institution has underlying purposes that are sound and good, if it has a great, far reaching mission that is plain, in spite of mismanagement or misfortune, it will survive the reorganization that is sure to take place when the crisis comes—as come it will. Then with the mistakes of the past safely charted, and reconsecrated to its original purposes, such an institution will go on to successes it could never before have reached.

And the men who “mismanaged or failed,” what of them? Can they “come back?” It all rests with them. If they can adjust themselves to the new order and read the signs aright, they can make their future what they will. This only applies, however, to those who made honest mistakes. If, however, their acts have been tinged with dishonesty, they can claim no kindlier fate than to be forgotten as soon as possible by those whose confidence and trust they violated.

Whatever may be the outcome of this decision of the Appellate Court, it must appear to every member that a crisis has been reached in the affairs of the Association. Evidently the time is not far off when the individual member will have some voice in the direction of the organization. God speed the day, for when the members control the Association and its Official Organ, the resources, instead of being used to oppose the determination of the truth to perpetuate an oligarchy, and to destroy all who chance to hold views, divergent to those of the editor, will be employed to promote the interests of American medicine and the welfare of the American physician.

In the mean time all honor and credit to Dr. Lydston who in the face of the bitterest opposition, the most vicious antagonism and the most disheartening indifference on the part of those whose battle he was waging, has had the character, courage and tenacity of purpose to keep constantly on the firing line. Single handed he has fought a splendid fight, a clean fight, and we hope the profession at large may awaken to what he has accomplished. When the Association emerges triumphant and becomes the force it should be in American medical affairs, the physicians of the country will have Dr. Lydston to thank more than anyone else.

REVIEWS OF MEDICAL JOURNALS.

The North American Journal of Homœopathy, October, 1913.

1. *Natrum Muriaticum in Cataract.* E. T. Allen, M.D.

There seems to be more foundation of fact for this article than is usual in others of similar nature. It is straightforward and remarkably free from conjecture.

2. *Care of Premature Infants.* Wm. H. Cooke, M.D.

3. *Hahnemann's Discoveries in the Light of Twentieth Century Medicine.* August Korndoerfer, M.D.

A discursive essay upon numerous doctrines of the Homœopathic school, including some of the non-essentials.

We cannot agree with the author that “the dual action of drugs has been proven a verity.” We ascribe but one line of action to a drug, and that is always in a pathogenic direction. Because the *body* reacts differently, and usually in definite sequence, to different amounts of a drug, is not sufficient reason for arguing that such reactions are due to diametrically opposed properties of the *drug*. A drug has no “curative” properties; any reaction following its use is secondary—*is aroused by the body* in response to the irritating or stimulating effect of the drug when brought into contact with its cells.

Upon another point we must also differ. We will admit the latest revelations relative to the constitution of matter may serve to delimit more accurately the extent to which attenuation may be legitimately carried, but they do not, according to our interpretation, serve in any way to confirm or strengthen the theory of dynamization, which is ordinarily taken to mean the "awakening of force" or "the development of increased energy through the process of trituration or dilution with strong succussion." Why so frequently is it judged necessary to thrust before the profession Hahnemann's untenable, unscientific theories of senescent origin; to claim that recent developments in science serve to establish them, and then to forego a discussion of them because "time and space forbid"?

Dr. Korndoerfer concludes his article with a comparison between Hahnemann's symptoms of "psora" and Sajous' symptoms of hypothyroidia, a comparison which was printed in the *Gazette* for April, 1913, p. 167. The symptom lists are interesting and instructive. However, when we consider that Hahnemann attributed seven-eighths of all chronic diseases to "psora," we wonder if there could have been such a preponderance of cases of hypothyroidia within the geographical boundaries of his practice. While we can only conjecture as to such a possibility, we do not find recorded any considerable number of cases of myxœdema occurring during that period, as would be expected in such a region were hypothyroidia so prevalent as to constitute the estimated 87.5 per cent of all chronic diseases.

4. *Teaching Hygiene to the Average Child.* C. F. Adams, M.D.
5. *Treatment of Disturbances in Postfetal Development.* F. E. Vorhees, M.D.
6. *The Therapeutic Management of Acute Infectious Fevers, with Special Reference to Typhoid Fever and Pneumonia.* G. H. Wells, M.D.

In this excellent article, Dr. Wells has touched upon many points of value and practical interest. When a sufficient amount of water is taken so that the "daily quantity of urine exceeds fifty ounces, I nearly always feel confident of the case going on to a successful issue unless some unforeseen complication occurs." He emphasizes the value of enteroclysis and describes a very attractive and simple apparatus for keeping the saline solution at the proper temperature. This is not in the least cumbersome; it can be used in private families, and is made up of one of the modern vacuum "Caloris" bottles with proper tubing. S. B. H.

The Homœopathic World, November, 1913.

1. *The Hospital of Tomorrow.* Wm. C. Reed, M.D.
Reviewed in the *Gazette*, Nov., 1913, p. 618.
2. *Veterinary Notes.* J. S. Hurndall, M.R.C.U.S.

The British Homœopathic Journal, November, 1913.

1. *Adolescence.* Vincent Green, M.D.
A survey of the physiological, educational and pathological aspects of this important subject. Pulsatilla and manganese are discussed as remedies which have a wide field of application during the adolescent period.
2. *The Management of Cases of Uterine Malposition.* E. A. Neatby, M.D.
In his discussion of those cases which require medicinal treatment and hygienic measures only, Neatby cites one in which the uterus changed from a retroflexed position to one of normal antiversión after a period of three years. No local or manipulative treatment was given,—merely the remedy as seemingly indicated by the symptoms. He remarks as follows: "Nature had the case in hand all the time, and, not proving quite equal to the cure, was supplemented from time to time by art."

Such a statement is bald conjecture, and reports of such cases with conclusions which almost invariably assign the credit of cure to the medicinal agent employed, can in no way serve to uphold any kind of therapy unless

they are properly checked up with control cases. It is difficult for the physician with the ordinary practice to get data on a sufficient number of cases of some one ailment, and simultaneously be able to control his findings with comparable results obtained with purely "expectant" or hygienic treatment. Such clinical experiments are of vast interest and importance, and though the dispensary and hospital offer the most convenient opportunity for amassing a sufficient number of cases from which to draw evidence of worth and conclusiveness, still, the cases met in daily private practice if systematically recorded and treated with this idea of experiment always in mind, can be made to contribute their share to the aggregate of clinical evidence which shall finally confirm or reject all therapeutic methods and principles. Such clinical experiments are being made by the more active men of the profession. Why cannot they be made by each member of the profession? The district medical societies, and particularly the societies of the specialists, offer convenient and proper organizations by which the results of experiments as performed by the individual members can be collected, tabulated and published. Such a course of experiments should be mapped out in each annual program and in a short time we should have facts rather than speculations to guide us in treatment, and facts rather than speculations to publish in our periodicals.

It must be made emphatically apparent, however, that the most astute judge cannot draw correct inferences regarding the efficacy of any one line of therapeutics, when a patient receives a course of baths, electricity, "tonics" and exercises in addition to the indicated remedy. Yet such inferences are constantly being made, many we must sadly admit, by physicians whose zealous efforts are being directed, in a misguided and unwittingly dishonest way, toward the wider recognition of homœopathy.

The Hahnemannian Monthly, October, 1913.

Transactions of the Homœopathic Medical Society of the State of Pennsylvania.

1. *The Failing Heart*. S. M. Reinhart, M.D.

A well-handled review of the symptomatology of cardiac decompensation, with some of the important therapeutic considerations.

2. *Gallstones*. R. T. White, M.D.
Nothing new is presented.

3. *Dermatitis Seborrhœica—Its Modern Conception, Diagnosis and Treatment*. R. C. Hoffman, M.D.

Transactions of the New Jersey State Homœopathic Medical Society.

1. *Hahnemann's Discoveries in the Light of Twentieth Century Medicine*. A. Korndoerfer, M.D.

Reviewed from the North American Journal of Homœopathy, Oct., 1913.

2. *Dietetic Treatment of Summer Diarrhœa*. R. A. Benson, M.D.

Directions are given for the preparation of casein milk—"Eiweissmilch"—which Benson has used in these cases. Lactose is blamed as an offending agent, which by its fermentation, increases the functional weakness of the intestine, and so maltose is used as a reinforcing agent to bring up the caloric value of the food to requisite standards.

In the discussion of the paper, Dr. Raue commends the use of boiled skimmed milk mixed with barley water.

3. *Care of Premature Infants*. W. H. Cooke, M.D.
Reviewed from N. A. J. of H., Oct., 1913.

4. *A Clinical Demonstration of Solidified Carbon Dioxide Refrigeration*. F. Dearborn, M.D.

The Journal of Ophthalmology and Oto-Laryngology, October, 1913.

Tuberculosis in Its Relation to Trauma of the Eye, by Cassius D. Westcott, M.D., Chicago.

"While the relationship between trauma and tuberculosis affecting the eye has received but scant treatment, the general literature contains numerous case reports and discussions in regard to the possible connection of injury with preceding or subsequent tuberculosis in many parts of the body. The familiar example of a fall in childhood with lameness following, and eventually a tuberculous hip or knee joint, has been repeated in other localities, with and without open wounds, varying from trivial contusions to severe crushing injuries."

. "Cases falling under the caption of weakened resistance following trauma bring up the question whether the tuberculous process was already latent in the part injured or whether this locality was free of tuberculosis and became the seat of a metastatic involvement after its resistance was lowered by trauma. Both conditions are believed to exist. Bosanquet postulates, for joint cases, that the symptoms of tuberculosis must appear within three months after the injury, and that evidence must be given that healing had not been perfect between the time of injury and the onset of tuberculous symptoms."

. "Case 2. Fred L., air and steam tester, C., M. & St. P. Ry. The day before I first saw this patient, Dec. 7, 1911, his right eye was burned by hot water from a steam hose. The same eye had been injured in youth, and had always been weak. The old injury involved the lids and cornea, but did not penetrate the globe. I found intense redness of the conjunctiva and swelling of the lids, and some old scars of the cornea. He was sent to the hospital, where he received the usual local treatment for such conditions—ices, compresses, atropine, White's ointment, etc. The lower half of the cornea showed more signs of repair, but the eye was getting soft and the globe becoming quadrate. The patient had been having a little temperature, and at this time it was 100 degrees. Physical examination was negative. He reacted nicely to .5 mg. of tuberculin, and we began the therapeutic injections in a few days. He responded at once, and on February 17th the eye was perfectly quiet and he was at work again."

D. W. W.

BOOK REVIEWS.

Genito-Urinary Diagnosis and Therapy. By Dr. Ernst Portner, Berlin. Translated and edited by Dr. Bransford Lewis, St. Louis. Published by C. V. Mosby Co., St. Louis, 1913. Price \$2.50.

This is a suggestive epitome, rather than an exhaustive treatise. The Berlin author places his information in a clear, easily understandable form of arrangement. The editor adds occasional notes for further elucidation. There is also an appendix on serological diagnosis and specific treatment of gonococcal infections by Dr. A. Sophian of Kansas City.

On the whole, the book may be recommended to students and practitioners. Short though the text is on many of the most abstruse subjects in this field, yet what is given is generally safe. One must overlook, of course, such misprints as "sterlization" on page 1 for sterilization, "pylonephritis" on page 129 for pyelonephritis. The Diseases of the Seminal Vesicles have been treated by both author and editor too scantily. There is no mention of vasotomy, nor of vesiculotomy. Perhaps the author and the editor do not place any value on these two very important operative measures. There is no description of cystoscopy and urethroscopy without which genito-urinary diagnosis in many instances can hardly be made with satisfaction. Very likely, this is to be excused because stress is laid on the aspect of "therapy." Why

American bookmakers should prefer this barbarous word for the more explicit "therapeutics" is a question that authors and editors should put to themselves, for while "Therapie" is good German, the Englished form "therapy" is not good English. There is a very good method of circumcision given by Dr. Lewis. The book is to be recommended for giving special space to urinary diseases of women and children. J. K.

Diseases of Women. Medical and Surgical Gynecology. By Charles A. L. Reed, A.M.F.C.S., M.D. Published by D. Appleton & Company, Cincinnati, New York and London. Price, \$1.00.

Just what necessity there existed for a new text-book on gynecology has not been made clear, further than by giving a good, practical, readable book.

The illustrations are, as a rule, very poor, and tend to cheapen an otherwise good book. The paper and type are excellent. The descriptive matter would seem at times a little lacking in lucidness, especially to the beginner in gynecological studies. This may be in part due to the necessity of brevity, as it covers a great deal of material for a one volume work.

Diagnosis of the Malignant Tumors of the Abdominal Viscera. By Professor Rudolph Schmidt, Professor of Medicine in the University of Innsbruck. Authorized English version by Joseph Burke, Sc.D., M.D., Attending Surgeon, Buffalo Hospital of the Sisters of Charity, Consulting Surgeon, Emergency Hospital, Buffalo, N. Y. Published by Rebman Company, Herald Square Building, 141-145 W. 36th St., N. Y. Price, \$4.00.

The author very truthfully says in his preface that "the diagnosis of a malignant growth ranks among the most important decisions in the domain of abdominal disease. Depending on the stage of the disease, it may mean a saving of life, or it may mean a death sentence."

The author begins with the very A B C's of his work and emphasizes the best methods of examining patients for the purpose of discovering abdominal or pelvic growths. Nor is he at fault in this emphasis of elementary teaching. Too frequently a possible exact diagnosis is not reached, simply because of the omission of exact methods of examination procedures. The author shows an intimate acquaintance with his subject, and in consequence goes into the minutiae of differential diagnosis of new growths with unusual clearness. While he relies upon laboratory findings as corroborative, and sometimes as confirmative, yet his greatest reliance appears to be placed upon the patient's family and personal history, together with the clinical evidence as adduced by his very systematic method of making a physical examination.

The book is a model in appearance, as are all of Rebman Co.'s books.

Vicious Circles in Disease. By Jamieson B. Hurry, M.A., M.D. (Cantab.) Ex-President Reading Pathological Society. With illustrations. Second and enlarged edition. Published by P. Blakiston's, Son & Co., 1012 Walnut St. 1913. Price, \$3.00 net.

The author defines a "vicious circle" as a morbid process in which two or more disorders are so correlated that they reciprocally aggravate and perpetuate each other.

He first classifies the vicious circles according to their natural order, such as, Organic circles, Mechanical circles, Infective circles, Neurotic circles, Chemical circles, and artificial circles.

As an illustration of the first type we have heart lesions where there is aortic incompetence with a consequent dilatation of the left ventricle. The dilated ventricle in turn becomes too weak to force the blood past the aortic obstruction, and so the circle is perpetuated.

In the second group may be cited gastrectasis and kinking of the duodenum. One perpetuates the other. In the Infective group may be consid-

ered such diseases of the skin as Impetigo and tinea tonsurans. A woman who is chlorotic may have menorrhagia. Her chlorosis is responsible for her menorrhagia, and the latter renders her chlorosis all the more severe.

While the facts which the author has set forth (and they are indisputable facts) are interesting and instructive, yet from a practical standpoint the book has little value. One need not be told that poverty and despair lead to drink, and that drink in turn leads to more poverty and deeper despair. It is self-evident. What the physician and sociologist are seeking is some practical method to annihilate both the poverty and the drink.

So it is with all the vicious circles mentioned; one is told that they exist, and there the author leaves him.

The Sexual Life. A Scientific Treatise Designed for Advanced Students and the Professions embracing The Natural Sexual Impulse, Normal Sexual Habits and Propagation, Together with Sexual Physiology and Hygiene. By C. W. Malchow, M.D., Professor of Proctology and Associate in Clinical Medicine, Hamline University College of Physicians and Surgeons; President of Physicians' and Surgeons' Club; Member Hennepin County Medical Society, Minnesota State Medical Society, American Medical Association, etc. Third Edition. Published by C. V. Mosby Co., St. Louis. 1913.

Evidently there must be a demand for enlightenment upon the subject of Sexology, else there would not be such a mushroom growth of publications along this one line. From a dearth of such we have become swamped with books upon the sexual life. That some of them are mere "slush" goes without saying, written to catch the present fancy for something sexually "plain." This little volume of Dr. Malchow's, however, belongs to a decided higher plane. It is dignified, essentially correct, and exceedingly helpful to the physician and moralist who is desirous of informing himself fundamentally upon a subject which is all too much misunderstood and ignorantly feared.

We cannot have too much of the kind of information which this author has given us. The important relation which sexual life bears to the health and happiness of the human race, has been only partly understood. Its better and sane understanding, with a practical employment of that knowledge, means a better day for humanity.

Diseases of the Skin. Including the Ex-Anthemata, for use of General Practitioners and advanced Students. By Frederick M. Dearborn, A.B., M.D., Professor of Dermatology in the New York Homœopathic Medical College and Flower Hospital; Clinical Professor of Dermatology in the New York College and Hospital for Women; Dermatologist to the Metropolitan Hospital (Department of Public Charities, New York City), to the Flower Hospital, to the Hahnemann Hospital and the Laura Franklin Free Hospital for Children, Consulting Dermatologist to the Hospital of the New York Medical College and Hospital for Women, to the Out-patient Department of the Flower Hospital, to the St. Mary's Hospital (Passaic, N. J.) to the Jamaica Hospital (Jamaica, N. Y.) and to the Yonkers' Homœopathic Hospital (Yonkers, N. Y.). With 230 Illustrations in the text. 551 large 8 vo. pages. Cloth, \$5.00 net. Postage, 30 cents. Philadelphia. Boericke & Tafel. 1913.

This is a work for the use of students and physicians by a modern homœopath. A homœopath is described to-day as one who in addition to a knowledge of medicine, has a knowledge of homœopathic therapeutics, and the author of this book shows that he "fills the bill."

The book is an excellent one for either student or practitioner. The print is good, the illustrations very clear and the subject matter very practical, especially as it is brief, and yet contains all matter that is essential. The differential diagnosis are sharply and tersely drawn, especially that between

scarlet fever and erythema scarlatiniformi. Throughout the book no space is given to wearying historical, histo-pathological, microscopical and theoretical discourses, which make many if not most of our text books impractical for the busy doctor and confusing to the student, matter of interest mostly to the specialist and the investigator.

There is an excellent condensed repertory for remedies for eczema at the end of the chapter on that subject. One often wishes, however, that instead of long lists of names of remedies at the close of the subject matter of a disease, from which to choose "the appropriate remedy" the author out of his abundant experience would give a few remedies with their prominent symptoms, which he has found especially applicable in that disease.

The profession is to be congratulated that this most difficult branch of medicine has been presented to them in such an eminently practical manner.

J. L. C.

SOCIETIES.

The 469th regular meeting of the Homœopathic Medical Society of the County of Kings was held October 21, with the President, Dr. Roy Upham, in the chair.

It was suggested that a change of meeting night be made on account of the conflict in dates with the two meetings of the New York State Society in February and October, which necessitate deferring the regular meeting from the second to the third Tuesday. Dr. Ritch moved that a change be made in the by-laws, changing the meeting night in future to the fourth Tuesday, which was laid over under the rules.

Dr. H. D. Schenck, chairman of the Legislative Committee, brought up the subject of the proposed amendment to the Health Laws known as the National Narcotic Law, which was introduced in the House of Representatives at Washington last June by Congressman Harrison of New York. It is described as H. R. 6282, and is pending at the present time in the Finance Committee of the Senate.

This bill regulates the manufacturing, selling, dealing in, dispensing, or distributing of narcotics. The provisions relating to physicians are very simple. Physicians must register and pay an annual tax of one dollar, and when purchasing narcotics make out a regular order form in duplicate, retaining a duplicate copy of such for two years. When the narcotics so ordered are received the date of such receipt must be recorded in respect to each order. The dispensing or distribution of narcotics to patients by physicians, dentists, or veterinary surgeons registered under this act, in the course of their professional practice, and while personally attending such patients is entirely exempted from any restriction whatever. The object of the bill is to trace the purchase of narcotics and indicate illicit traffic.

The Federal Government has for some time urged the enactment of a narcotic law and that a bill might be framed which treats justly all the interests involved. A National Drug Conference was called made up of representatives of each branch of the drug trade and of the medical profession, and the present bill is the result. The National Retail Druggists Association gave the bill its unqualified endorsement. At the meeting of that Association in October, 1913, this action was repudiated, and they are now opposing the bill.

Dr. Schenck read the following resolutions which were passed by the National Retail Druggists Association in October:

Resolved: That the N. A. D. R. recommend and assist in the enactment of such legislation in the various States as will confine the practice of pharmacy to pharmacists and make the quality and kind of all medicines sold or dispensed subject to the inspection and regulation of the same proper State authorities. Resolved: That the legal department of the N. A. D. R. be instructed to prepare a model pharmacy bill for the guidance of State

legislative committees. Resolved: That we endorse the contention of President Merritt (President of N. A. D. R.) that physicians who choose to be their own pharmacists shall furnish their patients with prescriptions for all remedies applied just as they would if the prescriptions were to be dispensed by licensed pharmacists, and that in case of the fatal termination where physicians have dispensed their own medicines, the local health officer and not the dispensing physician, shall certify the cause of death, and that this question be referred to the executive committee with power to act.

Dr. Orlando S. Ritch stated that the Legislature of the State of Maine has passed a law on the lines recommended by the resolution of the N. A. D. R. and that the physicians in that State are now in a quandary as the coroner must be called to certify the cause of death where physicians have prescribed and administered their own medicines.

Dr. Schenck then offered the following preamble and resolutions:

Whereas: House Bill No. 6282, introduced by Representative Harrison last June, was designed to control the sale and distribution of narcotics. Therefore be it:

Resolved: That the Homœopathic Medical Society of the County of Kings at its 469th Session heartily approves this bill now before the Finance Committee of the Senate, and urges its passage. This Society condemns as class legislation and dangerous and against public convenience and welfare, the amendments proposed by the National Association of Retail Druggists and prays that such amendments be left out of said bill.

Resolved: That a copy of these resolutions be sent to the Chairman of the Finance Committee of the Senate and to the Senators from this State. These resolutions were adopted.

Dr. Schenck also brought up the subject of the standing that Homœopathic surgeons would have in the proposed College of Surgeons of this country which is now being formed, patterned after the College of Surgeons of England, with the power to give the degree of "Fellow of the American College of Surgeons." At the meeting of the American Institute a committee was appointed and a resolution was passed with the object of securing for Homœopathic surgeons the same rights as those of the allopathic school. At the recent meeting of the New York State Homœopathic Society the matter was brought up but was tabled without action.

Dr. Ritch moved: As the resolution of the American Institute states distinctly that the Committee shall direct its efforts to securing for the surgical society the same recognition as other surgeons receive, this Society endorses the action of the American Institute. This motion was seconded and carried.

Dr. Ivimey Dowling of Albany read a paper entitled: "Surgery of the Accessory Nasal Sinuses for the relief of Ocular Diseases."

This paper was discussed by Drs. Warner and Schenck.

Dr. George F. Laidlaw, Professor of Theory and Practice of Medicine, New York Homœopathic Medical College, read a series of case histories from his hospital and private records under the title of "Diagnostic Problems."

L. D. BROUGHTON, M.D., Secretary.

PERSONAL AND GENERAL ITEMS.

Dr. Walter B. Whiting of Malden, Mass., has been obliged on account of ill health, to give up practice for the winter and has been spending some weeks at Blairstown, New Jersey. The *Gazette* counts Dr. Whiting as one of its truest friends and oldest subscribers, 1913 being his fortieth year as a supporter and subscriber to the journal. Long may he live and flourish!

Dr. Benjamin C. Woodbury, Jr., of Portsmouth, New Hampshire, is lecturing to the Sophomore and Freshman classes of B. U. School of Medi-

cine on "The Science and Art of Homœopathy." Dr. Woodbury is a graduate of the School of the class of 1906.

Dr. Ernest M. Dolloff (B. U. S. M. 1893) of Lynn, Mass., was operated on by Dr. Horace Packard at the Massachusetts Homœopathic Hospital on November 6.

Dr. Harold O. Hunt having felt obliged to resign his lectureship in Materia Medica at Boston University School of Medicine,—of which School he is a graduate of the class of 1909,—the course for the present year is to be given by Drs. Conrad Wesselhoeft, 2nd, and S. B. Hooker. Dr. Hooker graduated from the School in June last with a *cum laude*.

Dr. Laurence R. Clapp (B. U. S. M. 1908), who for the past four years has been located in Farmington, New Hampshire, has accepted appointment at Melbourne Homœopathic Hospital and is to sail for Australia in February next. His leaving Farmington makes a desirable opening there for a homœopathic physician.

For information regarding the place, address Dr. L. R. Clapp, care of Boston University School of Medicine, 80 East Concord St., Boston.

Dr. Eben C. Gould (1905 B. U. S. M.) is senior interne at Melbourne Homœopathic Hospital, having returned to Australia from Tasmania.

Dr. Ray C. Hart (B. U. S. M.) has finished his term of service at the Homœopathic Hospital in Melbourne and is located in the Northwest Territory of Australia, at Ouyen, Victoria, "the only homœopathic physician," he writes, "in an area of 25,000 square miles."

Dr. Elizabeth Hirst (B. U. S. M. 1913) has opened an office at 207 Highland Ave., Somerville, Mass.

Specimens desired.—Embryological or foetal specimens are asked for by the department of Histology in Boston University School of Medicine. It is desirable to preserve these in a large quantity of fluid, either alcohol or a ten per cent solution of formalin. Specimens in early stages of development are particularly wanted.

The Emerson Hospital has purchased the Weld estate, 118 Forest Hills Street, Jamaica Plain. Pending alterations, patients are being received at 65 Glen Road. Both the new and the temporary quarters are within three minutes' walk of the Green Street Elevated station.

Dr. Hollis G. Batchelder of Dedham has opened an office in the Van Cortland, 520 Beacon Street, Boston, where he sees patients by appointment only.

Dr. Dana B. Mayo of Somersworth, New Hampshire, (B. U. S. M. 1906), has been obliged to have an eye removed as the result of a peculiar accident in his office. The operation was performed at the Massachusetts Homœopathic Hospital.

Dr. John A. Hayward, (B. U. S. M. 1906) has settled at Camden, Maine, after a term of service at Trull Hospital.

Dr. Edgar F. Haines (class of 1906 B. U. S. M.) since his return from Philippine service has been located for a short time at Fort Leavenworth, Kansas, but has recently been obliged to undergo an operation by Dr. W. J. Mayo, at Saint Mary's Hospital, in Rochester, Minnesota.

Some of the physicians and surgeons from Boston and vicinity in attendance upon the Clinical Congress of Surgeons, held in Chicago in the week of November 10-15, were Dr. J. E. Briggs, Drs. Alonzo G. and Charles T. Howard, Dr. Thomas E. Chandler, Dr. H. D. Boyd, Dr. George D. Bliss, Dr. DeWitt G. Wilcox, all of Boston, Dr. George E. May of Newton Centre, Dr. Marion R. Horton of Brookline, and Drs. G. Forrest Martin and George L. Van Deursen of Lowell.

PRELIMINARY REPORT ON THE BAZAAR AND FETE.

It would seem from present indications that the net proceeds from the recent Bazaar and Fete for the benefit of Boston University School of Medicine will be about ten thousand dollars. The returns are not yet all in, and therefore it is impossible to give to the *Gazette* readers the exact facts. Physicians who have not sent in the money received for tickets, or have not notified the treasurer of the Fair Committee, Dr. Harold L. Babcock, 535 Beacon Street, Boston, of donations received, are earnestly requested to do so. Delay in receiving these statements means continued correspondence and expense.

Apart from the substantial money returns the benefits to the School are immeasurable. The public has learned of our existence and our needs as never before, and we hope and believe that the knowledge will be productive of far-reaching results.

GEORGE B. RICE,
Chairman of the Fair Committee.

AMERICAN ASSOCIATION OF PROGRESSIVE MEDICINE.

The *Gazette* is pleased to chronicle the birth and healthy development of a new national society, called the American Association of Progressive Medicine. Its aims and objects are best set forth by one of its members in the subjoined letter:

“The American Association of Progressive Medicine’ is a non-sectarian fraternal medical society, founded in the city of Burlington, N. J., Sept. 4th, 1912, by Dr. Eli G. Jones, of that city. It is the result of his 30 years’ teaching and writing to bring about a more kindly feeling between the physicians of the different schools of medicine. To bring them together where they could meet as physicians and brothers, with one object in view; to find the best, the most definite means of healing the sick.

“The object of our Association is to help our Doctors to be better physicians; to fit them to do more for the sick than they are doing. We are not opposed to any school of medicine; neither are we trying to build up or perpetuate any system of therapeutics; but, our sole purpose is to fit our members to *heal the sick*.

“Our Board of nine officers is composed of three eclectics, three regulars, and three homœopaths. Our Board of Censors is composed of three prominent physicians; one regular, one eclectic, and one homœopath. Our first President was an eclectic, our present one is a regular. The next President will probably be a homœopath. It is intended that no school of medicine shall ever get the control of our Association, and in consequence it will remain an Independent Medical Association. We seek no entangling alliance with any National Medical Society, but we welcome to our ranks physicians of all schools of medicine, who love their profession and who want to do their whole duty by their patients. ‘In union there is strength,’ and as a united profession we can present a solid front against medical nihilism and drugless healing.

“We believe that when the family physician is fitted to meet any emergency that may arise in the family, he will then ‘come into his own,’ and be once more the friend of the family, the wise counsellor, a tower of strength in the sick-room, to whom the people will turn when sickness and death hover over their homes.

"Our Association is not in any way connected with the A. M. A., nor with any other national medical society. A member of our Association may belong to any school of medicine that suits his fancy. He may be affiliated with any State or National medical society. When he comes to our Association we do not ask his medical politics, neither do we try to convert him or her to any system of therapeutics. We treat him as a physician, as a brother, and a gentleman, and we expect the same treatment in return.

"We require members to be graduates of a medical college, and legally qualified to practice where they reside. We organized with members from four school of medicine, representing the different States. We now have members from thirty-eight States and several foreign countries. Our members are men who have made a reputation by their success in healing the sick; whose hearts and souls are in the work of saving human life.

"Our last convention was the grandest medical convention ever held on the American continent. Such a splendid array of medical talent from all schools of medicine was never seen in any medical society. Men who had grown old and gray in their profession said that they 'never attended such a splendid medical society where they learned so much.' May God hasten the day when we shall stand shoulder to shoulder, a united profession, with all the bitterness of the past buried and forgotten!"

"So may it be!"

Its officers are:

President—Horace R. Powell, Poughkeepsie, N. Y. (Regular).

First Vice-Pres.—Charles Woodward, Chicago, Ill. (Eclectic).

Second Vice-Pres.—W. A. Guild, Des Moines, Ia. (Homœopath).

Third Vice-Pres.—W. C. Goodwin, Philadelphia, Pa. (Regular).

Fourth Vice-Pres.—Fred Carter, Plainfield, Vt. (Regular).

Hon. Pres. for life—Eli G. Jones, Burlington, N. J. (Regular).

Gen. Sec'y—L. M. Ottofy, St. Louis, Mo. (Homœopath).

Necrologist—Dr. Duvall, Baltimore, Md. (Homœopath).

Treas.—Dr. N. G. Vassar, Ridgeway, Ohio (Eclectic).

Board of Censors:

Arthur Vos, M.D., Cincinnati, Ohio (Regular).

Chas. A. Church, M.D., Passanis, N. J. (Homœopath).

W. R. Waterhouse, St. Louis, Mo. (Eclectic).

We are in entire accord with any association which has for its object the betterment of the profession along all lines of scientific, social and ethical progress. Hence we extend a hearty greeting to the new Association of Progressive Medicine.

Dr. W. A. Puckner, director of the chemical laboratory of the American Medical Association, investigated a number of the products furnished by twenty different pharmaceutical manufacturers and the degree of accuracy attained by each house was published in the *Journal of the American Medical Association*, September 13, 1913.

The results are given in detail and make it possible to summarize or classify them in various ways. For example, the average strength of all the preparations made by each house may be calculated. An objection to this method, however, lies in the fact that the preparations above strength, of any one house, might exactly counterbalance the ones under strength and the house receive thereby a perfect mark.

A more accurate method consists in calculating the average deflection from normal of the preparations of each house, and rank the houses in the contest in the order in which the average deflection is the least.

A third method would consist merely in stating the highest and lowest deviation from standard found in the products of each house.

BY WHATEVER METHOD THE RESULTS ARE SUMMARIZED,
THE H. K. MULFORD COMPANY HEADS THE LIST FOR AC-
CURACY OF PRODUCTS.

The preparations examined, namely, hypodermic tablets morphine sulphate, tablets potassium iodide, solution of potassium arsenite, fluid extract of hydrastis and fluid extract of digitalis, should be divided in summarizing results, into two classes. The first four mentioned are amenable to exact chemical assay and it is possible, therefore, to determine within a fraction of one per cent, the exact deviation from standard, or conversely, approach to perfection of these preparations. Their standards are definitely fixed, either by the Pharmacopeia or by the manufacturer's claim—100 per cent of the claimed strength being the target at which each manufacturer aims.

The other preparation, however, namely, fluid extract digitalis, is one for which no definite standard of strength has been fixed. The preparation is official but no assay processes have been provided by the Pharmacopeia, so that a preparation made in strict accordance with the U. S. P. directions may vary enormously in activity. A limited number only of the houses chosen for this contest make any attempt to standardize digitalis preparations. A few, however, have adopted physiologic methods of assay in an attempt to put on the market preparations of uniform strength.

Even in the absence of a fixed and official standard of strength, it is obvious that a fluid extract of digitalis should have represented in each cubic centimeter, one gram of a good quality of drug.

Dr. R. A. Hatcher, of Cornell University Medical School, who examined the digitalis samples for Dr. Puckner, and made a special study of this drug for a number of years, is the inventor of the process by which these samples were examined, and is fully competent, therefore, to express an opinion as to whether a preparation does represent a digitalis drug of good quality.

Dr. Hatcher's results with the nineteen fluid extracts examined in this contest forced him to the conclusion that **THE FLUID EXTRACT OF THE H. K. MULFORD COMPANY FULLY REPRESENTED A DIGITALIS DRUG OF GOOD QUALITY AND THAT THE NEXT IN VALUE ONLY POSSESSED 65.8 PER CENT OF THE STRENGTH OF THE MULFORD PREPARATION.**

The H. K. Mulford Company Fluid Extract Digitalis was therefore taken as the standard, or 100 per cent. The other 18 preparations ranged from 65.8 per cent down to a minimum of 29.25 per cent.

It cannot be claimed by those whose fluid extract digitalis was found to be weak in comparison with the H. K. Mulford Company sample that the latter is too strong, because Dr. Hatcher states that the Mulford preparation represents a good quality of drug.

To the credit of all of the firms, Dr. Puckner states that there was found no evidence of willful sophistication or adulteration in any product examined. He believes that none of the houses deliberately adulterate or sophisticate their standard drugs, but that the products of many of them are made by those "who are less competent and less skilled" than the others. It is the more complimentary to the H. K. Mulford Company, therefore, that it should attain the first place, with those who are doing their best to furnish standard articles. It is an emphatic endorsement of the competence and skill shown by the H. K. Mulford Company, and products of their manufacture.

RECENT DEATHS.

AUGUSTINE CATHARINE HAUB, M.D.

Augustine C. Haub, M.D., died, November 13, 1913, at her place of residence, Hotel Cambridge, 483 Beacon St., Boston, after a painful illness of nine months.

She was born in Gold Hill, Nevada, September 19, 1870. She was graduated from the Gold Hill High School in June, 1887. A year and a half

later she went to the Hahnemann Medical College in San Francisco, remaining there only one term. From there she came to Boston and entered Boston University School of Medicine, from which she was graduated in 1893. The year following her graduation she served as interne in the Massachusetts Homœopathic Hospital, and exhibited a marked aptitude for surgical work. She was afterward associated for a time with Dr. Baker Flint.

Her faithfulness to high ideals in her professional work gained for her a devoted clientele. She was fortunately the recipient of a considerable legacy from one of her patients in acknowledgment for unremitting devotion.

Her parents are both living, and reside in Santa Rosa, California. She leaves also a brother and three sisters.

Professor John Eastman Clarke, of the College of Liberal Arts, Boston University, died at his home, 18 Centre St., Cambridge, on November 22, from cancer. The vacancy in the Faculty caused by his illness and death has been filled by the appointment of Dr. James Hill.

BUREAU OF INFORMATION.

A Bureau of Information has been opened at the New York Academy of Medicine, under the direction of "The Society for the Advancement of Clinical Study in New York."

The object of this bureau is to furnish to visitors to New York, and the local profession, information on medical subjects, so as to make use of the large clinical opportunities that are always here, and which heretofore have not been readily available.

The Medical Profession of New York and Brooklyn is requested to furnish the bureau with information regarding such of their clinical work which they are willing any physician should visit. Surgeons are requested to send regularly each day, as early as possible, a list of the operations they have arranged for the following day. The Academy of Medicine, telephone, Bryant 974, is available for this purpose, or the mail may be used whenever there is sufficient time. An attendant in charge of the Bureau will be at the Academy daily after nine o'clock, for the express purpose of receiving all information, and promptly posting the same on the special bulletin board which has been installed. The attendant is ready to give every assistance in furnishing information.

Subscribers to "The Society for the Advancement of Clinical Study in New York" may arrange with the attendant to be notified when any special work in which they are interested is posted.

DIMINUTION OF HEBRAIC DEPENDENCY.

Dependency among the Jews of New York City, according to the annual report of the United Hebrew Charities, is decreasing appreciably. The association's statistics show that in the fiscal year just ended there were 700 fewer applications for relief than last year, and that 600 fewer persons were found by its investigators to need charitable support. The report goes on to say: The continuing decrease in the number of families demanding and requiring assistance is a growing indication that the Jewish immigrant is taking full advantage of the opportunities afforded here for a livelihood, and, more than this, is exercising thrift and prudence in providing against emergencies of illness, unemployment and accident, through the various mutual help agencies, such as fraternal organizations and insurance companies. From this it must not be inferred, however, that the financial burden upon the society is diminished. The problem of dependency has become much more difficult and intricate. Into it are injected larger and more complicated

considerations, involving woman and child labor, housing, education, health and recreation. Where in former years the grant of a small sum to tide one over the emergency disposed of the case, to-day the continuous relief granted must be coupled with intelligent, solicitous and painstaking efforts to rehabilitate the family.

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