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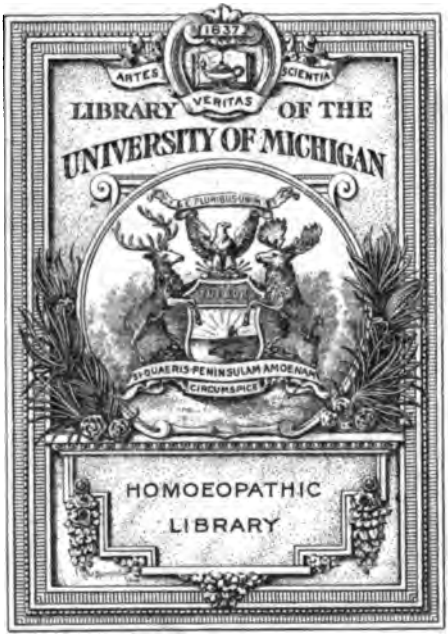
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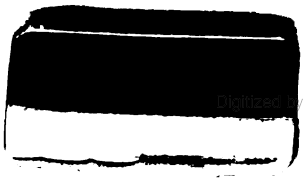
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THE NEW ENGLAND MEDICAL GAZETTE

A Monthly Journal of Homeopathic Medicine

Editors
JOHN P. SUTHERLAND, M.D.
ARTHUR H. RING, M.D.
W. H. WATTERS, M.D.

"Die Milde Macht Ist Gross"

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THE NEW ENGLAND MEDICAL GAZETTE

VOL. XLVI JANUARY, 1911 No. 1

ORIGINAL COMMUNICATIONS.

WHAT ARE WE GOING TO DO ABOUT IT ?*

BY GEORGE B. RICE, M.D., BOSTON.

It seems like bringing coals to Newcastle for me to bring observations on the materia medica to you, members of the Hughes Club, which will be either new, interesting, or stimulating. You will remember, however, that somewhere Emerson says:—"No man is so poor in wisdom that he cannot teach me something," and so I am encouraged to present some ideas which have long been waiting for proper expression before an indulgent audience.

On January the sixth, 1898, as retiring president of the Boston Homœopathic Medical Society, I was privileged to deliver an address in which was reviewed the work of the Society, and in which also attention was called to the fact that very few of the papers which had been presented during the year had expressed any particular interest in the subject of Homœopathy, or in the treatment of disease according to homœopathic law. To prove this statement a brief review was given of the work done. In my zeal certain questions were asked, such as:—"How can we better understand a few of the already well-proven drugs? By what means can our materia medica be made more concise, and within the comprehension of the average intellect? Do local applications interfere with the action of the indicated internal remedy? To what extent are we justified in using such adjuvants? Are there certain pathological conditions in the purely medical field, which cannot be reached at all by the homœopathically prescribed remedy, as at present understood?" I went on to say, "Are not these questions worth the while answering? If we are worshipping false gods, is it not time that we found it out? But if, as I believe, as we believe, the homœopathic method of curing disease surpasses every other, and can be so demonstrated, then will not our position become an enviable one, and will not the struggle be rewarded by official recognition, by control of governmental, State, and city institutions, with which

*Read before the Hughes Medical Club.

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we now have little or nothing to do? Is this not a work we *must* do if we wish to retain our self respect, the respect of the public, and of our fellow-workers in the cause of medical science?"

Certain well-known faults in the materia medica were touched upon, a plea was made for the specialist, that in the increased knowledge of the anatomy and physiology of special organs there also be shown and demonstrated increased knowledge of homœopathic drug action upon the special part. The paper ended with an appeal, and then by stating the belief that a new day would soon dawn for Homœopathy, and that our light would shine with such brilliancy that it would envelop the whole medical world, and bring to it a knowledge of the truth we possess. My paper was received with what seemed to me considerable enthusiasm, and I felt much elated, and for a few moments I really believed that I had said something worth while, but in this case the natural law of reaction took place early. When I went down stairs Dr. Frank C. Richardson said, "I enjoyed your paper exceedingly, but what are you going to do about it? What is your plan of reform?"

The writer of this paper was not the only one at about this time to agitate materia medica reform. In March, '99, this same Dr. Richardson read a paper before this club on the "Need of a Therapeutic Laboratory" to study the materia medica and place it on a more scientific basis.

In April, '99, Dr. Coffin and Dr. Colby brought forward a plan for reproving drugs according to Dr. Richardson's plan. Three weeks later Dr. Conrad Wesselhoeft, as the guest of the club, read a paper on the different methods of drug proving, and commended the plan of studying the pathology of drugs. November 17, '99, Dr. Coffin read a paper on a general review of drug provings. In March, 1900, Dr. Colby read a paper on "Drug Provings," and papers along this line were continued for many sessions, notable work being done by all the members of the club. In June, 1900, Dr. Bellows delivered an address before the O. O. and L. Society, of which he was that year president, in which he outlined a plan for a great medical reform, viz.—"The Reproving of the Homœopathic Materia Medica." This paper and the subsequent action of the society resulted in an active reproving movement all over the United States of one drug, "Belladonna." and Dr. Bellows, as you all know, devoted months of arduous toil in recording the results of the proving in book form. Soon after this the American Institute of Drug Proving was formed to carry out the work on a large scale, as soon as sufficient funds could be obtained. From this review I do not mean to imply that the universal activity in drug proving all over the country was stimulated entirely by the members of the Hughes Club. A reading of the transactions of our various societies and the American Institute would disprove this, but it would seem as though the greatest impetus came from the agita-

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tion of the subject by our members. Another outcome of this discussion was the plan of Dr. Walter Wesselhoeft to institute extensive clinical experiments with homœopathic drugs in our hospitals. The suggestion was that this work should be carried out in co-operation with our friends of the other school.

Until Dr. Bellows had accomplished the task of reproving Belladonna I do not think anyone realized its magnitude, and the impossibility for an individual, a school, or a local society, to prove any large number of drugs according to his method. To the superficial observer, who would carelessly summarize and review these facts, it would seem after all as though but little had been accomplished of real, vital, practical service to the homœopathic physician, since the days of Hahnemann and his immediate followers. I can hear Dr. Richardson again say, "What are you going to do about it?"

If any of you have had the good fortune to ride in an automobile through the hills and valleys of Wilton, Peterboro, and Dublin, New Hampshire, you will perhaps remember that as you go from West Wilton to Peterboro, over the Temple Mountains, that the first part of the way leads you along comparatively level roads, over foaming streams, and through somber woods, and that every now and then you come to an open space, and see in the distance the mountain summit looming up into the sky, over which you must pass before you reach your destination, and you perhaps say, "How can I ever cross that mountain?" and you are almost tempted to turn back and seek another road. But you keep on, passing one small obstacle after another, mounting this ascent and that, until finally you feel the fresh wind blowing across your face, and you look ahead and find that the seemingly impossible has been accomplished, and that you can see the village of promise nestling in the smiling valley below, and you wonder how it was done. If we will apply this comparison to our own struggles and discouragements I think we can gird our loins afresh, and reason with ourselves that by continuing to do the work which insistently lies before us, in the end the desired goal of a settled therapeutic system will come into view, and the results will be assured. Perhaps this end will not come in the way we now hope, but by meeting the instant need of things from day to day, what is right and what is best cannot fail to be ours. Kipling, in his poem, "An American," says—

"Which knowledge vexes him a space;
But while reproof around him rings,
He turns a keen untroubled face,
Home, to the instant need of things."

It seems to me that the "instant need" now lies before us in the continuance of this work in a smaller, and perhaps more practical, way than heretofore.

I would not propose a drug proving, but a drug *testing* of

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our present material in a definite way on our own patients, according to a concerted plan. And in this manner I am asking you to help in answering one of the questions I asked eleven years ago—"Are there certain pathological conditions in the purely medical field, which cannot be reached at all by the homœopathically prescribed remedy?" By replying to this question satisfactorily, we shall, as I have said before, mount one more ascent, and overcome one more obstacle on the road to our desired destination.

This club is composed, I think, of a body of very conservative men. We do not like to accept statements as facts unless they are proven to us by every possible scientific test. We are inclined to doubt the veracity of those physicians who are always writing of remarkable cures of seemingly desperate cases with this single homœopathic remedy, prescribed according to the totality of symptoms without regard to the etiology of the disease or the pathological change. We think we have many times disproved these assertions by our own individual observations and clinical experience. And yet, have we? Have we brought the same process of reasoning to bear in disclaiming these arguments for the wonderful dynamic power of homœopathic drugs which would be used in refuting any other problem in which we had a tremendously vital interest? Have we not said, "the validity of these drug provings is so open to doubt that we do not feel justified in placing the lives of our patients and our own reputation in the scale, and, therefore, as we do not trust in the action of the remedy we feel that we must bring to bear every known adjuvant to aid in the process of cure."

Now we must remember that the whole foundation upon which Homœopathy was built was based upon these assertions:—The proving of the drug on the healthy individual, the single drug, the divided drug to produce dynamic force, and the prescribing of the drug according to the totality of the symptoms. On these premises we stand, or fall, or surrender. The only answer to my question, then, I repeat, lies in the clinical experience of a considerable number of men, working in a definite, concerted way, according to the old fundamental principles of Homœopathy. Dr. Wesselhoeft has been harping on this "instant need," and we have listened, assented, and gone our way, shaking our heads. We say the task is beyond us, it requires too much time and effort and energy, and we declare we have not this to expend. To overcome this objection I am asking you to listen to a very simple plan, which I hope you will think interesting enough to discuss freely, and to help carry out. Can we not each individually select a case from practice where the pathological underlying cause is obscure, and the subjective symptoms prominent, and prescribe for this case as exactly as possible, in accord with the old homœopathic principle, taking sufficient time to study the symptoms and select the similimum?

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Can we not agree to lay aside prejudice, or distrust of our provings, using the material we possess, and making the best of it, and reporting our success or failure at our next meeting? The report should be very concise, and need occupy but a few moments in the discussion, and the work of testing drugs should be carried out over a number of periods, so that at the end of the year we should be able to present quite a convincing array of evidence for or against pure Homœopathy. It seems to me that this is just the organization to take up this task, and that the results cannot fail to be of value to us and the whole medical profession.

Dr. Richard Hughes, in whose honor this club was formed, was a pure homœopathist. He says in the introduction to the Manual of Therapeutics under "Duties of the Homœopathic Physician"—"We have no doubt in our minds that likes are cured by likes. But this is a quite different thing from affirming that likes cure all diseases without the aid of other means. How far this latter is true can only be decided by trial, and homœopathic practice, regarded scientifically, is a vast experiment toward the discussion of the question. In the case of many, I may say *most* diseases, it has already been answered in the affirmative. In some few the reply is already negative." Again he says, "If your treatment be not scientific, that is, methodized, it perishes with yourself, and benefits only the few individuals who come under your care. But every cure wrought upon principle is an accession to the Healing Art, and leads to consequences immeasurable."

ANNUAL ORATION.*

By Sarah Sweet Windsor, M.D., Boston, Mass.

At the present time we homœopaths seem to be sailing along with such fair skies and smooth seas that it is almost ridiculous and quite unpopular to imply that the past was rich in certain worthy qualities not so common now, or to hint that we are lacking any good thing, except, perhaps, money and a few more students to fill the laboratories thus provided.

Since, however, those who are forced to speak either as prophets or so-called orators usually have some misgivings as to present nearness to perfection, I shall be, in my remarks, but a timid follower in the footsteps of those who are prone to see better conditions in the past, room for improvement in the present, and necessary effort for continuous progress in the future.

In the short time allotted it will not be possible to touch on more than two or three points which stand out clearly as I look over the field.

*Delivered before the Massachusetts Homœopathic Medical Society, October 12, 1910.

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You need not be surprised at this homœopathic gathering if I deal with the subject of Homœopathy, for I truly believe that unless considerable is thought and said upon this subject in the next few years it will come to be a dead issue and few will be at the burial.

We have heard much of the need of money for increasing the usefulness of our school, and the need is real, but deeper far is the underlying truth that if we cannot keep a strong living belief in the principles of Homœopathy and instill it into the minds of an intelligent, thoughtful and efficient body of young men and women we may as well retire gracefully from the stage before the lights are turned out upon us.

It is not in accord with present economic principles to dissipate effort, time and money among a number of medical schools if medical education alone is the object. Indeed, the latest exponent of medical education consolidation would eliminate all but a very few of the largest institutions. Whatever may be said in opposition to this from other points of view we, as homœopaths, must give a real reason for existing as a separate place for medical instruction because we have a central, and to us a vital truth to impart which is not included in the curriculum of the older schools.

It is the old spirit of Homœopathy that needs to be cultivated, and as I study the early rise of the practice and follow the increasing force up to a time when there seems to have been especial power in those practising this system of medicine there are three important factors to account for the vigorous development and rapid spread of the faith. First, there was a keen desire for knowledge of the principles of Homœopathy; second, there was a conviction of the truth of these principles, and, third, there was a strong and wholesome resistance to the persecution induced by adherence to convictions.

We are having brilliant seekers for truth in the medical world, those who are seeking for causes, manifestations and results of disease, and this is well; but if our law of similars is the best known guide to the healing of disease we need young Hahnemanns and Herings and Wesselhoefts to continue with equal enthusiasm the splendid work of their seniors.

Where can we find a better example of the earnest truth-seeker than Hahnemann himself? Were he nothing to us in the way of a "Homœopathic father" he would command from an unprejudiced mind admiration and respect for the real work of investigation that he did. He had a student's instinct to delve deeply into his subject. Consider how thorough a knowledge he had, for his time, of chemistry. Berzelius, the greatest chemist of the age, though railing at his defection from the old gods, showed his estimate of Hahnemann by saying, "That man would have made a great chemist had he not turned out a great quack!"

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The last word has been disproved, we think, but the greatness remains. Of course, he had all the delight of the successful explorer in the working out of the law of similars, while much of our work must be over ground that he has already trodden. If we find less personal zest in the search, at least we can admire the thorough way in which he has broken out the path, and a real desire for further progress should be the result of his inspiring example. Down through the list of the strong leaders of our school we find this eager desire for the basic truths of the system, and closely allied with this desire we realize that they developed convictions.

Nothing gives such power to a human being in any struggle as an absolute conviction of the truth of the cause for which he stands. Mercenaries from time immemorial have been an uncertain and unreliable element in a contest. Our leaders have been men of conviction, firm in the courage that dares all things, hopes all things and endures all things for the cause. And this working faith brought about the third condition that is lacking almost entirely at the present time; for while I believe we have some earnest seekers for and lovers of the homœopathic principles, and some with strong convictions that in Homœopathy we have the best method of healing disease, there is almost totally lacking the active persecution that did so much for our cause from its inception down to recent times. Persecution, though grievous to the individual, is a wonderful power in developing and strengthening a belief in which there is genuine merit. In fact, experience has shown that it is not well to apply this treatment to an unworthy cause, it is so stimulating to growth for a time; that is one distinction between the true and false—note the condition after persecution ceases. Wise men have realized this fact and expressed it well. Guizat, who was Minister of Public Instruction when Hahnemann settled in Paris, expressed this thought to those who came urging him to forbid the founder of Homœopathy to practise. He said, "Hahnemann is a scholar of great merit, science must be free for all. If Homœopathy is a chimera, or a system without any internal substance, it will fall of itself. But if it is an advance it will spread even despite our repressive measures, and this the Academy should wish above all others, for the Academy has the mission to forward science and to encourage its discoveries." How much suffering the world would have been saved if this view of the futility of persecution had prevailed! Just what happens to a cause during this time of trial may be studied in the various phases that have appeared since this method began—of external discipline in order to impress the dominant will upon the person, sect, or colony that dares diverge from the beaten track.

Glance back at the time when systematic persecution first took form; do you imagine that those Roman Emperors, under whom the waves of persecution threatened to engulf the early

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Christians during nearly three hundred years—do you imagine for a moment that they had any idea of the ultimate effect of their acts? Instead of drowning the songs of the martyrs with the roar of wild beasts they did but cultivate the ear to hear the still, small voice, and one who now looks down upon the mind-thrilling ruins of old Rome, and pictures to himself the most dreadful scenes in the great amphitheatre, can at least faintly comprehend the meaning of that oft-repeated phrase that "the blood of the martyrs was the seed of the church."

Do you think that England foresaw what the end would be when those acts began which our American colonies called persecution and resolved to withstand and resist to the bitter end?

And if not within our own memories, still near enough to have been rehearsed to us by the victims, is the period when a real persecution, though, of course, not the old barbaric kind, took place against the valiant and worthy company of believers in a new system of medicine.

It is not to revive any bitterness that I allude to this trying time. Looking back at it from the comfortable position of a non-combatant and seeing only the benefit to the cause, it seems not an unfortunate happening. Barely a half century ago the medical societies of the different States were passing resolutions and dealing out invective against those of their number who began to practice by a fixed law. Let me cite one or two of the mildest recommendations. Report read before the Connecticut Medical Society, May, 1852: "Your committee recommend that in accordance with our By-Laws every physician who becomes a homœopathic practitioner should at once on proof of the fact be expelled from the society. . . . An honest conviction in favor of so gross a delusion may be justly considered as proving a mental obliquity so great as to disqualify for the proper performance of the duties of a physician."

Another brief extract, this time from an address before the Norfolk District Medical Society of Massachusetts, gives the temper of the times a few years later: "I for one desire the entire and unmistakable separation of homœopathists from our body. I believe the system to be dishonest and that the credulous few who practise it honestly should not save the Sodom of those who do not from the imputation they merit." It was a short step from these sentiments to expulsion and ostracism of the victims, and we may well believe that they suffered for their faith. But the effect of this persecution was in the main beneficial; suffering together for a cause unites the sufferers with a mighty bond, and minor differences are ignored for the common good. Convictions become of vital moment and gain converts by the strength with which they are held under stress of persecution. This brings out the real character; it necessarily sweeps away the weaklings who are too far removed from the centre to

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get strength enough to stand, and those who are left seem veritable heroes.

The time of danger to a cause is not when hardships must be endured for it but when success is smiling so blandly that the senses are lulled to sleep by the feeling of security this gives.

This is our time to take thought whether we have something within us to counterbalance the loss of that external discipline which is called persecution. If we are to continue as a true homœopathic school we must make self-discipline and self-spurring take the place of the outside force which kept us at our best. When a vigorous man a half mile from safety hears a pack of howling wolves drawing near there is no danger that he will not keep his circulation active in his efforts for self-preservation. When no such pressing necessity arises he must voluntarily resolve to stir his circulation by wisely planned exercise, else will he become an indolent half-hearted cumberer of the ground deserving to perish by the fatty degeneration self induced.

If we are to profit by the lessons of the past we shall imitate our leaders in their keen pursuit of the truths of Homœopathy and thereby hope to arrive at a firm state of conviction. From our former persecutors we shall learn that better way of true tolerance which has been so well compared with the spirit of persecution by a well-known writer: "The subject matter with which tolerance is concerned is man's attitude towards the opinions of his fellow-men; thus tolerance is the mean state in which virtue consists, persecution is the excess and indifference is the defect. The attitude of the persecutor is clear, he wishes to impose his own opinion on every one; the attitude of the indifferent man is also clear, he has no opinions and is, therefore, heedless. The virtue of the tolerant man lies in having opinions but not wishing to impose them by any external pressure or enforce them by any means save argument. He always keeps in view the hope of spreading his own opinions, but he endeavors to do so by producing conviction. He is thus tolerant not because he thinks that other opinions are as good as his own but because his opinions are so real to him that he would not have any one else hold them with less reality. Tolerance does not rest upon indifference or complacency or abandonment of principles in deference to popular opinion, but it rests upon respect for human nature, of which our own individual nature, however enlightened, still forms a part." If we can approach this ideal state we shall keep our well-won place in the great profession to which we belong.

It is probably in chronic myocarditis that rest is most important, and it is probably in patients with this disease that we encounter our greatest difficulties in enforcing a proper mode of life. No matter what may be the age of the patient, rest in bed is necessary for some time, usually for a month at the lowest calculation. Usually we find that the patient suffers so little that he delays consultation with a physician until his case is well nigh hopeless.—Bartlett.—Hahnemannian Monthly.

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THE RELATION OF DIAGNOSIS TO THERAPEUTICS.*

By Plumb Brown, M.D., Springfield, Mass.

When we have to do with an art whose end is the saving of human life, any neglect to make ourselves thorough masters of it becomes a crime. It is claimed by some, as a fact, that Homœopathy is decreasing and that in a few years nearly every practitioner of that school will have disappeared. Is there any truth in this, and if so, why is it?

If we, as a body of practitioners assembled here today, stand for anything commendatory, we owe it collectively and individually, in no small measure, to the results achieved in our daily practice, by the administration of our remedies in accordance with a definite and characteristic law. If the law is scientific, and if we are honest in our convictions that we believe in this law, then with it we rise or fall; for our materia medica is primarily our only distinctive mark. Diagnosis—"A part—Knowledge." "The art of recognizing the presence of disease from its signs and symptoms and deciding as to its character." Therapeutics—"The science of healing." Thus our subject is the connection between the recognition of the presence and character of disease and the science of healing. It is imperative that we arrive at a proper understanding of the relationship of these two important branches of medicine—the one to the other—if we wish to do for our patients and the community in which we live the greatest possible good. Intelligent thoroughness is, to me, most expressive of this relationship. An undiagnosticated case cured by the homœopathic remedy is of no more value, clinically speaking, than a cure made by a tyro who has no idea what he has cured. On the other hand, what can do us as individuals or as a body of intelligent, thorough and conscientious believers in, and followers of, the law of similars, greater harm and disgrace, than a prescription made by a so-called homœopathic physician, under the cloak of Homœopathy, containing such massive doses, and manifesting such gross ignorance of the scope and action of the drugs used, that even the members of the so-called regular school stand aghast, trembling with fear for the result, notwithstanding the fact that a most accurate diagnosis has been made?

I bespeak a more thorough and conscientious work, by homœopaths in the name of Homœopathy, of diagnosis and pathology, as well as a better knowledge of the therapeutics of the so-called regulars. Let us be thoroughly conversant with the dangers, possibilities and limitations of *all* remedial agents—allopathic, homœopathic, psychopathic, eclectic, isopathic, nosopathic and what not. "All that pertains to the great field of medical learning is ours," and it adds much to the dignity of our calling, and to our position in the medical and social world, to be

*Read before the Massachusetts Homœopathic Medical Society October 12, 1910

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able to say what was cured, as well as what cured. The first condition essential to success in the practice of any art in which tools or implements of any kind are used, is that scope and limits of the art be clearly defined. A second condition of equal importance is a thorough familiarity with the tools or implements. We, as professional artisans, have three problems ever before us. When to use our tools or skill, or under what circumstances of illness are we called up to resort to the use of drugs. What implements are we to select, or what means are we to use, to ascertain the properties of drugs? When selected and their properties as thoroughly understood as possible, how are we to use them? The permanency of any art or structure depends entirely upon the stability of the underlying foundations. These underlying parts may be concealed, in most cases are concealed, from the casual observer, but they must be substantial realities none the less, if the superstructure is to stand. We are not only interdependent, but also very dependent upon our foundation. The task for us is not to prove that others are wrong, but to satisfy ourselves that we are right. Not one of us can be honest with ourselves or our patients, if our faith in the underlying principles of our profession is not well founded. We have absolutely no right to be engaged in the practice of our profession, if we have not a firm belief and confidence in the correctness of our foundation theories. If we as homœopaths have not the certainty that the foundations of Homœopathy are sufficient to support it, we had better endeavor to strengthen our faith or seek refuge elsewhere. We lay claim to being scientific. Let us see what is a science. What do we mean when we speak of a branch of learning as being scientific? What are the distinguishing characteristics of our system which warrant our claim that it is scientific? Someone has said that "a science is a body of exact definitions and sound principles educed from and applied to a single class of facts or phenomena." "Science is knowledge reduced to order or knowledge so classified and arranged as to be easily remembered, readily referred to, and advantageously applied." Science is developmental, and is based upon the assumption that all nature's laws are immutable. Sciences are of two classes, those based upon axiomatic truths, which include the exact sciences, and those built up by process of induction, as the natural or empirical sciences or that class with which we have to deal in the departments of medical education. Empirical knowledge is that which we obtain by experiment, by trial, by observation; but it is not scientific until classified by some logical rule or arranged upon some continued thread of sequences. When we can group observed phenomena into order, distinguish causes from effects, discover underlying truths that are in common with the various orders, then we are studying scientifically. It is not scientific to be groping about among a detached mass of facts, handling them without method or hope of classification. However, progressive

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sciences have their origin in empiricism. The fact that the heart beat, that the arteries were tubes, also that they were both full of blood, was empirical, but all of this knowledge was not scientific until Harvey discovered the circulation of the blood and made known the great psychological fact that accounted for the various other facts known before concerning the animal organism. Thus we see that empirical knowledge led to eminently scientific knowledge. Before we attempt to administer relief to the patients to whose bedsides we have been called, what process of reasoning do we employ? First, the objective symptoms,—second, the subjective symptoms. After arranging these into groups, we find possibly an abnormal mental condition, or a deranged digestive process, or some trouble with the respiratory organs, or we may find an unhealthy condition of the liver or circulation, and so we proceed until we are led inductively to form a mental picture of the diseased state, which picture we call a diagnosis. The diagnosis once made, we are able to deduce facts from our experience that enables us to foretell, at least approximately, the future of the case—the prognosis. Having studied the case in all its parts, we next ask ourselves, what remedy, and in making this application we follow the same lines of thought which we followed in making the examination. The accuracy of our prescription will depend upon our training, experience and judgment, and in no small degree upon the correctness of our diagnosis. If we make no error in determining the totality of the symptoms (in which art the thorough diagnostitian should be most proficient), or in selecting the remedy from the materia medica, we can with scientific certainty determine the result. All these processes are so very rapid we scarcely realize them. Theories are necessary in all scientific research. It is said that "All of the laws referring to the same class of phenomena, taken together, constitute a physical theory." It matters little whether we call our medical faith a truth or a theory, for like the atomic theory of chemistry, it is a scientific notion of medicine that is in accord with the known facts we have, and when applied does not fail to lead to anticipated results. It had its origin in empiricism, but has gone beyond the experimental stage and reached into the scientific. Over against this is a system that began in empiricism and ends where it began. They do not even lay claim to any scientific definitions, laws or theories for their therapeutics. A drug is not even a law unto itself, simply an experiment. We claim to rest upon a scientific principle, a foundation rock. The other so-called system makes no such pretension, but is merely a floating mass of detached fragments. We claim to have a scientific system of therapeutics, and the law of similars is the foundation upon which we rest our claim, although to be sure we do have a great mass of unclassified and so unscientific matter. Many in our profession are warped by prejudice, and instead of testing the

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good in Homœopathy, ridicule it. Let us bear this ridicule with fortitude, believing that the principles of Homœopathy will in time be universally adopted by all scientific, thinking people. We see increasing evidence of this in the light of more modern scientific medico-psychical research. The science of Homœopathy is in its incomplete stage, but the principles are in advance of the practice. If we cannot agree in matters pertaining to medicine, religion, politics or what not, let us abide in peaceful disagreement and treat all honorable and honest persons with deference. At all times let us seek for those things that make for peace; and let us be honest with ourselves, having the courage of our convictions. We must have a reason for the faith that is in us, and the consciousness that we know where we stand. He who has reasoned with himself and calmly satisfied himself that he has adopted the policy that to his judgment is most plausible and best, is the man of convictions and truly honest. We are all intensely human, make mistakes, are confronted by disappointments, and often, far too often, fail to make a correct diagnosis, or to effect a cure. But this does not disprove the probability of there being a law of cure or a science of therapeutics. Do not blame nature for our mistakes and errors of judgment. True, there are limitations to human understanding, but those limitations are largely circumscribed by ourselves. Our *possibilities* are unlimited. "There are more things in heaven and earth than we have yet dreamed of in our philosophy." Our materia medica can never be finished. Provings and verifications by unprejudiced and intelligent physicians should be constantly going on, and there should be some system whereby the work of one may be corrected and verified by another. To the physician with trained reasoning powers, coupled with an honest desire to do his best, there is always a strong probability of accuracy and success.

To what extent does a diagnosis assist us in making a proper prescription, or what is the relation of diagnosis to therapeutics? I am sure we all agree that a prescription based upon an incorrect diagnosis will be a very poor one, so we must either be accurate in our diagnosis or else prescribe for the case by symptoms without any attempt at diagnosis and consequently without any idea of the cause of the symptoms. What difference does it make so long as the remedy corresponds to the totality of the symptoms? we often hear. We have before us in our mind's eye three mental pictures, one of a human organism in a state of health or as nature intended it to be, one as we find it after careful examination of all signs, symptoms and their character, or as it is, and, third, a clear drug picture or the effect of a remedial agent upon the healthy organism. Now I contend that the accurate and true totality of the symptoms taken by the intelligent and honest believer in the law of similars is based knowingly or otherwise upon at least a partial diagnosis. The diagnostitian and the pathologist are both needed to demonstrate what is curable in disease.

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Diagnosis is not merely the giving of a name to a certain group of symptoms, but properly studied gives to us the ability to determine the true totality of the symptoms. To be a true follower of Homœopathy as laid down for us in the Organon and other writings of Hahnemann requires a vast amount of hard and conscientious work. No drones should ever attempt to study, much less practice Homœopathy. In all that I have said I may have failed to establish positively any direct relationship between Diagnosis and Therapeutics, other than that previously given, namely, intelligent thoroughness. We must all admit that a diagnosis is not an entity, and we may administer our therapeutic agents with most telling and gratifying results without any pretense at a diagnosis. The self-made man who has so developed his every God-given faculty,—possibly against great difficulties, so that all who know him respect and admire him, and whose influence is felt throughout the community and even the State in which he lives,—would undoubtedly have been even a more potent force, had he had the opportunity of widening his field of vision and developing more fully his talents by a thorough college training. So the therapeutist and symptomologist may do most admirable and commendable work, without much pretense at diagnosis, but how much better work we could do and how much greater respect we could demand and expect, from the entire medical profession, as well as from the community in which we live, if we added to our knowledge of therapeutics a thorough and accurate knowledge of pathology and diagnosis! The seemingly almost marvellous results obtained from the administration of the carefully selected and well administered homœopathic remedy, is of great value; but how much greater value to all concerned it is, and will be, after an accurate diagnosis has been made! Let us see to it that we keep our poise and do not go to extremes. Symptomatology, diagnosis, pathology and therapeutics should go arm in arm, then we can turn to our records and show to the world that we as homœopathic physicians have ability second to none, are intelligently thorough, and scientific in the fullest sense of the word. The experience of years has proven that the law laid down by Hahnemann and his followers is undoubtedly the most scientific and certain guide for the treatment of the sick; but it has not proven to be the only law of cure, or that therapeutics is the whole of the science and art of medicine. I believe he is the most scientific and successful physician who first makes in all possible cases a thorough diagnosis and who understands all methods of treatment, hygienic, dietetic, psychic, drugs and all other useful agents, and is liberal enough to employ whatever will be of the most benefit in the individual case. Time will not permit of my speaking of the chaotic condition of medical science during Hahnemann's time. He not only exposed and overthrew the errors then existing, but he also founded a system of therapeutics based, at least, upon nature's laws. Modern medical science

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is still in somewhat of a chaotic condition, save for some few branches, and in so far as they are successful, I feel that their success is based upon the law of similars or the definite principle of Homœopathy. "Similia similibus curantur." In order to practice the art along this definite principle, we must thoroughly master our materia medica and acquire the ability to intelligently use it, as well as all the means at our command in diagnosis and pathology. If lacking in knowledge and ability to intelligently use either of these very important branches, especially that of our materia medica, we are almost certain of being disappointed in the application of the art and science of Homœopathy and so drift into the use of all sorts of palliatives. Another necessary adjunct to the successful application of our art is the preparation and proper method of applying drugs. We have all had experience confirming Hahnemann's theory that triturating and diluting greatly increase the medicinal quality of drugs. Modern science is daily verifying this in the ion theory, the revival of the tuberculin theory and its modern application, also the grand work being done by such men as Prof. E. S. Bailey of Chicago with the use of the radio active minerals, having by these lights already proven conclusively and scientifically the power of dynamics. Thus the potency of the imponderables is revealed and confirmed. How infinitesimals act, has been, and is still, a bone of contention. Because I firmly believe that every homœopathic physician should so qualify himself that he will be the best and most thoroughly accurate diagnostitian and pathologist possible and also believe in the potency of infinitesimals, it does not follow that you must so believe, but I simply bespeak a wider charity for all aids and supplements which the honest physician and surgeon is daily using as well as a more intelligent thoroughness in their use. As science opens up new avenues to our vision, she reveals new and useful additions to our armamentarium. Homœopathy is a system of rational therapeutics. Its cardinal principles have been, in the light of modern research, entirely vindicated and it has stood the test of a century, and it has a right to survive and will survive; and unless we are alert, work hard and study, intelligently, thoroughly, diligently and loyally, we may some day awake to a realization of the fact that modern science has literally swallowed our golden egg and left us stranded far behind. Let us ever see to it that we are close students of "all that pertains to the great field of medical science," which is ours, as well as close and thorough students of the laws, as laid down by Hahnemann, and verified by his faithful followers,—and then with our beloved Helmuth we may sing—

"Look down, O spirit, from thine unknown sphere,
Behold the days of persecution past;
See this assemblage of thy followers here,

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Proclaim the triumph of the truth at last.
Behold the once torn waters of the sea
Of Therapeutics breaking on the rocks
Of doubt and error and uncertainty,
Tearing the life-boat with incessant shocks—
Now, guided by precision's better chart,
On it the mariner shall safely steer,
And, taught by thee, with thankfulness of heart
Shall watch the beacon and dispel his fear.
Among the benefactors of thy race,
Who stamp their impress on the fleeting years
That grow to centuries, shall be thy place
Of honor, ceded by thy willing peers.
Among the epoch-making men, whose thought
Illuminates the world, there shalt thou stand,
Thy battle for humanity well fought,
Bearing thy mottoed banner in thy hand;
Then shall the sons of Aesculapius bring
Their votive offering of thanks to thee,
And all the nations of the earth shall sing
The grand Te Deum—Homœopathy!!"

DISCUSSION.

Dr. Shaw:—I am sure that the most conscientious, the most liberal-minded physician will be the one who will criticise himself most harshly for his failures in diagnosis.

In regard to the second half of the paper,—therapeutics—many points were made, and perhaps as much as any the lack of knowledge we, many of us, have of methods in pharmacology and therapeutics in the regular school when we first begin our practice. If we have courageous and scientific instructors, we are turned out to believe in the principles of homœopathy. We want to defend it, we want to believe that it is based on scientific principles, and we are at a loss if we do not know all that anyone else has to offer as a therapeutic agent. The methods of teaching pharmacology I am sure are the best in our own school. It is a matter of immense encouragement to me to know that each year something new is added and the students are turned out better equipped than they were when I left school. It is a matter of real rejoicing that we shall know everything that the regular schools do besides what we do ourselves, and shall be able to meet them in discussion and hold our own in consultation. Just how that shall be brought about must be left to the medical faculty of our school. One suggestion brought out by the criticism of the preceding paper that perhaps the regular schools might help us out, is a golden idea, and I certainly do hope that homœopathy will finally swallow up everything, and will prove to be the system of therapeutics that is a law.

The U. S. Civil Service Commission announces an examination on January 18, 1911, of candidates for the position of anatomist (male) at $1,600 per annum, in the Army Medical Museum, office of the Surgeon General. Applicants should write at once to the U. S. Civil Service Commission, Washington, D. C., for application and examination form 1312.

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THE DIET OF CHILDREN AS INFLUENCED BY FECAL EXAMINATION.*

By J. Arnold Rockwell, Jr., M. D., Cambridge, Mass.

No clinical diagnosis is today complete without due consideration of the dejecta; in fact, several diseases, notably pancreatic conditions, are intelligently understood and recognized only through fecal examination.

The scope of this rather recent addition to our clinical resources is constantly broadening, embracing dietetic studies, and making it necessary to practise this recently acquired knowledge, if we hope to meet the many complex phenomena incident to the intelligent feeding of our growing young America, as well in health as in disease.

To have uniform material for examination from known food-intake, the "test diet" has been inaugurated, much as the "test meal" has been used in stomach work. The numerous diets worked out by different investigators vary in their detail but have one end in view, viz., supplying the individual with the three essential food stuffs, proteins, carbohydrates and fats, in easily digested forms and in sufficient quantity to total 2,250 calories for the 24-hour intake, the amount necessary for an adult at rest. The Schmidt diet, perhaps the best known and most generally accepted, calls for the following materials:

Detailed Test-Diet.

(For Clinical Purposes and Quantitative Analyses.)

In the morning: 0.5 liter milk, or if milk does not agree, 0.5 liter cocoa [prepared from 20 Gm. cocoa-powder, 10 Gm. sugar, 400 Gm. water, and 100 Gm. milk], with 50 Gm. zweiback.

In the forenoon: 0.5 liter oatmeal-gruel [prepared from 40 Gm. oatmeal, 10 Gm. butter, 200 Gm. milk, 300 Gm. water, 1 egg (strained), and some salt].

At noon: 125 Gm. chopped beef (raw weight), broiled rare with 20 Gm. of butter, so that the interior still remains raw,
to this 250 Gm. potato-broth (made of 190 Gm. mashed potatoes, 100 Gm. milk, and 10 Gm. butter and some salt).

In the afternoon: as in the morning.

In the evening: as in the forenoon.

*Read before the Boston Homœopathic Medical Society, November 3, 1910.

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This diet gives 1½ liters of milk, 100 Gm. zweiback, 2 eggs, 50 Gm. butter, 125 Gm. meat, 190 Gm. potatoes, and 80 Gm. oatmeal. In other words, 110 Gm. albumen, 105 Gm. fat, 200 Gm. carbohydrates, which, as above stated, gives us the 24-hour requisite of food for an adult at rest.

The general rule is to continue this diet for three days or until such time as one feels certain of the dejecta being composed of waste material from the test-meal prescribed. To make this absolute, one has only to give a capsule containing .3 Gm. of powdered carmin at the beginning and end of the test diet. The color line, as noted in the feces, is very distinct. Of great importance is the determination of the elapsed time from the intake to the excreted stool, the normal time for the small intestine averages 2½ to 4 hours, whereas in the large intestine, only 1/5 the length of the former, 14 hours is required.

The chief difficulty in carrying out this regime is met with the patient's unwillingness to adhere strictly to the prescribed diet, and a physician's skill is taxed often to the utmost in convincing his patient of the necessity for such measures, assuring him that for accurate information the procedure is necessary.

In carrying through a fecal examination four stages are to be considered: (1) macroscopic examination; (2) microscopic; (3) chemic; (4) bacteriologic. The first three will be considered in this paper.

(1) Quite the most important examination is the macroscopical. Here we observe the color and consistency, and note the odor and chemical reaction. In normal feces we find mucin, the indigestible residue of food, decomposition products, and inorganic salts. The consistency of the feces varies from fluid to semi-fluid, depending largely on the time it remains in the intestine, and the extent to which absorption of its watery portion has taken place. A pure flesh diet gives a comparatively dry feces, while substances rich in sugar yield feces with a comparatively large amount of water. The quantity of water taken has no direct influence upon that found in the feces. This amount seems to be in direct ratio to the energy of the peristalsis. The odor is due to the presence of sulphuretted hydrogen and skatol. The color is due to the altered coloring matter of the bile hydrobilirubin or stercobilin, and partly to the character of the food. Milk stools in both infants and adults are lemon-yellow in color. Spinach, cabbage, calomel, and certain bacteria give green stools. The green color of infants' feces is believed to be due to the action of butyric and lactic acids upon the biliary coloring matter. Rhubarb, senna, longwood, saffron, fuchsin and blood may give red stools. Santonin gives blood-red or yellow-colored stools. Normal stools are brown and contain no unchanged bile. Meconium contains unchanged bile.

Iron, bismuth, salts, charcoal, and blood coming from the

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upper part of the gastro-intestinal canal impart a black color. The normal coloring matter of the feces is derived from the bile, and when this fluid is prevented from discharging into the duodenum the feces become very light or clay-colored. When blood, mucus, or pus is well mixed with the feces, the origin is high up in the intestine. When not mixed, the origin is from the lower part of the colon or the rectum.

The feces of infants fed with normal breast milk, and children and adults fed largely on milk show a lemon-yellow or orange-colored stool. The golden yellow stool is evidence of an excess of carbohydrate. The total quantity discharged daily varies from 4 to 6 ounces.

Among pathological findings are to be noted gross flakes of mucus, either transparent, ropy and extensive, or intimately mixed with foreign materials; blood pus, portions of tapeworm or other parasites, stones, ova, etc., are often found.

Butyric acid gives rise to the distinct acid-like smell of some feces, while acetic acid gives off a biting, sour smell, and malodorous stools are due to albumen putrefaction.

For a closer examination we make a broth by mixing a small selected piece of feces the size of a walnut with distilled water. The amount is divided and placed in two receptacles, one with a black and one with a white background. Here the sharp contrast produced gives us clearly outlined particles which, when placed for microscopical examination on slides, assist us in reaching our conclusions as to foreign elements present and source of difficulty.

(2) The microscopical examination of a stool from an ordinary mixed diet might develop the following report: particles of food; cells—red blood corpuscles, intestinal epithelial cells, pus corpuscles or leucocytes; crystals—triple phosphate, phosphate of lime, cholesterin, fatty, and hematoidin crystals. None of these has any pathological significance. Parasites and bacteria may be found. Parasites in the intestinal tract include worms and protozoa. The worms belong either to the nematoda or to the flat worms, the latter group containing the cestoda, which are fairly common, and the flukes, which in Europe, at least, are by no means ordinarily found in man.

Nematoda. (a) Perhaps the commonest of all internal parasites is the small threadworm, Oxyuris vermicularis. (b) Ascaris lumbricoides, six to eight inches long, and has a general resemblance to an earthworm. Not unfrequently its presence in children is associated with nervous disorders. (c) Ascaris mystax, a closely allied worm, is sometimes parasitic in children; the infection is acquired from cats. (d) Ankylostoma duodenale, which causes profound anemia by drawing blood from the walls of the bowel. The diagnosis is clinched by finding the ova in the motions. They exhibit a segmented yolk, enclosed in a thin shell. (e) Trichocephalus dispar, about two inches long and

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white, and does not seem to cause any great inconvenience. (f) Trichina spiralis.

Cestoda. Seen as many varieties of tapeworm.

Trematoda. (a) Distoma hepaticum is rather rare as a human parasite. When it does occur it may be found in the feces as brown-colored ova. (b) Distoma lanceolatum is considerably smaller, and is narrower in proportion to its length.

Protozoa. A number of protozoa, including members both of the Rhizopoda and Infusoria, have been found in the feces. The only one which is of undoubted clinical importance is the Amœba dysenterie, which is present in a great proportion of cases of tropical dysentery. In addition to amœba, dysenteric stools invariably contain bacteria, among which streptococci and the bacillus coli communis seem to preponderate. These, however, do not enter into the present consideration.

The normal test diet stool shows a brownish mixture practically homogeneous containing the chaffy remains of oatmeal and cocoa nibs. Under pathological conditions, however, the Schmidt diet would reveal connective tissue remains and tendons from the chopped meat. They are whitish-yellow in color, thread-like in appearance, and of solid consistency. In case of doubt the addition of a drop of acetic acid destroys this appearance of the connective tissue, whereas mucus would develop this thread-like quality.

Muscle fragments may also be noted as small brown-colored rods.

Potato remains appear as sago granules, glassy and transparent in character. These are easily mistaken for flakes of mucus, but the addition of iodine would produce the characteristic blue color with starches. Fat remains would be denoted by their light yellow color, and the soft, small, fecal lumps. Mucus appears in large extended strips or in finely divided semi-transparent yellowish particles.

For further microscopical examination the chemical tests are brought into play. Three drops of prepared feces are placed at equal intervals on a slide; one is crushed into a fine layer by a cover glass; another stirred with a drop of 36 per cent. acetic acid, heated to the steaming point and then covered, and the third stirred well with a small drop of strong solution of iodo-potassium iodide. The first in the normal stool will give us small granules, isolated fragments of muscle fibre with rounded edges, large and small crystals of calcium salts, flakes of fatty acids of calcium, colorless soaps, isolated potato cells, chaffy remains from oatmeal and cocoa nibs.

The second preparation, the acetic acid test, serves to furnish a view of the entire fat content. When cool, this specimen shows small flakes of fatty acid; when heated, these melt into drops congealing as the preparation cools.

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The third preparation, which appears brownish in color, later turning to violet, gives us the potato remains.

Under diseased conditions of the alimentary tract the following pathologic evidences present themselves. With preparation No. 1, large numbers of muscle fragments are seen in a good state of preservation with well-defined sharp edges, even to the detection of the crossed striations. Needles of fatty acids and soap, drops of neutral fats, numerous groups of potato cells, parasite eggs, mucus, connective tissue and pus come into the field of vision.

Preparation No. 2 shows massive fatty acid flakes, while No. 3 gives the blue color of starch granules and violet fungus spores, as well as yeast cells, the latter being colored yellow by iodine.

Normal feces should be feebly acid or feebly alkaline in reaction, this test being made with the ordinary litmus paper.

The sublimate test for detecting the condition of the bile shows green coloring to fecal broth when unaltered bile (bilirubin) is present, and red for the normal or reduced (hydrobilirubin) bile.

The most delicate test for occult blood is known as the benzidine test, which is given below in detail, as it is little known to the general practitioner and yet a very simple execution.

(1) Saturate solution of benzidine in glacial acetic acid. (Benzidine to the amount of a pea and 20 cc. glacial acetic).
(2) Fecal broth from pea size of feces in 3 cc. water.
(3) 10 drops of benzidine solution (1) with 3 cc. dioxygen.
(4) Add 2 drops of (2) to (3) and blue or greenish color indicates the presence of blood.

The light brown acid foamy stool with the butyric acid smell is the fermented stool, while the putrefactive evacuation is of darker color and not likely to be foamy.

The significance of these pathologic findings is the keynote of this paper, for upon these are to be determined the foods best suited to the individual case.

(1) Mucus. The presence of mucus indicates inflammation of the mucous membrane, and is the sole reliable indication of this condition. Two exceptions are to be noted: in the mucus—colic incident to the nervous over-production of mucus, and the glazed-looking dry stool so often the result of the straining in constipation. When noted in large flakes the origin is to be found in the colon. Sometimes opaque and glistening, and again closely intermingled with foreign ingredients: the fine sago-looking flakes of mucus come from the small intestine, the smaller they appear the higher up we look for their origin. These are usually filled with bacteria and coloring matter.

(2) Unchanged pigment. Bile pigment showing green in the sublimate test indicates too rapid passing of intestinal con-

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tents or failure of reduction; whereas complete absence of either red or green color in the sublimate test indicates a fatty stool where the bile is completely cut off.

(3) Fat occurs in all feces, normal and pathological, and may be recognized in the form of neutral fats, soaps, or fatty acids. Fatty stools, that is the "fat diarrheas" of infants, are recognized as such macroscopically, by their whitish color, often a peculiar sheen, and in liquid stools often by the presence of a thin floating layer of fatty acid crystals. Neutral fats appear either as droplets or as masses with irregularly rounded contours.

The stools may be abnormally fatty in disease of the pancreas, and in such cases when the bile is cut off from the intestine, and occasionally in disturbances of intestinal digestion as with intestinal tuberculosis and intestinal amyloid degeneration.

(4) As to the meat remains, any connective tissue remains appearing in the feces indicate disturbed gastric digestion, for gastric juice alone acts upon raw connective tissue. Again, if macroscopic muscle remains appear, small intestine disturbance is evident, the stomach sharing but slightly in the solution of muscle. Occasionally connective tissue and muscle remains are found together, an indication of combined gastric and intestinal disturbance.

(5) Carbohydrate and starch remains. Defective starch digestion has its origin in the small intestine, and to its juices alone do we look for complete reduction. We note small microscopic tapioca-like potato remains or even separate potato cells. The stool is soft and pappy, light brown and foamy and acid in reaction.

Gastrogenic Intestinal Disorders.

Acute Gastritis. In all forms of acute gastritis the removal of all food for twenty-four hours is the general rule. To quench the thirst, always a prominent symptom in the first stages of this condition, ice, ice water, or champagne in teaspoonful doses or less may be administered with impunity. It is usually wiser, however, to administer hot water for this early condition, especially during the first twenty-four hours. With the cessation of vomiting, diluted milk 4 to 1 with lime water, soda water or barley water, may be tried; not more than twenty ounces can commonly be taken in the first day. As the case progresses the materials used should be milk with decreasing amount of dilution, albumin water, whey, to all of which may be added a little sherry if necessary to bring up the body temperature. On the fourth or fifth day carbohydrates may be added in the form of arrowroot, toast or rusk, blanc-mange, one or two poached eggs, clear soup or beef tea. Boas recommends the following diet to begin about the third day.

8 a. m. : Milk (with tea), 200 Gm.
Zwieback, 50 Gm.

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10 a. m. : Bouillon with egg, 200 Gm.
Noon : Milk-soup, 200 Gm.
Toast, 50 Gm.
3 p. m. : Milk, 130 Gm.
Cakes, 50 Gm.
7 p. m. : Milk-soup with rice, 200 Gm.
Zwieback, 50 Gm.

In the toxic and infective forms of acute gastritis where immediate risk to life is involved, the problem consists in the maintenance of strength with absence from food over a much longer period of time, and in such cases rectal feeding becomes necessary.

Chronic Gastritis. The prophylactic treatment becomes more important here than with acute gastritis. The amount and character of the food, the state of the individual while eating, and the rest before and after the meal, with instructions as to mastication and mental repose, all lend valuable aid to the preventive side of this condition. The question of feeding deals more with what not to take than the prescription of a simple diet. Rich foods, spices, condiments, ices, tea and coffee should never be allowed.

It must be borne in mind with these cases of chronic gastritis, that digestion of protein is at a low level, and that carbohydrates, on the other hand, are liable to fermentation changes with development of injurious organic acids. The diet demands both of these ingredients, but they should be added in small quantities. Later, eggs, fish, raw meat, toast and butter may be allowed.

With continued impairment of digestive power in chronic gastritis, as is sometimes the case, Wegele's diet, supplying some 2,400 calories, is of value:

Morning: Pepton-cocoa, 150 Gm.
Butter on toast, 25 Gm.
Forenoon: One soft-boiled egg.
Noon: Oatmeal soup, 200 Gm.
Fowl, 150 Gm.
Carrot, 200 Gm.
Afternoon: Pepton-cocoa, 150 Gm.
Butter and biscuits, 25 Gm.
Evening: One egg.
Scraped ham, 100 Gm.
Macaroni with toasted bread crumbs, 100 Gm.

Diarrhea. Nervous diarrhea may arise from heat, cold, fright, etc. The stools in these cases are rather liquid, yellowish-brown, and soon became watery and of a lighter color. There may be a dozen in the twenty-four hours. A typical case may exhibit loose movements of normal color and odor, and without abnormal constituents.

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In acute duodenal indigestion, which usually occurs in middle and later childhood, the stools show evidences of undigested food, and in a certain number of cases become clay-colored.

In chronic duodenal indigestion, the fecal discharges show, at first, merely the various changes which occur in ordinary indigestion, sometimes manifesting a tendency to constipation, sometimes to diarrhea. The color of the discharges at this early period is not significant, and is usually a mixture of yellow, white and green. As the disease progresses mucus begins to appear, and increases to quite an amount, as shreds or masses, sometimes covering hard lumps of feces.

Intestinal indigestion from deficient secretion gives loose, rather large stools usually free from much odor. The color is usually a mixture of yellow, brown and white, the latter caused by various sized curds. They may also be light-greenish, with or without a small amount of mucus.

In fermental diarrhea the color of the discharges is commonly some shade of green or greenish-yellow, and the odor is often very offensive, sometimes being excessively sour from intestinal fermentation (acid), at other times extremely foul, indicating albuminous decomposition. There is usually a considerable amount of mucus present.

In infectious diarrhea the infecting organisms are found in the fecal discharges, and more especially the different types of the bacillus dysenteriæ of Shiga or Flexner. The discharges are comparatively small in amount, contain fecal matter at first, but soon consist of mucus, sometimes with pus, blood and shreds of membrane. The odor may be very offensive, but when the mucus predominates there is very little odor. The color and consistency are very variable, but generally the consistency is lessened, and the color is a mixture of green, brown and yellow. The blood is usually from congestion of the blood-vessels and straining.

One of the forms of infectious diarrhea from its intense choleriform symptoms has been called cholera infantum. This form is characterized by profuse diarrhea, chiefly serous, serum mixed with epithelial cells and many bacteria, and generally odorless. Bacterial analysis reveals the comma spirillum.

Another form of infectious diarrhea is endemic dysentery, caused by the amoeba coli. It is of rare occurrence in children and in northern latitudes. The stools are bloody, fetid, and contain fragments of sloughing mucous membrane.

No doubt diarrhea can result from chemical or mechanical irritants, decomposing meat or a meal of unripe apples, but it is more than likely that these products produce their effect not directly, but through bacterial agency, and that the bacteria normally present in the bowels undergo rapid development upon the introduction of such material. (Sutherland.) Consequently the dietetic treatment of diarrhea is largely bound up with the

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questions of the possibility of influencing bacterial growths in the intestine by alteration and manipulation of food. The small intestine contains bacteria producing organic acids as lactic, acetic and succinic by their action on carbohydrates, while in the lower two-thirds of the colon we find the coli communis and other protein-decomposing organisms. The region about the cecum is inhabited by both forms of bacteria.

As regards the colon, it must be remembered that here digestion proper is at an end, and food has little influence on the bacteria of this region, save indirectly by the choice of a diet leaving little residue and containing no hard or irritating particles.

As regards the small intestine, it is probable that diet has some influence on bacterial growth, and as a result of the steady production of acids by bacterial action on carbohydrates, the contents of the small intestine remain active notwithstanding the neutralizing effect of the alkaline succus entericus. This increased acidity, with the inevitable development of gas, accounts for the increased peristalsis and frequency of stools. In most cases of diarrhea, with the possible exception of those of nervous origin, in which the general condition of the patient and not the local irritation is to be dealt with, dietetic treatment involves a recognition of the cause, and a choice between a milk-carbohydrate and a protein diet. The decomposition of protein is best met by a milk diet or a milk-carbohydrate diet in which milk is the chief ingredient, whereas the irritative and inflammatory condition of the small intestine requires a reduction of the carbohydrates and the substitution of protein and fat. In forms of diarrheas it is well to avoid all articles containing cellulose, vegetables, fruit, coarse bread stuffs and grains, sugar, and meat extracts. In some cases of long-continued diarrhea the following diet, nearly pure protein, will bring about speedy improvement:

8 a. m. : Cocoa made with water, one or two eggs.
10 a. m. : Bouillon with an egg.
Noon : Chicken or fish, piece of toast, custard.
Claret glass of Burgundy.
4 p. m. : Panopepton, one egg, piece of toast.
Claret glass of Burgundy.
Sweetbread, chicken or fish, piece of toast.
10 p. m. : Raw meat sandwiches or panopepton.

Colitis. In general it may be stated that milk alone, either diluted 4 or 6 to 1 of lime water, soda water, or barley water, or as a blanc-mange, is the most acceptable diet. Any departure from this diet should be postponed as long as possible, and the return to carbohydrate food should be gradual, also the yolk of eggs and plasmon, while the return to meat, meat extracts and vegetables must be made with the greatest caution.

Constipation. Spasmodic cases are rare, but should be recognized, as they frequently cause much disturbance of the child's

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general health. They are usually due to fissures or to an increased size and consistency of the feces. The size of the fecal masses may at times be enormous.

The most common of all the causes of atonic constipation is the food, which is insufficient in amount or improper in quality for the digestion of the individual case. In infants being fed exclusively on milk, a low percentage of fat in the milk seems in a number of cases to produce constipation. Feces show increased consistency, and sometimes streaks of blood. Improvement of the mother's milk should be aimed at, and water given the child between feedings. When additional measures are necessary owing to a deficiency of fat in the mother's milk, one or two teaspoonsfuls of cream may be added to each nursing, or half this quantity of olive oil or cod-liver oil.

Diet in constipation in children on a mixed diet often means a substitution of cereals and increase of fat, for meat in quantity; sufficient water between meals to stimulate peristalsis, and the general avoidance of astringents. Consequently graham or whole wheat bread; Scotch oatmeal and Quaker oats; vegetables, such as cabbage, sprouts, tomatoes, salsify, Spanish onions, spinach, and asparagus should be freely used. Fruit, at least three times a day, including apples baked or raw, pears, currants, raspberries, cranberries, prunes, dates, and figs. Butter should be taken freely. Olive oil, either with salad, or on bread or cereal, is a great aid toward the restoration of normal functioning.

The foregoing pages have considered the topic of proper nutrition in as simple and direct a manner as possible. There is much to be said from many viewpoints on each individual phase of the subject. The points I especially wish to make, however, are that a properly chosen diet is one of our most valuable resources in the treatment of the gastro-intestinal, and many of the other diseases of children, and that scientific accuracy in diagnosis, and in the correction and selection of diets will be immeasurably increased if physicians will resort as a matter of routine to the making of fecal examinations.

To still further emphasize the necessity for a better understanding of the questions involved, and so vital to our growing youth, I will close my paper by giving a summary of the mortality statistics of children, compiled by the Census Bureau for 1908 and 1909, reminding you that it was estimated by Prof. Irving Fisher of Yale in his "Report on National Vitality" that, in the matter of diarrhea and enteritis alone in children under five years of age, 60 per cent. of the resulting deaths were undoubtedly unnecessary and avoidable.

Child Mortality. The total number of all deaths returned for the year 1908 from the entire registration area of the United States was 691,574. The figures for age show a somewhat increased per cent. of infants under one year for 1908 as com-

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pared with the preceding year, but the ratio for each of the individual years from one to four is nearly identical for 1907 and 1908. Nearly one-fifth of all the deaths that occurred were those of infants under one year of age, and over one-fourth are of children less than five years of age, that is, there were more than one-eighth of a million (136,432) deaths of babies under one year of age in about one-half the total population of the United States in 1908, and nearly 200,000 deaths of little children under five years of age in the same aggregate of population.

Of the total number of 732,538 deaths in 1909, in the Census Bureau's death registration area, representing a fraction over 55 per cent. of the provisionally estimated population of continental United States, no less than 196,534, or 26.8 per cent., were of children under five years of age, and 140,057, or 19.1 per cent., were of infants under one year of age. In general, one death out of five that occurred during the year 1909 was of an infant under one year of age, and a little more than one death in four was of children under five years of age. The proportion of deaths of children under five years of age to the total deaths that occurred in the year is far greater than that of any other five-year period.

The early years of life are of special importance, not only because of the large number of deaths that occur therein, but also because a large proportion of these deaths are preventable.

RECORDS OF THE MASSACHUSETTS STATE HOSPITALS, 1909.

By Arthur Blakeslee, Westboro, Mass.

Rates of Recovery.

Reckoned, as usual, upon commitments of the year from which they nearly all came.

	Commitments.	Percentages.
Westboro	477	18.24
McLean	158	17.72
Boston	384	16.17
Northampton	282	12.77
Taunton	461	11.50
Worcester	481	10.19
Danvers	658	7.29

About all of the acute alcoholic recover. Are they really of the insane? Deducting them the recovery rates run as follows:

Westboro	16.59
Boston	15.85
Worcester	8.19
Taunton	7.52
Northampton	7.22
Danvers	5.41

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Deaths to all treated:

Northampton	6.54
Westboro	6.77
Taunton	8.49
McLean	8.63
Danvers	9.31
Worcester	10.08
Boston	11.26

For the asylums the rates, as usual, were low. Gardner Colony 2.50, Worcester Asylum 4.42 and Medfield 4.71.

Deaths of manic depressive women:

	Cases.	Deaths.	Percentages.
Westboro	76	1	1.32
Northampton	39	1	2.56
Danvers	70	9	12.86
Boston	72	11	15.28
Taunton	54	9	16.67
Worcester	38	7	18.42

Hydrotherapy, employed at both the low rate hospitals, accounts for the surprising differences. Of the last four the average rate is nearly 12 times (11.65) larger than Westboro's. Less adequate means for the similar men, it seems, made their Westboro rate higher, but still much less than the general rate.

Private patients, supported by individuals:

Westboro, at the year's end had	198
Worcester	157
Danvers	136
Northampton	116
Taunton	104
Boston	89

Voluntary patients, self committed:

In the year McLean had	90
Westboro	70
Taunton	8
Danvers	6
Boston	6
Northampton	4
Worcester	1

Out "on visit" at the year's end:

From Westboro	145
Taunton	78
Boston	63
Worcester	60
Danvers	51
Northampton	40

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Out "on escape":

Danvers	18
Worcester	10
Northampton	6
Westboro	6
Boston	4
Taunton	3

Much liberty is given at Westboro, but only a few escape.

Friends of homœopathy will be pleased to notice Westboro's favorable record.

SOME PATHOGENIC EFFECTS OF CROTALIN.

By E. V. Ross, M D, Rochester, N. Y.

A man 40 years of age, dark eyes and hair, nervo-bilious temperament, after receiving .01 gr. of Crotalin hypodermatically experienced the following symptoms:

Arm swollen and red, extremely sensitive to touch.

Itching so marked on the second day that he was obliged to constantly rub or scratch the part lightly.

Arm gets numb when allowed to hang.

An old vaccination scar some distance from the redness and swelling becomes red and inflamed.

Sight blurred.

Loss of taste for three days.

Sweats on upper part of body during sleep.

Had a convulsion during which the body became arched backward (Opisthotonus) without loss of consciousness. This last symptom suggests Crotalin as a possible remedy in tetanus.

The extreme sensitiveness to touch of Crotalin differs from Lachesis in that it is owing to the soreness or tenderness of the parts, while the sensitiveness of Lachesis is due more to a nervous hyperaesthesia.

The symptoms as above enumerated were all very pronounced, lasting about four days.

Think of Crotalus horridus in complaints that have a yearly recurrence at about the same time.

STATE BOARD RESULTS. According to the recent report of the secretary of the Idaho State Board of Medical Examiners, homœopaths have no reason to be ashamed of the quality of their graduates. In this report we find the first place taken by a graduate of one of the Chicago schools with 87 per cent. Next comes a graduate of the Hahnemann Medical College of Chicago, 84 per cent.; third, Homœopathic College, University of Iowa, 84 per cent.; fourth, Northwestern University Medical School, 84 per cent.; fifth, Homœopathic Department, University of Minnesota, 83 per cent. This includes all the homœopathic graduates who applied for examination. Thirty-three per cent. of applicants for examination failed to pass.

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CLINICAL DEPARTMENT.

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

A year ago the Clinical Department was instituted for the purpose of giving our readers a specific place in which to report their interesting or unusual cases. In addition a case for diagnosis with some pathognomonic symptoms, has been printed each month. But few have sent in reports. There must be many experiences in the course of a year in the practice of each reader from which we might all profit. Will you not make a New Year's resolution to let us have at least one such?

If you can suggest any way in which the Clinical Department can be made of more use or interest, such suggestions will be gratefully received.

Case XI. Diagnosis: Migraine.

The three cases cited last month are just such as come into every doctor's office, and some of them will try our utmost resources. The physical examination of cases of "sick headache" should be most thorough and searching. An hereditary tendency will be found in about half the cases, sometimes dating back over two or more generations. While this undoubtedly has a physical significance one must not forget its suggestive possibilities in certain growing girls who frequently "hold the basin" for mother when she has "one of her headaches." For these headaches are most frequently met with in young adult women who say they have had them "since their teens."

Gowers and others have suggested a close relationship between migraine and epilepsy. This doubtless is so in some cases, but certainly in others has but slight connection. Migraine seems rather to fall within the category of neuralgias (a cephalalgia), or of gouty states. At any rate, most cases exhibit a faulty metabolism with decreased urine and solids just preceding the attacks, and an increase afterwards.

There is a type of headache described by the Germans as "indurative," which should always be looked for. It is characterized by a serous exudate within the tendinous insertions of the muscles, especially those at the base of the skull. They are palpable and exquisitely tender and, while forming, produce intense headache with a mental state in which the patient sometimes thinks he is going insane. These indurations sometimes appear in other tendinous insertions, especially those attached to the ramus of the pubes, and I have once seen a case in which they developed in the serrations of the left serratus magnus, simulating angina pectoris and causing momentary cessation of respiration. These cases frequently show albuminuria, and I have seen one case which later developed acute nephritis.

Openheimer speaks of disease of the nasal mucosa as a cause of migraine, and the first case (a) reported has been greatly helped by curing her chronic catarrh with Kali bichromicum. The eyes should always be carefully seen to. Patients will often say that they have lately been fitted to glasses, but unless one knows the one who did it to be a careful,

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thorough man, it is no harm to have it done again. Many trifling defects are overlooked which may make all the difference. Case (c) reported was benefitted for a year by suitable glasses. In this case, however, there is another element at work, for there is a distinct vaso-constrictor irritation during the attacks which have now returned. Cannabis Indica in material doses has helped this case. A full stomach is an excellent preventive, and such cases should eat something at bedtime and have food by the bed to take in the night if, as so often happens, they wake early, conscious of a headache coming on. At this time they should stay on the back and eat a good breakfast. Sometimes a five-grain veronal powder will abort an attack in a few hours.

The indurative headaches are best treated during the attacks by a mild mustard plaster freshly made and applied to the lower occipital region. The vibrator, galvanism and massage of the indurations between the attacks, with proper regulation of the hygienic and dietetic life, will abort the attacks. These patients should be warned to wrap up the neck when out of doors and not to sit in drafts, as neglect of these precautions seems to precipitate the attacks.

Having discovered the underlying cause of the neadache one should base his prescription upon the totality of symptoms, being sure that he has the totality, as Dr. Sutherland says. Carelessness on this latter point I take to be one of the causes of many of our failures.

Case I:—for Diagnosis:

The following case presented by Dr. Alonzo G. Howard is one, the diagnosis of which is far too often mistaken and will well repay careful study:

Married man. Age, 32. Occupation, broker.

More or less active, drives his own automobile. Complains of pain in the lower part of back which prevents his assuming an erect posture. Duration twelve days, following attempt to fold the legs of a card table, which required stooping over. On attempting to straighten up, felt something snap in the lower part of his back. Finally, could not straighten and any attempt to assume an erect posture caused great pain. Has not been able to stand erect since. Difficulty to get into a good position for sleeping. Cannot dress himself because any attempt at back motion brings on a pain in the lower spine. Refers all pain to the sacral region, running down posterior thighs into knees.

Had three osteopathic treatments which aggravated the condition. Treated by two physicians and X-ray by another. X-ray said to be negative. Treatment did not give relief.

Physical examination shows patient of good build, good musculature; walking with guarded steps, avoiding jar. Comes with forward stoop. Stands with severe body list to the left, right shoulder low. All back motion greatly limited, very guarded, accompanied by a spasm of the spinal muscles. Pain on palpation over the sacrum. Right hip very prominent. Feet normal.

Examination of knees negative. Abdominal examination negative. Lying on back cannot lift heels from table without great pain in sacrum, but passive hip flexion is possible within 25 degrees when the knees are

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extended. With knees flexed, passive hip flexion and rotation throughout normal arc of motion is possible without pain.

Palpation over the sacral joints shows the sacrum apparently depressed anteriorly.

What is the diagnosis and what the treatment?

Dr. Robert F. Souther writes as follows on

"THE SIGNIFICANCE OF ABDOMINAL PAIN."*

In considering the clinical significance of abdominal pain, which is a subject of much interest to the general practitioner as well as to the surgeon, I cannot hope to exhaust a subject so broad, but will consider some of the conditions frequently encountered. The normal abdomen is usually soft, easily depressed, moves up and down during respiration, is nowhere painful on palpation and offers no resistance to pressure. It is tympanitic upon percussion, except over the large intestines, where there may be large masses of fecal matter, and the percussion note is then dull. Pain in the abdomen or elsewhere, as a symptom, may be due to a great variety of causes; may mean much or little. It means more where there is a definite pathological condition as the underlying cause.

That we may consider the significance of abdominal pain, we shall immediately want to know where the pain is located, what structures underlie the location, the character, duration and extent of the pain, together with associated symptoms. The temperature and pulse are sometimes an index to conditions associated with pain, and at other times are negative. An important factor to consider is increase or loss of weight; appetite or loss of appetite. To enumerate the diseases in which we may find pain would be rather dull, as it would be a long and uninteresting list. Therefore, I shall consider only those cases in which pain is a prominent symptom, probably the symptom which prompts the patient to seek relief from his or her condition. There are a variety of medical cases that are taken care of by the physician that do not require surgical interference. The conditions that I shall mention particularly are the cases in which pain exists and is to be considered by the physician or surgeon when he tries to establish a diagnosis that points to surgical interference.

Pain in the right inguinal region immediately suggests to our minds an inflamed appendix, although the first attack of pain caused by an inflamed appendix may be very remote, for instance, in the epigastrium, around the umbilicus, or in the pelvic region, or even in the region of the gall bladder; or it may suggest the beginning of a hernia.

The subjective symptom of pain must be followed by a careful abdominal examination. Pain on pressure over the appendix fixes the diagnosis as that of appendicitis. The appendix has quite a definite anatomical location, but curiously enough when one tries to locate a diseased appendix, it appears to have wandered; but as a rule the proximal end is invariably at a fixed point, and from that point the end may be in any direction of a circle with a radius of three inches or more, and likewise the pain

*Read before the Worcester County Homœopathic Medical Society November 9, 1910.

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may be found over the appendix wherever it lies.

Pain in the right inguinal region in the female is very frequently found to be due to an appendix and inflamed tube or ovary. Localized peritonitis may cause an irritation of the entire peritoneum, closely resembling a general peritonitis. Acute general pain all over the abdomen is not an uncommon symptom. We have all undoubtedly seen many such cases. Pain is here the prominent symptom. Upon subjective examination we find the abdomen tense, swollen, the slightest jar causing more pain, as also does the slightest touch. This condition may be due to a variety of causes, as a ruptured pus tube, appendix, perforating ulcer of stomach or intestines, ruptured gall bladder with escape of contents.

Pain throughout the intestines appearing suddenly, developing a diarrhoea, preceded by vomitus, is a very common condition; acute intestinal catarrh due to indiscretions of diet, ptomaine poisoning, etc. Pain accompanied by vomiting is suggestive of localized peritonitis which frequently becomes general, necessitating surgical interference. Pain of long standing and loss of flesh is suggestive of malignancy, and upon further search a tumor may be felt. If located at pyloric end of stomach, these symptoms persist and vomiting is a prominent symptom, loss of weight resulting.

Quite recently two interesting cases came under my observation where pain in the abdomen was the first symptom to attract the patient's notice. Case 1, that of a man, age 35, who awoke in morning with acute pain in the region of the gall bladder, splinting of abdominal muscles, knees drawn up; every breath caused additional pain, nauseated but could not vomit, pulse slightly accelerated, no temperature. Cause—perforating ulcer of posterior wall of stomach, not walled off, escape of contents at each breath. Case 2, woman, age 44, came to hospital because of pain in abdomen. Upon examination, there was found a large tumor extending to well above the umbilicus, somewhat irregular. Upon vaginal examination, cervix seemed normal. Upon subjective examination it was found that the tumor had grown rapidly in last two weeks. A diagnosis was made of ovarian cyst with twisted pedicle. Patient consented to operation and a multilocular ovarian cystoma was found twisted upon its pedicle, causing obstruction to the venous flow, thus rapidly increasing the size of the tumor.

Already, I have spoken of pain in the right inguinal region and the disturbances that it may signify. Another area most prolific of pain is the right hypochondriac, particularly the lower left corner of this anatomical region, containing as it does the lower border of the liver with its gall bladder and ducts attached and below these the pyloric end of the stomach, duodenum, hepatic flexure of large intestines, and, lastly, the right kidney and its ureter. The kidney and its immediately related structures, located as it is posterior to the peritoneum, is not an organ of the abdominal cavity from an anatomical standpoint, but it frequently protrudes itself into such close relation that it has to be treated as such in determining a diagnosis. Great pain and tenderness may be found over a dislocated kidney, tumor of the kidney or an impacted stone in the ureter.

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To distinguish between a pain due to duodenal ulcer, a gastric ulcer or functional disturbances of the gall bladder and its ducts, it may be necessary to make an exploratory incision.

In gall stone colic pain is evident on pressure over gall bladder and extends back to right shoulder blade in many cases.

Pain associated with the pelvic organs I shall touch upon but briefly. We cannot exclude the pelvis with its organs when analyzing abdominal pain, the one cavity merging as it does into the other, with the respective organs of one cavity found frequently in that of the other. Quite frequently an appendix causing pain very low down, too low in fact to suggest appendicitis, is found lying inflamed, bound down over the brim of the pelvis. More commonly does an ovary or tumor of the womb outgrow the capacity of the pelvis and extend to the abdominal cavity before attention is called to its location by pain in the abdominal cavity.

Post-operative pain may be local in line of incision. In character, it is hot and burning and quite intense after the patient arouses from the anaesthesia. The pain constantly grows less and the patient rarely complains if there are no retaining sutures to cut across the wound. After several days, pain may again appear about the wound. If so, this calls for careful investigation, as it may mean infection and subsequent abscess formation.

Another post-operative pain is the much-dreaded gas pain. This follows abdominal operations, particularly where there is much handling of the intestines. These pains are characterized by a sensation of cutting and are frequently described by the patient as knife-like. They come and go quickly and are more frequent across the lower abdomen, and fortunately are relieved by soapsuds or saline enemata.

In the event of a continuance of the gas pains and distension of the abdomen, no relief following enema, peritonitis suggests itself.

The importance of making a vaginal examination where possible in any case suffering from abdominal pain and again making an abdominal examination where pain in the pelvis exists cannot be too strongly emphasized.

In many cases patients suffering from pain in the abdomen should be subjected to an exploratory incision as a means to diagnosis and in this way forestall a condition that it is impossible to diagnose without operation and one that is amenable to surgical treatment by early interference.

Causticum has a very characteristic action on the mucous membranes; it produces a hard racking cough, which shakes the body, and is very exhausting; there seems plenty of mucus, but the patient cannot seem to cough deep enough to reach it. The cough, however, is relieved by a swallow of cold water; with the cough, there is a pain over the hips, and often an involuntary spurting of urine, as in natrum mur., and sepia., rawness and soreness in the larynx and trachea, hoarseness and loss of voice with the catarrh; severe hoarseness worse in the [illegible] with phosphorus there is hoarseness, but it is worse in the evening, and there is great soreness of the larynx, and tightness of the chest; sanguinaria has a severe catarrhal cough, with burning under the sternum.—Chase.—No. America Journal of Homœopathy.

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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.

EDITORS:
JOHN P. SUTHERLAND, M.D.
W. H. WATTERS, M.D.

Reports of Societies and Personal Items should be sent in by the 15th of the month previous to the one in which they are to appear. Reprints will be furnished at cost and should be ordered of the Business Manager before article is published.

THE NEW YEAR.

The *Gazette* desires to extend to its readers its sincerest good wishes for a happy New Year in the truest sense of that phrase. At such a time as the present it is the custom for firms and business houses to take account of stock, to review their accomplishments in the past and to take a look forward in the endeavor to catch a glimpse of what the future may have in store. Let us do likewise. First, the past may be considered. The senior editor has now completed his twentieth year of connection with the journal; this has been divided into two sections, one of fourteen years, the other of six. Both of these periods have been busy ones professionally, the editorial work having been undertaken as a kind of pastime, although an arduous one. For a number of years between these two services the *Gazette* underwent some vicissitudes, mostly of a financial nature, during which time several able men valiantly stood at the helm. These culminated in the decision of Otis Clapp & Son to discontinue its publication. This firm had for years borne the burden of publication, even at times, it is understood, at considerable financial loss, and could not be blamed for no longer remaining sponsor for it. Then for a short time Boston University School of Medicine was its financial backer. Even this arrangement, however, was only temporary, and doubtless but for the courage and energy of one person, the *Gazette* would have died a natural death. At this period, Dr. William K. Knowles began an aggressive campaign among a number of interested persons. This resulted in the formation of a company and the appointment, in the early winter of 1905, of the present editorial staff. Dr. Knowles became business manager and treasurer, but was permitted to see only a part of the success resulting from his efforts. After his untimely death, in January, 1907, the work which he had begun was undertaken by his loyal wife, and to her pursuance of these original plans is due a great part of whatever success may have been achieved.

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Since incorporation the financial affairs have been placed upon a firm foundation. Each year has seen a little balance upon the right side of the ledger, sufficient, at least, after all bills have been paid, to justify an annual dividend to the stockholders. Coincident with this has been noted a steady increase in the subscription list and an increasing number of regular readers. The audience has increased in size, and gratification is frankly admitted for the fact.

During the past five years arrangements of type and pages have rendered possible the material enlargement of the journal until at present each number contains fully one-third more material than did the earlier ones. It would be the supreme point of absurdity for the editors to claim more than a minimum amount of the credit of this success, as it is fully realized by them and here gladly acknowledged that to its contributors from the Atlantic to the Pacific is due the great share of the success of the venture. The many who have so ably coöperated by contributing articles from their own pens and experiences have placed the *Gazette* in their debt to an extent which it can never repay.

For the future the outlook is most encouraging. Beginning the year with the largest subscription list in its history, the *Gazette* already has on hand a number of papers of unusual merit. Among the features in contemplation for the near future is a series of articles upon the various phases of medical thought by writers eminent each in the department in which he writes. It is planned to have one upon eclecticism, one upon osteopathy, one upon regular medicine, possibly one upon Christian Science, as well as one each on high potency and low potency. Another feature being arranged is a monthly retrospect covering the progress of some branch of medical science so divided as to include the entire field in the twelve divisions. Later announcement of this will appear more in detail.

The Clinical Department, so well conducted during the past year by Dr. Ring, will be continued and will without doubt enable many to give to themselves a form of self-examination as the cases are reported from month to month.

And so with a hopeful future the editors once more wish to all their readers a very Happy New Year.

BOOKS OF THE YEAR.

The editors of the *Gazette* have always placed much emphasis upon the need of every physician to keep fully up to date in the rapid advance in medicine. So rapid is this progress that the man of even ten years practice is behindhand and passé unless by assiduous reading, careful study and possibly some post-graduate work he keeps stride with his fellows in the profession. The most frequently employed method of keeping abreast of the advance is by subscribing for and reading a number of good medical period-

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icals. By this means all the new ideas will be promptly received and learned. It so frequently happens, however, that in even the best journals there is much chaff mixed with the wheat in such an intricate combination that it is next to impossible for the uninitiated to differentiate the bad from the good. Also, these journals can, from necessity, follow no regular course, giving a little here, a bit there, and a fragment somewhere else. As a pleasant and profitable recreation this is most commendable, but when one wishes to really get down to serious, hard study, periodicals offer but little satisfaction. For the proper pursuance of this more serious task the worker instinctively turns to his library and consults his friends among his books. And as in life at large a man is known by his friends, so in medicine one might almost say that the physician is known by the books that he studies. Be they good or be they bad they tend strongly to influence him in the same direction in which they trend. The writer has frequently had occasion to be in the private offices of physicians in various parts of the country and has had a considerable opportunity to test the truth of the above observation. In the majority of instances it has proven only too true. In the libraries of the most aggressive, successful and intelligent men is found the best assortment of the latest books, while in those belonging to the men who are satisfied with the knowledge obtained during their college course, will be found antiquated books on subjects the knowledge of which has been steadily progressing with every year. It is fully realized that, among younger men in particular, one great obstacle to the accession of a library is lack of the requisite funds to purchase one rather than lack of desire or enthusiasm. Even in such instances, by careful observation, some one of the several excellent reviews or summaries of the various subjects will be found, as they are comparatively inexpensive. On the other hand, of the many new books appearing each year, a large percentage, probably the majority, do not come up to the somewhat extravagant claims made for them by the over-enthusiastic agent. Too many men write books for the sake of self-aggrandizement and ethical advertising, too few because they have really something new to give to the world. In order, therefore, to give to our readers an adequate and unbiased idea of the value of some of the newest books along various lines, this article has been prepared. Several weeks ago we wrote to all the leading medical publishers concerning their best new books, and at the same time requested from a number of specialists their personal opinions about the books in their own specialties. Thus we were able to obtain both sides of the question, the opinion of both the publisher and the reader. To this we have added our own personal opinion, obtained from familiarity with the various books sent to the *Gazette* for review or other mention. To these sources we have added some notes gleaned from general reading or from miscellaneous means. In our notes particular emphasis is given to the books with which we or our consultants are personally

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familiar, as of these we can speak definitely. This does not by any means indicate that other books receiving merely cursory notice or even none at all are unsatisfactory, as they may be in all ways excellent. It merely means that this is the opinion of the editor, made with the assistance of a number of consultants, and like all other opinions may be subject to much change as other data accumulate. We sincerely regret our inability to include in our list the publications of William Wood & Co. and the F. A. Davis Co., as they have doubtless produced as excellent a series during the past years as has been their custom for other previous ones. As yet, however, no information has been received in answer to our inquiries, by means of which they can be represented. The principal books of the year, as far as they have been brought to our attention, are given in the following classified list, accompanied by occasional note or comment.

ANATOMY AND PATHOLOGY.

Anatomy, Descriptive and Applied. Henry Gray. Eighteenth Edition. Revised by E. A. Spitzka. $6.00. Lea & Febiger.

Certainly no comment need be made concerning this book with which every medical student is familiar. It is one of the foundation stones of medicine.

Applied Anatomy. G. G. Davis. $6.00. J. B. Lippincott Co.

Racial Anatomy. R. B. Beane. $2.00. J. B. Lippincott Co.

Normal Histology. Piersol. $3.50. J. B. Lippincott Co.

This book, now in its eighth edition, has come to be regarded as a standard work of sterling worth.

The Essentials of Histology, Descriptive and Practical. E. A. Schafer. $3.50. Lea & Febiger.

An old and well-tried friend, now in its eighth edition.

A Manual of Human Embryology. Keibel and Mall. $7.50. J. B. Lippincott Co.

The first volume of this book has but recently appeared.

Embryology. A Laboratory Text-Book. C. S. Minot. $3.50. P. Blakiston's Son & Co.

Minot's work on embryology, now in its second edition, is most satisfactory, both from the standpoint of the student and from that of the more advanced worker.

Morphology. Giovanni. $4.50. Rebman Company.

Physiology. Stewart. $5.00. Wm. Wood & Co.

Pathology. J. G. Adami. Two volumes. Lea & Febiger.

This book has taken up a fundamental subject in a manner that is in many respects unique. It has been given a very favorable reception, and is now appearing in the second edition. The first volume, that upon general pathology, is written entirely by Adami. In the second one, that upon systemic pathology, A. G. Nichols has been associated as a co-editor

Practical Pathology. G. Sims Woodhead. $8.00. Oxford University Press.

Anyone familiar with this author, with his work and with his reputation would expect just such an excellent volume as he has prepared. It has proven to be one of the best sellers produced by this house during the year.

Manual of Pathology. W. M. L. Copeland. $4.00. P. Blakiston's Son & Co.

A book now in its fourth edition, that has had an extensive sale.

Morbid Anatomy and Post-Mortem Technique. C. R. Box. $2.00. C. V. Mosby Co.

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Clinical Pathology. T. J. Horder. $3.00. Oxford University Press.

The author has endeavored to give the practitioner a brief survey of the scope and usefulness of modern laboratory methods as applied to the diagnosis and treatment of disease.

Pathogenic Micro-Organisms, Including Bacteria and Protozoa. Wm. H. Park and Anna W. Williams. $3.75. Lea & Febiger.

An excellent book.

General Pathology. E. O. Jordan. $3.00. W. B. Saunders Company.

A complete and comparatively brief treatment of the subject in a very satisfactory manner.

Practical Bacteriology, Blood Work and Animal Parasites. E. R. Stitt. $1.50. P. Blakiston's Son & Co.

Text-Book of Bacteriology. Hiss and Zinsser. $3.75. D. Appleton & Co.

The authors are rapidly making enviable names for themselves, and have produced here a volume that will in no wise detract from their reputation.

The Blood in Health and Disease. Buchanan. $4.50. Oxford University Press.

Anæmia. Ehrlich and Lazarus. $4.00. Rebman Company.

An English translation of the famous German treatise upon this subject. A classic.

Pathology of the Living. Moynihan. $2.00. W. B. Saunders Co.

Veterinary Micro-Organisms. M. Herzog. Lea & Febiger.

HYGIENE.

Hygiene for Mother and Child. F. H. MacCarthy. Harper Brothers.

This recent book is receiving a flattering amount of commendation from the reviewers.

Food and Hygiene. Tibbles. $1.50. Rebman Company.

A Manual of Hygiene and Sanitation. Seneca Egbert. $2.50. Lea & Febiger.

A now standard work that is just appearing in its fifth edition.

DIAGNOSIS.

Medical Diagnosis. Greene. $3.50. P. Blakiston's Son & Co.

A very convenient volume for pocket use, containing much of value.

Medical Diagnosis. J. C. Wilson. $6.00. J. B. Lippincott Co.

The well-known ability of the author is a sufficient guarantee of its value.

Diagnostic Therapeutics. Abrams. $5.00. Rebman Company.

Reported to have been one of the best sellers produced by this company during the year.

Diagnosis and Treatment of Disease. H. A. Cables. $2.50. C. V. Mosby Co.

This book is one of the "Golden Rule" series now being issued by this firm.

Serum Diagnosis of Syphilis and the Butyric Acid Test for Syphilis. Hidyo Noguchi. $2.00. J. B. Lippincott Co.

The opinion of the writer has already been expressed in a very favorable manner in a review that appeared in an early number of the *Gazette.*

Physical Examination and Diagnostic Anatomy. C. B. Slade. $1.25. W. B. Saunders Company.

A good little book covering the fundamental principles of physical examination.

Specific Diagnosis and Specific Medication. J. W. Fyfe. $5.00. Scudder Brothers.

TREATMENT.

Modern Treatment. H. A. Hare. Two volumes. $6.00 per volume. Lea & Febiger.

The writings by this author are well known. The present work

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should prove to be a most satisfactory one and is fully deserving of a large sale. Sold by subscription only.

Principles of Therapeutics. Manquat. $3.00. D. Appleton & Co.

Systematic and Regional Therapeutics. Hoxie. $4.00. D. Appleton & Co.

Prophylaxis and Treatment of Internal Disease. Forchheimer. $5.00. D. Appleton & Co.

A new edition has appeared during the year. Largely through previous editions the work has obtained a well-deserved and wide popularity.

Fever Nursing. J. C. Wilson. $1.00. J. B. Lippincott Co.

The Dietetic Treatment of Tuberculosis. N. B. Bardswell. $1.00. Oxford University Press.

Pulmonary Tuberculosis and Sanatorium Treatment. Muthu. $2.00. Wm. Wood & Co.

Modern Views of Syphilis and Its Treatment. Baar. $2.00. D. Appleton & Co.

Roentgen Rays and Electro-Therapeutics. M. K. Kassabian. $3.50. J. B. Lippincott Co.

The untimely death of the able author of this work is most regrettable, as he was an expert upon the subject treated.

The Opsonic Method of Treatment and Vaccine Therapy. R. W. Allen. $2.00. P. Blakiston's Son & Co.

Probably the best book printed upon the subject of vaccine therapy.

Immunity. W. D'E. Emery. Paul Hoeber.

Excellent and reliable.

MATERIA MEDICA AND PHARMACY.

A Manual of Materia Medica and Pharmacology. D. M. R. Culbreth. $4.75. Lea & Febiger.

Modern Dental Materia Medica, Pharmacology and Therapeutics. J. P. Buckley. $2.50. P. Blakiston's Son & Co.

Materia Medica of Nosodes. H. C. Allen. $4.00. Boericke & Tafel.

A Text-Book on Pharmacy. Charles Caspari. $4.25. Lea & Febiger.

A Manual of Pharmacy for Physicians. M. F. DeLorme. $1.25. P. Blakiston's Son & Co.

A Text-Book of Pharmacology and Therapeutics. A. R. Cushing. $3.75. Lea & Febiger.

A Text-Book of Pharmaceutical Chemistry. C. H. Daggett. $2.75. Lea & Febiger.

A Compend of Pharmacy. F. E. Stewart. $1.00. P. Blakiston's Son & Co.

MEDICINE.

Modern Medicine. Wm. Osler. Seven volumes. $6.00 per volume. Lea & Febiger.

The last volume of this system has appeared during the year. The entire work has undoubtedly been the most pretentious and extended of any one apart from surgery during the past few years. The value of the various volumes as they have from time to time appeared has already been noted in these columns. For completeness, exhaustive treatment and thoroughness we believe that this series prepared by many eminent writers is without rival.

The Practice of Medicine. A. O. J. Kelley. $4.75. Lea & Febiger.

A satisfactory work by a very pleasing writer.

The Treatment of Disease. R. W. Wilcox. $6.00. P. Blakiston's Son & Co.

The third edition of this work. It has proven itself to be eminently satisfactory. Sold by subscription.

System of Medicine. Allbutt and Rolleston. $6.00. The MacMillan Company.

Contagious, Constitutional and Blood Diseases. A. L. Blackwood. Boericke & Tafel.

Emergencies of General Practice. Sargent and Russell. $5.50. Oxford University Press.

A well-written book upon a subject of great practical value.

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Hyperæmia as Applied in Medicine and Surgery. Bier. $4.00. Rebman Company.

The originator of this now extensively used method of treatment gives his personal opinion of the treatment and methods of its application.

Inanition and Fattening Cures. von Noorden. $1.50. E. B. Treat & Co.

Part 8 of the publishers' series of small books upon disorders of metabolism and nutrition.

Technique of Reduction Cures and Gout. von Noorden. $1.50. E. B. Treat & Co.

Part 9 of the series upon disorders of metabolism and nutrition. The author of these books is so well known that his opinions will receive, as they deserve, extensive credence.

Pulmonary Tuberculosis. S. G. Bonney. $7.00. W. B. Saunders.

Distinctly practical throughout. The second edition fully as timely as was the original.

Consumption. Its Prevention and Home Treatment. Thomson. $1.00. Oxford University Press.

The Expectation of Life of the Consumptive after Sanatorium Treatment. N. D. Bardswell. $1.50. Oxford University Press.

Heart Disease, Blood Pressure and the Nauheim Treatment. L. F. Bishop. $3.00. E. B. Treat & Co.

Diseases of the Stomach and Intestines. R. C. Kemp. $6.00. W. B. Saunders Co.

This book received three printings in eight months so great was its unusual popularity. It has proven to be one of the best sellers of the year.

Dyspepsia. W. S. Fenwick. $3.00. W. B. Saunders Co.

Diseases of the Pancreas. E. L. Opie. $3.00. J. B. Lippincott Co.

The name of the author we almost always associated with pancreatic disturbances on account of his unusual work in connection with that organ.

Constipation and Allied Intestinal Disorders. A. F. Hertz. $4.00. Oxford University Press.

A very practical work.

Hookworm Disease. George Dock and C. C. Bass. $2.50. C. V. Mosby Co.

We understand that this book has had a very large sale, particularly in the southern parts of the country. According to our previously expressed opinion this result is most deserving.

Diseases of the Heart and Aorta. A. D. Hirschfelder. $6.00. J. B. Lippincott Co.

The History of Medicine. Max Neuberger. Volume I now ready. $9.00, Oxford University Press.

This first volume treats of the history of medicine from remote antiquity to the middle ages.

Diseases of China. Jeffreys and Maxwell. $6.00. P. Blakiston's Son & Co.

An unusual book in many respects.

SURGERY.

The Practice of Surgery. J. G. Mumford. $7.00. W. B. Saunders Co.

This promises to fulfill all the many expectations that have been entertained for it. The publishers state that it is proving to be of great popularity.

General Surgery. Lexer-Bevan. $6.00. D. Appleton & Co.

Modern Surgery. General and Operative. J. C. DaCosta. $5.50. W. B. Saunders Co.

The sixth edition has but recently appeared. It has proven eminently satisfactory.

Surgical After-Treatment. L. R. C. Crandon. $6.00. W. B. Saunders Co.

This has received two printings in six months and in our estimation fully deserves all the popularity that it is at the present time receiving. It covers a subject heretofore only too frequently neglected. Concerning its value we are very enthusiastic.

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Preparation and After-Treatment in Operative Cases. Haubold. $6.00. D. Appleton & Co.

A Manual of Surgery. A. Thompson and A. Miles. Two volumes. $7.00. Oxford University Press.

Vol. I, General Surgery; Vol. II, Regional Surgery.

The Practice of Surgery. Spencer and Gask. $5.50. P. Blakiston's Son & Co.

Surgical Anatomy. Fred'k Treves. $2.25. Lea & Febiger.

The fifth edition of a well-known work.

Operative Surgery. J. F. Binnie. Vol. II. $3.50. P. Blakiston's Son & Co.

One of the leather-bound series of manuals. It covers the vascular system, the bones, the joints and amputations.

Manual of Emergency Surgery. J. W. Sluss. $3.50. P. Blakiston's Son & Co.

We can speak from personal experience concerning its usefulness and reliability.

Gall Stones. Their Complications and Treatment. A. W. Mayo-Robson and P. J. Camidge. $1.50. Oxford University Press.

The names of these authors are inseparably united with lesions of the gall bladder and pancreas.

Dislocations and Joint Fractures. F. J. Cotton. $6.00. W. B. Saunders Co.

Many local physicians have spoken to the writer most enthusiastically concerning this work. There is undoubtedly none superior to it in the field covered.

A Treatise on Orthopedic Surgery.. Royal Whitman. $5.50. Lea & Febiger.

The fourth edition of this justly popular work has but recently appeared.

A Treatise on Fractures and Dislocations. L. A. Stimson. $5.00. Lea & Febiger

An earlier edition has been favorably reviewed in these columns. The present one fully justifies the opinion then expressed.

Anatomical and Surgical Study of Fracture of the Elbow. A. P. C. Ashurst. Lea & Febiger.

Fractures and Their Treatment. J. H. Pringle. $5.50. Oxford University Press.

Sprains and Allied Injuries of the Joints. R. H. A. Whitelocks. $3.00. Oxford University Press.

Hernia, Its Cause and Treatment.. R. W. Murray. $1.75. P. Blakiston's Son & Co.

Duodenal Ulcer. V. G. A. Moynihan. $4.00. W. B. Saunders Co.

The author's ability to write upon this subject must be unquestioned. His results are excellent.

Cystoscopy. Rumpel. $8.50. Rebman Co.

Bismuth Paste in Chronic Suppuration. E. C. Beck. $2.50. C. V. Mosby Co.

A book upon a special method of treatment by the originator of such treatment cannot fail to be of value.

Nephro-Coloptosis. H. W. Longyear. $3.00. C. V. Mosby Co.

Dawn of the Fourth Era in Surgery. R. T. Morris. $1.25. W. B. Saunders Co.

Surgical Anatomy. W. E. Macewen. $3.00. Wm. Wood & Co.

Borderland Surgery. G. M. Blech.

PEDIATRICS.

The Diseases of Infancy and Childhood. Henry Koplik. $5.00. Lea & Febiger.

The author is well known as an authority in his subject. His book is equally authentic and valuable.

Common Disorders and Diseases of Childhood. Still. $5.50. Oxford University Press.

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A very practical and deserving work. Has received wide popularity.

Diseases of Children. Goodhart and Still. $5.00. P. Blakiston's Son & Co.

The Surgery of Childhood. D. F. Willard. $7.00. J. B. Lippincott Co.

A Handbook on the Surgery of Childhood. E. Kirmisson. $7.00. Oxford University Press.

This book is proving to be a great seller.

Surgery of Childhood. S. F. Wilcox. $3.50. Boericke & Runyon.

Mentally Deficient Children. Shuttleworth and Potts. $2.00. P. Blakiston's Son & Co.

The Roentgen Ray in Pediatrics. T. N Rotch. $6.00. J. B. Lippincott Co

NEUROLOGY.

Brain Diseases. Hollander. $2.00. Rebman Co.

Nervous Diseases. Turner and Stewart. $6.00. P. Blakiston's Son & Co.

Diseases of the Nervous System. J. E. Wilson. $3.50. Boericke & Runyon.

A work that has given very general satisfaction.

Mental Diseases. Tanzi. $7.00. Rebman Company.

Mental Diseases and Their Homœopathic Treatment. W. M. Butler. Boericke & Runyon.

The material is excellent.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

A Treatise on Diseases of the Nose, Throat and Ear. W. D. Ballenger. $5.50. Lea & Febiger.

Probably the most universally popular of any one work covering these subjects that has appeared during the past few years. Now in its third edition.

Diseases of the Nose, Mouth, Pharynx and Larynx. Bruck. $5.00. Rebman Company.

An English translation of a German classic. Undoubtedly deserving of even more general use than it is receiving.

Rhinology and Laryngology. Fein. $1.50. Rebman Company.

Diseases of the Eye. G. E. de Schweinitz. $5.00. W. B. Saunders Co.

The sixth edition has just been prepared. No one doing any extensive work in this subject should be without the book.

A Treatise on Diseases of the Eye. J. E. Weeks. $6.00. Lea & Febiger.

An entirely new work. The subject is treated concisely and clearly, and deserves much credit.

Ophthalmic Therapeutics. A. Darrier. $4.00. P. Blakiston's Son & Co.

A review will probably appear in these columns next month and will be decidedly commendable.

Lessons on the Eye. F. L. Henderson. $1.50. P. Blakiston's Son & Co.

Principles and Practice of Modern Otology. Barnhill and Wales. $5.50. W. B. Saunders Co.

One physician says: "I regard it as one of the best books in the English language on the subject."

The Ear and Its Disorders. Gray. $4.25. Wm. Wood & Co.

Physiology and Pathology of the Semi-circular Canals. Iberslohoff. Paul Hoeber.

GYNECOLOGY.

Diagnosis and Treatment of Diseases of Women. H. S. Crossen. $6.00. C. V. Mosby Co.

One of the most satisfactory books of the year upon this subject. Illustrations excellent. The popularity has been wide.

Diseases of Women. Bland-Sutton and Giles. $3.25. Rebman Co.

The fact that this book is now in its sixth edition is guarantee of its worth.

Gynecological Diagnosis. Burrage. $6.00. D. Appleton & Co.

Sexual Life of Woman. Kisch. $5.00. Rebman Co.

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One of the best sellers put forth by this company. An exhaustive consideration of an important topic.

OBSTETRICS.

Practical Obstetrics. E. H. Tweedy. $5.50. Oxford University Press.
A very practical book well deserving its marked popularity.

A Manual of Obstetrics. A. F. A. King. $2.75. Lea & Febiger.
The eleventh edition has just appeared.

Puerperal Infection. A. W. W. Lea. $9.00. Oxford University Press.

Prevention and Treatment of Abortion. F. J. Taussig. $2.00. C. V. Mosby Co.

Motherhood. H. D. Bishop. Rose Publishing Co.

DERMATOLOGY.

Portfolio Dermochromes. Three volumes. $25.00. Abraham Jacoby. Rebman Co.
There will be no need of speaking with enthusiasm concerning this book, as it is undoubtedly widely known to all of our readers. The new fourth edition is equally as satisfactory as the others have been.

A Treatise on Diseases of the Skin. H. W. Stelwagon. $6.00. W. B. Saunders Co.
Without a superior in its specialty.

GENITO-URINARY DISORDERS.

Genito-Urinary Surgery and Venereal Diseases. Ninth edition. White and Martin. J. B. Lippincott Co.

Male Diseases in General Practice. E. M. Corner. $6.00. Oxford University Press.

Diseases of the Genito-Urinary Organs. Keyes. $6.00. D. Appleton & Co.

Gonorrhoea. Baumann. $1.50. D. Appleton & Co.

MISCELLANEOUS.

The Practitioner's Medical Dictionary. G. M. Gould. $4.00. P. Blakiston's Son & Co.

Medical Dictionary. H. W. Catell. $5.00. J. B. Lippincott Co.

Medical Vade Mecum. In German and English. $5.00. B. Lewis. P. Blakiston's Son & Co.

American Red Cross Abridged Text-Book on First Aid. 30 cents. Lynch and Shields. P. Blakiston's Son & Co.

Hydrotherapy. G. Hinsdale. W. B. Saunders Co.
An important book upon an important subject.

Personal Hygiene. W. L. Pyle. $1.50. W. B. Saunders Co.

Hygiene for Mother and Child. F. H. MacCarthy. Harper Brothers.

Commercial Organic Analysis. A. H. Allen. Eight volumes. $5.00 per volume. P. Blakiston's Son & Co.

Uric Acid in the Clinic. A. Haig. $1.50. P. Blakiston's Son & Co.

Foods and Their Adulterations. H. W. Wiley. $4.00. P. Blakiston's Son & Co.

Evolution and Heredity. Hart. $2.00. Rebman Co.

Biology. Medical and General. J. McFarland. $1.75. W. B. Saunders Co.

Medical Electricity and the Roentgen Ray. S. Tousey. $7.00. W. B. Saunders Co.
A very important book which is receiving very general recommendation.

Nutrition and Dietetics. Hall. $2.00. D. Appleton & Co.

Conquest of Disease through Animal Experimentation. Warbasse. $1.00. D. Appleton & Co.

MEDICAL REVIEWS.

A number of quarterly or other reviews of the year are prepared by various houses. The following we consider to be the most important

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that have been brought to our attention.

Progressive Medicine. Lea & Febiger.

Numerous reviews have expressed our very favorable opinion of this quarterly.

International Clinics. J. B. Lippincott Co.

International Medical Annual. E. B. Treat.

A complete reference handbook of modern therapeutics and treatment.

A Practical Medicine Series of Year Books. The Year Book Publishing Co.

These cover in a very satisfactory manner the progress of the year in the various departments of medicine.

A book that gives promise of much that will be of interest has just appeared, published by P. Blakiston's Son & Co. As we go to press before a copy is received, detailed statements cannot be made. This book is entitled "Induced Cystogeny in Cancer" and has been written by Hugh Campbell Ross of Liverpool.

A series from which we are expecting much is announced by Rebman Company to appear soon. It is as follows:

"The Experimental Chemico-Therapy of the Spirilla of Syphilis, Relapsing Fever, Yaws, etc." Ehrlich and Hata. $4.00.

"The Treatment of Syphilis with Dioxy-Diamide-Arseno-Benzol (Ehrlich-Hata 606)." Wechselman. $5.00.

"The Treatment of Syphilis by the Ehrlich-Hata Remedy." Bresler. $1.00.

BOOK REVIEWS.

Owing to the length of the preceding editorial and list, book reviews are held over until the February number.

THE MONTH'S BEST BOOKS.

Clinical Pathology. Weiss. J. & A. Churchill.
Diseases of the Nose, Throat and Ear. $2.50. Gleason. W. B. Saunders.
Diseases of the Eye. Weeks. Lea & Febiger.
Diseases of the Pancreas. Opie. $3.00. J. B. Lippincott Co.
Fever Nursing. Wilson. $1.00. J. B. Lippincott Co.
Histology. Stewart. $5.00. Wm. Wood & Co.
Hygiene of Infancy and Childhood. Fordyce. $2.50. Wm. Wood & Co
Medicine. Allbutt and Rolleston. $6.00. The MacMillan Co.
Modern Treatment. Vol. I. Hare. $6.00. Lea & Febiger.
Obstetrics. King. Lea & Febiger.
Ophthalmic Therapeutics. Darrier. P. Blakiston's Son & Co.
Orthopedic Surgery. Whitman. Lea & Febiger.
Pathology. Adami. Lea & Febiger.
Pharmacy for Physicians. DeLorme. $1.25. P. Blakiston's Son & Co.
Practical Bacteriology, Blood Work and Animal Parasitology. Stitt. $1.50. B. Blakiston's Son & Co.
Surgery. Mumford. $7.00. W. B. Saunders Co.
Surgery of Children. Kirmisson. Oxford Medical Publications.
Syphilis and Its Treatment. Baar. $2.00. D. Appleton & Co.
The Treatment of Disease. Wilcox. $7.50. P. Blakiston's Son & Co.
Urgent Surgery. Lejars. $7.00. Wm. Wood & Co.
Diseases of Children. Goodhart & Still. $5.00. P. Blakiston's Son.
Gynecological Diagnosis. Burrage. D. Appleton & Co.
Fractures and Their Treatment. Pringle. Oxford Medical Publications.
Diseases of the Skin. Stewagon. $6.00. W. B. Saunders Co.
Anaemia. Ehrlich and Lazarus. $4.00. Rebman Co.
Mental Symptoms of Brain Disease. Hollander. $2.00. Rebman Co.
Phases of Evolution and Heredity. Hart. $2.00. Rebman Co.

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Modern Treatment of Alcoholism and Drug Narcotism. McBride. $2.00. Rebman Co.

We are in receipt of the first copy of the new Italian journal of Homœopathy: La Critica, Giornale di Medicina Omiopatica Scientificæ Chirurgia. The editors are Drs. Mattoli, Sr. and Jr. Upon the last page we find a list of the homœopathic colleges. This has apparently been taken from some old list, as several institutions now defunct are named. One institution with which we must confess we are not familiar in this list is the Mc Killip Veterinary College of Chicago, Ill.

This first number, however, upon the whole, seems to be attractive and will doubtless be of much value to our Italian confreres.

The editor is in receipt of the Clinical Research leaflet, No. 1, published by the American Association of Clinical Research. This describes what is meant by the term "clinical research," speaks of the conjoined method of observation and experiment, method of recording observations, etc. Physicians and surgeons are urged to co-operate in this movement. All hospitals are requested to begin conjoined research along the lines indicated.

Circulars and further information may be obtained from the secretary, Dr. James Krauss, 419 Boylston Street, Boston.

The Rebman Publishing Company of New York City announce that beginning with the present month they will take over the publication of the Journal of Cutaneous Diseases.

SOCIETIES.

BOSTON HOMŒOPATHIC MEDICAL SOCIETY.

The last two meetings of the Boston Homœopathic Medical Society have been of unusual interest in a number of respects. At the meeting held November 3 the Society placed itself on record as favoring an affiliation with the Massachusetts Medical Society in a manner similar to the affiliation voted by the Worcester County Society and by the Western Massachusetts Society. By this affiliation, which has now gone into force, the Society is really a district branch of the State organization. All candidates for office in future must, therefore, be members of the State Society.

The scientific program was as follows:

"The Diet of Children As Influenced by Fecal Examination," Dr. J. Arnold Rockwell.

"Normal Occlusion and Its Influence on the Development of the Facial Bones," Dr. Alfred P. Rogers.

"Surgery of the Mouth in Children," Dr. L. M. S. Miner.

The December meeting consisted of a symposium upon Arteriosclerosis under the direct supervision of Dr. J. P. Sutherland. Dr. Sutherland presented the main paper of the evening, and this was discussed from its various aspects by Drs. E. P. Colby, Frank C. Richardson, J. Herbert Moore, H. P. Bellows, D. W. Wells, S. H. Blodgett, N. M. Wood, Percy Browne and C. A. Eaton.

Much interest was manifested, the time being too short to satisfactorily cover the subject.

MASSACHUSETTS SURGICAL AND GYNECOLOGICAL SOCIETY.

The semi-annual meeting of this society was held on Wednesday, December 14. The morning was devoted to a surgical clinic at the Massachusetts Homœopathic Hospital, where operations were performed by Drs. Chandler, Wesselhoeft, Packard, Smith, Briggs, Howard and Southwick. In the afternoon the formal papers were presented at the meeting at Young's Hotel, all of which will shortly appear in the *Gazette*. At 7

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o'clock the semi-annual banquet was held at Young's Hotel, with a record attendance.

The post-prandial exercises consisted of a speech upon medico-legal testimony by Judge Michael Murray, of an interesting talk upon the relation of the physician and the clergy by a member of the latter body, and concluded with an eloquent oration from Dr. H. D. Arndt, Field Secretary of the American Institute of Homœopathy. Dr. Arndt spoke with great enthusiasm concerning his work and the prospects, showing to his audience the possible dangers of homœopathy as well as the large fields that are at present waiting occupancy.

A sad feature of the meeting was the sudden illness of Dr. H. E. Spalding, so well known to all our readers.

AN ENJOYABLE MEETING OF HOMŒOPATHS IN NEW YORK STATE. The *Gazette* learns of a very enthusiastic meeting of well-known homœopaths which took place in Utica, New York, on the evening of Friday, December 9. Upon the invitation of Dr. C. G. Capron of Utica, a large gathering occurred, and among those present were such well-known men in Homœopathy as Copeland of New York, Biggar of Cleveland, LeSeur of Batavia, N. Y., Wilcox of Boston, Dowing and Van Loon of Albany. Following the elaborate banquet came the post-prandial exercises, Dr. Capron acting as toastmaster. Dr. Royal S. Copeland delivered the first speech, his subject being "The Present Status of Scientific Medicine." In this he combatted many of the statements made by the Carnegie Report, making a strong plea for Homœopathy and its perpetuation as a special method of treatment. Dr. DeWitt G. Wilcox of Boston spoke upon the value of homœopathic colleges. His argument was chiefly in favor of the perpetuation of these colleges, claiming that they, above all others, are teaching the broadest medicine in that they teach all the things that the other schools teach and add to this Homœopathy.

Dr. H. F. Biggar of Cleveland and Dr. LeSeur of Batavia also spoke in the manner so characteristic of them. The meeting throughout was marked by great enthusiasm.

PERSONAL AND GENERAL ITEMS.

Dr. H. D. Arndt, Field Secretary of the American Institute of Homœopathy, was the guest of Boston physicians for three days in December. During this time he delivered addresses before the Massachusetts Surgical and Gynecological Society, before the students of Boston University School of Medicine and before the Alpha Sigma fraternity. This being the Doctor's first visit to New England, his coming was eagerly anticipated, and the work that he did and the impression that he gave readily accounts for the unanimity of opinion concerning his election when the question of field secretary was broached in Los Angeles last year. Those of us who had met him before were enabled to make more intimate the pleasant relations already existing, while those who met him for the first time found that his reputation by no means belied the reality. He was entertained at a dinner given by a number of physicians at the Boston Art Club. From Boston he went to Worcester, and thence, we understand, to Springfield, visiting the homœopathic institutions in these two cities.

Dr. Henry E. Spalding, well known on account of frequent contributions to these columns, as well as by his extensive work in the medical profession, was taken suddenly ill at the banquet held at Young's Hotel by the Massachusetts Surgical and Gynecological Society on December 14. He was taken to the Massachusetts Homœopathic Hospital, where he remains in a comfortable and, we understand, slowly improving condition.

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Dr. W. H. Watters gave in December a series of lectures upon Pathology of the Mouth at the Medical School Building to the Massachusetts Dental Association.

Dr. Dorothea Lummis Moore (class of '84, B. U. S. M.) has removed from Los Angeles, California, to 253 St. Ronan Street, New Haven, Connecticut.

Dr. D. W. Livermore, class of 1906. B. U. S. M., has removed from Boston to Wallingford, Connecticut.

Dr. G. J. Jackowitz, B. U. S. M., 1907, of New Haven, Connecticut, was married to Miss Ethel M. Spaulding of Cheshire, Connecticut, on October 18, and has removed from 664 Chapel street to 318 Orange street.

Dr. H. Martin Morse, class of 1896, B. U. S. M., formerly of Peterboro, N. H., but recently of Claremont, N. H., has removed to Springfield, Vt.

Dr. LeVerne Holmes, B. U. S. M., class of 1904, has removed from West Stewartstown, N. H., to Manchester, Conn.

Dr. Sarah Adleman, class of 1910, B. U. S. M., has taken service at Fergus Falls Insane Hospital, Fergus Falls, Minn.

ROCKEFELLER INSTITUTE HOSPITAL.—The new hospital erected in connection with the Rockefeller Institute, New York, was opened for inspection in October. It contains 70 beds, which will be used for the treatment of selected cases only. At present infantile paralysis, pneumonia, heart disease and diseases of metabolism will be received for study. The following staff has been appointed: Director, Rufus I. Cole; physician, C. A. Herter; resident physician, C. C. Robinson.

It is announced that at the opening of the hospital Mr. Rockefeller added to the endowment of the institution the fund amounting to about three million dollars. The hospital is situated near the laboratory buildings and is open on all sides. There is a separate structure for contagious cases. The total height is eight stories; four of which will be used for patients, the others being devoted to rooms for study and investigation. One entire floor is devoted to clinical laboratories. On account of their generous endowment the entire staff is paid sufficiently large salaries so that their entire time will be devoted to the work of the institution.

Dr. Hermann M. Biggs of the Department of Health, New York, urges the establishment of a new research laboratory to be devoted exclusively to the study of specific therapy and preventive medicine. The expense of such a laboratory, including salaries, equipment and supplies, he estimates as about $46,000 annually.

Very few recognize the importance of rest in chronic parenchymatous nephritis. Many have been the experiences in which the albumin has been found all but absent in the morning, while the reaction was pronounced at night. In acute parenchymatous nephritis it is the rule for the albuminuria to continue for many months after the disappearance of all symptoms, and it is almost as frequent to find such patients up and about within a week after symptoms have disappeared. These patients constitute probably the class over which I have had the greatest difficulty in obtaining control, probably because aggravations from indiscretions do not subject them to inconvenience.—Bartlett.—The Hahnemannian Monthly.

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THE NEW ENGLAND
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ORIGINAL COMMUNICATIONS.

LABORATORY HELPS IN DIAGNOSIS OF GASTRIC CARCINOMA.*

By W. Henry Wilson, M.D., Chicago, Ill.

The diagnosis of carcinoma of the stomach belongs to the general practitioner as well as to the surgeon. Its early diagnosis belongs to the general practitioner alone. The mastery not only of the subjective symptoms, but of the objective symptoms as well, by this same general practitioner is of great moment. For, to express one's self in a language that is somewhat contradictory, the time has come when gastric carcinoma must be diagnosed before it has become carcinoma. With the clinical symptoms of the fully developed carcinoma most physicians are familiar, especially with the kind which is accompanied by obstruction and dilatation.

There are three groups of objective symptoms, which help in the diagnosis of cancer. These symptoms are furnished by an analysis of the stomach contents, the blood, and faeces. To understand objective as well as subjective symptoms of gastric carcinoma, it is necessary that we comprehend fully the actual possible state of the stomach when affected by malignant disease.

There are five kinds of gastric carcinoma. The scirrhus or hard cancer, the medullary cancer, adeno-carcinoma, the colloid and squamous celled cancer.

Scirrhus cancer is usually near the pylorus. It is a very hard, rather smooth thickening of the wall. It is so hard that the cutting knife creaks when it passes through it. There may be an occasional elevation of the surface, and this elevation may be ulcerated. Pyloric obstruction is usually pronounced. This tumor is a tumor of battle-fields. Every portion has been contested by the connective tissue. The epithelial tissue has won but won slowly.

Medullary cancer is also found most frequently at the pylorus, but may be in the wall without involving the pylorus. This tumor forms a fungus mass as large as an egg or orange. It is spongy and rich in blood vessels. It sometimes breaks down

*Read before the Illinois Valley Homœopathic Medical Association, November 4, 1910.

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in the middle owing to the central starvation. This is a most frequent form of cancer, being twice as frequent as the scirrhus. Adeno carcinoma are large soft fungus masses which are almost in shreds like a papilloma. The other forms of cancer are rare.

These cancers modify the shape and action of the stomach in different ways. Scirrhus cancer of the wall may contract the stomach to a few ounces capacity, or it may form a middle constructure dividing it into two, almost separate, compartments. In such an event a passage of the stomach tube will find fluid in two cavities instead of one. Sixty per cent. of all cancers are at the pylorus. Notwithstanding the fact that they may start some distance away they usually reach it eventually. Twenty per cent. of cancers are on the lesser curvature. Ten out of a hundred are located at the cardiac end.

As indicated above, carcinoma is not a simple disease. Rather it gives rise to several groups of diseases. Some of those combined may be suggested. We may have gastric carcinoma at the cardiac end of the stomach with stenosis of the oesophagus. This gives the effect of malignancy and starvation. Another combination and one which is frequent is cancer of the pylorus plus pyloric obstruction, plus gastric dilatation, plus atony, plus chronic gastritis, all of which leads not only to the toxemia of malignancy, but the toxemia of gastric fermentation. The inability to take food leads to starvation.

Taking up now objective symptoms, let us consider how these various pathological conditions of the stomach affect, first, the faeces; second, the blood, and third, the stomach contents. The principal contributions to the faeces are small, almost daily, hemorrhages. The bleeding is a persistent capillary hemorrhage. On the other hand, gastric ulcer bleeds from a larger vessel and is more profuse. Ulcer may give a tarry, black stool, due to the larger masses of blood. Cancer, on the contrary, gives blood in such small quantities that only some special test, like the Alvin test, will find it. In carrying out this test the patient should be placed on a milk and egg diet for several days before the sample is taken. Of course, carcinoma of the bowels must be clinically excluded. If occult blood is found day after day for a number of days, the patient having no symptoms of intestinal carcinoma and the stool free from large masses of blood, but shows occult blood on repeated tests, the presence of gastric carcinoma is to be strongly suspected.

The effect of gastric carcinoma on the blood may be in one or in two directions. First, it gives the same general effect as a malignant tumor anywhere in the body. If, however, it is situated at either orifices and causes starvation, the picture will more closely resemble that of a primary anemia. In such a patient I find that the increase of neutrophiles will, as a rule, survive the effects of starvation. This is a very important find-

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ing. This high neutrophilic percentage is doubly significant when starvation has depressed the total number of white cells below normal.

Gastric Contents.—The vomitus may be of service by noting the time, the naked eye appearance and the presence or absence of blood. Eighty per cent. of all gastric cancers are accompanied by vomiting. If located at the cardiac end the vomiting will occur promptly after meals. If at the pyorus end the vomiting will be late. If the amount vomited is very large, especially if it be larger than the amount taken, gastric dilatation is present. If some of the food particles rise to the top and float because of the bubbles of gas, then gastric fermentation is present. If the mass vomited is nearly all tenacious, stringy mucus, with incorporated food particles, then chronic gastritis is present. If masses of fresh blood are present and the vomiting was accompanied by pain, the food particles well digested, a gastric ulcer is probable. On the other hand, blood in the form of coffee grounds means blood that is partly digested, or rather converted, and consequently blood that entered the stomach more slowly. Such blood is suggestive of carcinoma but does not prove it. The examination of the stomach contents following the giving of a test meal is of greater value than the vomitus. For this purpose the Ewald test breakfast is ordinarily employed. In my experience the oatmeal breakfast has been unsatisfactory because if obstruction is not present the stomach is almost invariably empty and you are no wiser than before. Of course, one can give a second test meal, but I have found few patients who were longing for a second experience with the stomach tube. The test meal should be taken in the morning after a twelve-hour fast. It should ordinarily be withdrawn in one hour. If the stomach is normal, the findings will be as follows:

Amount recovered—one or two ounces.

Odor—almost none.

Color—yellow, milky looking.

On standing it will separate in two layers, one of fluid and one of bread. These will be about equal.

The food particles will be fresh and well divided.

Lactic acid—absent.

Blood—absent.

Mucus—very small amounts.

The starch grains will react moderately to iodine.

Free hydrochloric acid—15.

Total acids—50 to 60.

These findings serve as our standard.

The findings in gastric carcinoma may be considered as of two kinds, those due to the presence of a malignant growth and those due to the secondary effects. Under this first group comes the diminished or absent hydrochloric acid, the presence of al-

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tered and darkened blood, the presence of lactic acid and Oppler-Boas bacillus. The tests for hydrochloric acid are given in every text book. The recognition of the blood is a familiar clinical fact. One point should be noted that Oppler-Boas bacilli are large enough to be seen by even the dry lens. They are in fairly long threads and should be very abundant to be recognized as definite symptoms.

If the carcinoma is complicated by stenosis and atony we shall have in our somach findings a larger quantity than normal, the food particles will be stale and fermented, as evidenced by some of the food particles being floated to the top by gases. If instead of dilatation we have stenosis with or without gastritis, larger masses of mucus with food particles well incorporated will be in evidence. The stomach contents of a case of simple gastric dilatation will look to the naked eye like that due to malignancy, but in benign cases the Oppler-Boas bacilli will be absent and sarcina-ventriculi or germs arranged in little packets will be present. Simple chronic gastritis will give mucus in masses, but the gastritis of carcinoma will add to this the Oppler-Boas bacillus and lactic acid.

In conclusion, the early diagnosis of carcinoma is looked upon as of great importance now. The time is near at hand, however, when we must recognize that the early diagnosis of gastric ulcer is of still greater consequence, for if the recent observations of the surgeons are correct that condition precedes carcinoma in sixty to seventy per cent. of the cases.

REPORT OF TWO UNUSUAL OBSTETRICAL CASES.

By Frederick V. Wooldridge, M.D., Pittsburg, Pa.

Cæsarian section has come to be classed as an operation of election, and not of last resort. It should not be left until every other obstetrical operation has been tried. The two cases here reported demonstrate nothing new, but both have unusual points of interest making it worth while to give them in detail.

Case 1. Mrs. X. Age 27 years. Primipara.

I first saw the patient September 21, 1909. A glance at the accompanying photograph will give an idea of her physical condition. A history of Pott's disease in early years, with the resulting kyphosis and the deformity of the whole trunk, caused an extreme pelvic distorea. The local spinal tubercular lesion had apparently cleared up, but during the past three years there had been developing pulmonary tuberculosis.

I learned that on July 15, 1909, the patient had a slight hemorrhage, and that there was a typical tubercular history. The following conditions were present: evening temperature 102° and

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103° F.; night sweats; progressive loss of flesh; diarrhea more or less constant, and pulse averaging 110 to 112. Menses always irregular.

Physical examination: height, 4 feet 6 inches; general emaciation; heart, seemingly far back in the thorax, anemic murmur at times; lungs, right apex solid and moist râles all over right side, left apex solid and left lower lobe clear; abdomen, the uterus completely filled the abdominal cavity and palpation of the abdominal organs was impossible, pregnancy of probably eight and a half months' duration.



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Vaginal examination showed the vaginal canal quite long and running directly forward, the os uteri very high up and difficult to reach. The promontory of the sacrum was easily reached, and the conjugate vera was less than 6 c.m. The pelvis was not only shortened antero-posteriorly, but also crowded in transversely. No part of the child presented. The anal orifice pointed backward and slightly upward.

The patient's mental condition was bad. She suffered constantly from the increasing abdominal pressure: dyspnea was marked.

September 28, the day following her removal to a private hospital, Dr. W. F. Edmunson, of Pittsburgh, saw the case in consultation, and it was decided that Cæsarean section offered the best chance for the mother, and the only chance for the child. It was thought wise to improve the patient's general condition for a week before the operation was attempted, but the afternoon of the day following the consultation, September 29, the patient began to have regular uterine contractions. She was given a sedative, and careful preparation made for the operation.

September 30, the patient was anesthetized by Dr. H. W. Taylor, chloroform and oxygen being used; was placed in a modified Trendelburg position and abdominal section done. A living male child was delivered weighing 4½ pounds. It was puny but cried lustily.

A hasty examination of the pelvic inlet showed a shortening of all diameters of the pelvis, so that it would have been impossible to deliver a child weighing even two pounds through the parturient canal. The repair work was done as usual, catgut being used throughout. The patient made an uneventful recovery, was up on the eighth day, and went home on the sixteenth. The baby lived but a few days. It was tubercular and seemed to have no vitality at all. One year after operation the patient is in fairly good condition. The operation seemed to have checked, temporarily, the activity of the tubercle bacilli.

Case 2. Mrs. Y. Age 34 years.

This patient first became pregnant about June 26, 1908. A careful examination at this time disclosed the following: weight, 96 pounds; height, 5 feet; heart and lungs normal; abdominal palpation revealed nothing abnormal. Pelvimetry: interspinous diameter 16 c.m., intercristic diameter 22 c.m., external conjugate 15½ c.m., conjugate vera 9½ c.m., internal transverse 9 c.m., internal oblique 9½ to 10 c.m.

The fact that the patient's mother was a small woman, and had had small children with no severe labors, and also the fact that the patient's husband was of small stature led to the conclusion that a living child might be had by an induced labor or a natural labor if the presenting head was small. Then the patient and her husband refused the radical Cæsarean section. Pregnancy was uneventful, and after the sixth month frequent examinations were

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made to keep track of the relation between the presenting head and the pelvic inlet.

By February 7, 1909, the head of the child was riding above the brim and could only with difficulty be made to engage. The patient was about seven months' pregnant. She was taken to the Pittsburgh Homœopathic Hospital and labor was induced using Dr. Cook's method. The patient was in labor about thirty-six hours, that is, it took the presenting head, the position O. L. A., thirty-five hours to complete the first stage. The os uteri was relaxed and easily dilated. The second stage lasted forty-five minutes. No instruments and no lacerations. The child was a male and weighed 4½ pounds. It lived but five hours. The third stage lasted ten minutes. Recovery uneventful.

The patient became pregnant again about June 6, 1909. Toxemia developed and the uterus was emptied about June 12, by currettement. Recovery normal.

The patient again became pregnant about November 7, 1909. Her health was very good and continued so until June, 1910. Her condition improved somewhat after that, and it was hoped that she could go to term, August 14. However, during the first week in July, the pulse, which had averaged 110 to 120 per minute for a month past, began to go higher. Vaginal examination and palpation showed the presenting head above the brim, and it could not be forced into the inlet or even made to approach any engagement.

The kidneys became less active, both as to quantity and quality of secretion. The urea dropped from 20 gm. to 6 gm. daily, the total solids running about 30 gm. per twenty-four hours.

With all this a lack of nerve control developed. It was decided to operate at once. This would give an eight months' child.

On July 15, Cæsarean section was performed, and at 8.30 A. M. the patient was delivered of a male child weighing 6 pounds and 9 ounces. The child cried as soon as delivered. The recovery of the patient was uneventful, and she left the hospital on the nineteenth day, with a bright and healthy youngster. Today, November 15, 1910, both mother and child are well and happy.

The technic used in both operations was that elaborated by Dr. J. H. McClelland in his article on "Technique of Cæsarean Section," to be found in the Transactions of the Homœopathic Medical Society of Pennsylvania, 1907, page 111.

The Pacific Coast Journal of Homœopathy for November contains the report of the committee on local arrangements for the American Institute of Homœopathy in connection with the recent meeting in Los Angeles. The figures as given should be most satisfactory to all. From it we learn that a total of $3,812 was collected. After all the expenses for the lavish hospitality were paid, a balance of almost $1000 was left in the treasury. We understand that it has been voted to add this balance to the sum of several thousand dollars already in hand for the purpose of starting a homœopathic hospital in that city.

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HYSTEROMYOMECTOMY VERSUS PANHYSTEROMYOMECTOMY.

By H. D. Boyd, M.D., Boston, Mass.

In presenting this paper I am well aware that the subject may be thought hackneyed. Nevertheless, we know that the pendulum of surgery is swinging back to more conservatism in dealing with the pelvic organs of women. There has been much practical research work along this line in the last few years. A large number of cases have been carefully examined before operation and followed up afterward, the results noted and deductions drawn.

That there may be no misunderstanding of terms, let me state that by hysteromyomectomy I mean the removal of the supravaginal portion of the uterus for fibromyomata; by panhysteromyomectomy, the removal of the body and cervix of the uterus for the same cause.

In consideration of this much mooted subject, it will be necessary to review briefly the anatomy of the uterus, so that we may have a clear understanding of the reasons for and against these operations.

The non-pregnant uterus is contained in the pelvic cavity. Its lower segment is imbedded within the pelvic floor, between the bladder and the rectum. The uterus is connected with the ovaries, the abdominal wall, the lateral and posterior walls of the pelvis, the vagina, the bladder and the rectum, by fibro-elastic tissue, muscular bands and peritoneal folds. Most of these attachments, or so-called ligaments, however, have little influence in supporting the uterus; but owing to the intimate connection of the cervix with the vagina, and this with the pelvic floor and with the sacrum by fibro-muscular bands, the lower segment has the advantage of a relatively fixed position. The body, on the contrary, is freely movable.

The uterine artery, from the internal iliac, accompanies the ureter along the pelvic wall to the attached border of the broad ligament. About two cm. from the cervix, and on a level with the internal os, the artery crosses the ureter obliquely in front to the cervix and passes up the lateral border of the uterus, as far as the angle. It gives off the vaginal artery which supplies the cervix and vagina.

The nerves are derived from the utero-vaginal sub-division of the pelvic plexus and also from the second, third and fourth lumbar nerves. The utero-vaginal plexus divides into two parts, the smaller of which is distributed to the fundus, the larger forms a chain of minute ganglia along the cervix and vaginal vault. The cervical ganglion is especially large and lies behind the upper part of the vagina.

Myoma of the uterus, or fibromyoma, is a typical nodular growth, springing from some portion of the uterine body, usually

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above the cervix. Authorities differ as to the origin of myomata, ascribing them to many and varied causes. Kelly and Cullen after an exhaustive study of 1674 of these cases, state: "We still know practically nothing as to the origin of uterine myomata."

Although myomata are present early in life, they seldom have clinical significance until between the ages of thirty and fifty.

The characteristic symptoms of fibromyomata are hemorrhage, excessive flow at periods, anemia, pressure, pains which are variable, depending on the position and size of the tumor. The complications are adhesions, hydrosalpinx, pyosalpinx, ovarian tumors and carcinomatous conditions. C. P. Noble found, in a study of 218 cases, there were complications in 71.

If the patient has been losing much blood, it is essential that she be built up. If the surgeon can choose the time for operation, it is much better to have it before a menstrual period rather than just after one. To prepare the patient for operation, the bowels should be thoroughly cleared out and the twenty-four hours' amount of urine examined. The usual vaginal and abdominal cleansing should be done. After the patient is anaesthetized, a careful bi-manual examination of the growth should be made. The condition of the uterine mucosa should be ascertained by curette. The condition found will have some bearing on the choice of operation; for, if by curettage, malignant changes are discovered, or strongly suspected, a very radical operation is demanded. If nothing suspicious is found in the uterus, the cavity and cervix are thoroughly cleansed

The patient is then placed in position for abdominal operation The skin is thoroughly scrubbed and made as nearly aseptic as possible. The hips are elevated and an incision made in the median line below the umbilicus and carried well down to the symphysis. The tumor is examined for adhesions or other complications. The adnexa are inspected for pathological conditions. The tumor is delivered through the wound. One or both ovaries should be left in the pelvis, if possible. If the ovary is to remain, the ovarian artery is tied near the horn of the uterus. If the ovary is diseased, then the outer end of the broad ligament is grasped and a catgut ligature carried beneath the ovarian vessels and tied. A clamp is placed toward the uterine side of the ligament and the tissues severed between. The round ligament is next tied and clamped in the same way. The peritoneum on the anterior surface of the broad ligament and uterus is now incised from one round ligament to the other. The vesical peritoneum is pushed away with gauze; traction is made on the tumor and the uterine vessels exposed by pushing away the broad ligament from the tumor or uterus. The vessels are tied and a clamp applied to the uterine end. The tissue is cut between. The opposite side is treated in the same manner.

If a hysteromyomectomy is to be performed, the cervix is cut through with curved scissors or knife. The cervix is cupped or

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hollowed out, so that the edges can be easily drawn together. The uterus is given to an assistant to cut open at once to allay any suspicion of cancer. The stumps of the round ligaments and broad ligaments are now drawn down to the cervix and fastened between the flaps. The cervical flaps are brought together with two or three interrupted catgut sutures. The large, loose flap of peritoneum, which now lies in front of the cervical stump, is drawn over the stump and attached to the posterior side of the cervical stump and broad ligaments, covering all cut surfaces. The pelvic floor is carefully wiped dry with sterile gauze, and if nothing further is found to be done, the abdominal wound is closed.

If a panhysteromyomectomy is to be perfomed, the operation proceeds as outlined, until the uterine arteries are tied at the cervix; then, by pushing the broad ligaments away from the cervix, the ureters are carried with it and out of the danger line. A pair of curved, pointed scissors is pushed through in front of the cervix and the vaginal vault cut away as close to the cervix as possible. All bleeding points are picked up and tied; the stumps of the ligaments are brought down to the angles of the wound in the vaginal vault, and secured there. The vaginal wound is partly closed; a gauze drain is passed through the opening into the vagina. The peritoneal flap is brought together over the cut surfaces and the abdominal wound closed in the usual way. Drainage will depend entirely on the complications encountered.

The relief of symptoms afforded by these operations is almost complete. In 200 cases collected by Abel, Burkhardt and Schenk, 94 per cent. of symptoms were fully relieved.

In considering results, however, we must not lose sight of the fact that we are concerned not only with the relief of the present symptoms, but that we must consider the functional results and the future welfare of the patients. We are having these patients come to us at an earlier time of life than in years past. Physicians have found that when a fibromyoma is present, of sufficient size to cause the patient to seek relief, it does not do to temporize, and they are sending them to the surgeon.

Ellice McDonald, M.D., in the Journal of Obstetrics and Gynecology of the British Empire, August, 1909, gives a table of 700 cases of uterine fibromyomata clinically studied. He makes the following points:

1. The menopause does not bring a cure to fibroids; on the contrary, increasing age increases the danger of these growths.
2. There is little danger of malignancy arising in fibroids before forty years of age; after which time the danger increases with each year.

Most of these cases come to us when they are between the ages of thirty and fifty. Some are single, some are married. If we remove both ovaries, we cause the patient much suffering. Even a small piece of ovarian tissue left will give its "hormone" and

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prevent premature menopausal symptoms. Kelly and Cullen found that by saving one or even part of one ovary, 48.1 per cent. of these cases were saved from hot flushes; the remaining had hot flushes only to a slight degree.

It has been found by Starling and Bayliss that each organ has an internal secretion which they call secretin. Its importance lies in the fact that it is only one of a large number of chemical messengers, which, travelling by the way of the blood, from one organ to another, effect a correlation of the functions of the organs concerned. They have called these substances *hormones*. Some authors have claimed that the uterus secretes a hormone.

In a communication to the German Gynecological Congress, Zweifel and Abel found, in tracing the after-history of cases of hysterectomy, that when the uterus had been entirely removed, atrophy of the ovaries always supervened, with menopausal symptoms, similar to those seen after oophorectomy. In three cases, however, in which a part of the uterine mucosa had been saved, menopausal symptoms were absent. Doran, from a study of sixty-five cases, is inclined to support these views, advocating supravaginal amputation of the uterus, in order to prevent the occurrence of sudden artificial menopause. Other authors assert that the removal of the uterus does not affect the ovaries in any way, unless the blood supply has been interfered with.

By removal of the cervix, we weaken the pelvic floor, shorten the vagina, destroy the cervical ganglion, which many claim to be the seat of sexual sensation, and we increase the risk to the patient; in fact, some authorities maintain the mortality from hysteromyomectomy to be 1.5 per cent.; the mortality from panhysteromyomectomy, 4.1 per cent.

Kelly and Cullen, in summing up supravaginal hysteromyomectomy and panhysteromyomectomy, say:

"Considerable difference of opinion exists as to whether supravaginal hysterectomy or total removal of the uterus should be carried out, when myomata exist. After carefully weighing the advantages and disadvantages of each operation, we have adopted supravaginal hysterectomy as the usual procedure.

"Supravaginal amputation is the easier operation, especially in difficult cases, where it is almost impossible to expose the cervix and uterine vessels. In this operation, there is much less danger of injuring the ureters and less tendency to the production of cystitis. When a portion of the cervix is saved, the ends of the round ligaments may be inserted into it, and a good buttress for the pelvic contents is formed, which diminishes the tendency to prolapse of the pelvic contents. Taking it all in all, and making due allowance for the possibility of occasionally encountering sarcoma and carcinoma, we feel that supravaginal hysteromyomectomy is the better operation to adopt in the majority of cases."

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Out of 910 cases operated upon by them for myomata, 851 were supravaginal.

Having thus briefly reviewed the anatomy and physiology of the uterus and ovaries and examined the records of a number of surgeons; and when I take into consideration my own observations, experiences and results, it seems to me that the weight of opinion is in favor of hysteromyomectomy.

Works consulted:—

Gray's Anatomy; Pierso.'s Human Anatomy; Operative Gynecology, (Kelly); American System of Gynecology; Surgical Anatomy, Deaver; The Journal of the American Medical Association; Surgery, Gynecology and Obstetrics; Kelly and Noble; Kelly and Cullen; Fowler; Burghard.

DISCUSSION.

Dr. Southwick:—The casual observer of an ordinary operation for the removal of a uterine fibroid can easily look upon it as one of the simple operations of abdominal surgery. It is doubtful if any other tumor presents such a variety of conditions and complications calling for the greatest resourcefulness and art of the surgeon. The mortality of radical operations for these tumors, up to a comparatively recent period, was such as to make the boldest surgeon hesitate. Great as was Lister's introduction of antisepsis into surgery, his introduction of the catgut suture deserves equal or even greater honor. It is the violin string which has enabled the surgeon to operate on the fibroid of the uterus with a considerable less mortality than attends most epidemics of grippe.

Many methods of operating have been devised to meet the large variety of conditions found. They are classed generally into those calling for complete removal of the uterus, panhysterectomy and supravaginal amputation of the corpus of the uterus, which is the tumor bearing portion in 90 per cent. of the cases. Many operators follow largely one or the other method, become expert in one and naturally believe that particular method to be the best.

Success, however, is not to be measured solely by the patient escaping with her life. There are other questions in addition to living, as her chances will average better than nine out of ten by any modern method. The greatest care must be taken to avoid crippling her physically or injuring the functions of womanhood. In younger women the question of ability to bear children, to menstruate, even in small degree, and to maintain the marital relations are all important. In the woman of middle age such questions require less consideration, but the ability to work and earn her living is always essential, and in certain cases care must be taken to provide against the development of malignant disease and always to guard against unnecessary shock to the nervous system.

The question of operating on small fibroids, producing no symptoms, is still *sub judice*, with the weight of opinion against it, except in the presence of special indications such as a marked family history of malignant disease, rapid growth, location of the fibroid, in cervix uteri, where it might produce dystocia, etc.

The microscope has led to a well defined method of treatment for tumors of the breast, and it is doing a similar work for fibroids of the uterus. Rather more than two per cent. of these tumors show malignant degeneration when removed, and it is a fair inference that a certain proportion of those removed and found innocent would have become malignant if allowed to remain.

The microscopic examination of the sections of the tumor immediately after its removal will satisfy the surgical requirements of the case as effectually as curettage, and in some respects it admits of a more thorough examination of the growth.

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One fact stands out very prominently, i. e., that the malignant degeneration in the great majority of cases takes the form of carcinoma. This fact is of great importance if taken into consideration with a law of growth in pathology, i. e., an epithelial structure like cancer must always have an epithelial origin. In other words, cancer developing in a fibroid or in the uterine stump after operation, always originates in the epithelial lining of the endometrium of the cervical canal or cavity of the uterus. If no epithelium, i. e., no part of the endometrium, is left after operation, the subsequent development of cancer of the uterus, except from the mucous membrane covering the cervix, becomes impossible. The microscope has thus indicated a modification, and, the writer might add, a simplification of the operation described by the essayist.

The enucleation of the fibroid is one of the older operations which has been largely abandoned on account of its higher mortality and uncertainty or recurrence from growth of tiny nodules not seen at the time of operation. It has, however, a special field of usefulness in young women with small nodules under the peritoneum. The writer has in mind a patient from whom a fibroid the size of a hen's egg was enucleated in the sixth month of pregnancy. She made a good recovery. Pregnancy was not interrupted, and she has given birth since to two more children. Had a radical operation been performed, three fine children would have been lost to the family and the mother would not have enjoyed better health.

The great majority of fibroids cannot be treated by enucleation to advantage, even in young women with healthy ovaries which should not be sacrificed. The general type of operation in these cases is a high amputation of the fundus, preserving some of the endometrium and as much healthy ovarian tissue as possible. A new, small uterine cavity and fundus can be reconstructed; the second pelvic diaphragm formed by the broad ligaments and uterus, supported by the round ligaments, can be built up and the patient can be protected from undue pressure on the pelvic floor, as nature intended. Furthermore, she can menstruate, though sterile, and the nervous shock of a premature climacteric is avoided. The amputation of the uterus, at the level of the internal os, as recommended by the essayist, with the attachments of the round and broad ligaments to the stump, is preferred by the writer in the great majority of cases to the removal of the entire uterus. It requires less time than panhysterectomy, varying according to the dexterity of the operator. It preserves the normal attachments of the cervix and vault of the vagina. It has not been followed by prolapse of the vagina, i. e., a vaginal. The writer has seen recently three cases of the latter as a result of panhysterectomy, one of which was by the vaginal route. It does not shorten the vagina, destroy Fraenkel's ganglion, or interfere with the nervous mechanism, all of which deserve much more attention in relation to marital life than has been given to them.

The deep ligation of the uterine arteries on either side of the stump shuts off most of the blood supply and the cervix soon atrophies. The writer knows of but one case in literature of a fibroid growing in the cervix after removal of the corpus uteri. The details of the primary operation in this case are not known to me.

There is a certain amount of risk in injuring the ureters in removing the entire uterus. In a series of 156 such operations in a well known hospital, a ureter was injured in nineteen cases. The mortality between the two methods varies with the skill of the operator. In the hands of an expert the mortality does not greatly vary, but for the ordinary operator, supra vaginal amputation is the safer method.

If malignant degeneration is present, removal of the entire uterus, when possible, admits of no question. If the operation is performed in a benign case with the intention of preventing possible development

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of cancer in the uterine stump, it is a simple matter to cut around the cervix at the level of the internal os and continue the circular incision as the uterus is firmly elevated. The entire cervical canal with its epithelial lining and most of the cervix is cored out in this manner. This method offers all the advantages of total extirpation of the cervix except in the presence of malignant disease, without injury to the ureters, weaking the vaginal vault or shortening the vagina. The writer has tried it in a number of cases with very satisfactory results.

The question of how and when fibroid tumors should be treated from a surgical standpoint is most important to the general practitioner who must care for his patient later. An operation of some kind from which the patient escapes with her life is not enough. It is most essential that the operation shall be adapted to the individual and to the conditions found. The patient should be returned to her home without unnecessary mutilation, with the pelvic structures as nearly intact as possible, able to work, able to perform all the functions of life and with as little tax on her nervous system as possible; a woman restored by the art of surgery to a new lease of happy, healthy living.

BULLOUS DERMATITIS FOLLOWING VACCINATION.

By Clarence Crane, M.D., Boston, Mass.

The patient, a well developed boy of five years, was vaccinated by his family physician on September 6, 1909. The area of scarification was scrubbed with alcohol, and inoculation made with a commercially prepared ivory vaccine point. Six children, in other families, were vaccinated on the same day by the same physician, with no complications. September 14 the physician found a normal vaccination scab. The patient was not seen again until November 1, 1909. At this time the patient was practically covered with blebs, with the exception of a small area on his back. The general condition of the child was good. The evening temperature was about 100. An intense itching was the most troublesome symptom. The boy gradually grew worse, and on November 13 a large amount of blood was noticed in his urine.

The case was first seen by the writer on the afternoon of November 14. The characteristic lesion was present on nearly all parts of the body, especially upon the fore-arms, legs and feet. The eruption could be seen at one time in all of its different stages of development, beginning as an erythematous patch, which became papular, vesicular, pustular and crusty. A number of adjacent vesicles would increase in size, and coalesce to form a large bulla, the contents of which would become semi-purulent and then discharge. There was no ulceration with destruction of the true skin as in pemphigus, but the scab would peel off, leaving a tender, erythematous area of thin skin which would again, in a few days, break out with a new crop of vesicles. After repeated lesions had occurred in one area, an ulceration resulted, which was slow in healing. The boy's face was puffy, his temperature was 100.2, pulse 112. The urine looked black, and was scanty in amount.

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On November 15, the patient entered the Massachusetts Homœopathic Hospital. The twenty-four hours amount of urine was seven ounces, the specific gravity 1015, albumin 15 per cent. by bulk, there was a large amount of sediment which was mostly blood. Cultures were made from freshly ruptured bullae from time to time, and staphylococci were found. Streptococci were found occasionally. Leucocytosis was present, the count showing 30,000.

The disease was characterized by a constant elevation of temperature, the range being as high as 102.5. Another marked symptom was general lymph-adenitis. All of the palpable lymphatic glands were much enlarged and tender, those of the inguinal region almost reaching the point of suppuration. During the height of the disease a general edema occurred, the face, scrotum, foreskin, hands and feet being extremely puffy.

The treatment was directed toward cleansing the affected area, and allaying the intense itching. Moist dressings were found more satisfactory than dry or oily ones. A 5 per cent. aqueous solution of ichthyol was the main reliance as a local measure. This was used in the form of compresses, and changed twice daily. Four injections of a staphylococcus vaccine, and one of streptococcus, were given. Following three of these treatments, a marked decline in temperature was noted.

The condition gradually subsided, and on December 20, 1909, the patient was discharged from the hospital. At this time he was having isolated skin eruptions of the same type. His morning temperature was normal, his evening temperature 100. The urine was practically normal, and the edema had disappeared.

During the past ten months the boy has improved. However, he has continued to have recurrences of the characteristic eruption in a milder form, and at less frequent intervals.

The vaccination was carefully performed, and left a typical scar. The boy was well before being vaccinated; he was very ill afterward. Did the vaccination cause this condition?

Upon inquiring into the family history, it was learned that in 1901, three years before the child was born, the father was treated for the secondary manifestations of syphilis. Two months ago, an eight-year-old brother of the patient developed an interstitial keratitis which is responding to anti-syphilitic treatment. With an undoubted syphilitic taint in the patient, may there not be some relationship between these two conditions?

To Dr. John L. Coffin the writer is indebted for a diagnosis of this unusual case and for helpful advice in its treatment.

DISCUSSION.

Dr. Coffin:—Certain eruptions which take place during the time of vaccination or immediately following it are not very uncommon, particularly erythema multiforme and urticaria. But this case which

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Dr. Crane has given is of an entirely different nature and belongs to the class which may be considered extremely rare.

In 1901, Dr. Bowen of Boston reported a series of cases of which this case of Dr. Crane's is fairly typical. I do not remember the exact number of cases that he reported then, but if memory serves me right he reported about thirteen. They were all in children. They were all characterized by the bullous irritation which was located more upon the face and the arms and legs than upon the body, all characterized by the elevated temperature. In no case reported by him, and in no case that I have seen, have there ever been such marked constitutional symptoms and involvement of the kidney as in this case just reported, and I am inclined to think that this has been due largely to the extent of surface covered by the eruption, which was much greater than those reported by Bowen. In 1902, a year after the cases reported by Bowen, Dr. James S. Howe reported ten cases of this eruption which was similar in character, yet varied somewhat in its location and in its severity.

To get some idea of the frequency, these ten cases were examined at the Massachusetts General Hospital after the smallpox scare, and there had been between one and two hundred thousand vaccinations. There had been 135,000 public vaccinations at that time, so the ten cases resulting show that it is an extremely rare condition.

Now, these cases were all in adults. They were mostly in working men, and mostly in men accustomed to taking alcohol. The cases reported by Howe differ from the others in this point; that the irritation was located more on the face and body than on the extremities, which was the case in the children. They all ran exceedingly high temperatures, and of the ten cases, six died. Of these six cases, two or three had autopsies, and there was found pneumonia, bronchitis and general fibrinous involvement of the entire respiratory tract, and in one case minute ulcerations were found all through the mouth.

These cases are not to be confounded with the others for this reason;—they do not generally begin for some weeks after the vaccine is entirely healed and every sign of it has disappeared, and the patient may be perfectly normal. The average appearance in these cases which have been reported has been five weeks after the vaccine is healed. The duration has been from six to sixteen weeks. I think the shortest that recovered was in three weeks, and the shortest that died was in one week. So that we have here a disease which follows vaccine, and which presents in every case a well marked period of incubation.

The question is asked, "Is it due to vaccination? Is it due to impure vaccine matter or to some infection which takes place at the time of vaccination?" These questions have never been satisfactorily answered.

SPECIALISM IN AMERICA.—Würdemann, in Northwest Medicine, is our authority for the following statement:

"Fifty years ago the real specialists could be counted on the fingers of one hand. Twenty-five years later there were only a couple of hundred, and now, out of the 142,070 physicians in America listed in the A. M. A. directory, there are over 20,000 practicing at the various specialties, and of them nearly 5,000 are more or less skilled in the diagnosis and treatment of eye, ear, nose and throat troubles alone!"

Dr. Howard A. Kelly of Baltimore, in the Sunday School Times for March 27, 1910, contributes a full-page article on "A Physician's View of Christ's Miracles." Dr. Kelly says: "My whole attitude toward the Bible is that of the simple faith of my grandfathers, and any other side that is a critical means of investigation has never appealed to me in the least."—Journal of the Indiana State Medical Association.

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PESSARIES.

By Lucy Barney Hall, M.D., Hyde Park, Mass.

The aim of this short paper on pessaries is to impress the uninterested with the good work that can be accomplished by their use and to assure those who are putting in their first years of experience that this special line of treatment is an art, firmly founded on good judgment and mechanical ingenuity, and grounded on the thorough, persistent study of the individual case. A paper on this old but ever important subject will have its place in the meetings so long as there continue to come to the general practitioner patients worn out by obstructive dysmenorrhoea, unrelieved by general and special medication, exercise, etc., retroversions with perineum intact or retroversions where surgical treatment is inadvisable.

As operations upon the aged are not always satisfactory and young women have prolapsus without needing surgical interference, and many women suffer from more or less bearing down, backache, pressure on bladder, and incontinence of urine, while sterility is so often overcome by well directed treatment, the indicated pessary has its place and is not only a relief to the patient but greatly benefits the condition, often correcting it entirely. We all agree that every woman should come to the menopause with the pelvic organs in the best possible condition, that every case of bad lacerations should be urged to have the matter righted surgically, and the usual outcome of these cases when neglected should be thoroughly explained to the patient. Unfortunately, patients go for years without discomfort and are then made miserable, with complete prolapsus, when age contra-indicates surgical procedure. Much criticism has been given to the use of pessaries which should have been meted out to the abuse. A pessary, the subject of such reproach, may have been scientifically placed and then wholly neglected by the patient, regardless of the physician's advice. Patients have suffered from pessaries too large, or have been inconvenienced or discouraged by those too small, the posterior cul de sac has been often much irritated by a pessary too long in the antero-posterior diameter, without the patient's knowledge, or she may have been made very sore and lame, aggravated by coitus.

A Smith may not give the desired support, may turn or be ejected, while a Hodge, with its extra anterior breadth, rests satisfactorily in place. A hard rubber ring, so simple in design, can cause much abrasion by becoming imbedded in the lateral vaginal walls. There are many reasons for these misfits. A pessary may be placed when not needed, or may be left too long without examination, or inflammation of the uterus or adnexa may be present, when the pessary will add to the irritation, discomfort and danger. An inflamed cervix will often bleed freely

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after removal of a doughnut pessary. The great majority of cases indicating a pessary, must have some preparatory treatment before it can be comfortably borne by the patient, or mechanically adjusted by the operator. The metritis, endomedritis, cervicitis, ovaritis and salpingitis must be carefully and scientifically treated, douches, local medication and high frequency giving most satisfactory results. Four cases from last year's note book:

Mrs. S.—age 74. Mother of four children, suffering from procidentia; called family physician, without examination except as patient stood, a soft doughnut pessary was inserted 3 P. M. Patient in severe pain all night; support was removed by a local physician at 4 A. M. with much difficulty, followed by free hemorrhage. The writer saw the case next day on invitation of first physician. The offending pessary, a number six, well inflated, was brought home as a curiosity. Cleansing douches were given for a week, and a number four doughnut inserted. After a month's wear one less inflated was substituted, then a smaller size, this in turn by a concave hard rubber, and at the end of six months patient wore a Hodge, which has now done duty four months, allowing her to walk comfortably, with all bladder symptoms relieved, and can be kept easily cleansed.

Mrs. T.—age 68. Mother of three children, never conscious of pelvic organs until complete prolapsus while ironing. Physician called at time placed soft rubber ring. This was expelled in two hours. Next day at office a doughnut pessary was used, lost on way home. After several further attempts she was sent to me. Examination revealed a very small vagina, uterus small, prolapsed, but readily replaced, cervix and surrounding parts inflamed from friction. This irritability and short vagina seemed to be the factors in the expulsion of the instruments. Six high frequency treatments, followed by medicated tampons, relieved condition, and a small rubber concave was worn for two months, then a Smith four months. Patient has been six months now without pessary, walks out of doors considerably and does her housework as usual.

Third patient—English lady, age 81, very small, slight build, mother of ten children, eight now living; great walker. After unusually long walk had complete procidentia, uterus very small, anemic. Deprived of walking, patient became nervous, was treated for indigestion and insomnia for two years. Moving about house became so uncomfortable I was called in, replaced organ, filling vagina with gauze bandage, changed after three days. Gave five electrical treatments, taught the patient to remove, cleanse and replace a very small concave pessary. This is not a custom, but was done to please the old lady, who was going into the country on an extended visit. After six months she is reported active and happy.

Miss B.—age 25. Life had become unbearable from dysmenorrhea and apprehension, of years standing. After studying the case, made examination under ether. Uterus low in vagina,

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small, retroposed. Cervical canal was dilated and small Smith pessary placed. Patient was greatly relieved at next period; has had no return of the severe colic. Pessary was removed after six months, but after a painful period was replaced for another six months. Patient has now been without instrument four months, periods comfortable.

Each case requiring a pessary is most interesting and individual, and should be carefully studied as such each time treated, as the parts are seen under different conditions, before and after menses, after usual and unusual exercise, with bowels free and otherwise, under tamponing and without, in different positions, etc. A mental picture is thus made, indicating when case is ready for a pessary, and the style best adapted to the particular case. The size must then be determined, requiring mechanical ability and judgment, born of experience, the smallest possible instrument being always first choice. While preparing this paper the instrument makers have been interviewed in regard to new inventions, but without result except the assurance that pessaries that were relegated to dark shelves some fifteen years ago, in hopes surgery could cure all cases, are now used with much satisfaction where surgery is not indicated or is inadvisable. If the young practitioner would make a study of half a dozen standard patterns, learning to handle them and fixing their contour in mind, remembering that a correct diagnosis is of utmost importance, waiting if there be doubts until they are cleared up, then when clearly indicated he would follow the simple rules of application, being able to pass a finger about the entire pessary, harm could not result, and with the careful fitting of each instrument, knowledge and judgment would be gained until he would become expert. The patient should be instructed, if instrument gives pain, to return at once or remove it herself, to support the vulva with a bit of toilet paper during defecation for twenty-four hours, otherwise to forget its presence, making no change in her marital relations. She will be told to return in two days for re-examination, again in a week and after the first menstrual period, to take a douche once or twice a week to remove the slight odor. To lessen the odor the hard rubber pessary should always be used in preference to the soft, and the simple ring be substituted as early as practicable. The doughnut and concave are never used for married women. The concave should always be floated in water before using, as a slight imperfection will take up the secretions and douche water, giving that indescribable odor. For obstructive dysmenorrhea we are using the Outerbridge dilator with good results, especially in cases of sterility, the little pessary being placed a few days before expected period and removed a week after flow has ceased. When a pessary is doing good work, the bowel and bladder symptoms are relieved, menses improve, patient feels less nervous and that life is worth while.

In our discussions on pessaries the same few unfortunate

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cases are brought to prominence while but little mention is made of the many patients who are yearly aided, by their use, back to health and happiness.

DISCUSSION.

Dr. Wilcox: Pessaries, like women's hats, are subject to change in style, but never entirely lose their popularity. Between the two extremes of opinion, one in which pessaries are adverted for every form of pelvic disturbance, and the other in which they should never be used at all, but are regarded as absolutely vicious, there is a golden mean of opinion, and Dr. Hall has given that so excellently that I do not think I can improve on her general statement of facts.

Just a few words regarding cases where pessaries should not be used. They should not be used in any case where the uterus is not freely movable. If the uterus is at all fixed, it is due to adhesions, and a pessary will do a very great deal of harm in those cases of displacement where there has been an old-time pelvic inflammation resulting in tubo-ovarian abscess with adhesions and thickening of the pelvic tissue. If a pessary be inserted in such a case it is very likely to light up that old-time pelvic inflammation. Every surgeon, no doubt, has had experience in those cases where the pessary has been wrongly placed, where it has set up an acute inflammation and where an operation becomes necessary because of a suppurative process. In all conditions where there is any inflammatory condition whatever, a pessary should not be used. I agree with Dr. Hall very emphatically that there are cases in which surgical procedures are not advisable and in those cases a pessary will give excellent relief, especially in women who are 60 years of age or over, in procidentia or retro-displacement of any character where there are no adhesions, and in the early stages of prolapse where a support is indicated.

As to character of the pessary, I think Dr. Hall has given that very completely. As a rule, the soft, inflated pessary and the doughnut pessary are good to begin with, and later the hard rubber pessary can be substituted. I should want to emphasize one point, and that is that every patient to whom a pessary is applied should not be allowed to wear that pessary longer than a month without its being removed and a douche given and the pessary cleansed. After the patient has had it removed three or four times and has been educated in the manner of removing and cleansing it, she may then wear it for an indefinite period. The mistake in the use of a pessary, whether hard or soft, is allowing the patient to wear it too long without removal.

Dr. Willard A. Paul: Being a member of the committee on gynaecology I have no fault to find with this paper,—on the other hand I think it is one of the very best papers that has been presented in this society for a long time. It is a very practical and useful paper.

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Just one thing that I would like to suggest here, if you will permit me to tell a little story,—it is that I feel that we, as physicians, are responsible for the things we do for our patients. Let me illustrate: When I first began to practice medicine, one of my patients had the morphine habit, had taken morphine for years in large doses. That same patient had a little daughter who had rheumatism,—possibly syphilitic arthritis. In trying to cure the patient of the morphine habit, I put her on the scheme of reduction. She had to take it herself, so I gave her a bottle of morphine solution to take according to direction.

At the same time that she was taking the morphine, the little girl came down with iritis. I gave her a bottle of atropin. It worked very well until my patient herself took a hypodermic of atropin. The bottles which I sent to her were very much alike, both colorless. I would not have been criminally negligent in the case,—I worked very hard and saved her life. I speak of that to illustrate my idea of pessaries. We have no right to place a pessary in a patient and allow the patient to escape us. I think it is all right to treat with pessaries if you can keep a string on the patient.

A patient came to me a year and a half ago with what I thought was appendicitis. In treating her I discovered that she had had for some time trouble with the uterus, falling of the uterus, and had had a pessary introduced three years previously. She still had the pessary in place.

We should not, however, condemn pessaries because of these cases. I do not believe in condemning pessaries altogether, but I think these patients and these physicians were in something of the same relation as the patient who took the atropin. This patient wore the pessary three years and the result was that we had to remove the whole organ because of the deleterious effect of the pessary upon the organ for so long a time. I absolutely disagree with everybody who says that you can leave a pessary in indefinitely. I think thirty days is the very limit. A patient came to me not long ago who had had a pessary placed and was instructed to leave it for three months,—a doughnut pessary. I don't believe it is safe. I am in favor of pessaries if you can keep a string on them.

Dr. Hall: I believe that the patient should be very carefully instructed. I try to arrange matters so that we will not really have to keep a string upon the patient or upon the pessary. I always endeavor to arrange the pessary before the patient leaves me for good that she can remove the pessary and replace it herself, if it is one of those cases of procidentia. I do not believe in leaving a doughnut pessary or hard rubber concave for three months without cleansing and replacing, but the ring pessary is different and the patient can take care of it nicely.

We must help the majority, depending upon their intelligence to keep themselves in good condition and to remember that there

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is a pessary there. Possibly we have been negligent in the past about explaining thoroughly, and I think we should be very careful about it. In my office the patients are so appreciative they become very careful themselves about helping.

PUS IN THE KIDNEYS.*

By DeWitt G. Wilcox, M.D., Lecturer on Genito-Urinary Surgery at Boston University.

If we preface our study of the surgical disease of the kidney with the general hypothesis that the kidney becomes the scapegoat for the offences of nearly all the other organs of the body, we can reach a better understanding why it so often becomes a "quitter" early in the game. As a matter of fact, very few diseases arise primarily in the kidney, but there is scarcely any organ, which, upon being attacked with an overwhelming force of bacteria, does not send a "neuro-graphic" or "hemographic" message to the kidney "to come over into Macedonia and help" it. And the kidney, poor, innocent thing, seems never to learn by experience that *it* has a battle of its own to fight, in which it too frequently loses. So it almost invariably comes about that the kidney having fought valiantly and successfully for the preservation of some other organ, finds in the end that it has not sufficient vitality left to defend itself against attacks, and thus succumbs. Here again is demonstrated the old inborn trait of selfishness, that when the kidney is succumbing to her enemies and calls loudly for help not another organ is willing or able to help her. Is it the skin that is attacked by her old enemies, smallpox, scarlet fever, measles, eczema? She immediately suspends all action and calls upon the kidney to do her work while she fights. Thus the accommodating kidney not only assumes to do all its work, which is most arduous and exacting at best, but it must do all the work which the skin has been accustomed to do. Aye, it must do more, for in the fight which the skin is making against her enemies she is leaving myriads of dead bodies on the field in the shape of poisonous toxins for the kidney to bury or otherwise dispose of. Here we have the first sin against the kidney which so frequently lays the foundation for the final destruction, namely, the nephritis following exanthemata.

Is it typhoid or dysentery? The same practice is pursued. The intestinal tract ceases to eliminate her quota of metabolic leavings and begs the ever-ready kidney to do it for her. But all too late the ever-ready kidney discovers that it is trying to eliminate toxins for which it was never intended, for its delicate, complex structure breaks here and there, and lo! the generous but misguided kidney is soon a wreck.

* Read before the Massachusetts Surgical and Gynecological Society, Boston, Mass., December 14, 1910.

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Is it the lungs which have been ambushed and surprised by the pneumococcus and their air cell citadels packed with the enemy? They at once ask the kidney to cast off their carbonic acid refuse and thus make amends for their lack of oxidation. And so it is with nearly every organ in the body that when attacked by an infectious disease it not only puts the burden of its function largely upon the kidney, but at the same time demands that the kidney shall eliminate the dead bodies left on the field. It now becomes an interesting study to see what preparations the kidney makes to meet these sudden demands to be generous. The very first thing it does is to telegraph to the vaso-motor centres for more blood and immediately the flood gates of the renal arteries are opened and the kidneys become highly engorged. This is the first renal symptom in nearly all acute infections, and the picture which it produces is so graphic that any observing man may understand. The picture is blood in the urine, albumen, and casts in abundance, together with severe kidney pain and sensitiveness. But this red-flag symptom soon subsides for the vaso-motor system quickly perceives it has responded too generously to the kidney's call for more blood, the engorgement gradually lessens, and if the kidney is not over-burdened at this crucial time with too many toxins or too much elimination of normal waste products it may recover itself entirely, and all will be well. But if, on the contrary, no relief is sent to it the engorgement settles down into a continuous inflammation, and ere long a chronic nephritis is established with persistent tube casts, and albumen.

Having now in mind the manner in which the kidney suffers because of the general infection of the other organs, let us consider a few of the causes that lead not only to acute nephritis but later to suppurative nephritis. While we have known for a long time that an acutely inflamed kidney would, if unrelieved, break down and suppurate, yet until quite recently we have not had a full comprehension of all the facts that play a part in bringing about that breakdown. For instance, we did not know until comparatively recently that infectious diseases of the lower urinary tract would, if unrelieved, travel upward and produce suppuration of the kidney. We did not know that every case of general septicemia or pyemia was prone to cause acute nephritis. It is but recently that we have recognized that puerperal septicemia is more to be dreaded because of its effect upon the kidney than its effect upon the nerve centres. That infective endo-carditis kills not because of its destructive action on the endo-cardium but because of the infection reaching the kidney and setting up suppurative nephritis. What then are the chief factors which are producers of pus in the kidney? Obviously the infected blood stream comes first, and second the upward migration of infective micro-organisms from the lower urinary tract. These are the chief causes leading to suppuration of the kidney, and they are about equal in importance. There are two minor factors which must also be con-

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sidered,—infection due to pathogenic organisms in the urine, and infection reaching the kidney by contact from an adjacent organ, such as peri-renal abscess, from a suppurating gall bladder, appendix, or the pleura. What is the microscopic picture produced when the kidney is being infected from the blood stream? Let us for the purpose of a better understanding picture the cortical substance of the kidney as akin in structure to the cortical substance of the brain. Here, then, we have a network of minute blood vessels ramifying through a delicate structure of connective tissue quite as susceptible to blood pressure changes as is the brain. Suppose now we have a case of puerperal sepsis with myriads of bacteria floating in the blood stream. They in time reach the arterioles in the cortical substance of the kidney, and not finding room to pass through they block up the minute blood vessels and we have embolism or infarct. This sudden damming up of the blood leads to rapid engorgement back of the dam and anemia in front of it. Hence the red-flag clinical signs before noted. All these kidney symptoms are not unlike, both in suddenness and character, to a cerebral embolism. It is, in fact, an apoplexy of the kidney. After the engorgement subsides then comes destruction from want of blood supply, and we find in a few days an abscess forming about the embolism. We have now a well-established nephritis in progress, and its cure depends largely upon its prompt recognition and efficient treatment. I am of the opinion that in treating all cases of general septicemia, no matter how or where originating, it is quite as important to watch the kidneys and bring all possible aid to their relief as it is to treat the local manifestation of the infection, always remembering, of course, that every case of general septicemia is local to begin with, and that a prompt eradication of the local source will avert the general systemic infection.

Coming to the next cause of pus in the kidney we will consider the ascending infection from the lower urinary tract. The sources of these infections in order of importance: 1, Gonorrhea; 2, Suppurative Prostititis; 3, Suppurative Cystitis (the latter may be caused by instrumentation, such as careless or unclean catheterizing); Epididimitis and Vesiculitis are to be classed with Gonorrhea. In the light of present-day laboratory findings there is no question but that many patients have become victims of suppurative nephritis through careless catheterizing. Not infrequently the colon bacillus is carried into the bladder and ureter by the catheter. Heretofore we have not regarded simple retention of the urine as an important factor in the causation of kidney disease. In fact, it has had but scant attention aside from the mere discomfort it produced. But the truth has recently been forced upon us that hydronephrosis is very easily and quickly produced by any condition that causes retention of urine. This may be alcoholic stupor, or any comatose condition, mechanical injury of the lower urinary tract such as follows operations or childbirth,

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structure of the urethra, enlarged prostate stone in bladder or mere atony of the bladder. It is surprising how quickly the retained urine in an over-distended kidney pelvis can become infected and changed to pus, and a harmless hydronephrosis transformed to a dangerous pyonephrosis. This is due to the fact that the mere distention so changes the integrity of the lining epithelium of pelvis as to leave it a ready prey to any bacteria that may be floating in the urine. Until quite recently we have been inclined to regard floating or movable kidney rather lightly unless mechanically it interfered with some other organ or produced some reflex trouble. But a more careful study of the causes of suppurative nephritis has given us unmistakable evidence that a floating kidney is almost without exception doomed to become a diseased kidney in the course of time. This comes about through the buckling or kinking of the ureter, as the kidney descends into or towards the pelvis, and the urine is thus intercepted in its outflow. As the kinking is apt to come on suddenly, and to produce acute symptoms it has been called the Dietl crisis, after the man who first called attention to it. The crisis is characterized by sudden pain in the kidney region, nausea and vomiting, faintness, suppression of urine, to be followed later by polyurea. If now these crises occur frequently and the kidney pelvis becomes more and more distended after each crisis, it is only a matter of time ere the retained urine becomes infected and we have pyonephrosis. Following it still further, this retained pus in the kidney is not content to remain in the pelvis but insinuates itself into all the tubules, carrying destruction wherever it goes, and soon there is but a kidney shell left composed of thickened capsule enclosing shreds of cortical substances, blood clots and pus. I have had recently three well-marked cases illustrative of this type.

Stone in the pelvis of the kidney and stone in the ureter will act similarly to the kinking of the ureter, and produce the same results, but with more serious and rapid consequences. We know full well that a kidney, no matter how badly riddled with pus abscess, will continue to do duty a surprising length of time, provided it has full drainage, drainage, of course, being through the medium of an open ureter into the bladder and on through the urethra. But once let that highway become blocked for any length of time and the kidney goes to pieces very quickly, or a general septic condition follows. I have but briefly gone over the pathology of suppurative nephritis. A minute consideration of the subject would easily consume a whole afternoon, but what we, as practical men and women, are more interested in is the treatment of the disease. Could we in every case recognize the red-flag symptoms that are waved so early in the case, such as bloody urine, great sensitiveness in the kidney region, the presence of abundant albumen and casts, we would at once seek to relieve the kidney of all work possible by keeping the bowels open and obliging the skin by means of baths to do the work. Then add no extra

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work to the kidneys by keeping the patient on the lightest possible diet, such as milk. This with the indicated remedy would in the majority of cases if applied early enough result successfully.

After the suppurative process has been really established in the kidney there is still hope of cure without operative measures, but the secret is in drainage and elimination. Flushing of the kidney by means of the urethral catheter may in some cases effect a cure together with rest, diet, and posture. The patient should be kept in the sitting rather than the reclining posture most of the time. Massage of the kidney is an excellent method of aiding drainage if given scientifically. By this means, also, we can determine the quantity of pus in the kidney without catheterizing the ureter.

When the disease process has gone so far that the palliative treatment is of no avail, or when there is evidence that the affected kidney is not functionating, as can be demonstrated by catheterizing the ureter, or when the size of the kidney is such as to make its presence a menace then radical surgical methods must be used. Nephrectomy is the only operation which will be of much avail in such cases.

It is both surprising and gratifying to find the absolute comfort and good health which a patient so generally obtains after the removal of one kidney. Nature seems only too willing to pass the burden of elimination to the other kidney and to effect the change with a minimum amount of disturbance. But, of course, the prime consideration in such an operation is always the assurance that the other kidney is equal to the task. I am well aware that I have not mentioned a great factor in the causation of suppurative nephritis, namely, tuberculosis of the kidney, as well as sarcoma and carcinoma. But these subjects should be considered apart by themselves.

The progress made in the past few years to a better understanding of the action of the kidneys under the stress of infection is due largely to our laboratory workers, and that knowledge is proving of immense practical benefit both to internist and surgeon. For its application means the arrest of many an acute form of nephritis and the surgical eradication of many a chronic suppurative nephritis.

TUBERCULIN IN SURGICAL TUBERCULOSIS.—Stern of Cleveland has written an extensive article in the Cleveland Medical Journal upon the above subject. Among other things he says:

"In the treatment of surgical tuberculosis, the use of tuberculin has been followed by favorable results in my hands. I can only repeat what I reported to this society one year ago. My results have been uniformly better, my patients have arrived at the point where they could be discharged from active treatment in shorter time (although they must continue to wear a protective brace and keep up their fresh air and forced feeding cure for at least two years thereafter), and my complications, although few before, are still less in number and severity."

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THE IMPORTANCE OF CAREFUL MEASUREMENT OF REFRACTIVE ERRORS.

By Albert W. Horr, M.D., Boston, Mass.

There are four essentials to the fitting of accurate glasses:

1. A thorough knowledge of the eye, its anatomy and physiology, and its relation to the other organs of the body.

2. A thorough knowledge of physiologic optics.

3. Patience and persistency in applying this knowledge to individual cases.

4. As large an experience in actual practice as it is possible to obtain.

In these days, when an ever-increasing number of people are advertising in the public prints and by circular, calling themselves Refractionists, Optometrists, Eyesight Specialists and the like, claiming superior qualifications for fitting glasses and the ability to relieve every symptom of eye strain, as well as many other symptoms due to causes entirely outside the eye, we cannot too strongly emphasize the importance of thorough preparation for such work and the great difficulties to be overcome in prescribing correct glasses. A few weeks of the study of optics with more or less practice with the trial case cannot teach one to fit glasses. A medical education is a prerequisite.

The majority of our patients come to us suffering from reflex symptoms. The eyes may or may not be the cause of the distress; and if the eyes, the trouble may be refractive or a result of muscle imbalance, or more probably a combination of both. A knowledge of the general physical condition of the patient is most important. Temperament, the condition of the nervous system, chronic constitutional diseases, all have their bearing on our success. These can be found out and given their due weight only by a trained medical mind, and then only by thorough study of each case. Routine will not suffice; we must individualize with the utmost discrimination. The fitting of glasses is much more than covering each eye alternately and finding the lens which will give the uncovered eye the clearest vision. Many things must be considered; first, we must learn the condition of the refractive media of the eye, and in trying to measure the error, employ many methods of test. Objective tests are as important, if rightly understood and intelligently applied, as subjective. We must know and use the ophthalmoscope, our most important instrument, the retinascope, the keratometer, the perimeter, in our objective examination; the trial case in the subjective. If the results of these varied tests do not agree,—at least approximately, we must carefully go over them again and again, seeking to eliminate in every possible way any source of error. Even with the utmost care, with the most painstaking use of all the instrumental aids, there will be,

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I believe, a large proportion of cases which will prove unsatisfactory unless a cycloplegic is used to paralyze the accommodative muscle. A reliable cycloplegic is essential. Because it has not been used, far too many have obtained only partial relief from the wearing of glasses, or after many fruitless attempts at wearing them have given up in despair. The ideal practice, I firmly believe, would be to use atropin in the eyes of every patient under forty years of age and in some instances in those of older persons. This method, though ideal, is, in many cases, impracticable. Those of our patients who are dependent on each day's wages cannot give up a week, ten days or two weeks in order to have their eyes thoroughly examined. Many others have a great fear of belladonna in the eyes, and it is difficult to persuade them that the atropin will leave no permanent effect. When, however, a cycloplegic can be employed, the superior results obtained fully compensate for any inconvenience it has caused. Especially is there need of paralyzing the accommodation in the case of children. I have come to believe that without such a proceeding the wearing of glasses by children is, in the majority of cases, worthless and too often does harm. The experience of many years in the Dispensary and Out-Patient Department clinics has taught me the impossibility of correct results, no matter how painstaking the examination may be, without the cycloplegic. If children's eyes cannot be examined during vacation it is much better to lose a week or two of school than to put on guess-work glasses. I think I am right in saying that in this, the observation and experience of most of my colleagues will bear me out. If we cannot obtain the increased knowledge afforded by the use of atropin, or, perhaps, one of the other quicker but less reliable cycloplegics, the utmost care must be used, together with a goodly degree of patience in the application of all the instrumental aids.

When we have measured the refractive error as accurately as possible, we may find in many cases that we have advanced only one step toward prescribing proper glasses. We must, as carefully, examine the condition of the extrinsic muscles, and if we find heterophoria (muscle imbalance) we must learn the effect of our lenses on this condition. Do the glasses increase or decrease this tendency? Can we by increasing or decreasing the strength of the lenses modify the muscle strain? Will a slight decentering of the lenses relieve the symptoms or shall we incorporate prisms into our glasses, and if so, of what strength? What part of the theoretically correct prism will give the desired relief? What strength of prism is practical for everyday wear? These and many other questions arise before us and each and all must be given due weight.

If the symptoms of each case are painstakingly studied in their relation to possible disease of other organs, we may sometimes find the eye symptoms are due, not to refractive error or

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primary disease of the eye, but to some more or less obscure lesion, or functional disorder of the nerves. Some such cases of neurasthenics will doubtless occur to many of those present. Yet, I believe it is true that in a good proportion of such cases, if refractive error or muscle imbalance be found, at least a measure of relief can be had by wearing glasses, if the prescription is made only after a careful and prolonged examination where knowledge of the eye and its refractive media is supplemented by thorough attention to every detail of the case.

A FEW REMARKS ON NOSE AND THROAT TROUBLES.

By T. M. Strong, M.D., Boston, Mass.

Conditions Causing Obstructed Breathing.

Obstructed breathing arises from many conditions, adenoids, except in young children, playing a minor part. There may be the narrow choana, due to close approximation of the nasal and maxillary bones, so that very slight swelling of mucous tissue, the result of vaso-motor irritation, produces more or less contact. Or the turbinated bones and overlying tissues may be enlarged, either together or singly, vascular or hypertrophic. The vascular, intumescent, cavernous enlargement reduces more or less completely under cocaine; the hypertrophy, on the other hand, very slightly. If the main trouble seems to lie in the mucous tissue, then local and constitutional treatment will oftentimes give marked relief. The local treatment consisting of cauterizations, iodine, tannin and glycerine preparations; the constitutional, in regulating the diet, cold baths or sponging, with brisk rubbings, walking in open air as well as sleeping, the avoidance of tight collars or wraps around the throat, except in severe weather. A number of remedies may cover the conditions, the leading ones being aconite, Baryta carb., calcarea carb., the mercuries, nux vomica and pulsatilla. If with the shrinking of the mucous tissues the underlying bone shows up out of all proportion to its surroundings, there is nothing to do for reasonably permanent comfort, except the resection of a part of the bone. When the bone simply dips into the inferior meatus and is thin, a section off this lower edge will be sufficient, but when the body of the bone is enlarged then a portion of this must be taken, the amount varying with each particular case. In either case the cut should be outward, upward and backward so as to thoroughly include the posterior end of the bone and tissues, for it is here, as a rule, that the greatest obstruction exists. On account of the free vascular supply in this region it easily swells and oftentimes blocks the posterior choana, especially when lying down. This constant dilatation, hypostatic through the long hours of the night, associated with other catarrhal conditions, continued through season after season, finally produces the resisting irreducible hypertrophic tissue. This tissue appears in the postnasal mirror as a shining greyish mass. Removal is ac-

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complished preferably under cocaine-adrenaline application, the former in a ten per cent., the latter in a one to 5000 proportion. If injected, then the cocaine or eucain in a one to two per cent., and the adrenaline in 1-5000 or 1-10000 make very satisfactory proportions, as the hemorrhage following the reaction seems lessened, and the constitutional effects in those predisposed are lighter. The larger doses of earlier days do not seem necessary, except in occasional cases. The reaction following these operations may be severe in some persons, depending on the individual, so you will do well not to set the day for returning to the usual occupation too definitely. This reaction is manifested in fever, headaches, pains in and about the throat and neck, with soreness and stiffness of the muscles, enlarged glands and a general state of misery. The swelling of the tissues surrounding the wound may be excessive for several days, producing complete obstruction, thick grumous discharge, difficult to dislodge. Local cleansing and patience will in a few days produce their own reward, and slowly the parts take on recovered tone and the blessings of the patient are yours. To those who never knew what good breathing was the opening up of this new air space is a revelation, which must be experienced to be appreciated. These conditions are of slow growth, dating back to adenoids' days. We will find them in children especially if good results fail to follow the removal of adenoids. At any rate the nasal space should be carefully examined before such operations, so that you may forestall the disappointment of the parents, and prepare them for the possibility of a second operation. In young children it is not always easy to discover any posterior enlargements either with the speculum or with the sense of touch. It is not unusual to find them in children of ten years upward associated with the tonsils and adenoids, or coming with the complaint of discharge from the nose, obstructed breathing, and with the history of having the tonsils and adenoids removed at a more or less indefinite period in the past.

Whether we desire to treat the conditions or not, every one ought to be able to use the mirror sufficient to determine in a general way, whether we have enlarged turbinates, deviated or thickened septums, or polypoid degenerations. This is not difficult. Many cases, however, of obstructed breathing are not easy to determine, explain or treat successfully. During the day comfortable nasal breathing, but on falling asleep trouble comes on, and we have the snoring sleep, and the dry throat in the morning tells the patient of the mouth breathing. In this class of cases you will discover very little except by inference and that unsatisfactory. It is true there is a narrowing of the nasal tract and perhaps several places which look as if very little increase of the tissues would produce contact, but you do not see the contact. Could you examine these patients during sleep, you would probably find your contact points without difficulty, for then some weakened area in the circulation shows itself in dilatation and stasis. The

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only treatment possible is one continued over a long interval, consisting largely of stringents or measures which will contract or tone the walls of the blood vessels and stimulate the venous flow.

Persistent, often localized, muco-purulent or purulent discharges should awaken your suspicion of sinus trouble, which may be confined to a single sinus or may involve several. They should be, as far as possible, carefully differentiated from each other, and from other causes of exudation. These may be stated in general terms as follows: a one-sided or bilateral headache, confined to region of frontal sinus, not apparently involving supraorbital nerve, aggravated on stooping, with tenderness on pressure in frontal orbital angle, and with a discharge of pus coming down between the middle turbinated and outer wall, and which can often be shut off by careful packing, points to frontal sinus involvement. In ethmoiditis we have the pain located over the bridge of the nose, with ill-defined frontal headache, extending along inner wall of the orbit; some photophobia, with a discharge covering a larger surface of the middle or superior meatus. In sphenoidal troubles we have a deep-seated, intense pain from occiput to base of brain, pain behind the eyes and photophobia; dizziness at times, the latter rarely occurring with frontal or ethmoid conditions.

In antral disease we have pain, often swelling, in the upper maxilla, associated more or less frequently with pains in and about the teeth and infraorbital nerve; the discharge is apt to be profuse and accelerated by forced bending forward of the head, with a disagreeable odor coming from one nostril. If the sinus can be washed out the diagnosis is assured. It must be understood that these brief diagnostic points are very general, and that it is not infrequent to see cases where two or more sinuses are involved at the same time or successively, and the conditions by that much complicated in diagnosis and treatment.

These sinuses are often congested or inflamed without going on to suppuration. Especially does this seem to be true of the frontal. The pain is of a severe, boring, hammering, throbbing character, almost unbearable, aggravated on stooping or walking, with little or no catarrhal discharge. Here the warm douche with aconite, belladonna, or rhus, and the high frequency current through the condenser vacuum, bipolar, gives very satisfactory results.

It was, and is still to a degree, the idea that it is easy to cut off tonsils and scrape out adenoids, and in many cases this is true. We are finding, however, that a very respectable minority of cases come back to plague us. We have the history of recurring sore throats, either follicular or suppurative tonsillitis, or a low grade of subacute pharyngeal catarrhal conditions. Or there may be a return of headcolds, snuffles, obstructed breathing, cough aggravated at night, etc. Adults will come with symptoms and complaints of chronic pharyngeal catarrh, and we find more or less venous engorgement of the tissues, mucous exudate, soreness and

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inclination to frequent swallowing, aggravated at night. In a majority of these cases we find a hypertrophy or thickening of tonsillar tissue, which may show above the pillars. We are more apt, however, to find the tonsils flush with the edges, or even lying within, especially if there is a history of previous operation. There may be only a small surface exposed, and casual observation would scarcely lead to the idea that the tonsils were factors in the cause, yet on lifting up these tissues with a vulsellum we will be surprised at the amount which comes into view. This has been referred to as the "sunken" tonsil. It may extend well up into the supratonsillar fossa and downwards towards the lingual epiglottic space, and very often there will be a cheesy exudate released from the confined chryptic openings, which has been long concealed. In this offensive mass we find many a lurking cause of the persistent irritating sore throats, offensive breaths, and even general malaise. These sunken or basal tonsils we find in the young and adult, following or without previous operation. So we are learning that the mere cutting off of the tonsil is not enough, the tonsillar tissue must be well within the guillotine or snare, and to accomplish this the most successfully the tonsil should be pedunculated rather than basal. The proper way to dispose of these sunken tonsils is by enucleation, in as thorough a manner as we remove cervical glands. Sometimes they can be removed by the finger alone, but usually knife, scissors and snare are required. The adherent edges of the palatal arches are separated with the right angle knife, the tonsil lifted with tenaculum and further dissection carried on with the finger, curved blunt pointed scissors, sharp periosteotome, or similar instrument, until the tissue is free or carried well down, when the snare may be used to complete the operation.

You will also find in some of these cases a deviation of the septum to a greater or less degree, which will also be a factor in the obstructed breathing. Here I believe the dentist to be of more value than the rhinologist, when the patients are young. You will find associated, in the majority of these cases, the decayed teeth, irregular alignment and high arch, all strictly along the work of orthodontia. The profession and the laity are realizing as never before the importance of the teeth in the developmental age, as witnessed by the articles not only in the medical journals but in the lay press. No one who has worked along special lines but will add abundant testimony to this subject. We hope it will not be long before our own Hospital and Out-Door Department will have an abundant equipment for this work, for we think we could guarantee to furnish patients every week.

A source of irritating cough may be found in enlarged lymphatic tissue situated on the latero-posterior walls of the pharynx. On examining the throat you will see these reddened enlarged masses running up and down the back of the pharynx, oftentimes so irritable that the touch of the probe will produce a paroxysm of

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cough. Local treatment with iodine tincture, iodine, tannin, or, if more persistent, two or more transverse cuts with the cautery knife seems the most efficient treatment. We are speaking here of cases we meet in which after careful elimination of cause and effect our attention centers on this condition. Another cause, particularly aggravated after lying down, may depend upon an elongated uvula, it depending on local and constitutional causes, affecting mucous tissues. A moist cough may be indicative of the presence of adhesive, stringy, postnasal discharges, while a dry cough represents some reflex influence, which may be traced to decayed teeth or even impacted cerumen. The cough arising from mouth breathing is easily appreciated from descriptions already given. The enlarged lingual tonsillar tissue is very often the cause of a severe, sometimes strangling, spasmodic cough.

You are often asked, can catarrh be cured? The reply to that is, certainly it can, in many cases, but it takes two winters and a summer. By that we mean that during the first winter, the time the victim usually comes for treatment, you can do little but temporize, while you are contending against the changes incident to the season, or radically removing organically obstructive conditions. During the summer, when the patient is not troubled is the time to treat it for permanent improvement. This can be done along hygienic lines with stringent or stimulating local auxiliary measures. Here also the mild tissue nutrition stimulant of the high frequency current is of benefit. The result of these measures will appear in a better resisting power during the second winter; "colds" when given attention respond quicker, and they occur less frequently or require severe exciting causes to produce them. The patient is still under the observation of the physician, more or less frequently, but at the end of this treatment, he should be in a condition to go it alone for an indefinite, if not continuous, period. It is true, few patients, if any, will go under treatment for so long a period for "only catarrh," nevertheless, catarrh is curable in the broad sense of the word.

We have referred very briefly to internal medication, not because we do not believe firmly in its efficacy, but for fear of exposing our own limitations before this expert body of prescribers, and not to lengthen unduly this paper.

The moral of all this is that obstructive respiration, manifested by mouth breathing, even to a partial degree only, is of prime importance, and it is up to the family attendant to intelligently treat the cause himself, or insist that it shall be treated. And, again, that a purulent discharge from the nose for an indefinite period may be as serious a matter as a "running ear."

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CLINICAL DEPARTMENT.

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

Case I—Diagnosis: Sacro-iliac strain.

Indicated Treatment: Fixation, or sufficient support of the sacro-iliac articulations to avoid all strain or excessive motion.

Treatment: Plaster jacket with patient suspended, which gave great relief until pressure of the jacket caused some atrophy of the soft parts, which allowed it to slip up. A new jacket was applied, this time with the patient on the hammock, and all back and leg symptoms were relieved. A few weeks later a spring steel back brace was made and carefully fitted, when the plaster jacket was discontinued, and the patient has continued to be comfortable, except when under severe strain.

A course of exercises was recommended to strengthen the sacro-iliac ligaments and back muscles.

In all severe cases of sacro-iliac strain, fixation apparatus of some kind is indicated for a time. In some, the plaster jacket or a back brace may be used; in others the plaster spica. In less severe cases, a simple elastic or non-elastic girdle or back pad is applied, followed by a course of physical training. In the very mild cases, adhesive strapping can be so applied as to give ample support for the short time required.

Probably nine-tenths of the so-called cases of "sciatica" are traumatic in origin, due to some strain at the sacral or lumbo-sacral articulations, causing irritation of the sacral or lumbar plexus or sciatic nerve. These can usually be relieved by proper support.

Case II: for diagnosis:

(a) (No. 44,867 O. P. D.) Male patient, age 36 years; born in Boston. Family history: parents well, several brothers and a sister died in infancy. Patient was well up to three years ago, except for children's diseases (measles and ptusis). Three years ago had bronchitis. Since then has had a cough and some expectoration, usually in the afternoon. There is pain in the chest on forced expectoration, and some sweating. Cough also in morning on rising, and he has at times noticed blood in sputum.

Physical examination: Weight 133 pounds; pulse 90. Temperature 98.2. Dullness and subcrepitant rales and slight bronchial respiration at the apex of the left lung. Six months later, after various fluctuations in his condition the report reads: Rales in both apices, broncho-vesicular respiration, dullness in both apices. Weight 138 pounds.

(b) (No. 44,653 O.P.D.) Woman patient, aged 30 years. Born in New York. Family history: father died of rheumatism and mother in childbirth; brother died from a throat operation, and a sister of scarlet fever. Patient had measles and ptusis in childhood. She is married and has three living children. During last pregnancy she took cold and was very weak from it, and has not regained her strength. Is now nursing a seven-weeks' old baby girl. She complains of slight cough, much dyspnoea and some sweating at night. She has little appetite and the bowels are regular.

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Physical examination: weight 133 pounds. Dullness anteriorly and posteriorly in the right apex; broncho-vesicular respiration posteriorly and voice and whispered bronchophony.

What is the diagnosis of these patients, and what the treatment?

WHAT DO WE NEED TO KNOW CLINICALLY ABOUT THE MIND? It is a deplorable fact that detailed observations upon patients suffering from brain lesions with a view to obtaining exact data regarding the mental changes and a checking up of such clinical knowledge with equally exact post-mortem findings, microscopical as well as macroscopical, are almost an unknown quantity in our literature. Yet such recorded observations are of inestimable value and must be gathered in great number before any deductions of positive value can be drawn as to the localization of psychic functions. Of course, such work cannot be done by one man, but more careful studies could be made by the general practitioner, and with a little more persuasion he might secure more autopsies and turn the brain over to the laboratories for the pathological data.

We cannot hope to obtain such a sequence, however, until our medical schools stimulate the necessary interest and give their students such courses as will permit the general practitioner to make the observations, teach him what to look for and how to look for it.

It is not sufficient to say that following apoplexy or other brain disease there was loss of memory. Memory is a diffuse faculty, the retention quality of each neuron association group, perhaps of each neuron. We must know the special memories disturbed: whether those for space, position, color, form, solidity, music (tone), words or figures, each of which probably has its special local centre in the frontal lobes. To learn this one has but to test out these primary senses. Or there may be a general slacking of all memories, as well as interest and attention (also diffuse qualities), in which case the nervous current reacting the fore brain may not be sufficient to actively energize the cells; a lack of bodily tone.

If these primary senses are disturbed they would, of course, furnish fallacious material to the higher centres for reasoning and judgment. It is, therefore, well to learn if the patient reasons correctly from false premises, which often happens even in healthy minds. Inversely does he draw false judgments from correct premises, the primary sensations being intact. If so, the error is probably in his higher synthetic centres of reasoning and judgment which clinico-pathological evidence seems to place in the middle region of the frontal cortex just under the anterior fontenelle. The power to weigh and decide is probably also in this locality.

If the feelings and emotions are disturbed, how? The mere slacking of the amount of vital energy to the fore brain or an inability to use it well because of a disturbance of some of the primary senses will, as we all know, produce a general irritability and bodily restlessness.

It is now pretty generally accepted that there is an intimate relation between the sympathetic nervous system which presides over the animal functions,—circulation, respiration, digestion and reproduction, all the

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involuntary muscles and functions,—and the mid-brain, especially the parietal lobes; that a disturbance of any of these functions brings about distortion of impression in these brain areas of general (somatic and kinæsthetic) sensation, felt by the patient as vague discomforts and spoken of as emotions and moods.

It is probable that much of the current which energizes the fore-brain, allowing associative intellect, passes through these areas of general sensation, hence the resultant dullness following a disturbed digestion or circulation.

When the central end is itself the seat of irritation there may result all varieties of depression and capriciousness and even catatonia, as lately shown by Sothard in his studies on the brains of cases of dementia precox. Ideational states may also send back (from the fore-brain) or block the stream of nervous impulses in such a way as to overload, as the electrician would say, the parietal cortex, causing depression, i. e., as when we conceive of the death of a dear one we are depressed and cannot eat, the breath comes faster or in sighs, and the heart pounds. Evidently, then, in disturbed emotional states the first duty of the clinician is to determine if the error lies in the thoracic or abdominal viscera. In this connection the recent studies of Goldthwait, Painter, Osgood, Reynolds, and Lovett on body posture and visceral ptosis are of unusual interest, as are those of Metchnikoff in pointing out the anatomical and bacteriological errors underlying auto-intoxication. This, I believe, will be found to be a much more common source of mental depression and clouding than has been heretofore supposed. May it not be for this reason that we have so constantly failed to find anything pathological in the brains of patients dying of manic depressive insanity and other depression states?

If careful examination fails to reveal any bodily state which might be primary we must then turn to the brain itself to see if any accident may give cause for believing that there is a depression of the inner parietal table of the skull. This should be carefully ruled out in other parts also, and slight falls early in life should not be overlooked, as there is sometimes an interval of years between such accidents and resulting mental symptoms. Other irritating lesions, tumor and syphilis, must also be thought of. The blood pressure should be taken to discover if there be arterio-sclerosis, although as Dr. E. P. Colby has pointed out, arthromatous vessels too small to materially change the pressure reading may yet cause marked mental symptoms.

The temporal lobes seem to preside over hunger, thirst, combativeness (which pathologically results in homicide) slyness, suspicion and the hoarding instinct. Abnormalities of these mental elements should therefore be looked for and recorded. In this connection it is well to examine the ear. There are many authentic records which show that homicidal mania may be secondary to ear disease.

It is believed on good evidence that the occipital lobes preside over the affections and the gregarious instinct. If, however, the patient loses all desire for or interest in the children or those near and dear to him, or if he is possessed by an abnormal desire to be alone, or a fear of being alone, we are justified in assuming that there is something wrong in this region.

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The cerebellum in its central part is known to be the seat of voluntary and perhaps involuntary co-ordination. Its lateral lobes are but little understood, but clinical observation has frequently demonstrated that when the cerebellum exceeds its normal ratio of weight to the cerebrum, the sexual activity has been found excessive.

The proportions in which all the different mental attributes will combine to determine the resultant type of individual are as numerous as the number of different personalities. And in order that any satisfactory conclusions may be drawn from an analysis, we should know as much as possible of the patient's congenital type of mind and his heredity. Learn how far he was ordinarily ruled by his intellect (fore-brain) and how far by instinctive impulse (mid and rear-brain) and whether now, under diseased conditions, this relation has been changed. If self control is localizable it is in the fore-brain and is proportionate to the strength and health of the collective higher-intellectual centres presiding over the ethical sentiments.

I am well aware that from the point of view of the psychologist there are many objections to the localizations here advanced; that into a complex function, such as speech, so many centres enter that the function should be rightly spoken of as diffuse, many parts of the brain being contributory at the same time. So elaborate a switch board with its numerous associative links is indeed an awe-inspiring maze, a kaleidoscope moving so rapidly that consciousness is unable to follow the rapidly changing elements and gets only the final resultant image.

Yet practically we must have some simple working basis and the one which I have here endeavored to outline, based on abundant clinico-pathological and experimental evidence, may be used as a nucleus upon which to elaborate, according to our individual grasp of, and interest in, the subject.

In the next issue I shall endeavor to point out practical tests for the primary senses.

The Trustees of Massachusetts Hospitals for Consumptives on January 3 passed the following vote:

"Voted, That it will be the policy of the Board of Trustees of Hospitals for Consumptives to employ at the North Reading, Lakeville and Westfield State Sanatoria, on the medical staff, as far as suitable men can be found, at least one graduate of a Homœopathic Medical School."

Boston University Medical Library has recently received several files of the leading medical journals for the past year, through the kindness of Mr. Howard Goodwin of the well-known firm of Mellin's Food Company. This is not the first time the library has been generously remembered by the firm.

AESCULUS HIPPOCASTANUM.—The nasal symptoms likewise are a sensation of dryness, burning or rawness, like a supervening coryza.

Sneezing and coryza soon develop.

The inspired air feels cold as after taking peppermint.

Sensitiveness of the nasal passages and the throat to the inspired air is the leading modality. Burning and rawness is the predominant sensation. This last was described by one prover as though the whole throat was excoriated and constricted with burning like fire on swallowing.—Stearns.—No. American Journal of Homœopathy.

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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.

EDITORS:
JOHN P. SUTHERLAND, M.D.
W. H. WATTERS, M.D.

Reports of Societies and Personal Items should be sent in by the 15th of the month previous to the one in which they are to appear. Reprints will be furnished at cost and should be ordered of the Business Manager before article is published.

WANTED—A MASSACHUSETTS STATE TUBERCULOSIS SANATORIUM UNDER HOMŒOPATHIC MANAGEMENT.

In 1895, when the Massachusetts State Sanatorium at Rutland was authorized by our Legislature, a clause was introduced into the bill requiring homœopathic treatment to be given to those who desired it. The board of trustees appointed by the Governor included an able physician of each school of practice, under whose skilful and harmonious advice matters medical were so well planned and carried out that not only was very great success attained in the treatment of the disease, but also for several years perfect justice was done to the minority school represented—the homœopathic. This was particularly gratifying, because our school of practice had often been rebuffed in its attempts to get a foothold in public institutions, notably in the Boston City Hospital. This justice to our side was largely due to the broad and liberal attitude of the old school medical trustee above referred to, who had made a special study of the sanatorium problem abroad, and whose departure from the Board after a too brief service was greatly lamented. That this liberal provision for homœopathic treatment was not unwise was shown by the great and continued popularity of this department among the patients and friends of the institution, and also by its superior final results, as can easily be shown by statistical evidence.

Lately, however, three smaller Sanatoria have been added to the equipment of the State, and have now been running for about a year, more or less. A new board has the management of these three in addition to the original one at Rutland. On this new board of seven members are three regular physicians, but not one of our own school.

Last summer the position of Superintendent at Rutland became vacant, and for it there were two applicants. Both were nice men personally and of about the same age; but one was a homœopathist and the other a so-called regular.

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The homœopathist had graduated with honor at one of the best medical schools in the country, not one of whose graduates failed to pass the State medical examining board of Massachusetts this last year, and its graduates had a higher average (78.8) than those of any other medical school in Boston.

The regular physician who applied graduated at a medical school, more than ten per cent. of whose graduates failed to pass the State Board Examination, and whose graduates averaged 76.2 per cent. At the same examinations almost five per cent. of the graduates of the Harvard Medical School failed to pass, and the Harvard graduates averaged 78.7 per cent.

Previously to his medical course the homœopathist had obtained the degree of A.B. at a good university, while the other man had no college education.

As to experience in tuberculosis, a very essential requisite for a Superintendent, the homœopathist had served most acceptably one year in the Cullis Home for Consumptives, and then almost ten years in the Rutland Sanatorium, which has 350 patients. The regular had served a little more than one year in the Rutland Sanatorium and a little more than one year in a small Sanatorium in the country, which had a maximum of only twenty-five patients. The rest of his time since graduation had been spent in treating the insane.

The homœopathist was a man of tact, with winning ways, and was a universal favorite, with executive ability, of strong physique, of recognized integrity and of unblemished moral character. He was recommended as the best man for the place by the efficient retiring Superintendent (although of the other school), under whom he had served in the same buildings and in close touch for three and one-half years. He was also recommended by both of the Consulting Physicians to the Sanatorium, one of whom was of the regular school, and by all of the old trustees who were asked to do so.

Nevertheless, *he was turned down*, although he was the logical candidate and knew the ropes of that particular institution as no one else in the country did. The present trustees do not say that it was *because he was a homœopathist,* but there can be no possibility of doubt that that was the real reason for his rejection.

Next, the trustees voted to transfer all the women tuberculous patients in the State to the Rutland Sanatorium, and to assign all the men patients to the smaller ones in North Reading, Lakeville and Westfield. This has not yet been done. Without here discussing the wisdom of this separation of the sexes, about which many have grave doubts, certain it is that this action, whether intentional or not, would naturally deprive all the men patients in the State of the homœopathic treatment which they had enjoyed at Rutland, and which had been guaranteed to them by act of the Legislature. After a body of homœopathic physicians had appeared before the trustees and forcibly protested against this discrimina-

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tion, the board finally voted to employ a homœopathic physician in each of the smaller sanatoria. This of course was a vote in the right direction, but in view of the present situation this settlement of the question is not satisfactory to the homœopathic profession, which now demands an institution all to itself, exactly as at Westborough it has one of the State insane hospitals, containing 1,100 patients, entirely under its own management, a hospital which has done splendid work for the past twenty-five years, and without friction. A petition has just been presented to the Legislature and a bill drawn, asking for one of the smaller sanatoria to be devoted to this purpose, or for a new one to be established in the eastern part of the State, where both men and women who desire Homœopathy can be treated all together instead of being scattered through the other sanatoria. If a new one is to be built, the same appropriation ($100,000) is asked for which the Legislature granted for the establishment of each of the present smaller sanatoria. That there is urgent need for more accommodations will be admitted by everybody who has studied the problem. The commission which has just made in print its report to our Legislature (dated Nov. 1, 1910) states (page 54) that an increase to 5,000 or 6,000 beds is desirable, and estimates (page 11) that there are 30,000 cases of tuberculosis in the State. There is no necessity for detailing the reasons why our branch of the profession prefers a separate institution. They are obvious. One, however, which deserves to be mentioned, is the fact that it would be extremely difficult to get young physicians to accept subordinate positions, if they thought that there was no possibility of their ultimate advancement or promotion. Last summer's experience with the superintendency at Rutland would completely dash to the ground all aspirations of ambitious young men. Another reason is on the ground of permanency. As things are now, at any meeting of this board of trustees, the homœopathic subordinates might be discharged, and there would be no redress.

The petition to the Legislature referred to also requests that some homœopathic physicians be added to the board of trustees, to safeguard our interests. After last summer's experience also this would seem to be eminently desirable.

It is hoped that all homœopathic physicians in our State will make a special effort to influence their senators and representatives on these vital questions.

THE EIGHTH QUINQUENNIAL INTERNATIONAL HOMŒOPATHIC CONGRESS.

The following circular letter from the special committee on International Congress appointed by the American Institute has been received and doubtless will prove of interest to our readers. It gives us pleasure to present it without special note, because the points made are sufficiently clear to speak for themselves. The

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success of the Congress is a matter of vital importance not to any one homœopathist or to any one nation, but to the homœopathists of the entire world because it is to be international in character and scope. Its success can be assured only by the unselfish and persistent work of the united profession. It is to be hoped that New England will feel its share of responsibility towards bringing about the desired success and will send a large delegation to the Congress itself.

Once more the Institute membership and friends of Homœopathy are notified that the Eighth Quinquennial International Homœopathic Congress is to be held in London during the week of July 17-22 inclusive. This date has been decided upon because it has been found convenient for our continental and British colleagues; it will be convenient also for the members of the Institute who wish to do their duty by that organization and attend its meeting at Narragansett Pier and have time enough intervening to reach London.

The Institute will meet during the week of June 25 to July 1. This will leave a period of sixteen days before the Congress opens. No plea here will be made on behalf of the Institute, for this is a matter quite by itself. But a most earnest plea is hereby made on behalf of the International Congress. Its international character should be emphasized and this can be done only by the wide and hearty coöperation of homœopathic physicians in all parts of the world. In proportion to their numbers the homœopathic physicians of the United States in attendance should far outnumber physicians from other countries. Therefore for the credit of Homœopathy,—for the reputation of the Institute,—a large American delegation should plan to attend the Congress.

It is impossible at this time to present even an outline of the program, but the subjects to be discussed are those which pertain particularly to

I. The Principles, Philosophy and Practice of Homœopathy;
II. to Drug Pathogenesy;
III. to Homœopathic Therapeutics;
IV. to the Status of Homœopathy throughout the world and to Homœopathic Propagandism;
V. The scope of the Congress is not to be narrowed in any way, and essays will be welcomed on the practical aspects of subjects of general interest, like Radium, X-Ray, Vaccines and Sera, as well as from all Specialties in the Art of Healing. The Congress will be divided into sections as was the case at the meeting in Atlantic City in 1906, with a president for each section.

It has been decided that papers dealing with subjects of general interest should not exceed twenty minutes in delivery, and that papers dealing with the Specialties are not to exceed fifteen minutes. In the discussions the length of speeches is to be left to the Chairman and the sense of the meeting. It is expected that essays shall be typewritten and that copies shall be in the hands of the Perma-

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nent Secretary, Dr. John H. Clarke, 8 Bolton Street, Picadilly, W., London, not later than May 31, 1911.

Details concerning the meeting itself will be furnished as soon as plans are formulated by the committees now arranging for the Congress. A matter of great practical importance which must be considered at any early date by those who expect to attend the Congress is that of transit. How shall we on this side of the Atlantic get over to London? It is too well known to need comment that already Americans who are planning to spend part of the summer in Europe are engaging their staterooms and negotiating for their tickets, for steamship accommodations are decidedly limited, and in order to get any accommodations reservations must be made early. The Institute's Committee on the Congress has been investigating this matter and is able to report that there are several steamers booked for sailing between the first and the sixth of July. Since comparatively few Americans would care to take so long a trip merely for the sake of attending the Congress, those who do go are likely to make the Congress simply a part of their summer vacation. For the benefit of those who may desire to see something of Great Britain and the continent and to do so in a relatively inexpensive manner, the Institute's Committee has secured itineraries which embrace a few days in either Ireland or Scotland prior to the Congress, and trips of varyink extent and duration on the continent after the meeting. These trips are under the direction of Thomas Cook and Son, and full details concerning them can be obtained on applying to any member of the Institute's Committee.

Other and very attractive tours have been arranged for by the Raymond and Whitcomb Company. Circulars concerning these tours occupying from thirty-four to fifty-seven days and ranging from $340 to $580, everything included, have been prepared and distributed by the Raymond and Whitcomb Company, and already are in the hands of the Institute members. Considering the very pleasant and enjoyable experiences the Institute members had last summer during their trip to the Pacific coast, it has been deemed wise to give the stamp of approval to the itineraries just referred to. With a little thought in advance sufficient coöperation may be secured to form congenial groups of ten or twenty or more who under special guides can spend their time pleasantly, restfully and profitably and to the best advantage in every way.

It will be possible to sail from New York on Saturday, July 1; from Boston on Monday, July 3; or from Montreal on Thursday, July 6. Those who wish to go comfortably and inexpensively can secure passage on the Canadian Pacific Steamship "Lake Champlain," which is to sail from Montreal on July 6. This steamer furnishes one class accommodations at the low rate of about $50. The return trip may be arranged on the "Empress of Ireland," leaving Liverpool on August 11, at about $80 to $100. Return passages on other lines and at other dates can be secured, but the

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making of plans must not be too long delayed. For a trip combining complete relaxation, comfort and real rest we can recommend the thoroughly enjoyable, picturesque sail down the majestic and beautiful St. Lawrence from Montreal, by the fortressed heights of Old Quebec with its old-world Frontenac and Dufferin Terrace, through the Gulf of St. Lawrence, via the Straits of Belle Isle or by the southern coast of Newfoundland, with only four days at sea intervening to the North coast of Ireland, by the Isle of Man up the famous Mersey to Liverpool. Without exaggeration this may be called an ideal trip for tired people.

In order to facilitate the making of necessary arrangements we urge all those who plan to attend the Congress independently or who wish to join any of the parties which may be formed for any of the tours to signify their intentions at the earliest possible date. Members of the Committee will gladly give any information they possess and render any assistance in their power to those who desire to attend the Congress and at the same time derive the pleasures and benefits to be obtained from a trip abroad.

J. P. SUTHERLAND, M. D., *Chairman*,
295 Commonwealth Ave., Boston,
HILLS COLE, M.D.,
1748 Broadway, New York City,
A. E. AUSTIN, M.D.,
8 East 58th St., New York City,
G. W. ROBERTS, M.D.,
170 West 59th St., New York City,
JAMES C. WOOD, M.D.,
818 Rose Bldg., Cleveland O.,
Committee.

BISMUTH PASTE IN THERAPEUTICS.—In the American Journal of Surgery for October are found two articles upon the use of bismuth paste in sinuses. One is by Beck of Chicago; the other by Aranow of New York. From the former the following is abstracted:

What are the specific actions of bismuth in chronic suppuration, especially in nasal accessory cavities?

1. It has been positively proven that within the body bismuth paste acts as a chemotactic and bactericide.

2. By its semi-solid consistency it acts as a sustentacular framework, so that granulation can more easily bridge over and obliterate a cavity. By its presence it will prevent the accumulation of secretions and reinfection.

3. Any channel or cavity which is devoid of epithelium and collapsible, stiff-walled, but not too large, will become obliterated by the large and healthy granulations which are characteristic of bismuth paste.

In the latter we find:

Indications. All cases of intractable fistula after the original cause has been removed; cases in which the natural process of healing has been retarded.

Limitations. This treatment is not applicable in biliary or pancreatic fistula, or in cavities communicating with the cranium or vital organs. Sequestra will usually prevent healing. Acute processes are not benefitted by this remedy. With the above exceptions it has been found of value in sinuses of every part of the body.

Dangers. Nitrite poisoning—retention of pus and hemorrhage from the sinus are the few unwonted results. They are rare but should be watched for.

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SOCIETIES

BOSTON HOMŒOPATHIC MEDICAL SOCIETY.

The annual meeting of the Boston Homœopathic Medical Society was held in Jacob Sleeper Hall, 688 Boylston street, Boston, on Thursday evening, January 5, at eight o'clock.

The meeting was called to order by the president, Alonzo G. Howard, M.D.

In the absence of the secretary, Dr. William A. Ham, Dr. F. A. Gardner of Salem was chosen to serve as secretary pro tem. The reading of the records of the last meeting was omitted.

Upon the recommendation of Dr. W. H. Watters it was unanimously voted that the Boston Homœopathic Medical Society favor the reappointment of Dr. N. R. Perkins to the State Board of Examiners.

Dr. John P. Sutherland made a motion that a committee of three be appointed to wait upon Governor Foss to urge the reappointment of Dr. Perkins.

The reports of the treasurer, Dr. George D. Bliss, and of the auditor, Dr. Wesley T. Lee, were read and accepted.

The Nominating Committee reported the following officers elected for the coming year:—

President—Samuel H. Spalding, M.D.
First Vice-President—Charles T. Howard, M.D.
Second Vice-President—Lena H. Diemar, M.D.
Secretary—William A. Ham, M.D.
Assistant Secretary—W. H. Flanders, M.D.
Auditor—Wesley T. Lee, M.D.
Censors—Alonzo G. Howard, M.D., F. W. Halsey, M.D., Lucy B. Hall, M.D.

President's annual address, "Anterior Poliomyelitis," Alonzo G. Howard, M.D.

The society was entertained during the evening by the Beethoven Quartette and readings by Mr. Charles T. Grilley.

BOOK REVIEWS.

An International System of Ophthalmic Practice. Edited by Walter H. Pyle, A.M., M.D. Member of the American Ophthalmological Society. Therapeutics by Dr. A. Darier, Paris. Translated by Sydney Stephenson, M.B., F.R.C.S., London. Late Honorary Secretary of the Ophthalmological Society. Illustrated. P. Blakiston's Son & Co. Philadelphia. 1910.

This book consists of two parts, first, ten chapters, 179 pages on General Therapeutics: Methods of Diagnosis, Constitutional Treatment, Extraoral Medication, Intraocular and Subconjunctival Injections, Serumtherapy, Diaphoretics, Revulsives, Purgatives, Heat and Cold, etc., Phototherapy, Electricity, Electrotherapy, X-rays and Radium, Hydrotherapy, Mechanotherapy, Local Medication, Anesthetics, Analgesics, Vasodilators, Vasoconstrictors, Mydriatics and Cycloplegics, Miotics, Grugs Modifying Conjunctival Secretions. The Silver Compounds.

The careful description of the technic of intra-venous injection will be valuable to those not familiar with the Paris method. It is exactly the same as observed by the reviewer in Abadie's Clinic ten years ago.

To those who have been followers of Wright in the use of Tuberculin, the initial dose (1/500 m gm) recommended by Darier, will seem excessively strong. If the initial dose be .0001 m gm, aggravation is frequently noted before .001 has been reached.

The subconjunctival injection of Guaiacol 1 per cent. as an antidote for an over-dose of tuberculin has proved of value by the reviewer in one case.

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Second part, Special Therapeutics, ten chapters, 213 pages, gives the therapeutic indication for the following: Diseases of the Orbit, of the Lacrymal Apparatus, of the Eyelids, of the Conjunctiva, of the Cornea and Sclera, of the Iris and Ciliary Body, Iritis, Iridocyclitis, Diseases of the Crystalline Lens, Treatment of Glaucoma, Diseases of Vitreous Body, Choroid and Retina, of the Optic Nerve.

The enthusiasm of the author can be recommended as an antidote for "therapeutic nihilism," but the statement that 80 per cent. of cases of infection following cataract extraction can be cured by para specific Serotherapy, will be received with some incredulity. A good cross index makes the book valuable as a ready reference. D. W. W.

Progressive Medicine. Edited by Hobart Amory Hare, M.D. Assisted by Leighton F. Appleman, M.D. Volume IV. December, 1910. Lea & Febiger. Philadelphia and New York.

The resume given by Lavenson of the year's progress in diseases of the stomach is, in the estimation of the writer, of great interest and value, particularly that part dealing with gastric ulcer and its non-surgical treatment.

The present status of the Cammidge reaction in pancreatitis is well defined.

Bradford's contribution, particularly that dealing with experimental nephritis, is excellent.

In surgery Bloodgood is always an interesting writer. He quotes Halsted as saying that anaesthesia by any other method than nitrous oxide-oxygen has become a subject of historical interest only. The subject of vaccine therapy in its relation to genito-urinary diseases and to typhoid fever is carefully considered.

The book is of great interest throughout.

Lessons on the Eye. For the Use of Undergraduate Students. By Frank L. Henderson, M.D., Ophthalmic Surgeon to St. Mary's Infirmary; Consulting Oculist to the Wabash Railway; etc. Fourth edition, revised. Price, $1.50 net. P. Blakiston's Son & Co. Philadelphia. 1910.

A proper review of any book should always take into consideration the aim of the author and the manner in which he has approached the point toward which he has directed his endeavors. Therefore, let this author himself express the former:—

"It is not my desire to minimize medical education, but rather to increase the *useful* knowledge of the graduate by selecting that which will be of the most service to him, at the same time giving him as much as the undergraduate student can reasonably be expected to learn in the limited time allotted to the eye in our medical schools. The use of these printed notes enables the teacher to devote much time to quizzing which would otherwise be spent in lecturing. They also enable the student to dispense with his inaccurate and misleading classroom notes."

The contents are arranged in the form of twenty-eight lectures or lessons covering those subjects that are usually taught in the average medical schools. Throughout there is a very practical tone to all topics, the mere theoretical being carefully avoided. Also those subjects that are of value to the specialist only are studiously omitted, a thing that we believe to be wise. Some of the minor details might well be criticized, particularly the etiology of phlyctenular conjunctivitis, where the author speaks of the "strumous diathesis," "scrofulosis" and "tubercular," giving no hint of any possible connection between them and not apparently considering them to be obsolete terms in this connection. Apart from some such minor matters the book is very satisfactory and should be a distinct boon to the medical student and to many general practitioners.

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Four Epochs of Life. By Elizabeth Hamilton-Muncie, M.D., Ph.M. Greaves Publishing Co., New York.

That there is an urgent need for good books suitable to explain the sex question and various matters of hygiene to the young must be considered an undebatable fact. Journalism, both medical and lay, abounds with papers upon the social evil, the sex question and the proper training of the young. There is a general agreement that early instruction in various matters hitherto shunned as "immodest" is the best solution of the problem. For the purpose of giving such instruction both to parents and to their children Dr. Muncie has written this book. In order to make it as attractive as possible, and to avoid appearance of sermonizing, she has made it into the form of a story: Two medical students, a man and a woman, become mutually interested each in the other, and upon graduation are married. Then is described their various experiences in starting housekeeping. In due time plans are made for a baby. Different prenatal environments are given and the production of male or female children is briefly touched upon. The babies come (twins), and grow under favorable surroundings. As time advances they are told of the stamenate and pistillate flowers and from this a new world of instruction is opened. A new baby comes and with it new problems for the twins. Conversations with father and mother are given as the children reach various ages. Adolescence and its significance is described; also examples are given of the unfortunate results of impurity in others.

Throughout the entire book there is a candor, frank and apparent, but without any suggestiveness or other intimation of uncleanliness. It seems to be one that is well suited to be placed in the hands of parents or all others to whom the proper knowledge of such questions is of vital interest.

We hope that it will receive what we believe it deserves, a wide popularity.

Osteology and Syndesmology. By Howard A. Sutton, A.B., M.D. Assistant in the Department of Anatomy of the University of Pennsylvania, Lecturer in Anatomy Pennsylvania Orthopedic Institute, Assistant Surgeon Methodist Episcopal Hospital, etc., and Cecil K. Drinker, B.S. P. Blakiston's Son & Co., Philadelphia, 1910.

This little book has appeared as a rather unique method of dealing with a part of a very elementary subject—anatomy. The authors truly state that osteology is the foundation of anatomy. Just why this particular part is singled out for special treatment in a separate book may not be as evident.

All the bones of the body are described in a synoptic manner, together with the joints that they help to form. About a third of the entire space is devoted to the head.

The type is generous throughout, lending itself well to the use of a quiz compend. To medical students and, to a lesser extent, to orthopedists the book should be of particular value.

Internal Secretions from a Physiological and Therapeutical Standpoint. By Isaac Ott, A.M., M.D. Professor of Physiology in the Medico-Chirurgical College of Philadelphia; Ex-Fellow in Biology, Johns Hopkins University; Consulting Neurologist, Norristown Asylum, Pa.; Ex-President American Neurological Association; etc., etc. E. D. Vogel, Bookseller, Easton, Pa. 1910. Price, $1.00.

This little book consists of three lectures, delivered to his class of students by this distinguished physiologist, well known by his text-book upon physiology.

It is in no way pretentious, but in its little more than one hundred pages, gives just the elementary facts concerning the present status of our knowledge of these apparently allied conditions that are desirable.

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It is admirably adapted for study by those who desire the salient features of the subject in a small space without taking time to read much that is more foreign to it. This and the popularity of the author as a graceful writer should be a sufficient guarantee for any who need information along these lines of medical investigation. It is willingly recommended.

Diagnosis and Treatment of Diseases of Women. By Harry Sturgeon Crossen, M.D. Professor of Clinical Gynecology, Washington University; Gynecologist to Washington University Hospital and Director of the Gynecological Clinic; Gynecologist to St. Louis Mullanphy Hospital, to Missouri Baptist Sanitarium, to Bethesda Hospital, and to the St. Louis City Hospitals; formerly Superintendent of the St. Louis Female Hospital; etc., etc. Second edition, revised and enlarged. With seven hundred and forty-four engravings. C. V. Mosby Company. 1910.

There is no need for one to ever lay emphasis to medical practitioners upon their absolute inability to satisfactorily practice general medicine without a thoroughly adequate knowledge of the diseases of women. Many books upon this subject are at present in the field. Probably a majority, however, are of more actual value to the surgeon or gynecologist than to others on account of the large amount of space devoted to the technic of operative measures of a major character.

In the book now being reviewed this undesirable feature has been reduced to the minimum, thus much enhancing its value to those not surgeons and so increasing its usefulness. No unique features are particularly noticeable, the sequence of the various topics being the usual one. Two chapters stand forth as especially meritorious: one upon diagnosis, the other upon treatment. The former in particular is a most comprehensive one, including apparently every known or possible condition. It, in common with the entire book, is profusely illustrated, a fact that gives to it almost the effect of a continuous demonstration or clinic. In all there are seven hundred and forty-four illustrations. A final chapter of formulae may or may not prove of value to the individual physician, according to his personal opinion. The index is unusually full.

In general arrangement as well as in intrinsic worth, the book is very attractive, and should not fail to be popular, as it fully deserves to be.

THE MONTH'S BEST BOOKS.

Plastic and Cosmetic Surgery. Kolle. $5.00. D. Appleton & Co.
Dermatology. Pusey. $6.00. D. Appleton & Co.
Induced Cell Reproduction and Cancer. Ross. 50 cents. P. Blakiston's Son & Co.
Laboratory and Field Studies in Botany. Vinal. 60 cents. P. Blakiston's Son & Co.
Compend of Gynecology. Wells. $1.00. P. Blakiston's Son & Co.
Commercial Organic Analysis. Allen. $5.00. P. Blakiston's Son & Co.
Leucorrhoea. Ostrom. $1.00. Boericke & Tafel.
The Testimony of the Clinic. Nash. $1.50. Boericke & Tafel.

P. Blakiston's Son & Co. announce the publication of a book entitled "Diseases of China," by Jeffreys Maxwell. Judging from the preliminary announcement this should be a volume of great value to those interested in the various unusual diseases that are met in that country, and will doubtless be of much interest as well as value to all physicians.

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PERSONAL AND GENERAL ITEMS.

Dr. A. A. Arthur of Marshfield, Dr. John L. Mahoney (1898, B. U. S. M.) of Boston, and Dr. Daniel R. McNally (B. U. S. M., 1906) of Pawtucket, R. I., are all taking post-graduate work in Pathology at Boston University School of Medicine. In addition Dr. Mahoney has been assisting Dr. Eaton in the course in Bacteriological Technique.

Dr. E. A. Darby, formerly in practice in Amherst, Mass., has removed from Florence, Colorado, to Wauseon, Ohio.

Dr. Chas. W. Bush, class of 1890, B. U. S. M., has removed from 420 Massachusetts Avenue to 196 Huntington Avenue, Boston.

Dr. Alberta S. Guibord, class of 1899, B. U. S. M., has settled at the Sheffield, 394 Massachusetts Avenue, Boston, for the winter.

Dr. Edwin M. Kent, class of 1909, B. U. S. M., has been transferred from Ch'ang-Li Hsien to Shanhaikwan, North China, Methodist Episcopal Mission service.

Dr. Geo. W. Spears, B. U. S. M., 1876, has removed from 53 Hereford Street to 220 Huntington Avenue, Boston.

Dr. J. Emmons Briggs, Professor of Clinical Surgery in Boston University, has removed from 382 Commonwealth Avenue to 477 Beacon Street, Boston.

Dr. Hattie Williams Baker (class of 1903, B. U. S. M.), for the past two years in practice in Houston, Texas, is spending the year in Boston with her husband, whose business brings him here from the Southwest. They are located at Hotel Nottingham, Huntington Avenue.

Dr. E. H. Burhman, who for a number of years was in charge of the women's department at Westboro, and later served as house officer at Rutland, has been visiting Boston for a short time, devoting her time to work in the pathological laboratory of Boston University.

The University of Pennsylvania has recently received a gift of one hundred thousand dollars for the purpose of endowing a chair to be called the Benjamin Rush chair of physiologic chemistry.

Through the liberality of the heirs of D. O. Mills and Calvin Page, the sum of one million dollars is donated to St. Luke's Hospital, San Francisco.

OBITUARY.

Dr. Clara D. Whitman Reed died on Januay 18 at South Ackworth, New Hampshire. Dr. Reed had been in practice for many years at Newton, Massachusetts.

Dr. T. Dwight Stow, for many years in practice in Mexico, New York, died in December, 1910, at the age of 80 years.

The *Gazette* records with deep regret the death in January of Dr. Osman Royal of Portland, Ore. Obituary notice will appear in our March issue, as will also the obituary of Dr. Edward F. Vose of Portland, Me., who died in January of the present year.

Dr. Otto Albert Pfefferkorn, a graduate of the class of 1910, B. U. School of Medicine, died at his home in East Weymouth, Mass., on January 28, at the age of twenty-five years.

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THE NEW ENGLAND
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ORIGINAL COMMUNICATIONS.

UTERINE FLEXIONS AS A CAUSE FOR STERILITY.

By H. A. Whitmarsh, M.D., Providence, R. I.

That a crooked uterine canal does not favor ready conception goes without saying. That the reason is chiefly mechanical is probably not the case. Such explanation would be far too easy and superficial. A canal, however tortuous and stenosed, which is able to drain the uterine cavity of fluid, either leucorrhoeal or menstrual, is likewise able to take in spermatozoa. And we do not tell a patient she cannot become pregnant merely because we find an anteflexed or retroflexed uterus. With the exception perhaps of extreme anteflexion, flexions and displacements generally of the uterus are, per se, rarely the cause of absolute sterility. From this you may surmise that I shall not try to make too strong a case, but rather aim to give flexion its due rank among the many causes of sterility in woman.

The Baconian method is needed in surgery and gynaecology as in medicine. We should start with findings and not with theories. The real facts of our science are to be conscientiously sought because so vital to the well-being of our immediate patients and society at large. Medical literature is burdened with attempts to substantiate the claims of men whose minds are seen to be more imaginative than judicial. But it can never be too full of the results of careful observation. Every physician should both carefully observe and faithfully record the results of observation. The beginner who keeps careful, though brief record of his cases, lays a foundation which makes him surer of himself in after years. . . . . With due apology for the sermon I return to the task in hand.

It is not enough that the ovum, as shown by Boweri, has protoplasm and all the needed organs and qualities (except that its centrosoma which starts segmentation is in a state of inactivity); not enough that the male germ with its active centrosoma is on the way. The spermatozoon, swimming one to two, or three to six mm. per minute, needs a medium slightly alkaline in reaction, and the united sperm and ovum need a hospitable endometrium,

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lining a uterus whose texture and nutrition are of such quality as will favor the development of the fertilized ovum. . . . . Now whether the flaccid uterus of infancy and childhood fails to develop at puberty, either in its anterior or posterior wall, or whether in later years shortened ligaments or adhesions binding the fundus down have accomplished a flexion, the result is not only a flattening and more or less occlusion of the canal, but with the flexion of cervix, or body, or both, atrophy of uterine wall at the angle of flexion, plus an impaired circulation, with congestion and hyperplasia in other portions of the organ; and still more important, an added endometritis with altered secretions, forming a combination most hostile to spermatozoa. Thus it is, when this mechanical deviation is a cause of the pathology here outlined, as also a hindrance to its cure, that flexion exercises its most potent influence against conception, and makes hazardous the development of the fetus, if in spite of these combined obstacles, conception has perchance taken place. This mechanical hindrance to the cure of endometritis (and the consequent relief of sterility) operates in at least two ways. First it is difficult in flexion to thoroughly apply to the diseased endometrium the local treatment so helpful. Second, the uterine cavity, like any other, heals far more readily when drainage is free. The easy mechanical removal of purulent or muco-purulent discharge is invariably helpful to the cure of any secreting surface.

An interesting study on the part of an author, whose name I do not now recall, has shown that pregnancy is far more frequent in women with normal contour and capacity of the vaginal vault posterior to the cervix. Here ordinarily is room for the seminal fluid, the so-called seminal lake, which, either in the horizontal or even upright position, may be retained a considerable time, bathing the cervix and filling the os. This is especially the case when the cervix is normally straight and rests against the posterior vaginal wall in this upper chamber under Douglas' cul-de-sac. (This space we frequently find wanting in unmarried women past the menopause, but occasionally also in young single women and the childless married. The finger, on examing, feels the cervix, not projecting into the vagina, but rather forming the whole roof of the vault, the vagina being cone shaped, truncated at the junction with cervix. The examining finger may almost fill the space, so narrowed is it found to be.)

When, however, even in a normal upper vagina the cervix is sharply flexed in either direction, but especially forward, the os is lifted up, away from the deposited seminal fluid, pointing quite in the opposite direction from normal, viz., upward and forward. If now the anatomy be still more defective in the way of a conical cervix, as quite likely may be the case, there exists a mechanical combination decidedly inimical to family increase. So much for the mechanical and anatomical.

Turning to the physiological for a moment, there are those

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who stoutly maintain that the uterus itself in sexual orgasm plays an important though not essential part, in the entrance of spermatozoa to the uterine cavity. They claim that it has the power to open and close in such manner as to draw to itself any fluid within reach: making the vaginal canal and the uterine canal for the time being more or less continuous. Such advocates would find in flexion a serious interference with this physiological function of the uterus so interesting if true. The writer disclaims any personal observations substantiating this theory, but has heard it taught by those who would command respect in any circle.

As before intimated, I look upon an infected endometrium with altered secretions as the chief cause in curable sterility, giving second place perhaps to stenosis as found at the internal os, or seen in conical cervix with pinhole os. Next come flexions, causing, not often absolute, but relative, sterility.

Now the best remedy I know for flexion sufficient to cause sterility, is pregnancy; very easy to prescribe, difficult to apply, to be sure, and not satisfying to our patients who have perhaps long years desired offspring in vain. We therefore keep this prescription to ourselves, and advise dilation and straightening of the canal, a mild approximation to pregnancy in its results, because in some cases, at least, a certain uterine development is seen to follow through dilation. In ordinary flexions the uterus straightens with the dilating, continues straight, or more nearly so, if an intra-uterine stem be worn for one, two or three or more weeks, as the case may require. This must be carefully fitted, as indeed must all pessaries if they would avoid being consigned to oblivion. Especially should the stem be not too long. Patience and care must be exercised in dilating too. It is comparatively easy in hurried and forcible dilation to rupture the uterine wall at one side or the other. Should this accident occur, no further attempt should be made to dilate, as only wider laceration takes place. Most good obtains when the dilation is accomplished slowly, twenty minutes being none too long for the best results. For remember that we are dealing as a rule with a uterus never pregnant. The degree of success depends naturally on the degree of flexion to be overcome, combined with the chronicity and extent of consequent changes in the uterine walls. But much also depends on the gradual and thorough dilation and careful fitting of stem pessary, securing the minimum amount of irritation. Surgical cleanliness is of course imperative. Relapses are bound to occur, but many of the failures are due to nonobservance of the few points just mentioned. The twenty-five or thirty per cent. not benefitted or cured in this way require a more radical surgical treatment.

Observe that this discussion has to do with relative or curable sterility, not absolute sterility. It assumes normal spermatozoa, normal ovum and fallopian tubes. It should therefore give a favorable prognosis, and does where flexion is the chief cause, since flexion may generally be cured, or at least circumvented.

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As above stated, the conical cervix with pinhole os, sharply anteflexed, is the mechanical or anatomical combination forming an effectual barrier to conception. It requires likewise pretty radical operative treatment for its cure. It has been my intention not to detain you with technic or details, but rather to speak of principles in treatment, and that very briefly. Dilating and curetting, together with mechanical attempts to straighten, avail in about three-quarters of the cases. And mechanical measures succeed not by virtue of correcting anatomical deviation alone, but through incidental correction of concomitant conditions. Of the three-quarters of cases remaining reasonably straight after operative treatment, one-half or more will not become pregnant, showing that some cause other than flexion must be sought. (Incidentally let me remark that man is sterile far more frequently than we used to think. So that in the cure of sterility we should by no means spend all our time and give all our attention to the woman. Wilson, for instance, says that *forty-two per cent.* of men having gonorrhoea are sterile. Even with very liberal allowance for possible high estimate, one concludes that in a fair proportion of cases the trouble is with the man.)

With this rather meagre treatment of the topic assigned me I would close by calling attention to the "Stomato-plasty" of Pozzi, a radical measure which I believe to be good surgery theoretically, and which has yielded excellent practical results. It leaves no raw surface to invite infection; leaves the uterus something as obtains in a bi-lateral tear of childbirth, with little eversion or thickening. Pregnancy results in more than twenty-five per cent. of the cases, and goes to full term without miscarriage. Dysmenorrhoea is always immediately and definitely cured, and the cervical endometritis due to stenosis, together with the leucorrhoea, rapidly disappear.

The operation consists in bi-lateral slitting of the cervix with scissors as in repair of double laceration, but carried as high as the vaginal junction with cervix. This gives four raw surfaces, two anterior and two posterior. Up the middle line of each of these four surfaces a wedge of uterine tissue is removed with the knife, so that by sutures, cervical mucous membrane is approximated to vaginal mucous membrane laterally, thus rolling in each quarter section of the cervix. The immediate result is a rather clumsy gaping cervix suggesting an open duck's bill. A few weeks, however, suffice to contract and shape the cervix into tolerably normal proportions.

The Governors of the N. Y. Skin and Cancer Hospital announce a course of nine lectures to be given at 4.15 o'clock on Wednesday afternoons from March 1 to April 26, inclusive, in the Out-Patient hall of the Hospital, Second Avenue, corner 19th Street, New York. The lectures will be given by Drs. Bulkley and Bainbridge, and cover the subjects Eczema, Acne, Psoriasis, Syphilis, and Cancer. The course will be free to the medical profession.

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SALPINGITIS.*

By J. Emmons Briggs, M.D., Boston, Mass.

Salpingitis is an inflammation of the tube, due in all cases to the introduction of infectious micro-organisms, the most common of these being the gonococcus, streptococcus, pneumococcus, colon bacillus and tubercle bacillus. The acuteness of the infection depends upon the virulence of the micro-organisms introduced and the resistance which the patient offers to the infection. It is well known that bacteria differ greatly in their intensity, and among the pus producers some are very active and others quite bland. Thus, we should expect a more rapid and destructive process in a streptococcic infection than in one produced by the pneumococcus.

Gonorrhoea is responsible for over fifty per cent. of all cases of salpingitis. Streptococcic infection ranks next in point of frequency and is of greater virulence.

This latter infection occurs quite frequently following miscarriage or childbirth, it being much more common in induced abortions than in miscarriages. In these cases, it is usually introduced by unclean instrumentation.

A gonococcic infection is usually introduced by intercourse with a person infected with gonorrhoea. There may be a few exceptions to this statement, as in a case which I am about to relate. Nevertheless, the above described method of infection will cover practically all cases.

In November, 1898, I was called in consultation to see a girl, twenty-two years of age, of excellent character, who was suffering from a pelvic abscess following a gonorrhoeal infection. She denied intercourse and had an unruptured hymen. About a month before I saw her, she lent her douching apparatus to a young girl who had a leucorrhoea. She used this apparatus herself afterwards and within a week developed a profuse leucorrhoeal discharge. Soon after that her symptoms became very acute and she developed a gonorrhoeal salpingitis, for which a salpingectomy was performed. One week after operating upon her, I operated upon her mother, a woman over fifty years of age, who also had an acute gonorrhoea with tubal involvement. She gave a history of having used her daughter's douche point. I am convinced that both of these cases had their origin in the contaminating douche point, although of course no proof of this exists.

In discussing the subject of salpingitis, I shall have nothing to say regarding the infection or its manifestations upon the external genitalia, but shall confine myself to the lesion of the tube, in its acute, semi-acute and chronic manifestations, inasmuch as it affects the tubes, adjacent organs, uterus and peritoneum.

* Read before the Massachusetts Surgical and Gynecological Society, Dec. 14, 1910.

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The earliest pathology of a septic inflammation of the tube is redness, swelling and oedema of the mucous lining of the tube, followed by involvement of the muscular and peritoneal surfaces. Inflammation of the mucous membrane causes an outpouring of mucus, which soon becomes turbid. As this process advances, there may be a leakage of fluid from the fimbriated end of the tube into the general peritoneal cavity, or if the inflammation is less acute, the fimbriae become sealed and an accumulation of fluid occurs within the tube, which distends it to a greater or less extent.

As the inflammatory condition encroaches upon the peritoneal covering of the tube, the irritation caused thereby results in a plastic exudation and usually in the formation of adhesions between the tube and adjacent structures. These same adhesions, although marking the progress and extension of the disease, serve in themselves as a barrier against further extension, for they wall off and circumscribe the inflammatory zone. When both the fimbriated extremity and uterine end of the tube are sealed, the condition known as pyo-salpinx develops. When this is present, the tubes become enormously distended, the normal mucous membrane lining the tube becomes transformed into granulation tissue and the mass becomes firmly adherent to all neighboring structures.

With further extension of the disease, rupture of this tube may occur and pus find its way into the pelvic cavity, where it usually becomes surrounded by protecting adhesions, which alone prevent general peritoneal involvement. Not all cases of salpingitis go on to pyo-salpinx, or to pelvic abscess formations. Some of them are so acute that nature has no time to form protective adhesions and the infected fluid formed within the tube finds its way readily into the peritoneal cavity, resulting in a general peritonitis and death to the patient.

In other, and in more frequent cases, the inflammation runs a semi-acute and less destructive course, confining itself to the tube. That is, there is no transudation of fluid into the general peritoneal cavity and no extensive pyo-salpinx results.

This condition is at first attended by considerable rise in temperature and acute pain, but in the course of a few weeks the temperature falls and the acuteness of the pain diminishes, yet the patient complains of soreness in the pelvis, in the region of the tubes and is very miserable from repeated attacks of pelvic discomfort. In very chronic cases of salpingitis, the original elements of infection disappear, that is, the gonococcus, if it were the initiative, is no longer to be found within the tube, neither in the contents nor in the mucus or transformed lining of the tube. All germ life may have disappeared. In such cases the tube may still remain distended. When such a condition as this is present, the fimbriated extremities of the tube will be found sealed and the liquid contents clear. The term hydro-salpinx is applied to

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this condition, which, in the writer's opinion, is, in the majority of cases, the end result of an old case of salpingitis. It will be seen that I am assuming that the majority at least of cases of hydro-salpinx originated as a more active salpingitis.

In tuberculosis of the tube, the disease may be transmitted from other parts of the body, as a hematogenous infection with its primary lesion in the lung, or it may involve the tube in continuity from the adjacent peritoneum in cases of tubercular peritonitis. It is possible for a tubercular infection to be primary within the tube, in which case it would have to be introduced per vaginam and thence through the uterus to the tubes. In such a case it might be possible for the uterus itself to escape infection.

The usual appearance of the tube when infected by tuberculosis is that of a somewhat swollen oedematous Fallopian tube, finely studded with tubercles and covered by more or less fibrous exudate with adhesions. The fimbriated ends of the tube are thickened and everted. A microscopical examination of the tube reveals the characteristic nodules of tuberculosis with giant cells surrounded by epitheliod and small round cells.

Thus far, we have considered the typical manifestations as seen in ordinary cases of salpingitis. While considering the pathology of this condition, it might not be out of place to consider some of the remote results of chronic inflammation of the tube, namely, its bearing upon ectopic gestation and sterility. This leads us to the consideration of the anatomy of the Fallopian tube and the physiology of impregnation. When the ovum escapes from the ovary, it becomes entangled in the fimbriae of the tube and is carried onward into the uterus where impregnation occurs.

The progress of the ovum in the Fallopian tube is due to ciliae which cover the columnar epithelium of the lining of the tube. These ciliae move by a wave-like motion and propel the ovum onward through the tube. The result of any inflammation in the tube, however mild it may be, would be to destroy or to impair the function of the epithelium of the tube. In cases of mild infection the destructive process may be so insignificant as to leave the tube pervious, yet might destroy the epithelium over a limited part of the tube. It can be readily seen that the ovum after starting upon its journey from the ovary to the uterus might become arrested at a point where the lesion was present; here it may meet the spermatazoa and become fertilized. This, briefly, is the pathology of ectopic gestation.

In cases where the inflammation has been more severe than in the condition above described, where the fimbriated extremities of the Fallopian tubes have become sealed or where a destructive inflammation has obliterated the lumen of the canal, it is readily understood that sterility results.

The diagnosis of salpingitis is not usually difficult. In the majority of cases the commencement of pelvic inflammation dates from a period of acute infection; in a woman who has borne chil-

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dren, frequently from a confinement in which there was a temperature and other symptoms of a febrile nature, a protracted convalescence and pelvic discomfort. A miscarriage may be responsible for the condition, followed by symptoms similar to those above described. In a large majority of cases it has its origin in an attack of gonorrhoea, diagnosed as such at the time, or escaping observation altogether. In all acute cases of salpingitis, there is pelvic pain, sense of weight and pressure, rise in temperature and pulse, soreness and sensitiveness upon vaginal examination when the tubes are palpated. If the condition is progressive and leakage from the tube occurs, the symptoms are those of peritonitis or a local pus accumulation. In the former condition the soreness becomes generalized, the abdomen becomes splinted, vomiting and all the characteristic symptoms of general peritonitis develop. In cases where the sepsis becomes localized, a pelvic abscess forms and the patient suffers from high temperature, chills, pelvic pain and irritation of the bladder and of the rectum. Upon vaginal examination, the uterus will be found to be fixed, the entire culdesac of Douglas filled with a mass extending into one or both sides of the pelvis. Vaginal findings in cases of chronic salpingitis will be resistance in the region of the tube with more or less fixation of the uterus and often a distinctly palpable tube.

Although diagnosis of salpingitis with a clear history and with ordinary pathological findings is not difficult, nevertheless errors arise in connection with differential diagnosis between tubal involvement and appendicitis. It frequently happens that the appendix drops over the brim of the pelvis and should it become inflamed in that location the symptoms are quite analogous to those of salpingitis, and many cases of mistaken diagnosis have occurred. Menorrhagia and metrorrhagia are frequently present in salpingitis. These conditions are probably due to an involvement of the endometrium in the same septic process which is the cause of the tubal lesion.

As a result of accumulated experience, we have come to believe that sepsis or accumulation of pus in the peritoneal cavity should be treated by immediate surgical interference. This rule would doubtless hold good were the septic process or pus formation in salpingitis liable to become generalized. We have already spoken of the tendency for localization of septic processes originating in the tubes and that nature very kindly walls off these inflamed organs from the general peritoneal cavity. Of course, exceptions arise when a leaking tube precipitates its contents directly into the abdomen with a resulting general septic peritonitis.

As commonly happens, with a walled-off inflammatory zone, there need not be the urgency in operation which we experience in dealing with many acute septic manifestations within the peritoneal cavity, such for instance as fulminating appendicitis, gan-

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grene of the gall bladder and so forth. In fact, if a radical operation is to be undertaken in these cases, I prefer a chronic case where the inflammatory condition has been going on for quite a period, for I believe that the absorption of the toxins developed by continuous suppuration fortifies the patient against renewed infection when the abdomen is opened.

While it is our custom to operate all cases of appendicitis as soon as diagnosis is made, it rarely happens that salpingitis demands such prompt relief. Very many cases enter the hospital with temperatures high, with exquisitely sensitive abdomen, where the application of ice bag and rest is the treatment employed for a few days, and when the symptoms begin to abate salpingectomy is performed. The only cases of salpingitis which absolutely demand prompt abdominal section are those very acute cases of a leaking tube where general peritonitis is imminent.

In cases of pyo-salpinx and pelvic abscess, there are two methods of procedure, vaginal drainage and salpingectomy.

The indications for the former are quite well defined and relate principally to the size and location of the pus accumulation. Upon vaginal examination, we frequently encounter a bulging in Douglas's culdesac with fixation of the uterus and inflammatory deposits on either side. This abscess may present itself on either side of the uterus and may be apparently continuous, involving both sides and in the median line. When such an abscess can be readily palpated and fluctuation determined, it is my practice to make a vaginal incision just posterior to the uterus and drain. After the pus has made its exit, the finger should be carried through the opening and the lateral zones explored. It frequently happens that other abscess cavities are opened into in this way. A drainage tube should then be introduced and the wound irrigated daily. This operation has certain distinct advantages over salpingectomy:—first, in all cases where there is a large accumulation of pus, it is attended by a much lower mortality; second, a much easier convalescence with no suffering; third, no liability to ventral hernia; fourth, little likelihood of doing serious injury to the intestine, as is frequently the case in breaking up dense adhesions in salpingectomy; fifth, its greatest field of usefulness lies in the fact that it can be done quickly under nitrous oxide anaesthesia, if necessary, in those very severe cases where abdominal section would be very hazardous.

The disadvantages of the operation are two: first, the possibility of injury to the rectum in making vaginal puncture, which is insignificant; second, that the operation is not usually radical. The abscess is evacuated but the diseased tubes remain and they are likely to be the foci of renewed inflammatory processes. I usually consider this operation as the primary step to the more radical operation of salpingectomy which is to be performed at a later date. I have done this operation a great many times and have advised the more radical operation following it. Many of

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my patients have left the hospital apparently cured and have experienced no further difficulties from tubal involvement.

Salpingectomy, oophorosalpingectomy and hysterectomy are the operations usually employed for salpingitis in its various manifestations. I am aware that all surgery is tending toward conservatism. We save a part of the uterus, a part of an ovary and the question of saving a part of a tube is open to discussion. There may be cases where it is possible to make a resection of the tube, as in hydrosalpinx, and there are records of patients treated in this way who have become pregnant; but there can be no doubt that a resection of the tube is a procedure which should be undertaken only in cases where we are practically sure that the acuteness of the process is entirely abated. It must be admitted that this is a very hard proposition to determine upon the operating table. We should, therefore, be very cautious in undertaking this operation.

Salpingectomy consists in the removal of the tubes through a median abdominal incision. On entering the abdomen we usually encounter adhesions, which, when broken up, leave exposed to view a distended tube curled upon itself and firmly fixed, occupying a position posterior and to the lateral side of the uterus. These adhesions are broken up and with the fingers the tube is elevated from its position. Clamps are applied to the broad ligament and the tube is severed from its attachment to the broad ligament and uterus. The question of removal of the ovary must be decided at this time. In years past it was customary to remove the ovaries in practically all cases where there was an extensive disease of the tubes. This teaching has been greatly modified in past years. Now, we remove the ovary only when it is so badly diseased that it in itself is a menace to the patient. In all cases where the tubes are sacrificed, or the uterus and tubes, as in hysterectomy, we should preserve as much ovarian tissue as possible. Such a procedure does away with those very distressing symptoms incident to a premature post-operative climacteric.

In salpingitis, the pathology of the ovary is usually due to plastic exudations and inflammation conveyed by continuity from the adjoining septic tubes, and when the cause is removed the ovary soon resumes its normal condition. Therefore, it is unnecessary and unwise to remove it unless it is specially indicated.

Occasionally, the right tube is involved in cases of appendicitis, especially in those cases where the appendix is low and results in the formation of an abscess in the pelvis. I have in such cases removed a tube greatly distended, oedematous and covered with plastic exudate. The propriety of such a procedure has frequently been a question in my mind, as the inflammation in such cases occurs from without, and it is quite probable that restoration would spontaneously occur.

After removing the tubes and inspecting the ovaries, remov-

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ing them if absolutely necessary, we next direct our attention to the uterus and must decide whether it had better remain or be sacrificed. No rule can be laid down which will cover all cases. The operation is prolonged thereby, but this objectionable feature is more than counterbalanced by the advantages of dependent and adequate drainage per vaginam. My own experience teaches me to remove the uterus in cases where it is the seat of acute sepsis or contains suppurative foci, or where its surface is badly denuded of peritoneum by the breaking up of adhesions. When the peritoneum is removed in this way, I believe it to be dangerous to leave this extensive raw surface, because of the great liability of the intestines in the immediate neighborhood becoming adherent, resulting in the formation of acute angles, thereby causing intestinal obstruction. In the application of gauze drainage in cases of salpingitis, it is especially desirable to exercise the greatest care that the intestines be withdrawn from Douglas's culdesac and that space filled with the gauze drain. Should the intestines be left in the culdesac and the gauze drain applied over them, crowding them into this denuded cavity, great liability of obstruction occurs. I have on two occasions been obliged to open an abdomen and break up such adhesions, in order to save a patient's life.

After removing the diseased structures, the question of drainage must be considered. In only a very small proportion of the cases is it safe to close the abdomen without some provision for drainage. If the uterus is removed, the only drain required may be a wick of gauze or a rubber drainage tube inserted through the vaginal vault; but as the uterus is rarely removed, we must usually drain at the lower angle of the abdominal incision. Here we may make use of many different drains; those which we usually employ are gauze or rubber tubing or both. The gauze has the advantage of acting as a hemostatic, a rubber drainage tube serves to keep the opening patent for a longer period than gauze, but has the distinct disadvantage of being a causative factor in producing many cases of fecal fistula. If a rubber drainage tube is used, great care should be exercised in changing its position from time to time. The best method of doing this is to withdraw it one-half or three-fourths of an inch every day or two. This will change the point of contact on the intestine and prevent pressure necrosis.

The operation of salpingectomy is by no means free from danger. The principal accidents which may occur during its performance are those which are occasioned by the very dense adhesion formations which amalgamate all the pelvic structures and the intestines in the immediate vicinity. These adhesions in acute cases are not usually very dense, but in chronic conditions of a severe type they may be so firm that separation of the intestine from other pelvic viscera is accomplished with extreme difficulty and with great liability of tearing into the intestine. If

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this accident occurs, an attempt should be made to repair the damage, but as the area involved is always septic, such attempts are likely to be unsuccessful. Fecal fistula follows, which fortunately in the majority of cases closes spontaneously.

The urinary bladder is rarely injured unless a hysterectomy is performed when that may be accidentally opened. Should this happen, sutures should be introduced and a self-retaining catheter placed in the urethra.

The great danger in all cases of salpingitis is of general peritonitis. In order to avoid this most serious complication great care must be exercised during the entire operation in walling off the general peritoneal cavity with gauze sponges. All pus spilled will therefore come in contact with gauze, and any free pus should be immediately absorbed upon fresh gauze so that it will not be disseminated.

If the technic of the operation is properly carried out, there will be surprisingly few cases of peritonitis following this operation. The general flushing of the peritoneal cavity with sterile water or salt solution should be avoided.

Final results after salpingectomy are exceedingly satisfactory. Patients are forever relieved from the distress incident to the inflamed tubes and the result is radical and gratifying in every respect.

TEETH IN RELATION TO MEDICINE.*

By Carrie I. Bence, D.D.S., Boston, Mass.

While in addressing members of the medical profession it is not necessary to speak of the teeth in detail, yet a brief reference to their number, time of eruption and structure may not be amiss.

The temporary set consists of twenty teeth, that is, eight incisors, four cuspids, and eight molars. The permanent set consists of thirty-two teeth, divided anatomically into classes, and these divisions largely correspond with their functions as portions of the masticatory apparatus.

There are eight incisors, which serve in the incising of food; four cuspids, whose chief function in the carnivorous animals is to pierce and hold the food, a function wholly rudimentary in man; eight bicuspids, which are intermediate in position and function between the cuspids and molars, which are the crushing and grinding teeth proper.

The temporary teeth appear any time from the age of six months to two years; permanent teeth, from the age of six to

* Read before the Twentieth Century Medical Society, January 18, 1911.

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twenty-five years. The first permanent tooth erupts at the age of six years, and is often called the sixth year molar, but first molar is a better name. This tooth is the most important tooth in the mouth, as it determines the shape of the arch of the permanent denture; it is also the most neglected tooth, because erupting so early it is often considered a temporary tooth, and as such receives no attention, being allowed to decay. At the age of fourteen all the permanent teeth should be in position, with the exception of the third molar, sometimes called the wisdom tooth.

Let us now consider the structure of the teeth. The enamel is the hard external covering of the crown, and the hardest substance in the body. Directly under the enamel is the dentine, which composes the bulk of the tooth and largely determines its form. The cementum forms the external covering of the root, and to it is attached the pericementum, or peridental membrane, a membrane intervening between the cementum and its bony socket in the alveolar process. Finally we have the dental pulp, a mass of soft tissue occupying the internal chamber of the tooth, called the pulp cavity or pulp chamber.

Enamel is composed of 97 per cent. inorganic or calcified tissue; and 3 per cent. organic, consisting chiefly of water. Dentine is one-third organic matter, and two-thirds calcified tissue. Cementum resembles bone in structure. The pulp cavity contains the blood vessels and the nerves which supply the teeth.

The environment of the teeth offers every opportunity for their decay; in fact, the entire body offers no better culture medium for germs than the mouth. Dr. Miller, working in Hoch's laboratory, established the fact that as a source of infection an unhygienic mouth is of major importance, in that it constitutes the breeding ground, and is the portal by which the larger portion of disease-producing germs enter the body. Dentists are only now awaking to the fact that their duty to the public consists not only in constantly combating the ravages of cavities of the teeth, but that an hygienic mouth is an absolute prerequisite to good health.

Among the pathogenic germs which invade the mouth from without are bacillus tuberculosis, pneumococcus, diphtheria, Vincent's streptococcus, and a variety of others, each of which is the known cause of serious disease. With the neglect of the teeth, pus germs are also added to this deadly company, so if one with an unhygienic mouth is so fortunate as to escape tuberculosis, pneumonia, or diphtheria, a case of chronic dyspepsia, intestinal indigestion, or anto-intoxication caused by absorption of bacterial waste products developed in the fermenting masses of imperfectly masticated, and infected food is awaiting him. Even in an hygienic mouth small numbers of these germs are always found, and in a neglected mouth they thrive and multiply.

It may be asked how does decay of the teeth start, what causes a perfectly sound tooth to decay? Decay never occurs

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on a tooth surface that is perfectly smooth and polished, and teeth are generally far from being so. Around the gum margins of the teeth the hard enamel covering is thinner than in any other part of the teeth, and in the grooves and sulci it is often defective. The particles of food lodging about the teeth around the margins, in between the teeth, and in the sulci and grooves soon set up an active fermentation which produces the micro-organism which, in its turn, produces an acid condition which attacks the tooth structure. Teeth which have been extracted, then retained for purposes of experiment, never present more decay than when extracted. It is only in the excellent culture medium presented by the warm moist mouth that we find the small cavity so increasing in size that a radical operation becomes necessary. It may surprise you to learn that statistics prove that only 8 per cent. of the people brush their teeth. A great many make no attempt to care for their teeth, others use a ligature or a toothpick to remove particles of food, some merely wipe around them with a cloth, and a few rinse their mouths with a mouth wash. All of them think their teeth are clean, and that nothing more is necessary. They do not know of the mucous placques which in many mouths accumulate around the entire tooth surface, and which are responsible for the majority of the decay. These mucous placques consist of a gelatinous film formed on the surface of the enamel, and under cover of this the micro-organism produces its acid in concentrated form and attacks the enamel, undisturbed by external interference. This film is not soluble in the fluids of the mouth, nor is it easily dislodged when finally attacked; no rinsing of the mouth with liquid will affect it, and it takes appreciable friction with the tooth brush to dislodge it. If you remember, a few moments ago I told you decay never attacks a tooth which presents a smooth, polished surface, and this statement is the firm rock which forms the foundation of the new dentistry called Oral Prophylaxis.

The word prophylaxis is derived from the Greek, meaning *before; to guard; defending from disease; prevention.* Oral prophylaxis embraces everything pertaining to the prevention of disease and decay in the oral cavity; its object is to place the mouth in as clean and healthy a condition as possible.

How is this accomplished? First, by instrumentation, which consists of removing all deposits of tartar, also accumulations of organic detritus, as decomposing animal food and vegetable-fermenting starches and sugars, and broken down epithelial cells from the mucous membrane, for these combine to form a pasty and cheesy deposit which is found about the gum margins of the teeth. No amount of filling and restoring of defective teeth will ever suffice to maintain a healthy mouth, as will unremitting care and removal of these deposits. If after these deposits are removed no pathological condition is found, such as receding gums, loose teeth, and pus flowing from around the necks of

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the teeth, we take each tooth separately and clean and polish it with hand instruments, every surface of the tooth receiving this attention until it is in a thoroughly hygienic condition. If we have found a pathological condition resulting from ignorance, or misplaced confidence in the dentist, we adopt different methods. This pathological condition may be interstitial gingiritis, or to put it more plainly an inflammation of the gums caused by accumulation of the deposits around the necks of the teeth, pushing down between the cementum (or root of the tooth) and the pericementum. This deposit is as firmly attached as a barnacle to a rock, and it requires a great deal of skill to remove it. There are many symptoms of this disease, such as a red, full, inflamed gum, which bleeds readily if touched, and in many cases bleeds from no cause apparent to the patient. If this condition is neglected, we find that in the majority of cases it is but a question of time when the tooth investment will be entirely lost, and the affected tooth will drop out.

Let us now trace the pathology involved in this disease. With the constant irritation and inflamed condition of the gums, there is at once established the condition found in all inflamed territory, namely, the exudation of the contents of the nutritive vehicles, which with the presence of micro-organisms eventually induces the breaking up of the exuded vessel-contents, and the adjacent tissue into pus. There rarely is found an exudation which does not soon exhibit suppuration processes. This condition in which exudates and pus are exhibited, gives rise to the precipitation of calcic material on the cementum (or roots of the teeth). This is called serumal or sanguinary calculus. This calculus is composed of calcium phosphates, calcium carbonates, and magnesium phosphates. This mechanical irritation is supplemented by the presence of pyogenis bacteria, which in their life processes cause toxins, puruleney and suppuration, which by gravitation and capillary attraction infect and destroy the alveolar process. Soon are noticed at certain points, pockets of increased depth, which indicate their presence upon the gum by a reddish or purple line. Now the tooth often commences to change its position, it elongates—protrudes, or rotates. These conditions soon cause a profuse formation of pus about the diseased teeth. Even at this late stage of this disease called Pyorrhœa Alveolaris, the prognosis is favorable if it has not become too chronic.

The condition of the teeth in pregnant women is of special interest. How many times have pregnant women complained to you of toothache? How many times after the birth of a child do women go to the dentist to have teeth extracted? We used to accept this state of affairs with resignation, saying the lime salts in the blood which normally nourished the tooth structure were taken into the fetal circulation. Now we know better, we know that the old saying, "a tooth for a child," is not a true one, it is an unnecessary and avoidable state of affairs. While there may

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be some deficiency of the lime salts, this by no means accounts for the extensive tooth destruction that has gone on during this period. The greater part of this tooth destruction is due to the fact that at this time the patient disregards the hygienic laws she has previously observed with more or less care, so the unclean condition of the mouth and teeth, the excess of acid in the secretions, the highly nervous state, the vomiting of pregnancy, which coats the teeth with a mixture of partially digested food and a solution of hydrochloric acid, are all great factors in causing dental cavities. Dentists should instruct their patients how to prevent so much trouble at this time, and *you*, the physician, should also give them advice along this line, as you have a better opportunity than the dentist, for in many cases a pregnant woman never thinks of visiting the dentist unless driven to it by aching teeth, so it is your duty to insist on them having regular prophylactic treatment during this time if they care to preserve their teeth.

Horace Fletcher says in one of his lectures that most diseases are either mental or dental. Of course I know this is somewhat exaggerated and I can not expect your profession to admit it at all, but I hope I have sufficiently interested you in the teeth so you will examine the mouth of your patients. You may, perhaps, be surprised at the close relation between poor teeth and poor health.

SOME CONTAGIOUS AND ERUPTIVE DISEASES.

By Maurice Worcester Turner, M.D., Brookline, Mass.

The therapeutic management of contagious diseases, with the aid of Bœnninghausen, differs not essentially from the conduct of other affections with that repertory, yet some slight changes in procedure require explanation.

With the exanthems, and some other eruptive conditions, a modified location must be used; for, while properly the *part affected* is the *skin*, in Bœnninghausen these cases have the "cause" and "location" *combined* and given in the section on the skin specifically under the disease name. Thus under eruptions, p. 208 et seq., is to be found chicken-pox, "rubeolæ" (as the original Bœnninghausen gives "measles"), scarlatina, and smallpox, also erysipelas, furuncles, itch, milk-crust, wheals and hives, purpura, herpes zoster, etc., —some with variations,—besides many other eruptions, which in the older Bœnninghausen are given as *like* measles, *like* nettle rash, etc., or with similar modifying prefixes, and therefore are available when the diagnosis is uncertain.

Taking for the *first* rubric a group of remedies under the disease name savors of the "pathological prescription" and perhaps of an effort to group medicines as "specifics," but neither of these contentions is valid if *complete* working out of the case with the reper-

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tory be made. In fact, such rubrics as chicken-pox, measles, scarlatina, etc., are really recognitions by Bœnninghausen of the special causes of these affections, as we know them today, and are given thus for the purpose of covering not only cause but location as well.

This is also true, in Bœnninghausen, of numerous other conditions with which the group of medicines under the disease name is to be used as the first rubric in the repertorial study, e. g. apoplexy, chlorosis, consumption, convulsions of various types, dropsy, etc.; this pathological grouping being necessary if a repertory is to be compact and concise.

Take for illustration the following cases:—Two little boys, brothers, developed dry coughs, without any evidence of cold otherwise, examination of throats and chests being negative. Several children in the neighborhood had measles and it was known that exposure had occurred. Though there was no particular time at which the coughs were worse two conditions aggravated, namely, running, even about the house, and eating; there was relief from drinking.

These rubrics were taken:—

Cause and location,

1—Measles "rubeolæ," on account of exposure, 213.

How affected,

2—Dry cough, 115.

Modalities,

3—Aggravation eating, when, 278.

4—Aggravation running, 297.

5—Amelioration drinking, after, 312,

which worked out as follows:

	1	2	3	4	5	Totals.
Acon.	4	4				
Bell.	3	3	2	3		
Bry.	4	4	3	4	3	18
Carbo-v.	1	3	4			
Coff.	3	3	1	1		
Ip.	1	4				
Merc.	3	3	2	3		
Phos.	1	4	3	2	3	13
Puls.	4	4	3			
Rhus	2	3	1	3	2	11
Sars.	2	1	2			
Sul.	1	3	4	4		

The choice of Bryonia being confirmed, by reference to the Guiding Symptoms, its exhibition (2c) was followed by happy results, the coughs subsided; the eruptions, which developed in three days, were very light; eye symptoms being nil, so that both boys emerged but little the worse for the illness. Many physicians question the possibility of aborting cases of this kind; but their doubts would cease if their experience with the repertory were greater;—for in this case Bryonia would hardly have been selected without repertorial aid.

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Another instance of the efficiency of Bœnninghausen in eruptive diseases is in a recent case of erythema nodosum. As there is no rubric under that name the "cause" and "location" are not united in the repertory, and must be covered separately.

The case was as follows:—A woman of fifty, previously well, developed the typical sore areas of erythema nodosum, the lesions being not only on the legs below the knees but on the thighs and forearms as well. They were numerous and attended with rheumatic pains. Rhus seemingly indicated was given without effect except to modify the pains; then as the soreness became more marked, and chromatic changes developed, with complaint of the bed being hard, Arnica was exhibited. Though this modified the local symptoms it was evident that it was not the simillimum as an endocardial murmur appeared, with attacks of palpitation accompanied by much anxiety. The case was then retaken and the following study resulted:—

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	Totals
Agar.	2	2	2	1	1																		
Ambr.	1	2	1	2	1	2																	
Ant-cr.	2	2	1	1																			
Arg.	2	1	1	1																			
Arn.	4	2	3	1																			
Ars.	1	2	2																				
Asaf	3	3	2	1																			
Aur.	2	1	2	1	4	1																	
Bar-c.	1	2	1	1																			
Bell.	4	3	3	1	3	3																	
Can-s.	1	1	2																				
Canth.	1	2	1	1																			
Caps.	2	1	3	2	2																		
Chin.	3	2	4	1	2	3	4	3	1	3	1	4	3	4	3	4	4	2	2	4	4	1	62
Clem.	3	1	2	1																			
Con.	3	2	1	3	2	2																	
Cup.	3	3	1	2	1	1																	
Dulc.	3	1	1	2																			
Guai.	1	2	4	1																			
Hep.	3	1	2	2	1																		
K-carb.	1	3	2	1	1																		
Lach.	3	1	1																				
Led.	2	2	2	1																			
Lyc.	3	4	1	2	3	4																	
Mag-c.	3	2	1	1																			
Mag-m.	3	1	1	1																			
Merc.	2	3	4	4	3	2	4	1	3	2	2	2	3	4	3	4	4	3	2	4	4	4	67
Nat-c.	1	2	2	3	4																		
Nux-v.	4	3	3	2	3	1	3																
Par.	1	1	1	1																			
Petrol.	3	2	2	1	1																		
Phos.	2	2	1	1	3	4	3																
Pho-ac.	4	3	2	3	1	4	1																
Puls.	3	4	2	2	3	2	4																
Ran-b.	1	1	2	2																			
Ran-s.	2	2	1	2	1																		
Rhus	2	3	3	4	4	2																	
Ruta	1	2	2	1																			
Sele.	2	2	1	3																			

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Seneg.	2	1	1	1																				
Sep.	3	4	3	2	3	1																		
Sil.	4	4	2	2	3	1																		
Spig.	3	2	3	3	1	2																		
Spo.	3	1	3	2	3	1	1																	
Squ.	2	1	2																					
Sul.	4	3	2	2	4	3	3	3	1	4	2	4	3	4	4	4	2	3	2	1	4	4		66
Thuj.	1	2	3	1	4	1																		
Valer.	2	2	2	1																				
Verat-a.	3	2	1	1	3	2	3																	
Verb.	2	1	2	1																				

These are the rubrics:—

Cause:
1—Eruption Painful, 212.

Location:
2—Leg below Knee, 137.
3—Thigh, 136.
4—Forearm, 131.

Concomitants:
5—Cries (sadness), 19.
6—Bowels, diarrhœa painless, 86.
7—Stool, acrid, 87.
8—Stool, frothy, 88.
9—Agg. before midnight, 271.
10—Dyspnœa (oppressed), 113.
11—Agg. excitement, 279.
12—Agg. talking, 303.
13—Cough (hard and) dry, 115.
14—Agg. night, 270.
15—Palpitation, anxious, 126.
16—Agg. night, 270.
17—Thigh (bone), 136.
18—Hip joint, 140.
19—Right side, 142.
20—Tearing pain, in bone, 203.
21—Agg. night, 270.
22—Agg. motion, 291.

Mercurius exhibited in the 2c, requiring to be repeated several times, cleared up the case, including the endocarditis, not a vestige of which remains. Had Mercurius been recognized at the outset as the simillimum the heart complication would not have occurred.

The rubric "painful eruption," as typical of erythema nodosum, I took originally, in a study made some years ago, after a fruitless search in Bœnninghausen for a rubric under that disease name; it proved satisfactory then and has several times since, but it requires the various locations after it to complete the symptom parts, in this way differing from the exanthems.

Repertorial work of this kind may, to the unthinking, appear to be a modified organo-therapy,—the organ-location alone treated, the patient forgotten,—thus a sort of local prescribing.

A little reflection will, however, show that this cannot be so, for the concomitant symptoms include everything else of the patient that is morbific, and cases are few without concomitants. Besides many modalities can be grouped as so-called "generals."

Now the concomitants *always* decide the remedy, in the Bœninghausen study, the foundation, i e. the location, with its associated symptoms, having been properly laid, for it often happens that the remedy which finally totals highest, with the aid of the concomitants, is of small numerical value in the foundation,—see the case of erythema nodosum.

This is one reason why *all* the remedies in the rubric of location *must* be taken, those of low as well as those of high rank,—to give opportunity for the selective action of the concomitants.

The "affected locality" is used as a point of departure because that, with its associated symptoms, includes usually the last developed symptoms of the case; these, in the orderly study, are taken first, and the essentials covered, after which the other groups, i. e. the concomitants, are available and decisive.

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Because the concomitants include all the symptoms of the case, except the local ones, and because the action of the concomitants determines the remedy, one is forever prevented, when using Bœninghausen, from treating organs or localities instead of individuals; and, furthermore, there should always be a final appeal to the materia medica, which alone, if properly carried out, precludes beyond a peradventure the possibility of "local prescribing."

EXERCISES HELD AT THE CEREMONY OF LAYING THE CORNERSTONE OF THE EVANS MEMORIAL BUILDING, FEBRUARY 4, 1911.

Upon the afternoon of Saturday, February four, the cornerstone of the new Robert Dawson Evans Memorial Building for Clinical Research and Preventive Medicine was laid, with appropriate ceremonies by Miss Rosamond Hunt, a niece of Mrs. Evans, the donor. A large attendance both at the brief out of door exercises and at the more prolonged ones in the amphitheatre of the Medical School added much to the interest of this noteworthy event. The following is the detailed report of the latter part of the ceremony. It was opened by an introductory address by Mr. Piper, President of the Board of Trustees of the Massachusetts Homœopathic Hospital, who spoke as follows:

"In the copper box which has been deposited in the stone which you have just seen laid, the following articles have been placed:

"A brief biographical sketch of Robert Dawson Evans,
Objects of the foundation,
A copy of the deed of gift,
Annual report, 1909, Massachusetts Homœopathic Hospital;
Annual report, 1910, Boston University School of Medicine;
Copy of the Boston Transcript, Boston Herald;
Copy of the card of invitation and program of exercises of the laying of the cornerstone,
Photograph of Mr. and Mrs. Evans.

"The Robert Dawson Evans Memorial for Clinical Research and Preventive Medicine is a monument to a noble and successful man. This is not the place, nor am I the person, to give a eulogy of Mr. Evans. He was born in New Brunswick in 1842. He served two years in the army in the Civil War, and was discharged in 1863 for disability caused by wounds. In 1909, in his usual good health, he was thrown from his horse and died a few days later.

"Both Mr. and Mrs. Evans disliked the thought of sickness, and the purpose of this foundation especially appealed to Mrs. Evans. Last April, through Dr. Richardson, she proposed to the trustees to give $100,000 for the erection of a building to be

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put up on a site belonging to the Hospital and an equal sum for endowment. At that time, the land on which this structure was to stand was owned by Boston University. Last summer the title was transferred and the generous offer of Mrs. Evans was gratefully accepted. This memorial differs essentially from an ordinary hospital; its purpose is to promote health and to prevent disease. Much can be accomplished in this field, and the results achieved in the Massachusetts Homœopathic Hospital are a just cause for pride and give good ground for hope in the conflict of disease. To promote this work the Robert Dawson Evans Memorial will be equipped, and to this end it will always be devoted.

"It is most appropriate that the first speaker should be the one who had most to do with the obtaining of this gift for the hospital, Dr. Frank C. Richardson, who has been appointed Medical Director of the Robert Dawson Evans Memorial, and who will present the special objects of the foundation."

Frank C. Richardson, M.D., Medical Director, Evans Memorial.

There is a deal of solemnity in the thought that the receptacle which we have today enclosed in the cornerstone of the Robert Dawson Evans Memorial Building will in all probability be opened and its contents examined by those who are as yet unborn, and inspiring is the belief that we have laid the cornerstone of an institution destined to contribute in rich measure to whatever of advancement those future generations may be privileged to enjoy.

A gift prompted by the generous impulses of a tender heart and an altruistic mind, the building now in process of construction will make possible a noble work and will serve as a fitting memorial of a life which furnished an example of the finest ideals and the broadest humanitarian instincts.

In this building it is proposed to establish, in connection with the Massachusetts Homœopathic Hospital and in intimate association with Boston University School of Medicine, a Department of Clinical Research and Preventive Medicine.

The purpose of this institution is to furnish facilities for active participation in the work of progressive medical science by the study and practical application of the newer forms of therapeutics as well as the further perfection of the homœopathic method of drug selection in the treatment of disease now made possible by modern means of research. To this end and also with a view to the conservation of health and the prevention of disease, ample opportunity will be afforded for investigation in the fields of chemistry, pharmacology, psychology, physiology, and pathology, in all of which subjects the possibilities of advance are infinite.

The plans as developed call for the erection of a four-story brick building of fire-proof construction, upon land adjacent to the Medical School which has been generously donated for the purpose by Boston University.

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Upon the upper floor will be located commodious and well equipped laboratories, where efforts will be made to arrive at a solution of some of the many problems of vital interest and importance to this and future generations. For example, in the pathological department, which, it is expected, will be in charge of W. H. Watters, A.M., M.D., Ph.D., there is contemplated as initial study the phenomena of cancer, including possible methods of treatment. Subsidiary topics will be the prevention and treatment of typhoid fever and of scarlet fever from the standpoint of vaccines.

In chemistry it is hoped that Allan Winter Rowe, Sc.B., M.D., Ph.D., will conduct a series of studies for the accurate determination of the fuel value of important food stuffs, together with an estimate of the efficacy of their use.

In the realm of physiology Arthur W. Weysse, Ph.D., M.D., proposes as initial studies experimental research as to the effects of alcohol on the body in respect to its resistance to various toxic substances.

Pharmacological studies may be made to determine the effect of drugs in large and small doses upon the human system, ideal conditions making it possible to have the subjects under proper regime and strictest supervision.

Of equal importance will be the psychopathic laboratory devoted to the study of the etiologic and therapeutic relations of intellectual to physical life.

These are but examples of the almost innumerable subjects awaiting scientific investigation.

The third floor is to be devoted to the patients under the care of the research workers, proximity to the laboratories affording opportunity for most accurate observation of results.

The second floor is to be given up largely to patients suffering from the various neuroses, which class of cases has not hitherto been provided for in our hospital.

On the ground floor will be provided an attractive auditorium, capable of seating about two hundred and fifty people, where it is intended to have given popular talks upon subjects affecting the physical and moral welfare of the individual and the community. Here too, patients, carefully divided into classes according to their physical or mental needs, may meet for instruction in the proper interpretation of their various symptoms and the self-correction of errors of living and thinking. In this way psychotherapy can be productive of best results because its sophistries will be controlled by the rectification of scientific reasoning.

Such is an outline of the plans and purpose of the Robert Dawson Evans Department of Clinical Research and Preventive Medicine.

Administered by a Board of Trustees keenly alive to its magnificent capabilities for good, the institution is especially fortunate in having enlisted a company of workers fully imbued with the

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profound conviction of its mission and the obligation to fulfil it. With these indispensable elements of success there can be no doubt that the humanitarian achievement of this noble foundation will be far reaching and in accord with the liberal progressive spirit of the man whose name it will bear, the guiding principle of whose life might well serve as its motto, "Truth above everything."

Mr. Piper. Allusion has been made to the assistance which was indispensable from the public authorities. We had asked to be present with us this afternoon his Excellency the Governor. He said that he regretted very much that he had a previous engagement which prevented his coming, and said that he would have been particularly glad to come on account of his friendship for Mr. Evans.

We have, however, with us the one through whose efforts we succeeded in obtaining this grant. The land on which the Hospital stands, the land on which the Medical School stands and the land on which the new memorial building will stand were all given by the City of Boston with certain restrictions. At the time it was sought to have the site transferred to the Hospital it was necessary to have those restrictions waived in order to make the transfer. This was done last summer with the assistance of the Mayor and his co-operation, and I am very glad to be able to present to you His Honor, Mayor Fitzgerald.

Mayor Fitzgerald. Some months ago, in the early summer, ex-Governor Bates came into my office (he is always a welcome guest there) to present this proposition to me, and I was very glad to give the assistance of the mayor's office to the carrying out of this project. A great many people expect that a government like the City of Boston conducts its affairs purely on a business basis, but I have always considered it to be the duty of the mayor to so conduct the affairs of the city, as far as the mayor's office is concerned, as to promote the general happiness of the people; and surely nothing can conduce to the welfare and happiness of the public more than the proper development of an institution like this. So, ex-Governor Bates was doubly welcome on this errand, and I directed the proper authorities to do what he wanted.

This institution, founded in 1858 by Legislature, antedates the founding of the Carney Hospital, and ranks among the foremost of our private charities. That the particular school of medicine which it represents has a large following is attested to by the number of notable bequests which the Hospital has received. Among these I am reminded of the John C. Haynes legacy in 1908, and the donation of $200,000 from the Robert Dawson Evans estate, which has resulted in the laying of the cornerstone today.

The growth of the Hospital may be measured by the increase in patients treated, which in 1880 was only 190, ten years later had mounted to 683, and in 1909 was estimated at 5,000. More

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than 50,000 people have been treated at the Hospital since its foundation. Whatever divergence of opinion may exist as to the efficacy of different therapeutic methods, no one will question the intelligence of the benefactors of this institution in selecting the points of attack for the forces of physical redemption. The hospital for contagious diseases at Brighton aims to protect society against one of its evils, an insidious malady, which afflicts even the most careful as well as those who are indifferent. The building here will be devoted to clinical research and preventive medicine, with proper care for those suffering from nervous breakdown. At no period in the history of medical science has the old adage about "an ounce of prevention" received more respect, and we may hope by improving general conditions to bring human suffering to a minimum.

Over and above the benefit wrought to the particular patients of this Hospital I do not see how humanity at large can fail to derive advantage from the study of causes and effects which will be made by your corps of devoted investigators. Where the human and scientific motives go hand in hand, humanity is doubly the gainer and the general laws of health are clearly established. I congratulate you, Mr. President, upon this evidence of progress and of the splendid work of your institution, and am honored in your invitation to be here as the representative of the city today.

Mr. Piper. The Evans Memorial, as has been pointed out by Dr. Richardson, will be carried on under the general direction of the Hospital authorities, with the co-operation of the authorities of the School of Medicine. The President of the Trustees of Boston University is our friend and guest today, and you will be glad to hear from ex-Governor Bates.

Ex-Governor Bates. I want to say that I never made a request upon a public officer that seemed to be granted more readily than this one, and if the Mayor was always as much inclined to take my advice he would give us not only the wonderful administration which he is giving us, but a still more wonderful one.

However, I am here today as the representative of an allied institution. This is not merely a day when the Massachusetts Homœopathic Hospital rejoices, but it is also a day when Boston University has cause for rejoicing. We are allied in supplementary fields, and allied solely for the benefit of humanity. Our School of Medicine is so closely connected with this Hospital that we recognize that this foundation is to open up to that School greater opportunities for usefulness, and so I am tendering congratulations, as well as thinking that I am entitled also as the representative of the Board of Trustees of Boston University, to receive congratulations upon this event. I come on behalf of those Trustees to express the high appreciation that they have of a generous gift promoted by a generous heart. We believe that it is a memorial of interest, not only to the University

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and to the Hospital, but still more of interest to the constituency we serve, humanity; and I think that humanity might well be represented here today by some special spokesman. We are often filled with respect as we gaze upon a memorial to some life that has ended; that has been built in marble or bronze, but so far as this world is concerned that life seems to be ended with the type of memorial. In this type of memorial we see something that seems to indicate that the life is still here as a main force in its help to its brother-man, and so the character of this memorial appeals to us.

I think it comes at a time when the world, as never before, is considering not only its advancement, but its failures. It was only the other day that some of the most distinguished physicians of this land made the statement that the American nation lost fifteen years on an average of every human life by reason of diseases that were preventable. It was further stated by these experts that the loss of human life from preventable diseases in this country was 600,000 per year. A large number, since we came into this room, have died by diseases that were preventable. The forces of disease, typhoid, cancer, pneumonia and various other diseases that occur to you, seem to have been triumphant in spite of all that man has done. We recognize that the medical profession is of the most devoted, that it is occupied by men for the most part of the highest character, whose unselfish lives entitle them to the respect of all the communities in which they live; and we know that we have 80,000 doctors in this country who are waiting to be shown how to meet this question of human life, and that there are ninety million people back of the eighty thousand doctors who are asking for help. That is why this institution has for its prime object to endeavor to render that help. We have been great losers; men have travelled in beaten paths. I believe in the kind of a race that is run in relays. I do not think that the Marathon race for human life ought to be one where you allow one man to begin at the same starting point as the others, where you do not have the advantage of co-operation; but here is an institution which is going to provide the means of preserving that which has been begun, and to begin where those who went before have left off; and in such an institution as that I believe there is hope for humanity, hope in the effort to overcome those enemies of human life to which I have referred.

So, today, on behalf of the Board of Trustees of the University that I represent, and in the interests of this great Hospital, and in the interests of all mankind, I trust that humanity may find that it has reason to take fresh hope from the laying of the foundation stone of this building. I call it a building, but it is really a battle ground, where we trust that a successful fight is to be made; light is to take the place of darkness. Humanity is there to find a help because disease is there not only to be

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alleviated, but remedies to be found by which it may be prevented.

May the fight be a successful fight, and may the generous donor find that as the result of founding this institution she has succeeded in reducing the sum total of human suffering and adding to the sum total of human happiness.

Mr. Piper. A hospital or a medical school without doctors could not be successful A medical society, a collection of doctors who look out for the interests of the profession and for the interests of humanity, is necessary and desirable, and on this occasion I am glad to be able to present to you Dr. George B. Rice, President of the Massachusetts Homœopathic Medical Society.

Dr. Rice. I feel that I must add a tribute of praise to the work of Mrs. Evans and to the effort and self-sacrifice on the part of our friend and colleague, Dr. Richardson, to the members of the Board of Trustees of the Massachusetts Homœopathic Hospital and its president, to the Dean of our Medical School, to the honorable mayor of the City of Boston, to the president of the trustees of Boston University and to the superintendent of our Hospital. It is through the generosity and philanthropy of this noble woman and the co-operation of these men that we are gathered here today to witness the laying of the cornerstone of an institution whose work will be directed toward the relief of suffering human kind. My heart is full that I am privileged to stand before you, and in behalf of the Massachusetts Homœopathic Medical Society utter words of thanks and appreciation. The erection of this building marks a most important step in the progress of medicine. It is more than a school, more than a hospital, for it combines the efficiency of each and adds to their power of doing good. Its influence will be felt by the medical profession throughout the land, and its benefits will reach all mankind. A few evenings ago I was fortunate enough to be present at the annual meeting of the alumni society of Brown University, and while there listened to eloquent speakers, among whom was Dr. Alexander Meiklejohn. Among other points he discussed the difficulties of college professors in getting students to realize how necessary it is for them to obtain a broad education, and he said among other things: "You can lead a horse to water, but you cannot make him drink." Then he said he would like to change this couplet and make it say: "You can lead a horse to water and you can make him thirsty." Now, we want to make the students and the public "thirsty" for the kind of therapeutic drink that we can offer, and what can be a better way than by the erection of institutions of which this is an example? As a profession we are proud to be trusted with this new responsibility, and we hope and pray that we may not be unworthy.

Mr. Piper. We have with us representatives of two educational institutions which are connected with medical work as

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well as this one, and I shall ask you to listen for a few moments to President Hamilton of Tufts, who is here this afternoon.

President Hamilton of Tufts College. This is an absolutely unexpected invitation, but I cannot find it in my heart to decline a literal acceptance of the request to speak for a few moments. I am here partly because of a very great personal interest in this building, which we have seen begun this afternoon, partly because I am glad to bring the greetings and congratulations of a sister institution to this great university which now has this remarkable, and so far as I know, unique opportunity of usefulness open to it. There are a great many persons engaged in an attempt to solve the problems attacked in this new building, but I know of no case where the opportunities offered will equal those which this institution is to enjoy. Ordinarily the work is done by men who are busy with many other things, or it is done in laboratories removed from the clinical facilities which you are to enjoy. In this remarkable combination, clinical and laboratory, this opportunity to fight at short range the battle of the human race, this institution is exceedingly fortunate. It was a happy inspiration that suggested to Mrs. Evans the rendering of just this service to humanity in the name of her husband.

Ex-Governor Bates said that somebody should appear as the representative of humanity, and I think I should like to appear as such a representative. I am of the ranks of those who see from the non-professional side the enormous inroads upon the life and happiness of the community which are made by these, as yet, half-understood diseases. Now, if we can get at these problems, if we can find out how to prevent and how to treat these scourges of the human race, we may not in our lives see the reaping of the results of this endeavor, but I believe there are no problems which will not ultimately yield to the persistent efforts of the human mind. I believe the day will come when the great scourges which afflict mankind will no longer be regarded as serious matters, when they can be prevented and dealt with as former scourges have been dealt with. Perhaps the non-professional portion of this audience may not know that diseases as simple as chickenpox, under certain circumstances, can become as fatal as Asiatic cholera or smallpox; and many others which we ordinarily regard as simple, have been dangerous and most devastating to humanity.

Under the auspices of such an institution as this, with the opportunities for research and treatment that this and similar institutions will furnish, more than a half, perhaps all, of the scourges of humanity may at least be controlled, so that humanity will at last get to the point where the greater part of us may enjoy the blessed privileges of a natural death.

Mr. Piper. Before calling the last speaker, I wish to call you attention to the blue prints on the wall behind me. These are copies of the plans for the building, and we should be glad

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to have you make a nearer inspection, so that you may know just what the building is going to be and just how it is to be arranged.

I will call upon one who has given many years of service to the Hospital and the Medical School, and who is also a member of our Board of Trustees.

Dr. J. P. Sutherland, Dean of Boston University School of Medicine. I consider it a great honor to participate in the exercises which have called us together this afternoon, and it is in my estimation an especial honor to be permitted to represent Boston University School of Medicine on this epoch-making and therefore memorable occasion. We are here to assist in the performance of an important ceremony, the full significance and ultimate results of which we probably are quite unable to appreciate. Felicitations, congratulations, and rejoicings are in order; for a memorial building is to be erected, its foundations already are solidly laid, and it is to be dedicated to the high uses of investigation into the physical and psychic mysteries of human life, and the education of profession and laity in methods of preventing and healing diseases.

The occasion which calls us together is a big event in the history of Homœopathy here in Boston;—it is a big event in the history of our Hospital and our School;—it is a big event in the Cause of true Philanthropy;—it is a big event in the Cause of Medical Science and of Preventive Medicine;—therefore, it is a big event in the Cause of practical and useful Education.

It is natural upon such an occasion to become reminiscent and from the platform of the past take a look into the future;—and as the thoughts turn backward one sees . . . what? Small beginnings slowly, steadily, solidly growing until our present extensive proportions have been reached! Aside from the introduction of Homœopathy into Massachusetts in 1838 by Dr. Gregg, and the formation of societies, local and State, the first organized effort of Homœopathy was the opening of a dispensary, whose existence was brief, in a room over Boylston Market in 1846 by Drs. Hoffendahl and Thayer. Then in 1855 came a charter for the hospital. The Dispensary was chartered in 1856 and the following year began its work, first in a room in Tremont Temple. . . . Later, 1870, in a house of its own in Burroughs Place, and still later in 1873, while retaining the Burroughs Place as a branch, it became "centralized" in the lower floor of Boston University School of Medicine. These quarters were soon outgrown, and in 1892 the Dispensary moved into its present quarters, which were built for it.

As to our Hospital—it was chartered in 1855, but for fifteen years nothing was done in the way of a building. In 1870, however, a hospital organization was formed, and rooms were hired in the building owned by the Dispensary in Burroughs Place, wherein the work of the Hospital was done. The establishment

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of Boston University School of Medicine gave the Hospital an impetus it has not yet gotten over, for in order to be near the School a building was erected (now the Central Administration Building) on the lot adjoining the School, in 1876, three years after the School was opened. And what a glorious institution some of us considered it! In 1884 the first surgical wing was built and occupied. In 1889, aided by a liberal grant by the State, the Medical Wing and Surgical Annex were built and some smaller additions made. These were occupied in 1892. Later the Maternity on West Newton Street was added to the facilities of the Hospital, and still later the Clark Ward for Children on Brookline Street. In 1908 was completed and put into use the John C. Haynes Memorial Hospital for Contagious Diseases, built to accommodate 120 patients;—and yet last Spring in the second year of its use, 171 patients were housed and treated under its sheltering roof at one time and for a period of several weeks.

In passing it is appropriate to refer to the Westboro Insane Hospital because the noble men and women who brought about the establishment of the Dispensary and Hospital and School were the men and women through whose influence the Westboro Hospital came into existence as a branch of the homœopathic work in Massachusetts. This Hospital was established by the State in 1883, and opened for patients in 1886. At first the capacity of the Westboro Hospital was 400. Today its capacity is about 1,100, and in the course of its existence it has treated more than 9,000 cases of insanity with a success that places it far ahead of any similar institution in this State.

It is interesting and appropriate to call attention to the fact that on the Joint Staff of the Dispensary, now the Out-Patient Department of the Hospital, and the Hospital itself there are 111 physicians, surgeons and specialists. Of this considerable number, 93 obtained their medical education and training at Boston University School of Medicine and graduated therefrom. A word, therefore, in connection with the inception of the School, its influence and its development.

Boston University School of Medicine is in the 38th year of its existence, and it owes this existence to the independent and progressive spirit of the homœopathic physicians of the State who, acting through their State Society, secured from the Legislature in 1867 a charter for a medical school. The times, however, were not ripe for its establishment, but later it came into existence as the resultant of three distinct influences:

(1) the growth of Homœopathy,

(2) the Founding of Boston University, and

(3) the crippling and financial embarrassment of the New England Female Medical College, due to the death of its founder, Dr. Gregory.

But few people today ever hear about or know anything of the New England Female Medical College, but though it was not

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homœopathic it should be mentioned here and now, for it did noble pioneer work and deserves an imperishable monument. After three years of planning, it was in 1848 opened for the reception of students. Let it be noted that it was the *first medical school in the world* to be opened for the medical education of women. It had for its friends and supporters Boston men and women of national and international reputation—whose names have become household words in New England and elsewhere. But on the death of its founder it languished, and by act of Legislature became a part of Boston University. In 1873—twenty-five years after the founding of the New England Female Medical College, Boston University opened its Medical School and became in its turn a pioneer, for Boston University was the first university in the world to be organized "logically and from the start on the principle of no discrimination on the ground of sex," either among students or teachers. "University freedom" was its cry, and university freedom has been consistently offered to all regardless of sex, nationality or creed.

The aspirations and standards of our Medical School have been consistently high. Not to weary you with details, let me summarize by saying that Boston University School of Medicine was the first in this country to offer a systematically graded three years' course, in 1873, and it was among the first to make that course compulsory.

It was the first to offer a four years' course (1878), and the first to make the four years' course compulsory (1890).

It restored and grants the Baccalaureates in Surgery and Medicine.

It is one of the six out of the 155 medical schools of this country to offer and maintain a five years' course qualifying at its completion for the M.D. *cum laude.*

It is one of a very few to establish and offer a six years' combination course whereby the two degrees Sc.B. and M.D. may be acquired.

It is the only medical school in this or any other country that possesses three medals won on the merits of its exhibits in open competition at National and International Expositions and Congresses.

Within the brief history of our school its buildings have been more than doubled in size, its course more than doubled in length, its faculty and the subjects taught more than doubled in number.

And now comes to Homœopathy; to our Hospital, and to our School, for our interests are interwoven and interdependent, this latest expansion of power and influence; this memorial gift to the hospital, this gift to the progressive and scientific spirit of the age—the Robert Dawson Evans Memorial Building for Clinical Research and Preventive Medicine.

What is to be our attitude towards it but one of earnest devotion similar to that which has made of our other institutions de-

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served successes! It is the culmination of a long series of progressions that deserve recognition, approval and imitation. And while pledging ourselves to the faithful guarding and forwarding of its interests, we also pledge ourselves to hold in affectionate regard the memories of those noble men and women from whom we have received the inheritances which fill the present with rejoicing and make the future bright with promise.

The exercises were closed by benediction by President William E. Huntington.

RHEUMATISM.—*Aconite* produces pains in the fibrous tissues, generally the muscles and the large joints, but no marked redness or swelling. It is the remedy in the beginning when you have the high fever and great restlessness, anxiety and fearfulness marked at night. Patient knows he is going to die this time sure. The nervous excitability is most marked when Aconite is the remedy. Stiff neck and lumbago after a chill, especially with fever. Under its use the heart is much less liable to be affected. Painful palpitation, præcordial anxiety and other cardiac complications indicate its use. In the cardiac complications of rheumatism Aconite is the chief remedy.

Colchicum, used by both schools, but its usefulness is wholly due to its homœopathicity. It produces a perfect picture of inflammatory rheumatism—pain, swelling, sweat. Remember it in pericarditis when occurring in the course of rheumatic fever, in torticollis, as it seems to have an elective affinity for the muscles of the neck. Its pains are *tearing* and there is marked muscular weakness, especially in the arms and legs, as if paralyzed, hence pulse small, weak and quickened. Debility very marked. The stomach is generally affected, nausea when smelling food. Urine scanty and red. Feeble, debilitated persons who have suffered with rheumatism a long time.

Rhus toxicodendron is one of the great homœopathic medicines for rheumatic states. Both acute and chronic cases call for it. It is especially suitable after exposure to wet when overheated and perspiring, after great physical exertion. It has an especial affinity for the deep muscles of the back. Characteristic are the marked stiffness and soreness, aggravation from cold, damp, stormy weather, corresponding improvement from extreme warmth and in more chronic types, the improvement after the parts get "limbered up." There is much restlessness and desire to move about, it brings some relief to the aches and pains.—Boericke, Medical Century.

ROXBURY HOMOEOPATHIC DISPENSARY.

The annual meeting of the Corporation and the Board of Trustees of the Roxbury Homœopathic Dispensary was held on January 9, and the following officers elected for the ensuing year: President, William O. Curtis, Esq.; Vice-Presidents, Mrs. A. B. Fenno-Gendrot, Mary E. Mosher, M.D., Donald M. Blair, Esq.; Secretary. Mrs. Lillian G. Knowles; Treasurer, Dana F. Downing, M.D.; Consulting Physicians, L. Houghton Kimball, M.D., S. H. Calderwood, M.D.; Physician-in-Charge, Dana F. Downing, M.D.

Proof of loss of a cow killed by lightning contained the following: Question—"What disposition of carcass?" Answer—"Quiet and peaceful."

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CLINICAL DEPARTMENT.

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

Case II—Diagnosis: Tuberculosis.

As regards case No. 44,867 and No. 44,653 which appeared in the February issue of this journal. When similar cases are referred to the vaccine clinic of the Out-Patient Department, the following is the method of procedure: A von Pirquet cutaneous test is instigated and the degree of reaction carefully noted. Tuberculin is employed therapeutically. The size of the initial inoculation as well as of subsequent ones is carefully graded for each individual case. This is determined by the general clinical condition of each patient. Microscopic examination of the sputum of all cases is essential whenever possible. The secondary infection in cases where there is profuse expectoration seems to exercise a most important role as regards the progress of the patient. The sputum frequently shows large numbers of such organisms as pneumococci, streptococci or staphylococci. When a condition such as the above exists, cultures are made from the sputum and an autogenous vaccine is prepared from the prevailing organism. Having prepared an autogenous vaccine to combat the secondary infection, the patients are given therapeutic inoculations of tuberculin and their autogenous pneumococcus (if such it proves to be) in alternation. The patients as a rule are thus inoculated twice each week so that they have the benefit of a dose of each once in six to eight days. If a given case is not sufficiently far advanced to require a vaccine for secondary infection, the patient receives gradually increasing doses of tuberculin at weekly intervals. The dose, however, is seldom if ever, increased beyond .0006 or .0007 mg.

The above outline of vaccine treatment is never instigated to the exclusion of any other but is used in conjunction with all other recognized forms, hygienic, dietetic and prophylactic methods. The weight of the patient at regular intervals is recorded and the physical condition carefully watched.

Massachusetts Homœopathic Hospital, C. A. Eaton, M.D.
Department of Vaccine Therapy.

Case III: for diagnosis:

Case is that of a girl aged twelve years. Her parents are well and strong. She has never been a strong child, always tired easily and a poor eater and sleeper. A complaining child. Early last December (1910) she felt more languid than usual; had occipital headache and her legs felt heavy. These symptoms increased through the month; she left school about the first of January and had to go to bed because she could not walk. About this time she ran a temperature of 101 F. for a day or so. She complained of much pain in the lumbar spine and in the legs, especially the left. She was sent to the hospital where she was soon urged to get up and dress, and was allowed to go over the stairs to the

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playroom three times a day. She put on some flesh, ate better, but sleep did not improve, and after two weeks was discharged.

The middle of February examination showed a well-nourished girl of pasty complexion. She was lying on a couch dressed, but dreaded to move because of pain in her lower back. To sit up she pushed the rigid trunk with her arms and after balancing herself for a moment walked a few steps slightly dragging her left leg, which measures a half inch less than the right; flexion of the trunk is painful. Upon lying down again the head pulls backward into the pillow. The back muscles are all rigid, and she cannot lie on her back because of the pain. Knee jerks are both slightly exaggerated, especially the left, and there is a slight pseudo-clonus; pupils contract to light and are equal.

What is the probable diagnosis? From what would it have to be differentiated?

WHAT DO WE NEED TO KNOW CLINICALLY ABOUT THE MIND?

As children we had a kaleidoscope which we kept turning and watching, fascinated by the ever-changing play of designs and colors. Sometimes the pieces of glass did not fall readily into their places, the resultant pattern was not uniform and complete. We had a chance to analyze the component shapes and colors; then we would shake the kaleidoscope in an attempt to bring about a unified and satisfying picture. Then it was broken, and with bated curiosity we took off the end to see of what it was made and how it worked, and attempted to arrange the pretty pieces of glass in the old designs.

Methods.

Our primary perceptual centres are the units of our mental kaleidoscope from which all the beauty and richness of our mental fabric is woven. To understand the composite resultants we must study it from three main avenues: (1) through its normal working state in the healthy individual (normal psychology, ethics and all the branches of philosophy); (2) through its diseased state when we can get more striking accentuations of the individual faculties because of the friction which prevents the pieces from readily falling into their places and so makes imperfect mind pictures (abnormal psychology), and (3) through its useless state, when it is completely broken and will no longer work, we may pull it to pieces and so far as our knowledge will permit, determine when and what the friction was (neuro-pathology). From this collective knowledge we may be in a position not only to lessen the friction between the elements as when we apply corrective lenses to refractive or muscular errors of the eye; or, by appropriate treatment bring about compensation of a dilated heart, and so correct a depressed mood. We may in time localize errors in the central end of the higher reflex arcs, out of which the more delicate psychic fabric is wrought, and through surgical, chemical or other measures again establish a readjustment of the elements and obtain a set of normal mind pictures and thought processes: "a consummation devoutly to be wished."

Mental Synthesis.

On the normal side let us conceive, if we can, a perfect human being.

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Each of his senses would be in such a state of normal poise that only perfect percepts would be sent in from his eyes, ears, nose, tongue and skin, from the viscera of his thoracic, abdominal and pelvic cavities and from his joints and muscles to the primary perceptual centres in the brain. These centres are in the brain stem, rear brain, parietal, temporal and base of the frontal lobes and the isle of Reil; and these in turn would accurately transmit such percepts to the higher reflex (association) arcs in the frontal and apex of the parietal cortex which preside over intellect and volitional acts: i. e., comparison, reason, insight, judgment and finally decision, which seems to be the end process in the intellectual chain of reflex arcs—the location of opinions and sentiments.

The Will.

At this point, about under the anterior fontenelle, we can theorize that the association processes having ended, the energy must find a motor outlet for expression as all sensory processes ultimately do, and so is referred back to the pre-central convolutions (the great motor cortex) through neurons, which so far as psycho-physiology is concerned, must be considered the seat of will.

Initiative.

Now we have already said that the great volume of bodily sensations which determine the emotional content of mind are continually streaming into the areas of general sensation in the parietal lobes. The central end of the sensations derived from the muscles and joints (kinaesthetic) is situated in the post-central convolutions. The association fibres which pass through such short central arcs (it is probable that the greatest furnishing the emotional element in all action and as greatly augmenting the energy which discharges into this great motor area—perhaps into the Betz cells, and thence out through the pyramidal tracts. This emotional (affective) energy would be greatly enhanced by the fact of having to pass through such short central arcs (it is probable that the greatest resistance is offered to the nervous current in the synopses of the more complex psychical arcs), and would be proportional to the physical well-being of the individual. This energy coming as it does from all the great muscles of the body could add great force to the presumably weaker though more highly organized intellectual (will) arcs, and so would naturally be a most important factor in carrying out decisive action. These might be called the arcs of initiative.

The will, then, being the end process of the intellectual reflex arcs, and initiative or the energizing force the end process of the association arcs of the areas of general sensation, both come together at the great discharging ground in the pre-central convolution from which they are projected into the appropriate channels for the execution of voluntary and perhaps some of the involuntary acts.

I realize that the scheme is somewhat arbitrary and leaves out much of the psychic man—interest, attention, memory and inhibition, etc. These we can examine, however, even if they cannot yet be shown to be localizable.

If, as I have said, all of these reflexes were in perfect working order

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and each faculty, i. e., each intellectual and emotional (affective) correlate, were developed to its logical perfection, we should have an ideal individual with perfect poise of emotions and acts in all the somatic and intellectual spheres, language, music, art, logic, ethics, etc., etc.

Practically we must all fall far short of this standard, and the question is how shall we go to work to find out how far short a given individual is and what part such errors play in his mental state. In fact, "we want to know just what a man is with his mask off."

What to Test For.

To accomplish this, innumerable tests have been devised, and more are being worked out every day in our experimental psychological laboratories. The amount of apparatus and the time necessary to develop skill in its use makes elaborate analysis both of the primary sensory organs and their psychic correlates and syntheses impracticable outside of a properly equipped laboratory. However, there are many simple things which one can do to test the normality of mind processes. He must first establish for himself, however, through sufficient study and observation in each of the three fields mentioned, as well as by a working knowledge of the rest of the human mechanism, a fairly accurate idea of what constitutes the normal and the approximate limits of its variations. At this time only the more primary senses will be referred to, analysis of the more complex mind resultants being left until after the discussion of the abnormal psychology.

What, then, should the primary perceptual centres learn from the eye, ear, nose, tongue, skin, internal viscera, muscles and joints?

We may construct the following table:

From the EYE, i. e., through the optic nerve, are received mental impressions of form, color, brightness, distance and some elements of static equilibrium.

From the EAR, i. e., through the auditory nerve, noise, tones, timber, and elements of station.

From the NOSE, i. e., through the olfactory nerve, smells to the number of at least 50,000 (Titchner).

From the TONGUE, i. e., through the trifacial, facial and the glosopharyngeal, the tastes, sweet, bitter, sour, salt and alkaline.

From the SKIN, i. e., through the sensory branch of the fifth and the posterior cord-roots to the gracile and cuncate nuclei of the medulla, touch, temperature and pain.

From the muscles, joints, bones and internal viscera, i. e., through the sympathetic nervous system via posterior cord-roots, equilibrium, and all those vague instinctive bodily sensations which make for the feelings which constitute well being and determine the emotions.

The tests for these primary sensations are well known, and need not be enumerated. They may be found in any good neurological text book. Together they form the entire primary content of consciousness such as any of the higher animals possess, and the way in which they are blended in the higher psychic arcs determines the kind of mentality in any given individual.

In the next number we shall deal with these higher psychic arcs.

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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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ARTHUR H. RING M.D., Assistant Editor.

Reports of Societies and Personal Items should be sent in by the 15th of the month previous to the one in which they are to appear. Reprints will be furnished at cost and should be ordered of the Business Manager before article is published.

MEDICAL RESEARCH.

It is an interesting and very encouraging occupation for anyone with a little spare time to bring together mentally or on paper the various generous gifts that have recently been made for the purpose of furthering research on strictly medical lines. Beginning with the Rockefeller Institute and its recently constructed hospital situated in our largest city, we find that the benefits possible to such an institution have become so well recognized that several benevolently inclined persons throughout the country have seen somewhat of the possibilities and are freely contributing out of their abundance toward that work which will be for the physical betterment of their neighbors. The value of the New York institution has already been demonstrated in a most striking manner. A few weeks ago came the announcement from Philadelphia of a gift to the University of Pennsylvania of the sum of about two hundred thousand dollars for research in that institution. More recently we have learned of the gift to the Northwestern University Medical School of another two hundred thousand dollars by Mr. James A. Patten for the endowment of a chair of medical research in that institution. The chief object of the research, at least at first, is to be tuberculosis, in view of the fact that a brother of the donor recently died of that disease. It is stated that the estimated income from this will be adequate to secure the services of a skilled investigator who will initiate the work. It is also stated that additional funds will doubtless become available later for assistants and associates.

A research laboratory has for some time been provided for New York, the results of which, under the direction of Dr. Hermann F. Biggs, have been most gratifying. Founded in 1894 for the purpose of preparing diphtheria antitoxin, it has far outgrown this limited field, important though that be. In his recent report

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to the Commissioner of the Department of Health, Dr. Biggs urgently requests still further enlargement by the establishment of a division for Specific Therapy and Preventive Medicine. His reasons for this, as well as his summary of future possibilities for such a division, can best be given in his own words:

"There are now under the care of the city in the various hospitals, more than three thousand cases of tuberculosis, of which about seven hundred are in the hospitals of the Department of Health. The tuberculin treatment is being used only in very exceptional instances. The most thoughtful investigators, both in this country and abroad, are now agreed that the tuberculin treatment is valuable in a considerable proportion of the sub-acute and incipient cases of tuberculosis, and some believe it is indicated in a great many other cases, and even in those which are fairly advanced, but in which the lesions are no longer actively progressing. There is still doubt as to just when and how it should be administered, and just what preparation should be used. The Department has at present no trained observers in this line of work, and, therefore, cannot use tuberculin as well as if such advice was available. It is quite certain that further advances will be made in this line in the near future. The great importance of this work to the city renders it necessary that there should be available the entire time one or more thoroughly trained physicians familiar with bacteriology, to study the clinical side of the subject, and a bacteriologist to prepare the tuberculins and to study methods for the improvements of the preparations.

"Another direction in which the services of the laboratory are needed is in the use of gonococcus vaccines and in bacteriological examinations in infants and young children suffering from suspected gonorrhœal vaginitis. This disease is a very serious menace in the hospitals for contagious diseases and in all hospitals having young female children, and in tenement houses. Serious infections of the eye and of the internal organs not infrequently follow from the dissemination of the infection, and the expense of isolating and treating these cases is a great burden on the various hospitals of the city. During the past year every child admitted to the contagious disease hospitals has been examined. Over twelve per cent. of all the children have been found to be infected. It has now been demonstrated that gonococcus vaccine, as now produced, has value in the treatment of this condition, and it will undoubtedly be further improved. This work requires not only the services of a bacteriologist but even more the services of one or more physicians trained in both bacteriological and clinical methods.

"It is well known that the death rate from diphtheria has been greatly lowered by the use of antitoxin, so that the annual death rate is less than one-third of what it was fifteen years ago, and this means a saving of several thousand lives each year in New York City. The number of cases, however, is still very large. If we could devise some way of giving antitoxin internally, so that it would bt absorbed, we could make its use general. This is undoubtedly a very difficult problem to solve, but a start has been made and sufficient has been done to show that it will probably be accomplished. If so, diphtheria will probably be eradicated as completely as has been the case with smallpox. This work would require, at least, a skilled bacteriologist, a skilled chemist and an assistant.

"The further perfection of an efficient streptococcus anti-serum to be used in sepsis, after childbirth, septicæmia, erysipelas, scarlet fever, and many other septic conditions is of the most urgent importance. While these cases are not now as frequent as in past years, they are still numerous and of the greatest importance. Two hundred and fifty women died from streptococcus infection after childbirth last year. The Department should have a bacteriologist to prepare the serum and a physician

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trained in laboratory methods, to make the bacteriological diagnosis through blood cultures and to administer the serum in the homes of the poor. The cost of the serum for each case (usually an efficient serum is not procurable at all from private manufacturers) would be twenty-five to fifty dollars.

"The preparation of vaccines to combat diseases due to gonococci, streptococci, staphylococci, colon bacilli, typhoid bacilli, and other bacteria. Many forms of infections due to these bacteria, especially when they are localized or sub-acute, may be helpfully treated by these vaccines. These vaccines have been used extensively during the past year in the treatment of patients in Bellevue Hospital under the direction of Drs. Hastings and Howland, and at the Babies' Hospital under the supervision of Dr. Holt. The laboratory would prepare and supply these vaccines to the hospitals of New York and to physicians treating persons at their homes who were too poor to pay for them. The workers in the laboratory would become a center for storing knowledge and giving advice on these subjects.

"The use of the gonococcus vaccine is not only indicated in the infection of young children, but also in certain varieties of gonorrhœal disease of adults, such as the joint affections. The streptococcus vaccines are useful in sub-acute septicæmia which leads, as a rule, to ultimate death. The colon bacillus vaccine is very helpful to localized infections of the bladder and kidney and elsewhere. The typhoid bacillus vaccines have been used to great advantage to immunize those who are in danger of acquiring infection and to prevent relapses in those suffering from typhoid fever. At the present time it is impossible for the poor to obtain these vaccines unless they enter a hospital, and not usually then.

"Diseases such as pneumonia, influenza, whooping cough, trachoma, scarlet fever and measles, which still baffle us, should be investigated with the hope of finding remedies, or at least of applying immediately any advances in knowledge made elsewhere."

It is understood that his recommendations, at least in their important particulars, have been accepted by the proper authorities. Not only in this country is this feeling of the need of research manifest. Even at present in England many are warmly advocating, as the most fitting memorial for the late King Edward, an institute of medical research because of his never-failing interest in hospital work and all means of alleviating suffering.

And in Germany, Speyer house in Frankfort is to receive, so say the reports, one-half of all the profits from Ehrlich's new remedy for syphilis, "606."

No need is there to speak of the Pasteur Institute in Paris or of the various cancer research endowments on both sides of the Atlantic.

It is gratifying, however, to realize that in all of this era of generosity New England, and particularly Boston, is not behind other places. Much research has been done for years at the various medical schools and hospitals in a more or less sporadic manner. Thanks to the liberality of Mrs. Robert Dawson Evans, a distinct institution exclusively for research has now been provided for, and even now its walls are rising. Planned to do work somewhat similar to that of the Rockefeller Institute with its laboratories and hospital beds, it will probably be opened for

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actual work some time in the late fall of 1911. At that time many of the problems now being followed at the adjoining Boston University School of Medicine, as far as opportunity permits, can be carried along to what we may hope will be a satisfactory conclusion. At least, at that time Boston will come into possession of an institution which in excellence of construction, completeness of equipment and possibilities for investigation, can bear comparison with that of any other city.

STATUS LYMPHATICUS.

The occurrence in the experience of the writer within the past six months of five fatal cases of that vague disease called for want of a better term status lymphaticus emphasizes the lack of knowledge not only of the cause and characteristics of the disease but particularly of the inability to recognize it clinically. Of these cases four deaths occurred during or immediately following surgical anaesthesia and in no case was recognition made. It will not be our province to speak at the present time of any possible theories concerning the etiology of the condition. It is one that was first noted nearly 200 years ago by Bishat, but was practically overlooked until about 10 years ago when Paultauf wrote an able paper upon Hyperplasia of the Thymus Gland. Recently the subject has been receiving more and more attention. The diagnosis is seldom made antemortem. Escderick says that status lymphaticus may be suspected in patients having pale, thin skin, pasty complexion, a good supply of sub-cutaneous fat, enlarged superficial lymph nodes, especially those of the neck and axilla, and frequently a palpable spleen. In the five cases above noted, all of which went to autopsy, the spleen was enlarged in only one instance. When, during an operation, collapse occurs, the irritation of the nasal pharynx has apparently been followed by some good results. In view of these occurrences, all happening in persons otherwise in the best of health and of ages varying from 10 to 25 years, the patient's family in case of anaesthesia, should, we believe, always be warned that there is an element of risk in anaesthesia. This risk, of course, is but slight. It nevertheless should be explained, and if this is done the surgeon will in these occasional instances feel that the right advice of warning has been given.

ALTERED VIEWPOINTS.

To those of us who for the past years have had instilled into our hearts the horror of bacterial infection of wounds from the operator's hands, certain results of recent investigation will be of interest. We have all seen, and many have subjected themselves to the arduous process of preparing the hands for a surgical operation. The preliminary cleaning, followed by five to ten minutes of severe scrubbing with a coarse brush, and this in turn followed by immer-

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sion and scrubbing in one, two, or three other solutions is a familiar sight in every operating room. No wonder many nurses and some surgeons could not present skin sufficiently resistant to withstand these heroic measures. No wonder the process was not seldom a much-dreaded one, particularly when alcohol or formaldehyde was used. It was claimed that the hair follicles, sebaceous and sweat glands were teeming with seething hordes of micro-organisms, all ready to go forth upon their pyogenic errands. In order to eliminate such, therefore, prolonged scrubbing and the use of antiseptics were essential. More recently we have come to suspect that some of this procedure may really do more injury than benefit by its traumatic effect. Some recent studies by Ritchie, reported in one of the recent German periodicals, have been the means of bringing up the question whether our ideas have not been largely erroneous.

As a result of much investigation Ritchie states that there is lack of proof that the sweat glands or their ducts in normal skin serve as domiciles for bacteria, that the surgeon may disregard such locations as possible sources of operative danger, and that even into hair follicles bacteria cannot readily enter; and that when they do become thus located they cannot enter the sebaceous glands communicating therewith. The contention is made that in both varieties of glands the current of secretion, a thick oily substance, is from within outward, against which tide it is impossible for micro-organisms to travel.

In practical application of this work the prolonged harsh scrubbing in soap and water has been eliminated from von Brun's clinic, the exclusive and comparatively short use of alcohol having been substituted. The idea is receiving gradually extending application and is one that seems to be well worth investigation.

OBITUARY.

OSMON ROYAL, M.D.

The sudden death of Osmon Royal, M.D., which occurred December 31, 1910, in Portland, Oregon, was a great shock, not only to a large circle of patients and friends in his own city, but to the entire State of Oregon, with which he was professionally identified. Dr. Royal appeared to be in normal health on the morning of his death, with the exception of a cold. He was, however, very tired, because of the exacting duties of his profession. For several weeks prior to December thirty-first he had not only attended to his own large practice, but, in addition, to the practice of two brother physicians who were ill. The weather had been unusually severe, roads almost impassable, and the increased demands on his time, added to long trips, often extended his work hours far into the night. His wife and son, noting his overworked condition, persuaded him, on the afternoon of December thirty-first, to take a little diversion, and attend with them the high school foot-ball game, which was held in Portland that day. It was while watching the game, sitting quietly by the side of his wife and son, that the final summons came. Physicians present did all in their power to revive him, but without avail. In the vain hope that something more might be accomplished, he was placed in his own auto and conveyed to the Homœopathic Hospital, a few blocks away;

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but life had fled before he was removed from the grounds. The hospital physician, Dr. C. A. Macrum, pronounced apoplexy the cause of his death. Dr. Royal was buried from the Grace Methodist Episcopal Church, in Portland, Wednesday, January 4. He had been an active member of this church for twenty-five years. Mrs. Royal, with her characteristic thoughtfulness, allowed his remains to lie in state at the church during the noon hour, that the working people who were accustomed to visit him in his office at that time might have a last look at the peaceful face of their loved counsellor and physician.

Dr. Royal was accounted one of the most prominent and influential members of the Oregon medical fraternity, and at the time of his death was President of the Oregon State Board of Medical Examiners. The physicians of Portland attended the funeral in a body. Many of the prominent business men of Portland, whom he had known well and long, gave testimonials regarding the worth and genuineness of the life which had closed so suddenly. The interment at River View Cemetery was private. Quoting from the pen of his wife, "We laid him away on the highest slope of our beautiful River View Cemetery. Below the wooded hillside lies the peaceful Willamette, stretching away in the distance like a stream of silver is the great Columbia; while over to the right, between these two rivers which he so loved, is the home of his boyhood, his father's old farm at Mt. Tabor."

Dr. Royal was of English-German parentage. He was born in Sandwich, Illinois, January 3, 1856. His mother died when he was an infant, but his stepmother, who is still living in Portland, cared for him with great tenderness. When the Doctor was nine years old he went to Oregon with his parents, making the journey by the way of the Isthmus of Panama,—then a much-travelled route to the Pacific Coast. Portland, at that time, was a mere hamlet, and Washington had no Seattle; so he had the privilege of seeing not only the growth of his own city, but of the great Northwest as a whole. When he was a small boy, he had a newspaper route, carrying the "Oregonian" for several years. He always regarded that paper with great interest. Later he worked at various trades in and about Portland; and when his father lost his health and property, he cheerfully assumed the double duty of caring for his parents and making his own way.

Dr. Royal attended the Willamette University at Salem and later went to Ohio-Wesleyan University, at Delaware, Ohio. After graduating from that University, he came to Boston University School of Medicine. When he received his diploma in 1885, he returned to Portland and entered upon his practice, which covered a little more than twenty-five years.

In 1888, Dr. Royal married Miss Julia Morgan of New York City, who with one son, Osmon Royal, Jr., survives him.

Last July, when the American Institute of Homœopathy met in Pasadena, California, Dr. Royal was one of our most enthusiastic hosts from the Pacific Coast, and was not sparing in his efforts to entertain, not only the members, but every one who attended the Institute. He had a warm place in his heart for his Alma Mater; and because of his thoughtfulness and generosity the Boston University School of Medicine had a re-union dinner at Hotel Maryland, Dr. Royal acting, with his accustomed modesty, as our host. He accompanied the Institute to San Francisco, and when the meeting finally adjourned, took a party of about one hundred members and friends from San Francisco to Portland, providing by telegrams to different places for their entertainment on the way, and in his own city. When he bade them goodbye, he said, "We shall expect you all in Portland in 1915." Dr. Royal was anxious for a class re-union in Pasadena, and expressed great regret that we could not meet together again, and answer the roll-call, as we did a quarter of a century ago. Had his desire been realized, there would have been many vacancies, for we numbered at our graduation twenty-six, now eighteen.

The writer enjoyed the hospitality of his family ten days, while in

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Portland, and can never forget the grandness of the nature which dwelt beneath that quiet, unobtrusive manner. We are proud of his achievement in our profession, proud of him as our classmate, and glory that no stain has ever tarnished his fair name.

"The sun is but a spark of fire,
A transient meteor in the sky,
The soul, immortal as its sire,
Shall never die."

Clara E. Gary, M. D., Class '85,
416 Marlboro Street, Boston, Mass.

EDWIN F. VOSE, M.D.

The many friends of Dr. Edwin F. Vose, of Portland, Me., regret the loss of his friendship and the privilege of his professional advice. The doctor has been for years prominent in Portland and in Maine, and it will be difficult to find one who will be able at present to successfully fill the position that he has occupied with so much credit. The following obituary appeared in the Portland Daily Press of January 14. This gives the facts of his life in such a satisfactory way that it will be quoted in full:

Edwin Faxon Vose was born in Watertown, Mass., Oct. 17, 1850, the son of Henry C. and Rachel W. (Faxon) Vose.

He received his early education in the public schools and at the Massachusetts Agricultural College in the class of 1872. After a course of medical study with his father he entered the medical department of the Boston University and graduated therefrom in 1876. Before graduating he served one year as house surgeon of the Massachusetts Homœopathic Hospital. After receiving his diploma he began the practice of medicine in partnership with Dr. Eliphalet Clark at Portland, who was one of the pioneers of Homœopathy in the State of Maine. In 1877, the retirement of Dr. Clark left him in full charge of their combined practice, which he had since continued and steadily increased. Dr. Vose was the president of the Maine State Homœopathic Medical Society in 1895, a member of the Maine Academy of Medicine, and when the Legislature in 1895 passed the bill requiring that all physicians practicing in the State be registered or pass examinations, he was appointed by Governor Cleaves as a member of the examining board. Dr. Vose was prominently identified with fraternal societies and organizations, being past master of Portland lodge of Masons, past high priest of Mt. Vernon chapter, Royal Arch Masons, past master of Portland council, Royal and Select Masters, past commander of Portland commandery, Knights Templar, member of the Order of High Priesthood, the Maine Consistory of 32d degree Masons, Aleppo temple, Nobles of the Mystic Shrine of Boston, the Order of the Red Cross of Constantine, and the Royal Order of Scotland, the latter of which is limited to a membership of 300 in the United States, and is controlled at Edinburgh, Scotland; also past grand of Hadattah lodge and a member of Una encampment in the Odd Fellows, and a member of Bramhall lodge, K. of P. He was an active member of the Maine Charitable Mechanic Association, the Portland Club and the Sons of the American Revolution. In politics Dr. Vose was a Republican and was for a number of years, beginning in 1894, a member of the school board.

He was married July 5, 1876, to Lizzie M. Begg, daughter of John and Lizzie (McCurdy) Begg, of Brooklyn, N. Y. He is survived by his wife and one daughter, Mrs. Horace Crosby of this city. He also leaves one brother, Dr. A. C. Vose of Marion, Mass.

CLARA D. WHITMAN REED, M.D.

Dr. Clara D. Whitman Reed died at her home in South Acworth, N. H., January 13, 1911.

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Dr. Reed was born in Alstead, N. H., in 1840, the daughter of Joel and Clarissa Porter. At the age of 13 she removed with her parents to South Acworth. In 1857 she married William F. Whitman, who was killed in the Civil War. In 1869 she married George A. Reed, who died in 1874. She graduated from Boston University School of Medicine in 1878 and began her professional career in Bellows Falls, Vermont, where she remained nine years. She then removed to Newton, Mass., and continued in active practise until one year before her decease. She is survived by one daughter, Miss Viola M. Whitman.

Dr. Reed was devoted to her work to an unusual degree, and her professional career was a remarkably successful one. Dearly loved by all who knew her, her death brings a deep sense of loss to many patients and friends. She was an exceptionally strong character, and the fine qualities of her nature were never shown better than in the last year of her life, when she bore the intense suffering of a most distressing illness with wonderful fortitude and resignation.

ORPHA D. BALDWIN BRUCE, M.D.

Dr. Orpha D. Baldwin Bruce (class of 1885, B. U. S. M.), of Tampa, Florida, died on December 10, at the age of 59. Previous to her marriage to Dr. H. A. Bruce, a retired homœopathic physician, Dr. Baldwin was in practice in Cleveland, Ohio, and in Portland, Oregon.

BOOK REVIEWS.

The Modern Treatment of Alcoholism and Drug Narcotism. By C. A. McBride, M.D., L. R. C. P. & S. (Edin.). $2.00. Rebman Co., New York, publishers.

In this book Dr. McBride reviews the History, Pathology, Causes and Forms of Inebriety and finally describes a method of treatment which he himself originated and has used "with more than ordinary success." For thirty years he has made a specialty of inebriety and the rich experience which he brings to the treatment of his subject lends weight and confidence to each opinion which he expresses. Though he modestly says in the preface that from a literary point of view he knows himself incapable of producing a satisfactory work, the book is delightfully and simply written and teeming with useful ideas. He speaks in the first person, which always lends interest.

Inebriety he divides into (1) The Constant Drinker, who uses stimulants daily; (2) The Periodic Drinker; (3) The Dipsomaniac, cases whose outbreaks are marked by excitement of a maniacal kind; (4) The Voluntary Drinkers, whom he does not consider medical cases, and (5) Mixed Cases.

The treatment is considered under the heads of, moral treatment, which is important; dietetics, not so important, except that he has often seen the typhoid-like tongue rapidly clear up through the use of lemonade; and drug treatment, which is all-important. Home treatment versus institution, and colony treatment and travelling are discussed, and his prescriptions are plainly stated, as well as the details for the carrying out of his treatment. There are also chapters on the cure of the tobacco, tea and coffee habits, and on the more common drug habits, morphine, cocaine, etc. Altogether, the book is practical and usable.

It is printed in good type, well sub-headed and on a light paper, which makes it pleasant to hold.

Mental Symptoms of Brain Diseases. By Bernard Hollander, M.D. $2.00. Rebman Co., New York, publishers.

Within the 230 pages of this little book are collected a very large amount of clinical data, which bespeaks an immense amount of reading

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and careful selection. Dr. Hollander's thesis is that the purely mental functions can all be localized in time, when we have accumulated sufficient data, pathological and experimental.

In his own words, the aim of his book is the collection of clinical records of mental symptoms of localized brain lesions. It deals chiefly with gross microscopic lesions of the brain due to injury, hemorrhage, tumor, etc., which have hitherto been almost entirely neglected from the point of view of their intimate psychic symptoms.

The facts disclosed are of prime importance to the physiologist and psychologist as throwing light upon the connection of the different parts of the brain; with the intellect, which he places in the frontal lobes, and the instincts and emotions which he finds disturbed in lesions of the parietal and temporal lobes and the cerebellum.

They are also of great importance in the treatment of insanity, since they assist the psychiatrist in localizing the seat of irritation and in deciding whether or not operation may be of use. As our knowledge increases Dr. Hollander believes such operative procedure will become much more common.

The book is also of interest to the sociologist and the criminologist, and the author says, "We are bound to admit that in certain cases at least, it is the expert physician who should determine the cause of crime, the responsibility of the criminal, and his treatment, and not the judge and jury."

The author is logical and conservative and his style is pleasing. The type and paper used also lend to the pleasure of the reading.

THE MONTH'S BEST BOOKS.

Diagnostic Methods of Examination. Sahli. $6.50. W. B. Saunders.
Vaginal Celiotomy. Bandler. $5.00. W. B. Saunders.
Practical Treatment. Edited by Mosser. $6.00. W. B. Saunders Co.
Syphilis, Diagnosis and Treatment. Lambkin. $2.25. Wm. Wood & Co.
Introduction to Surgery. Morison. $2.50. Wm. Wood & Co.
Intestinal Surgery. Bidwell. $2.50. Wm. Wood & Co.
Human Embryology and Morphology. Keith. $3.50. Longwood, Green & Co.
Diseases of Women. Fothergill. $3.00. Wm. Wood & Co.
The Physiology of Reproduction. Marshall. Longwood, Green & Co.
Hygiene of Infancy and Childhood. Fordyce. $2.50, Wm. Wood & Co.
Treatment for Diseases of the Eye. Adam. $2.50. Rebman Co.
Microscopic Diognosis in Gynecology. Jolly. $5.50. Rebman Co.
Case Histories in Pediatrics. Morse. W. M. Leonard.

In the January number of the "Post-Graduate" is an extensive article by Bardenheuer of Cologne, Germany, entitled "A Post-Graduate Lecture on the Treatment of Fractures by Weight and Extension." This is too long to be satisfactorily summarized in abstract form, but is well worth study by any who are interested in the subject.

The Eclectic Medical Journal appears this year in a new form which is very attractive. The size is somewhat smaller than heretofore, and the price is reduced to $1.50 a year.

The Medical Advance, a journal always bringing some new ideas to our desk, appears for January in a new and very attractive dress.

The monthly bulletin of the State Board of Health of Illinois for October has been recently received. It contains an unusual amount of material of interest to physicians and prospective physicians. Among other things is included a complete list of requirements for practice in all of the States of the Union and in all its possessions.

This bulletin is always of interest, but the present copy seems to be particularly so.

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WASHINGTON LETTER.

The annual meeting of the Washington Homœopathic Medical Society was unusually interesting, in that Dr. J. Herbert Moore, of our own Boston University Faculty, gave us Washingtonians the benefit of his years of study in artificial feeding of infants; by means of slides he presented the subject clearly and fascinatingly.Among the listeners was Dr. Harvey W. Wiley, Chief of the Bureau of Chemistry, who has charge of the enforcement of the pure food and drug law.

At the January meeting of the medical society the following officers were elected for service during 1911: President, Dr. G. C. Birdsall; Vice-President, Dr. W. R. Buchanan; Secretary, Dr. John R. Sharp; Assistant Secretary, Dr. H. Clifton King; Treasurer, Dr. J. H. Bronson; Librarian, Dr. Julia M. Green.

Drs. L. D. Wilson and Frank A. Swartevant were elected members of the advisory board, and Drs. Reginald Munson and Martha C. Burritt members of the board of censors.

A committee was named to act for the medical society in its relationship with the National Homœopathic Hospital of this city.

Dr. Milburn has recently entered upon his duties as interne at the National Homœopathic Hospital.

Miss Little and Miss Johnson, superintendent and assistant superintendent, respectively, of the Homœopathic Hospital, resigned recently, to take up similar work in New Haven, Conn. Miss Ellison has succeeded Miss Little here.

LOUISE ROSS.

LETTER FROM DR. JAMES KRAUSS.

January 16, 1911.

Editor, New England Medical Gazette:

Dear Sir—Under the caption of, "What are we going to do about it?" a paper published in the Gazette of this January, pages 601-605, another time-worn proposition is brought forward of testing drugs "to present quite a convincing array of evidence for or against pure Homœopathy." The method is for a number of men "to select a case from practice where the pathological underlying cause is obscure, and the subjective symptoms prominent, and prescribe for this case as exactly as possible, in accord with the old homœopathic principle, taking sufficient time to study the symptoms and select the similimum," and then to report "our success or failure at our next meeting."

I will not dwell upon the futility of such propositions to prove or to disprove Homœopathy. I will only say that the founder of Homœopathy would never publish his own cases, because he was great enough to know that uncorroborated a clinical case proves not even that case and cannot be brought to prove any other case.

The old bushwhacking methods of the Civil War where marauding combatants, singly or in detached bands, made war under cover of woods or rocks, cannot be successfully transplanted into the realm of science, nor can such methods successfully convince opposing camps of medical thought and endeavor.

No doubt the bushwhackers thought the war began and ended with them, and thought nothing of the vast armies fighting the battles on both sides; and if they had been called upon to write the history of the Civil War, they would probably have found no word for Grant and Lee, but instead glowing words of tribute for George and Frank and John and Howdy and Walt, and, "What are we going to do about it?"

But the bushwhackers did not decide the Civil War; nor will medical bushwhackers decide the great problems of medicine. For this, we need organized medical armies and a method of procedure which is scientifically proof to all attacks, overt and covert.

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It ought to be the pride of men who are anxious to prove the truths of Homœopathy that, under the impetus of the American Institute of Homœopathy, an organization has been formed for the conclusive observation and correlation of clinical facts, for conclusive clinical research.

The American Association of Clinical Research is the first organized body that has taken into account the futility of inconclusive, unconvincing research work. Its object is known in Europe as well as in America, but, of course, here in Boston, where it saw the light of day, the very men that should be its most ardent supporters have not heard of its existence. The membership of the Association consists of some of the ablest men of all schools. Their papers are quoted in London as well as in New York and Chicago and San Francisco; are taken bodily into the columns of such journals as the English Mechanic and World of Science in London as well as the medical journals; and even the London Times, the most important journal of the world, had on December 7 last an article on "Organized Scientific Research," in which the lack of organization in research is deplored, the primitive and unscientific method of research work as followed hitherto is deprecated, while the value of co-ordinated research is accentuated, with the obligation to communicate all the details, to make reports and summarize conclusions with credit of discovery to contributory investigators.

Now, what we are going to do about it? Are we going to allow ignorance, prejudice and indifference to carry the day, or are we going to buckle down and each of us do some little part to make the object of the American Association of Clinical Research effective?

Yours very truly, JAMES KRAUSS, M.D.

LETTER FROM DR. COSTAIN.

It will be of interest to those who contemplate attending the next meeting of the American Institute of Homœopathy at Narragansett Pier to know that arrangements have been practically consummated to provide a palatial special train for their accommodation from the West, the tentative plan being to have the Western members assemble at Chicago, then go in a body on a special train to leave the La Salle Street Station via Lake Shore-New York Central Lines about 10 a. m. on Friday, June 23, making a daylight trip most of the distance to Buffalo, and enabling delegates from points east of Chicago to board the train at Toledo about 3 p. m., Cleveland 5.30 p. m.; also those from Buffalo and Rochester can be taken on later. The schedule further provides for a stop of several hours in New York and arrival at Narragansett Pier in time for evening dinner Saturday.

The equipment of the train will be especially selected to include every possible travel comfort and luxury, consisting of buffet-library car, diner, serving meals a la carte, standard sleepers of the most modern type, containing sections and drawing rooms, also a compartment car with a commodious observation parlor, which will be especially appreciated by the ladies. The entire train will be electrically lighted and otherwise complete in every appointment. The leaving time, 10 a. m., from La Salle Street Station, will allow ample time for connection with all important trains from the West, as such trains will arrive at Chicago from 7 to 9 a. m.

While it is yet too early to definitely announce fares, as negotiations with the traffic associations are still pending, we confidently hope to secure the usual concession of one fare and three-fifths for the round trip on the certificate plan from some sections, and from localities where such fares will not be granted the railroads will undoubtedly have in effect their customary summer excursion fares to New York and return with limit of 30 days from the day of sale, which were available from practically all the Western territory last summer, based on the following round trip fares from the principal getaways:

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Chicago to New York and return	$28.20
St. Louis to New York and return	32.85
Indianapolis to New York and return	28.00
Louisville to New York and return	36.00
Cincinnati to New York and return	28.00
Columbus to New York and return	25.50
Toledo to New York and return	25.50
Cleveland to New York and return	25.50

The local fare from New York to Narragansett Pier is $3.70; round trip $7.50.

Everything indicates that this will be one of the most interesting and largely attended meetings in the history of the organization, as the normal attendance will be greatly augmented, due to the opportunity to visit New York and the seashore under such favorable conditions.

Dr. J. P. Sutherland, Chairman of the International Congress of Homœopathy, is very desirous that a large number shall make the trip abroad.

The success of the Congress will be to the lasting credit of Homœopathy and will afford an excellent opportunity for a trip abroad. Arrangements have already been made whereby parties of 10 and 20 may enjoy the Congress and also make special tours to the most historic points in Great Britain, Prussia, the Netherlands, etc.

The Canadian Pacific Steamship Company is working very earnestly to procure the passage of those going abroad on the steamer Lake Champlain, sailing from Montreal, July 6th. They have already secured a number of reservations for this boat. This route includes three days on the St. Lawrence River before open water is reached.

They advise the delegates to book passage without delay, as the tourist travel is usually heavy in June and July. Any one changing plans or changing his mind about making the trip can, at a later date, cancel his reservation, but all those who wish to go should make steamship reservations at once.

The O., O. and L. Society will spend one day at the end of the week in Boston. We wish to advise that they purchase their return tickets to that point and pay a small additional fare from Albany to New York on the going trip.

PERSONAL AND GENERAL ITEMS.

FOR SALE.—A $2,500 Kansas location for a competent homœopath. Brick office building and vacant lots only for sale. Price $1,400 cash. Enclose stamp for particulars. Address "Kansas," care N. E. Medical Gazette, 422 Columbia Road, Boston, Mass.

FOR RENT.—Use of a physician's Boston office for part of any or every day in the week. Centrally located in an office building exclusively for physicians. Continuous telephone service, day and night. Apply to "B. L.," care New England Medical Gazette, 422 Columbia Road, Dorchester, Boston.

FOR SALE.—An established homœopathic practice in a beautiful college town of 5,000 inhabitants. Preference given to a good homœopath of some experience. Practice only for sale; ill health the reason. Address "College," care New England Medical Gazette, 422 Columbia Road, Boston, Mass.

Dr. John E. Willis (B. U. S. M., 1898) has removed from Somersworth, N. H., to Worcester, Mass. His practice in Somersworth has been taken by Dr. Dana B. Mayo (1904, B. U. S. M.), removed from Island Pond, Vermont.

Dr. B. Thurber Guild has located in North Adams, Mass.

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Dr. Anna Mann-Richardson, class of 1901, B. U. School of Medicine, has removed from Orange, N. J., to 16 Omar Terrace, Newtonville.

Dr. Ella E. Severance, class of 1901, B. U. S. M., has entered upon a year's service in the Woman's Southern Homœopathic Hospital of Philadelphia.

Dr. David M. Gardner, class of 1900, B. U. S. M., after spending, with his family, nine months in a trip around the world, has located in Rutland, Massachusetts, where he will specialize in the treatment of tuberculosis.

Dr. Gaius E. Harmon, class of 1909, B. U. S. M., after a year's internship at Newton Hospital, has taken service at Norwich (Connecticut) Insane Hospital.

By the will of the late Mrs. Lucy P. Goff, the city of New Bedford, Massachusetts, is to have an homœopathic hospital as a memorial to Mrs. Goff's son, Winfred Goff, the baritone singer, who died in 1908. Mrs. Goff died on January 27. The hospital is to be named The Winfred Goff Memorial Homœopathic Hospital.

The Hahnemann Hospital of Chicago is one of the five beneficiaries by the will of the late David B. Shipman, who left an estate valued at $1,500,000. This will has been recently contested in the United States second court of appeals, but a decision has been given allowing it to stand.

Dr. Kernig, the well-known Russian internist, recently passed his 70th birthday. In honor of this event the St. Petersburg Wochenschrift has prepared an issue consisting of articles written by prominent Russian clinicians, all of whom have been at some time medical pupils of Kernig.

The final appraisal of the estate of Mr. J. S. Kennedy, who recently made such a generous donation to the Presbyterian Hospital of New York, shows that the sum of $2,858,000 will be received by that institution.

The Hahnemann Medical College and Hospital of Philadelphia has received a gift of $2,000 for a laboratory for clinical research work in medicine. Announcement of this gift was made at the testimonial dinner given to the Dean of the College, Dr. William B. Van Lennep, by Dr. Lewis Plummer Posey, of Philadelphia, on January 21, the donor being Mr. Walter E. Hering, who a short time ago endowed a chair of therapeutics and materia medica in memory of his father, the late Dr. Constantine Hering, the pioneer of Homœopathy in this country. The equipment will include at least forty microscopes, which will give every individual senior student an opportunity to do clinical research work with his own microscope in conjunction with his bedside work, and will as well enable the members of the faculty and teaching staff, should they so desire, to do individual research work.

GOOD NEWS FROM LONDON.—The February number of the Homœopathic World bring cheering news that the fund required for the London Homœopathic Hospital has been successfully raised. This fund amounted to about $70,000 and was for the following purposes: $25,000 for alterations in the old hospital building; $15,000 to complete the new Sir Henry Tyler wing extension; and $30,000 to build a new home for nurses. Last year Lord Dysart promised to donate the last $30,000 of this sum, provided the balance was subscribed prior to January 1st of the present year. Thanks to the efforts of Lord Cawdor, this balance was successfully raised. The Board of Managers of the hospital have recently come into possession of two additional lots adjoining that upon which it was planned to erect the nurses' home, and have decided to make a more commodious building than was earlier intended. A structure will accordingly be erected at a cost of about $70,000, of such a character that each nurse will have a separate bedroom, and one that will be fitted with all modern accessories.

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THE NEW ENGLAND
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ORIGINAL COMMUNICATIONS.

HOMŒOPATHIC TREATMENT SUPERIOR IN PULMONARY TUBERCULOSIS.

By Herbert C. Clapp, M.D., Boston, Formerly (for nine years) Visiting and Examining Physician to the Massachusetts State Sanatorium at Rutland.

The following tables have been carefully compiled from the official reports filed away in the archives of the Massachusetts State Sanatorium at Rutland, and show in a striking manner the superiority of the *Homœopathic* method of treatment. Of course all educated physicians of all beliefs admit that the most important part of the modern treatment of pulmonary tuberculosis, which has been so wonderfully successful within the past comparatively few years, is *hygienic*, and no sane physician nowadays would undertake the treatment of a case without carrying this out in its completest detail. Nevertheless, it cannot be denied that all good and successful physicians, in addition to a careful hygiene, prescribe drugs in most cases, some more and some less, for the relief of symptoms which act as a handicap in the progress of the patient towards recovery. This can easily be proved by observation and by reading the latest text-books and medical journals. If we could cure all cases by hygiene alone, there would be no need of medicine; but the end results show that this cannot be done. In spite of the remarkable gains in the last few years, we even now fail so often that we need every possible help. When, therefore, some physicians cry out that tuberculosis ought to be treated, not by drugs, but by hygiene, they should not be taken literally, but simply as entering a protest against a blind reliance on medicines supposed to have a miraculous power, to the exclusion, partial or entire, of the most careful hygiene.

Homœopathic physicians, after abundant opportunities for observation, have proved to their own satisfaction the superiority of homœopathic medicines in most cases of disease. If it were not so, there would be no inducement for them to remain homœopathists, as it is policy for any physician to try to get the best results possible. This superiority naturally was more striking in the early days when the dominant school used such enormous doses of drugs, as well as copious bleeding and other depletive measures, than now when the same school has so largely reduced the size of its doses, a reduction admittedly in-

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fluenced to a great extent by the example of the homœopathists. But even now this superiority is evidenced, although to a less extent, in private and institutional practice. As an example, one of the best of our Massachusetts State institutions, our large Westboro Insane Hospital, which now accommodates more than 1,100 patients, has been under homœopathic management and treatment for more than 25 years and has done splendid work and obtained superior results, and has been a credit to the State.

The Massachusetts State Sanatorium at Rutland, opened Oct. 10, 1898, for the treatment of tuberculosis, was the first institution of its kind on this continent to be supported by public money, and it has since been widely copied. Its success has been great, not only as measured by the number of broken-down men and women restored to useful lives, but also as an educational centre, as has been often pointed out, thus being a powerful agent of prevention.

Since its opening one-third or more of its patients of both sexes have enjoyed, in addition to hygiene, the advantage of homœopathic medication, which a wise Legislature guaranteed in the act creating the institution in 1895.

For the first four years the records of the homœopathic and regular services, from a medical standpoint, were kept entirely distinct, and for each service a separate annual report to the trustees was made. Since that time the statistics of both sides have been united and combined into one annual report. For the purposes of comparison this report for each year has now been divided up into its component parts. As these parts had been constructed on the same form, this work presented few difficulties. More embarrassing was the task of harmonizing and standardizing the reports of the earlier years. For in its first annual report the regular service had no tabulation, and one had to be constructed from what material was accessible; and in the other early years where separate reports were made, the tabulations of this service not only differed in form from the homœopathic service, but also changed somewhat in successive years. Being originally more complicated, they have here been simplified by combination, in order to bring them into harmony not only with the scheme of the homœopathic service, but also with that of most other tuberculosis sanatoria. For instance, the classes "improved," "much improved" and "very much improved," have all been combined into the commonly used class "improved." Likewise, "incipient" and "well-marked incipient" into "incipient," the common designation. Likewise "advanced" and "very advanced" into "advanced." By this means, and by this only, comparisons can be instituted with perfect fairness to all, and a conscientious effort has been made to have everything as accurate as possible in this paper.

In the laborious task of preparing statistics Dr. George N. Lapham has been of invaluable assistance.

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To simplify the percentages and to make them more quickly grasped, the decimal fractions have been omitted. As, e. g., the percentage 30.97 has been recorded 31 per cent. As for most of

MASS. STATE SANATORIUM AT RUTLAND.

Statistics by "RUTLAND" Classification

Number of Patients Discharged and Percentages in

REGULAR SERVICE

For year ending Sept. 30	Results	Incipient	Mod. Advanced	Advanced	Total	Per cent All Cases	Per cent Incipient Cases Arrested or App. Cured
1899	Arrested or app. cured	27	7	1	35	31.	52.
	Improved	20	12	22	54	46.	
	Not improved	5	0	20	25	23.	
	Total	52	19	43	114		
1900	Arrested or app. cured	39	10	7	56	40.	59.
	Improved	26	29	19	74	52.	
	Not improved	1	6	4	11	8.	
	Total	66	45	30	141		
1901	Arrested or app. cured	70	12	3	85	42.	56.
	Improved	52	48	8	108	54.	
	Not improved	2	3	3	8	4.	
	Total	124	63	14	201		
1902	Arrested or app. cured	58	31	1	90	47.	8.
	Improved	14	59	8	81	42.	
	Not improved	2	18	2	22	11.	
	Total	74	108	11	193		
1903	Arrested or app. cured	90	41	1	132	49.	76.
	Improved	28	88	6	122	45.	
	Not improved	0	14	1	15	5.	
	Total	118	143	8	269		
1904	Arrested or app. cured	101	30	10	141	41.	70.
	Improved	38	37	111	186	53.	
	Not improved	4	2	14	20	6.	
	Total	143	69	135	347		
1905	Arrested or app. cured	65	28	11	104	31.	71.
	Improved	30	85	85	200	60.	
	Not improved	1	7	19	27	8.	
	Total	96	120	115	331		
For 14 mos. ending Nov. 30, 1906	Arrested or app. cured	129	84	10	223	39.	71.
	Improved	49	140	105	294	52.	
	Not improved	2	15	31	48	8.	
	Total	180	239	146	565		

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MASS. STATE SANATORIUM AT RUTLAND.

Statistics by the "NATIONAL ASSOCIATION" Classification

Number of Patients Discharged and Percentages in

REGULAR SERVICE

For year ending Nov. 30	Results	Incipient	Mod. Advanced	Advanced	Total	Per cent All Cases	Per cent Incipient App Cured	Per cent Incipient Arrested	Per cent Incipient App. Cured & Arrested Combined
1907	App. Cured ..	90	28	5	123	26.	50.	31.	81.
	Arrested	55	40	10	105	22.			
	Improved	34	97	63	194	41.			
	Not Improved	0	21	25	46	10.			
	Total	179	186	103	468				
1908	App. Cured ...	40	13	0	53	13.	25.	51.	76
	Arrested	82	70	11	163	40.			
	Improved	37	88	20	138	33.			
	Not Improved	7	33	16	56	13.			
	Total	159	204	47	410				
1909	App. Cured...	59	37	0	96	22.	55.	29.	84.
	Arrested	31	106	7	144	33.			
	Improved	14	86	20	120	28.			
	Not Improved	3	34	34	71	16.			
	Total	107	263	61	431				
Half of 1910	App. Cured ...	23	9	0	32	14.	27.	53.	80.
	Arrested	45	43	3	91	40.			
	Improved	17	40	11	68	30.			
	Not Improved	0	23	9	32	14.			
	Total	85	115	23	223				

the time the deaths were very few, failing patients leaving, the deaths are included in the tables as "not improved." Where the incipient class had been divided into two grades, "incipient" and "well-marked incipient," and 81.4 per cent. of arrests had been noted for the *highest* grade of incipients, the uniting of the two grades into one, as is generally done, brings the percentage down to 59.

The separate calculation of the percentage of *incipient* cases which are apparently cured is exceedingly important, because they are the curable cases, while the cure of a far-advanced case is exceedingly rare.

If, for instance, an institution contained 10 incipient and 90 far-advanced cases, the percentage of apparent cures among the incipients might be quite large, while that among all cases would necessarily be exceedingly small. By good rights, hopeless cases ought not to be treated in the same institution with those for whom there is some chance for cure, if the best results are

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MASS. STATE SANATORIUM AT RUTLAND

Statistics by "RUTLAND" Classification

Number of Patients Discharged and Percentages in

HOMŒOPATHIC SERVICE

For year ending Sept. 30	Results	Incipient	Mod. Advanced	Advanced	Total	Per cent All Cases	Per cent Incipient Cases App Cured or Arrested
1899	App. cured or arrested	25	4	0	29	37.	64.
	Improved	12	12	1	25	32.	
	Not improved	2	14	8	24	31.	
	Total	39	30	9	78		
1900	App. cured or arrested	53	6	0	59	45.	64.
	Improved	28	18	3	49	37.	
	Not improved	1	16	7	24	18	
	Total	82	40	10	132		
1901	App. cured or arrested	62	12	0	74	50.	67.
	Improved	25	34	2	61	41.	
	Not improved	5	6	1	12	8.	
	Total	92	52	3	147		
1902	App. cured or arrested	56	9	1	66	50.	66.
	Improved	26	29	4	59	45.	
	Not improved	3	2	1	6	4.	
	Total	85	40	6	131		
1903	App. cured or arrested	99	6	0	105	49.	69.
	Improved	39	42	7	88	41.	
	Not improved	5	14	3	22	10	
	Total	143	62	10	215		
1904	App. cured or arrested	97	18	2	117	51.	82.
	Improved	15	67	7	89	39.	
	Not improved	6	13	4	23	10.	
	Total	118	98	13	229		
1905	App. cured or arrested	78	9	0	87	37.	61.
	Improved	45	82	6	133	57.	
	Not improved	5	8	2	15	6.	
	Total	128	99	8	235		
For 14 mos. ending Nov. 30, 1906	App. cured or arrested	92	11	3	106	38	78.
	Improved	25	94	25	144	52.	
	Not improved	0	12	14	26	9.	
	Total	117	117	42	276		

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MASS. STATE SANATORIUM AT RUTLAND.

Statistics by the "NATIONAL [illegible]N" Classification

Number of Patients D[illegible]in

HOMŒOPA

For year ending Nov	Results	Incipien	
1907	App. cured.....	65	
	Arrested.....	19	
	Improved.....	11	
	Not improved...	2	
	Total.....	97	109
1908	App. cured.....	36	12
	Arrested.....	25	47
	Improved.....	10	49
	Not improved...	0	0
	Total.....	71	108
1909	App. cured.....	66	6
	Arrested.....	21	41
	Improved.....	8	26
	Not improved...	1	5
	Total.....	96	78
Half of 1910	App. cured.....	29	10
	Arrested..	14	32
	Improved.....	6	16
	Not improved..	0	4
	Total.....	49	62

desired. The natural depressio[illegible]
bers in the tables which are not [illegible]
sidered" patients discharged. T[illegible]
short a time—a month, more o[illegible]
tically, are not "considered" in

In the early years the ho[illegible]
term "apparently cured" for [illegible]
service preferred the word "a[illegible]
designed to mean exactly the [illegible]
tics were kept by the so-call[illegible]
fore, these terms were use[illegible]
when for purposes of compa[illegible]
country the "National Associa[illegible]
the term "apparently cured" denote[illegible]
and "arrested" the second grade. Natura[illegible]
ent cures or arrests must be expected to rela[illegible]
the patient lives improperly or returns to unhy[illegible]
roundings.

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COMPARATIVE PERCENTAGES.

The following percentages, gathered from the foregoing tables, represent clearly and emphatically the superior results obtained on the Homœopathic side. "One swallow does not make a summer," and a few cases of any one disease, e.g. 25 or 50 or 100, are not a sufficient number from which to draw trustworthy deductions. But when about 6000 "considered" cases are treated in the same institution, side by side, during a period of 11½ years, with such results as are here shown, the food, air, water, exercise, rest, and, in fact, all the surroundings being exactly the same, and nothing being different, except the medication, the most skeptical must admit that these figures mean something.

MASS. STATE SANATORIUM AT RUTLAND.

Percentages by "RUTLAND" Classification "Apparently Cured" *or* "Arrested"
(Here used synonymously to indicate the best class in results)

Year	INCIPIENT CASES		ALL CASES	
	Regular	Homoeopathic	Regular	Homoeopathic
1899	52	64	31	37
1900	59	64	40	45
1901	56	67	42	50
1902	78	66	47	50
1903	76	69	49	49
1904	70	82	41	51
1905	68	61	31	37
1906	71	78	39	38
Average	63	69	40	44

Percentages by "NATIONAL ASSOCIATION" Classification
"Apparently Cured" (1st Class) *and* "Arrested" (2d Class) Combined

1907	81	.....	87	48	.....	56
1908	76	.....	85	53	.....	58
1909	84	.....	90	55	.....	64
1910 (half).....	80	.....	87	54	.....	72
Average	80	.....	87	52	.....	62

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NOTES ON ANTERIOR POLIOMYELITIS.

By Frank C. Richardson, M.D., Professor of Neurology, Boston University School of Medicine.

The medical profession of today is confronted with the somewhat alarming prevalence of a disease which, although known for many years, had hitherto been considered of sporadic occurrence, and the people are anxiously awaiting some assurance of its prevention and cure.

The literature upon Anterior Poliomyelitis has during the past three years been most voluminous and is available for careful study. Such study must inevitably lead to the conclusion that epidemics of this disease have very greatly increased in several parts of the world in a measure not to be explained in any way by the increased interest in the subject.

The various State Boards of Health, notably those of New York and Massachusetts, have in recent years conducted thorough and painstaking investigation of epidemics occurring within their jurisdiction, and their reports embody all the recent knowledge of poliomyelitis; therefore it would surely be a work of supererogation to burden you at this time with a lengthy essay upon a disease with which you are already well acquainted.

In the following paper no attempt will be made to exploit startling theories or new facts. Its raison d'etre is that the writer in the capacity of neurologist has been afforded opportunity for the observation of a considerable number of cases of infantile paralysis, and it was thought that a first hand recital of personal experience might be of interest and possibly of value.

The cases referred to were detached cases occurring in various parts of New England and may perhaps be regarded as more representative of the disease than a series of cases taken from a localized epidemic which are apt to present certain characteristics due to environment.

An analysis of seventeen cases which while in the acute stage have come under the writer's direct observation affords conclusions that conform for the most part to those deduced from reports issued by the various State Boards.

Without wearying you with statistical data, which are available for your leisure perusal, it may not be without interest to discuss some of the salient clinical features of this dread disease.

That we are dealing with an acute disease produced by some external agent—that is, the fact of its infectious character—seems well proven.

The source of infection and the medium of its introduction is as yet unsettled. In no one of the writer's cases was it possible to trace a cause, the disease occurring in previously

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healthy individuals, who had not been exposed to any known source of infection.

It has been stated that the usual route of infection is through either the respiratory or digestive tract, but as a large proportion of cases show no concomitant derangement of these tracts, the question is by no means settled. The laboratory finding that the virus is filterable, thus placing the disease in the category with yellow fever, suggests that possibly the virus may be transmitted by insects in a manner similar to that of the anopheles.

It is generally agreed that if the disease is contagious at all it is only mildly so.

In July, 1910, the writer saw a boy twelve years old, who presented a severe type of poliomyelitis. The temperature rose to 103°, there was severe pain in the back and limbs and head, retraction of head, and on second day paralysis of both upper extremities. There had been no case of sickness in the household or neighborhood, and no known source of infection could be traced. A seven-year old brother who had been intimately associated with the sick boy and occupied the same bed during the first night of the illness, did not contract the disease, but a sixteen-year-old brother who had had the most casual communication with the other two, developed typical poliomyelitis six days later, with paralysis of both lower extremities.

All observers are agreed that the causus morbii is much more widespread than is generally supposed and that there must be individual susceptibility to this as to other diseases of infectious character.

What contributes to this susceptibility is a problem which has not yet been worked out. Whether or not the old theory that tissues of least nutritive and functional stability are most readily affected by certain disease germs will apply in the case under consideration cannot be definitely asserted. In all but three of the writer's cases it was possible to trace a well-marked neurotic heredity. This may be thought to represent only the usual proportion found in the younger generation of the present day, and if so what connection may this fact have with the increasing prevalence of anterior poliomyelitis? Are our children reaping the harvest from seeds of nervous instability sown by their progenitors?

While anterior poliomyelitis was at first thought to be essentially a summer disease, and while the majority of epidemics have occurred during the summer months, careful investigation has failed to fasten upon atmospheric or hygienic conditions any marked etiologic responsibility.

In an epidemic occurring in Franklin County, Massachusetts, 1908, sixty-nine cases were reported, 28 of which occurred in July and August, the remaining 41 cases in the fall months.

Of the 67 cases reported from various parts of the State during that year 11 occurred in August, 14 in September, 15 in October and November.

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Of 630 cases tabulated by the Massachusetts State Board of Health from its investigation during 1910, 360 occurred during June, July and August, and 270 during September, October and November.

Of the writer's cases one occurred in April, six in July and August, and ten in September and October. Thus it will be seen that the cool months of fall are nearly as prolific of cases as the earlier summer months, and reports from various sources show that no month of the year grants immunity.

The disease attacks children chiefly, but youth and adults not infrequently. In the Franklin County epidemic of 1908 there were 52 cases in the first decade of life, 13 in the second and 4 from 20 to 25. In the remaining cases of that year reported throughout the state the largest number of cases occurred between the ages of 1 and 2, and from the years from 2 to 8 there were reported from 3 to 8 cases for each age; after this the reported cases were 1 or 2 a year up to 16. There were 2 adult cases reported, one 21 and one 40. Of the cases reported in Massachusetts in 1909, 87 per cent. occurred in the first ten years, the youngest patient reported being three weeks old and the oldest 72 years. Of course these extremes of age would make us think of possible error in diagnosis. Of the writer's cases 5 occurred in the first decade, 8 in the second, and 4 in the third, the youngest patient being 16 months, the oldest 35 years.

The symptomatology of the disease can only be mentioned here in the briefest way.

The period of incubation in human beings is not clearly known but is generally stated as being from one to fourteen days. There is usually an acute febrile onset, but rarely the high temperature of meningitis. In the group of cases under observation the temperature range was from 99° to 104°, in the majority of instances not above 102°. The temperature usually becomes normal at or before the onset of the paralysis. In all of the seventeen cases observed there was aching, pain and tenderness of more or less severity; this was not confined to any one part of the body, but was especially severe in the neck and back. Nausea or vomiting are very common symptoms, having been found in eight of the seventeen cases. Profuse sweating, stated by German observers as one of the early characteristic symptoms, was not present in this series, nor has it been noted in the cases reported to the Massachusetts State Board. Paralysis is generally noticed in from one to seven days after the acute attack, but may occur almost at once. In eight of the seventeen cases observed the onset of paralysis was on or before the second day, in one case within twelve hours. The longest interval was seven days.

As the name "regressive palsy," sometimes given this disease, would imply, the primary involvement is no indication of the final disability. The first distribution of the paralysis may be to any or all of the extremities and occasionally involves the face.

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Of the observed cases four had primary involvement of all four extremities and an equal number had involvement of both lower extremities. The remaining cases were about equally distributed. In four cases of the series there was involvement of the bladder, which is generally considered to be a very rare symptom.

After a period varying, in the experience of the writer, from one to three weeks, regression of the paralysis begins and may continue until there has been recovery of all but one muscle or one group of muscles which may show upon electrical test complete reaction of degeneration.

The extent and degree of the final palsy varies as greatly as does that of the initial involvement. It is generally agreed that the lower extremities are much more frequently permanently affected than the upper. While it is probably merely coincidence, it is not without interest to note that in nine of the writer's cases the final regression was to the left lower extremity.

In the matter of differential diagnosis it should be remembered that the flaccid-degenerative paralysis with regression is the essential feature of poliomyelitis; all else is subordinate to it.

In the early stages of an acute attack error in diagnosis is very easy. Fever, vomiting, rheumatic pains and the like are concomitants of a great many other disorders, so that their presence has no particular significance. It is only with the onset of the paralysis that the diagnosis can be positively made and no doubt many abortive cases are never recognized, the slight resulting weakness being overlooked.

Acute transverse myelitis is seldom if ever found in children, and when it occurs in adults is most always in the dorsal portion of the cord and not in the cervical or lumbar enlargement as is most often the case with poliomyelitis. Furthermore, the absence of anæsthesia should be evidence in favor of the latter disease.

Sensory disturbances should also be of assistance in the differentiation from peripheral neuritis, which is sometimes most difficult.

Cerebral palsies are readily distinguishable because of the character of the paralysis and the presence or absence of atrophy.

It would seem that there should never be confusion with spondylitis, yet the writer, in view of the fact that a competent orthopoedist had failed to find any vertebral lesion, decided that poliomyelitis accounted for weakness of the lower extremities in the two-year-old child of a colleague, and the appearance six weeks later of a distinct kyphosis established the correct diagnosis.

Thus far laboratory investigation of blood and spinal fluid has failed to discover any specific reaction which would serve to make a positive diagnosis. Results of possible import, however, have recently been obtained in the research laboratory of the Harvard Medical School from a study of blood and spinal fluid in

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the prodromal and acute stages of poliomyelitis. The study was both experimental and human. The experimental work was done on monkeys, the Fexner-Lewis serum being used for inoculation. The results from this experimental study were comparable to those obtained from the study of the disease in children, which latter may be epitomized as follows: In the early acute stage the blood findings show from a moderate to a quite marked drop in the white blood count with a lymphocytosis moderately marked. The spinal fluid findings are very interesting in all these cases from the fact that in two of them definite fibrin formation was present early, which disappeared rapidly in one and very slowly in the other. The increase in cells was marked in all at the first puncture, and in three of the cases increased slightly later on in the course of the acute stage. The type of cells found was practically parallel with the findings of the experimental spinal fluids, the lymphocytes and small mononuclears predominating on the first examinations, later being replaced by large mono-nuclears, and in the last findings polynuclears were beginning to appear.

It is hoped that similar studies may lead to more definite and helpful results.

The importance of examination of the spinal fluid as an aid to diagnosis may be illustrated by a case reported by Hoffman, in 1909, of a young man of twenty who developed pain in the wrist and heavy feeling in the back. A few days later he had a sudden tremor in the arms, and during the night the right arm became completely paralyzed and the left leg partly paralyzed. The paralysis was flaccid and atrophic, with reaction of degeneration. The cerebro-spinal fluid showed increased lymphocytosis, albumen, inhibition of hemolysis and agglutination of erythrocytes. The clinical picture, except for the examination of the cerebro-spinal fluid, was typical of acute poliomyelitis. Under syphilitic treatment the leg recovered and the arm improved. These syphilitic cases are rare, but it is important to recognize that they do occur, and to investigate the possibility of a syphilitic origin in all suspicious cases.

Formerly it was thought that poliomyelitis almost invariably resulted in some degree of permanent paralysis. One gratifying result of recent investigation is the knowledge that a fair proportion of cases completely recover. A careful investigation of 150 of the cases reported to the Massachusetts State Board of Health in 1909 showed that 25 of these (17.7 per cent.) had wholly recovered. This report was not accepted and the investigators were sent again to these children, and each child was stripped naked and the separate movements of the ankle, knee, hip, spine, abdomen, and arms were separately tested. From this careful exaimnation it is sure that 25 children out of 150 have recovered since the disease in 1909. The Secretary of the Board informs me that 1910 statistics will show a still larger percentage of complete recoveries.

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It is extremely difficult to estimate in the early stages of its development what the outcome of an attack will be. As a rule the acute stage is brief, lasting but a few days, and at most not longer than a few weeks. Spontaneous recovery or great improvement can be expected in all but the fatal cases. The recovery is gradual and may be expected to continue during six months, or a year, or even longer, after the onset of the paralysis.

To determine what element of the disorder may be left as a permanent condition electrical tests are our chief aid. It may safely be said that those muscles in which after two or three weeks faradic irritability is not lost will recover. On the contrary, the truth of the statement to be found in most text books to the effect that if after a week or ten days we find faradic contractility lost in a muscle or group of muscles they will remain paralyzed is not borne out by facts. The writer has known of several cases in which reaction of degeneration of more than a year's duration has disappeared under appropriate treatment.

In fatal cases death takes place in the acute stage from involvement of the respiratory and cardiac centres. The one fatal case of the writer's series was of the acute ascending type. This type simulates closely Landry's paralysis, and while their genetic relationship may possibly be conceded, the present tendency to look upon Landry's paralysis and acute poliomyelitis as identical does not seem justifiable, in view of the fact that in most cases of Landry's disease the onset is without pain or febrile disturbance, and the pathologic process touches the trophic centre so slightly that as a rule muscular atrophy does not result.

It may be of interest to state here that the investigation of the disease during 1910 by the Massachusetts State Board of Health has, while not yet ready for report, been so far productive of no new facts of great importance. There have been fewer cases reported than in 1909, notwithstanding the fact that poliomyelitis has been added to the list of notifiable diseases. Springfield and Fall River have been the principal sufferers from epidemics, both cities having been comparatively free from the disease in previous years. The investigators have been impressed with the fact of the disease granting immunity to future attacks, and that the same locality does not suffer an epidemic two successive years; also with the fact that the disease seems to be most prevalent among the well-to-do.

If clinical and laboratory investigation has not greatly enhanced our understanding of the true nature of poliomyelitis, recent experience has certainly added much to our knowledge of how to treat it, with the result that we are better able not only to modify its severity but also more often to prevent deformity and promote restitution of nerve and muscle power.

The medicinal treatment of the acute stage must, of course, be symptomatic. The remedies found most useful by the writer have been Gelsemium, Belladonna, Eupatorium, and Helleborus. During this stage rest is of the greatest importance, and the ut-

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most quiet should be enforced. Placing the patient, especially if a child, in a hot pack, or bath, has proved of benefit in allaying pain and hyperaesthesia, but care should be used to avoid the depressing influence of too prolonged use of this measure. The use of electricity in the early stage is to be avoided, because this (as physical therapeutics and such like measures) is liable to disturb the rest which is so strongly indicated at this time.

Upon the subsidence of the fever and early pain there is frequently tenderness and pain on motion of the limbs or trunk, and there may also be found contraction of the limbs, mainly of the hips, and knees, due to the persistence of sensitiveness which does not allow the limbs to be brought into the straight and normal positions. Deformities of position may be developed, even at this stage, and it is important to prevent the overstretching of paralyzed muscles, either from pressure of bedclothes, force of gravity, or the unantagonized pull of sound muscles. These are to be guarded against and prevented usually by a proper arrangement of pillows, sand bags, cradles for the bedclothes, etc.

It is in the stage of regression and until all potential power has been regained that the utmost effort of the physician should be made to restore these patients to a life of comfort and usefulness.

The prevalent idea that recovered power is gained within the first few months of convalescence and that the child should not be burdened with any special efforts directed toward developing individual muscles and nerves is particularly unfortunate, because the clinical facts prove the contrary. As has already been intimated, it is possible to gain a return of muscle power after a long period following the onset of the disease, even when during the interval there has been no evidence of actual local return of power. It is very essential, therefore, that treatment directed to this end be carried out, not only in a most thorough manner, but also over an extended period. The indications for treatment are twofold. The stimulation of the nerves to prevent degeneration, so far as possible, and stimulation and protection of muscles to prevent atrophy and overstretching, and thus keep the muscle in condition to respond quickly when nerve impulses are restored. Muscle protection may be secured by light braces and the apparatus of the orthopoedist's art, which need not be dwelt upon here.

For stimulation of nerves and muscles the chief means to be employed is electricity. The main dependence for actual results must be placed upon the galvanic and faradic currents. In the early stages galvanism should be used upon the nerve trunks, and for muscular contraction that current should be used to which the muscle will contract most readily. Wherever faradic irritability is present that current should be selected; if no response to faradism is elicited the interrupted galvanic current should be used. The electrodes may be applied over both the

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nerve points and the muscles themselves. The current strength should be just sufficient to excite mild contraction.

Physical therapy, including massage and hydrotherapy, is of use, especially massage, but should be regarded as only an adjunct to the more important electrical stimulation.

A most valuable adjuvant is to be found in muscle training. It is applicable as soon as any sign of returning power is found and is best applied through the assistive form of exercise. This method is applied as follows: The part to which the muscle belongs is put through passive movement with slow rhythm in the direction that is desired. The patient is then directed to make effort to move the part in the same direction to whatever extent is possible, the assistant supplying the power needed to complete the actual motion.

In the application of any of these measures it should ever be remembered that a weakened muscle tires more easily than a normal one, and our efforts should always stop short of fatigue.

It is confidently believed that homoeopathically prescribed drugs may aid in restitution of paralyzed muscles, and Conium and Plumbum have been found especially useful.

The proper treatment of poliomyelitis requires on the part of the physician not only a complete understanding of the disease in all its details, but also intelligently applied skill and untiring fidelity.

If this somewhat desultory paper shall prove to be of any assistance in the management of the deplorable conditions under consideration it will have served its purpose.

THE TREATMENT OF ANTERIOR POLIOMYELITIS

By Alonzo G. Howard, M.D., Lecturer on Orthopedic Surgery, Boston University School of Medicine, Orthopedic Surgeon, Massachusetts Homœpathic Hospital, and Medical Mission Dispensary.

Of all the diseases appearing in recent years in our profession none has aroused greater interest, or called for, or has received, deeper research on the part of the medical world than that of anterior poliomyelitis. That which was *taught* a few years ago in regard to this disease is quite different from what we *know* today. And doubtless greater things are to be discovered in the years to come. No problem, however, has confronted the medical profession with greater difficulties.

The very nature of this disease, the frequency with which it attacks apparently healthy children and adults, leaving them paralyzed, usually before it has been correctly diagnosed, has made it one of the most dreaded of all diseases. It appears in the homes of the poor and the rich, the high and the low, without warning or

*Read before the New York State Homœopathic Medical Society, Albany, Feb. 15, 1911.

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apparent cause, bringing to *some* DEATH, but more frequently leaving its victims crippled beyond hope of cure.

Though the disease has been recognized for more than 100 years, only recently have we known of great epidemics, the most severe occurring during the last three years. Previously, many isolated cases were seen, and here and there a small epidemic was found. The recent epidemic in this country has been traced to Sweden, from whence it was carried to New York, and during 1907, 2500 cases were reported in New York City. From New York it has spread over this country and has appeared even in Cuba; Austria, Germany and Holland have had epidemics, though small in comparison with those in this country. Minnesota reported several hundred cases in 1909; Nebraska 619, Kansas 80, and Massachusetts nearly 1000 cases. In Berkshire County alone there were reported 82 cases, while Boston reported 299. In cases of this disease previously reported there were few deaths and almost no complete recoveries, some paralysis being left with each victim. In the recent epidemic a large number of deaths are reported (about 10 per cent.), and about an equal number of complete recoveries. The remaining cases, about 80 per cent., were left with more or less paralysis.

The disease is infectious and is transmitted direct, or by means of a third or healthy person, and is most frequent in its occurrence in the Northern States during the warm months. Many experiments by Dr. Flexnor and others, on monkeys, show that it may be introduced through the eye, respiratory tract, and by subcutaneous injection. Just how it is transmitted from one human being to another is still a question which future observations may solve for us.

The stage of incubation is not definitely known, but is supposed to be from one to fourteen days, although Dr. Holt reports one case with an incubation period of one month. In other instances several members of a family have been stricken on the same day, though just when they were exposed to the infection is not stated.

The onset of the disease is usually accompanied by an elevation of temperature, sometimes a very high temperature, gastric disturbances, pain in the extremities and abdomen, and a list of other symptoms simulating la grippe, cerebro-spinal menengitis, intestinal diseases, and disturbances accompanying teething in the young child, making an early diagnosis well nigh impossible. As the virus is not known, obtaining the spinal fluid does not help in the diagnosis.

In dispensary practice, the writer has seen several cases, which were brought in months after the acute symptoms has subsided, for treatment of the paralysis, where the acute symptoms had been so slight that no medical attendance was ever obtained.

A surprisingly large number of adults have had the disease during the last few years, in which the acute attack was very

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similar to that of la grippe. That one attack does not necessarily render the patient immune is shown by several cases reported recently, where the victim had a paralysis as a legacy of a previous attack in childhood, and in the later attack another part of the body was affected.

The fever subsides in from one to three days, the pains disappear or become less severe, the bowel condition becomes normal, and the patient is apparently well, excepting for the paralysis and diminished or lost patella reflexes, which is usually noted in from one to four days after the onset. The resultant paralysis may be slight, or severe, and widely distributed, leaving its mark on any part of the patient—one or both legs, one or both arms (if in the arms it is usually the upper arms), one arm and leg, or the spinal, neck, hip, trunk or shoulder muscles may be affected. By far the greater number are left with one leg paralyzed. Prof. Frank C. Richardson, of Boston University, has called my attention to the fact that the left leg was most frequently damaged. On looking up my own cases I also find this to be true.

There are, without doubt, many cases where bodily resistance has prevented any severe after affects, the paralysis has cleared up, leaving the patient apparently well, and doubtless many other such cases were never reported. The patients continue to improve for months after the paralysis first appears, and this has led to a carelessness or laxity of treatment in many instances, or a discontinuance of treatment when its continuance was most important in order to prevent deformity and preserve all possible power in the affected limb.

Although extensive experiments have been carried on with monkeys, but little has been done on the human body, owing to limited opportunities for such investigation. However, we do not know that the disease is not a mere inflammation of the anterior horns of the cord, nor of the cord alone. These recent epidemics teach us that without doubt many cases have previously been diagnosed cerebro-spinal menengitis. Unquestionably certain cases of cerebro-spinal menengitis are caused by the same virus, and Dr. Holt suggests that the name anterior poliomyelitis, or infantile paralysis, be changed to epidemic myelitis or epidemic myeloencephalitis.

In addition to the actual destruction of nerve tissue there is an infiltration or engorgement, causing pressure, which, on clearing up, is accompanied by a corresponding improvement in the paralysis. Later on, increasing atrophy of the paralyzed parts is noticed. This atrophy is due to impaired nutrition in the unparalyzed muscles from disturbed nerve and blood supply and lack of exercise, as well as to the direct paralysis of certain muscle groups. There is, of course, no difficulty in diagnosing the disease after the paralysis has occurred, and the patella reflexes are diminished or lost.

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With this introduction we will proceed to the treatment. During the acute stage isolation of the patient is imperative for the protection of other members of the family. The difficulty of early diagnosis, and the early destructive process of the disease renders prompt effectual treatment extremely difficult. Serum therapy does not offer any hope at the present time. Even when the exact virus becomes known, it does not seem that serum therapy could be used advantageously, owing to the difficulty of early diagnosis, and in the administration of the serum early enough to prevent paralysis.

Previous to the appearance of the paralysis we can only treat the patient symptomatically, and it would seem that the early symptoms would most frequently call for Bellodonna or Gelsemium internally. The orthopedist has little to do with the drug therapy of the acute stage of the disease. There is no treatment that can be compared with the strictly homœopathic medication during the stage of fever, cerebral excitement, or coma, and gastric disturbance. Therefore in the essential medical treatment of the case at this early stage the general homœopathic practitioner is usually competent to care for the case in this respect. There are, however, certain non-medicinal points to be observed in this early stage. If, as the pathologists have shown us, this early stage is accompanied by a marked infiltration, engorgement, and inflammation of the cord, it would seem important that our efforts should be directed towards reducing this pathological condition as rapidly as possible. Therefore, cold applications to the head and spine are indicated.

Absolute rest is of first importance. This condition of rest is not obtained by merely placing the patient in bed with a word of advice to the nurse. Effectual rest is only obtained by placing the patient in a position where leg and arm motions and restless activities are impossible, or where the patient is more comfortable when quiet. This can best be obtained by placing the patient upon a Bradford gas-pipe bed frame and fastening the child on with a binder or strap about the shoulders and hips.

On this Bradford frame the patient may be lifted, frame and all, for the necessary toilet preparations or to have the bed made, or from one room to another without any jar or voluntary effort on the part of the patient. A patient thus placed will be most comfortable, and the frame may be elevated to allow a circulation of air under the patient in hot weather. The prone position is more conducive to rest and recovery than when merely placed in bed.

A similar result may be obtained by making a posterior plaster of paris shell or splint to fit the patient. It is, however, easier for an inexperienced nurse to keep the patient dry and clean if the latter is on a Bradford frame. During the stage of active inflammation the use of the bed frame or plaster of paris posterior splint is just as clearly indicated as it is in caries of the spine. This should be continued from two to four weeks, or longer. Dur-

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ing this period there should be no attempt to see how much the patient can walk or use his paralyzed limbs. Such uncalled-for activity merely increases the cerebro-spinal irritation, and can only result in harm to the patient. Sufficient information in regard to the extent of the paralysis may be obtained by observation, and electrical and other tests which do not unnecessarily disturb the patient.

It is also of great importance during the early stage as it is later, to prevent the continued over-contraction of the unparalyzed muscles and thereby the over-straining of the damaged muscles. The greatest dangers here are "toe drop" when the tibial muscles and ankle flexors are paralyzed and the posterior calf muscles remain intact and therefore in a constant state of unopposed contraction.

The influence of gravity is also an important factor in causing toe drop. The drop can be avoided by the use of a posterior foot and leg splint which may be made of plaster of paris or wire. Also, a cradle should be used to keep the bed clothes from pressing on the toes. Hyperextension and subluxation of the knee is common where the quadriceps are damaged and the pull on the hamstrings is unopposed. To obviate this the posterior foot and leg splint may be extended up the thigh with the knee in a slightly flexed position, and well supported. If the patient be on the Bradford frame, the knees may be supported by a folded pillow-case placed in the popliteal space. Where the posterior plaster of paris shell is used, it may be continued down to support both the knee and foot.

During the first two or three weeks, massage and vibration should be carefully avoided—for all attempts at such treatment but increase the muscle pains, and disturb the patient to the extent of interfering with the absolute rest desirable to hasten all possible recovery of the spinal engorgement.

However, during this stage electric light baths can be given daily, or twice daily, for from twenty to thirty minutes, to increase nutrition. And this baking should be continued for months. I am accustomed to using a cluster of incandescent lights arranged in a semi-circular box of wood or tin. These bakers are superior to the leucodescent lamps because they do not require being held and constantly watched. They can be made cheaply and used by the nurse or parent. Immediately after the baking a towel wet with cold water is quickly applied to the part, which is then rubbed dry and covered. This is an excellent method of keeping the damaged limbs warm, stimulating the circulation and increasing the nutrition which is so greatly desired.

After the first three or four weeks we may commence massage and passive motions to aid nutrition and stretch the contracted muscles, being careful never to overstretch the damaged muscles.

If there is much paralysis of the foot, leg or thigh, the patient should not be allowed to attempt to walk earlier than the sixth week.

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The patient's general health should receive constant attention,—diet, fresh air and bathing should be attended to. After walking is begun the physician should carefully watch for any tendency toward the habit of toe-drop and valgus position, or eversion of the foot, which is sure to occur with the frequently damaged tibial muscles. It has been stated that "every contracture deformity of infantile paralysis indicates ignorance or neglect on the part of the physician, the parent, or the patient." Only those who have the after treatment of these cases can realize how much unnecessary damage has been done, and how much surgery is required, which, with adequate treatment, might have been avoided.

In nearly all cases of paralysis some form of apparatus is indicated for a time, and in severe cases permanent apparatus is required. Gymnastic apparatus must be employed in order that proper exercises may be carried out successfully. In later stages walking apparatus is of great value to enable the patient to stand or walk. Such apparatus necessarily varies with each individual case. The apparatus should be as light as possible, with the required strength, and should be so adapted that it will encourage the use of the limbs in as natural and comfortable a manner as possible.

Such apparatus or braces may consist of a simple foot and ankle brace with a stop-joint to limit ankle extension, allowing normal use of the tendo-achilles and preventing the toe-drop, contractures and valgus deformities, so frequently seen, or, with this brace may be incorporated a leg brace to prevent involuntary flexion or hyperextension of the knee; and where the hip muscles are damaged, this leg and foot brace may be fastened to a leather pelvic corset, thus insuring stability in walking. Many children who were unable to stand are, after the application of splints or braces, able to walk into the room at the next visit. Being able to walk means greatly increased muscle power, improved health, co-ordination, and the saving of great labor on the part of parents and friends.

If the spinal or neck muscles are involved suitable corsets and braces can be made to prevent serious deformity, and to insure growth along normal lines. The apparatus now in use shows wonderful ingenuity and skill on the part of the originators, and by their proper use patients otherwise hopelessly bedridden are enabled to get about with comfort, many deformities are prevented, and those that do result are less apparent.

Nowhere in medicine have such ingenious surgical operations been devised as those used for the correction of paralytic deformities. Foremost in this special field of surgery stands Professor Lange, whose recent visit to this country has stimulated new interest in the work. Lange's operation for the formation of artificial ligaments for flail foot or ankle has been very successful in proper hands. The transplantation of healthy tendons to new lo-

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cations for better leverage, and to take the place of those paralyzed, has helped thousands of cripples. The transplantation of the upper fibres of the trapezius to take the place of the paralyzed deltoid promises to be equally successful in selected cases.

Arthrodesis, or elimination of the tibio-astragaloid joint, has made a useful limb of many previously useless or almost useless limbs, and has made the use of all leg and foot apparatus unnecessary in such cases. Resection of the knee joint in badly paralyzed leg muscles has been equally successful. Other operations too numerous to mention here have been performed, which have afforded great relief to the patient, lessening pain, improving the gait, and thus increasing his comfort and earning power. The advance made in the understanding and treatment of this disease in the last few years has been so marked that we can look forward to greater discoveries in the future.

The following case illustrates the indications for and improvement following surgical interference:

Mr. E. B., of Pasadena, Cal., age 17 years. Perfectly well until four years, when he had a fever which was diagnosed as cerebro-spinal menengitis, but which was unquestionably anterior poliomyelitis. On recovering from acute attack could not walk. Was wheeled about in a baby carriage for one year, then learned to walk.

On entering the Hospital physical examination showed paralysis of about all the right anterior leg and foot muscles. Tendo-achilles permanently contracted, walked with marked limp, weight bearing all on the distal ends of the third and fourth and whole length of the fifth metatarsal bones. Heel about two and one-quarter inches from the floor. Marked contraction of plantar fascia. The astragalus was partially displaced anteriorly under the tibia. Neck of astragalus markedly elongated and enlargement of the cuboid, with the foot in a varus position. The ankle was so weak that the foot frequently turned inward, allowing the external malleolus to rest upon the floor. Could walk only when wearing a special shoe with cork insole, one and three-quarter in. high in the heel and a rather high shoe heel. The leg had the usual "pipe-stem" appearance of the severe paralytic case.

Thigh muscles fairly good. Can extend leg through normal arc of knee motion. Adductors, abductors and rotators good. Two inches shortening of right leg. Considerable lumbar scoliosis with tilting of the pelvis, due to the short leg.

Operation 1-9-09. Tourniquet applied below the knee. Long, U-shaped incision under the external malleolus. Tendons and ligaments of the fibula and tibio-astragaloid joint being severed—the foot dislocated inward. All the articular cartilage of the fibula, tibia and astragalus was carefully removed. Tenotomy of the tendoachilles was performed, and a sufficient amount of the neck of the astragalus removed to allow the foot to be brought into 120 degrees ankle flexion. Osteotomy of the lower end of the

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fibula (Pott's fracture) was performed. The plantar fascia was tenotomized. Then the foot was brought into a position of 120 degrees ankle flexion, ligaments reunited with iodized catgut, wound closed with iodized catgut, and silkworm drains being inserted, sterile dressings applied and a plaster of paris splint applied, including foot, leg and thigh. The farctured fibula was pressed tightly against the astragalus.

Two days later a window was cut in the plaster, and the silkworm drains removed. The wound healed by first intention. Later. when all dressings could be removed, a new plaster boot was applied, coming well up to the knee. Convalescence was uneventful. and at nine weeks the patient walked in the plaster of paris boot, at first with crutches. Later a steel leg brace was worn for three months, to guard against accidents.

Now the patient writes that he is employed in driving a mule team up and down Mt. Wilson; that he places that foot in a looped strap which is attached to the wagon brake, and uses all the force necessary to brake the wagon. He walks comfortably and with less limp, and the foot and leg have increased in size.

I might quote other cases of arthrodesis of the ankle joint with equally good results where the patient was able to discard heavy, cumbersome retention apparatus, with relief of inflamed bursae and pressure sores, and the patient's usefulness was extended by having a substantial, reliable leg to stand upon and walk with.

Other cases might be quoted illustrating tendon transplantation, elongation of tendons—the proper application of walking apparatus. Best of all, we can now point to cases where, by proper care and treatment, these deformities have been prevented and operations avoided. Our time will not permit of this.

In view of the intense interest that is being given to this subject today, I believe greater advance must be made in early diagnosis, resulting in more efficient treatment during the acute stage, thereby preventing much of the resultant paralysis. Following future epidemics, instead of a great harvest of cripples, dependent for support upon friends or the State, we shall have a large percentage of patients completely cured, or so radically improved that they shall still be able to hold their position in the social and industrial world. We must be optimistic with regard to this question, though it now presents many baffling features. The earnest, honest effort that is being put forth by the medical profession today must result in a deeper understanding and in the ultimate conquest of this disease.

Apropos of the recent death of one of our eminent British colleagues, a considerable amount of talk has started in England concerning the attitude of the general profession toward Homœopathy. Dr. R. Farquarson, a former professor of therapeutics in one of the universities, has suggested that the time has now arrived when his associates might with wisdom reconsider their attitude toward the followers of Hahnemann, who, he says, can treat disease on a "much more scientific principle than those now followed."

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DIVERTICULITIS, WITH REPORT OF CASES.*

By Winfield Smith, M.D., Boston Mass.

The honor of an invitation to attend a meeting of the Hughes Club receives no emphasis by the mention of the fact, but I cannot allow the opportunity to pass without a statement of appreciation on my part of your kindness and your hospitality, and as acknowledgment of the honor which you bestow in allowing me to read a paper before this body.

I am reminded—as I have been many times by various experiences—of a visit which it was my pleasure to make some fifteen years ago to the home of Sir Richard Hughes in Brighton, England, when he was at the zenith of his medical activities, and his family was still intact and living in the delightful English manner which is so full of charm to an American visiting Great Britain. He was keenly interested in American medicine, particularly with the homœopathic section thereof, and expressed himself as having adopted Boston as his American home. His friends in this city were so numerous and the homoeopathic influence here was so unified and strong that he felt it was a centre of Homoeopathy which could be relied upon to do its medical duty. He spoke of the Hughes Club and emphasized the honor which you extended to him in adopting his name, and while I was not a member of your organization, I am sure that you will agree with my reply that the honor accruing to him was microscopical compared with that which any club having his name might legitimately expect to enjoy.

It has been suggested that a short paper on Diverticulitis might be of interest just at this time, and as I read an article before one of our societies in the early summer on this subject, and am much interested in the many phases of this disease and the problems still to be solved in connection with the surgical treatment of the many cases which we are sure to meet in the future, I have ventured to make an effort which I trust may prove worth the time and effort expended. Many clever and accomplished men have realized and said for many years that the elimination of the large intestine would immediately remove many vicious dangers to not only our general well-being but also to our length of life and the "pursuit of happiness." One investigator, bolder than the rest, has unqualifiedly advised removal of the large intestine entire as a simple sanitary measure. The ills attendant upon inflammations resident in or about the caecum would almost justify one in supporting such a statement, radical as it may appear, but when one considers that recently many other far-reaching pathological conditions have been demonstrated to exist in other portions of the colon, one is inclined to treat with respect any opinion of a qualified man even if such opinion is iconoclastic at first sight.

*Read before the Hughes Medical Club, Boston, Mass.

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Up to a comparatively recent time appendicitis and its attendant evils and dangers was not universally understood nor appreciated by even surgeons of large experience, as witness an interview which I had with Sir Frederick Treves—at that time (1896)—at the London Hospital where he was still on service and continued for several years thereafter. He was about to publish a new edition of his "Surgery," an excellent treatise, as we all know. Both in his book and according to his latest personal opinion, he was settled in the conviction that inflammatory conditions about the caecum should still be classified as Typhilitis, Paratyphlitis and Perityphlitis, and that the Appendix Vermiformis was a simple contributing factor in the sum total of caecal inflammation. I have no doubt that he carried this opinion to a much later date than the one above mentioned, and that it required many cases in addition to that of his King, upon whom he twice operated, to convince him that appendicitis is practically an entity, and that the vast majority—one might almost say all—of the inflammatory processes occurring in the right iliac fossa have their origin in the Appendix Vermiformis—sometimes in such a manner as to baffle the keenest minds engaged in pathological studies even at the present time. Whatever may be the difficulties surrounding the disentanglement of the pathological maze in this question, there is no doubt in the minds of qualified men as to the proper method of treatment in these cases, which is rather unique as well as fortunate in one department of medicine, at least. There are other pathological processes occurring in the colon which have not received proper attention up to the present, for various reasons, among which may be mentioned the comparative infrequency of their occurrence, the facts that they are more chronic in development, that they are perhaps more deeply seated than appendiceal inflammations, and that the glamour of the appendix has so appropriated the lower abdomen as to exclude the less frequent but nevertheless important pathological conditions which may reside in other portions of the large intestine. It has been discovered that throughout the whole extent of the colon from its inception in the cæcum to its termination at the anus there may start at any point an acute degenerative process due to imperfect embryonal development or to sacculated diverticula which may develop from many causes, among which may be mentioned—as a prominent factor—constipation due to a natural or acquired insufficiency of the ileo-caecal valve—a condition which induces sacculation and tends to render such a state more or less permanent. An anatomical study of the large intestine would be of interest at this time as many careful investigators—notably in England—have devoted a great amount of time and patience to this portion of the alimentary tract, but the limits of this short paper preclude such a study, interesting and helpful as it unquestionably would be. It may be stated, however, that this section of the bowel is predisposed to anatomical anomalies and insufficiencies—

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notably irregular distribution of the peritoneal investment at various points along the gut and relaxation of the supports which ordinarily can be expected to serve as a protection by preventing injury through undue mobility. As the sigmoid is the most freely movable and most completely sacculated portion of the colon, one would instinctively look for the greatest amount of trouble in this section, and pathologists and surgeons, as a matter of fact, are agreed that inflammation starting in the diverticula (but recently called diverticulitis) is chiefly found in the sigmoid flexure or the upper third of the rectum.

The pathological history of diverticulitis is as follows: for some reason, considered in many cases to be constipation and the consequent lodgment in the diverticula of small bits of hardened faecal particles, an inflammatory process is inaugurated much the same in character as that which develops in the Vermiform Appendix when a concretion invades its lumen and forms a nidus for the development of germ life even up to the point of actual pus production and the accompanying overgrowth and induration of surrounding tissues. That the formation of pus is not so frequent in this region is due to the larger caliber of the lumen of the diverticula as compared with that of the appendix and the consequent facility with which these pockets drain into the larger area of the bowel when the inflammatory pressure becomes sufficient to expel the pus. For this reason alone the sigmoid and its deverticula can never become the menace—sometimes very abruptly as we all have had occasion many times to witness—as does its associate in the right iliac fossa, but irritation of the saccules of this section of the large intestine may and does easily become more or less chronic in its nature and forms an available point for the deposit of malignant disease. This characteristic has been recently noticed by several operators, W. J. Mayo and H. Z. Giffen and L. B. Wilson, the two latter having jointly reported a case of "Carcinoma on Diverticulitis of the Sigmoid" in the American Journal of the Medical Sciences for November, 1909. Hochenegg also reports a case of this nature in which "a carcinoma of the sigmoid was resected; the flexure showed for a great distance numerous cherry-sized diverticula filled with somewhat hard, plastic faecal matter. The carinoma was regarded as resulting from the chronic irritation and ulceration of the diverticula, due to the retained faeces."

The CLINICAL HISTORY of a case of diverticulitis is much the same as that found in appendicitis, with the difference that the attacks are rarely as severe, usually occur at intervals for several years and, obviously, attack the left lower rather than the right lower quadrant of the abdomen. The pulse quickens, the temperature rises, and more or less tenderness can be elicited on pressure in the region of the sigmoid, accompanied in many cases by a well-defined tumor which may vary in size as do similar deposits about the appendix. Many of these patients recover, in the manner indicated earlier in this paper, by intra-intestinal drain-

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age, but it occasionally happens that pus formation proceeds with great rapidity, in which case one is astonished at the severity and sudden onset of the symptoms, the pain being frequently agonizing in character and the general toxaemia much more profound than that shown in any other similar abdominal lesion of which we have knowledge.

We have looked upon the right iliac fossa as the seat of the only dangerous pus-producing area of the abdomen for so long that the possibility of similar conditions arising elsewhere in the abdominal cavity has been almost, if not quite, ignored. At the present time, however, the views of experienced surgeons the world over have changed radically from this opinion until most of our previous ideas on this subject have been made over in large measure, if not completely. Indeed, Telling and Stierlin are reported by Dr. Murphy to have announced that "diverticulitis of the sigmoid has been brought to their attention frequently enough within the last few years to make them think of its possibility in every case of abdominal cramp, especially when symptoms or signs are later localized in the left lower abdominal quadrant. Most of all should it be considered in a history of recurrent attacks over a period of years, and when a mass is palpable."

In contrasting or comparing this disease with appendicitis it must be borne in mind that while the appendix is practically anchored in a definite region and may be found on examination with comparative ease in the majority of cases, an inflammation of the diverticula may take place at such a point in the sigmoid as to make it impossible of detection by external abdominal examination or by digital search in the rectum. Other aids in diagnosis must then be invoked, and one can easily imagine a case in which an exploratory incision might be justifiable or even necessary.

When I read a paper similar to this at the early summer meeting of the Massachusetts Surgical and Gynaecological Society, many men present recalled cases of diverticulitis or what had probably been this disease, in one of which an operation had been performed and an abscess along the sigmoid had been opened and drained with very satisfactory results.

The TREATMENT OF DIVERTICULITIS is, unquestionably, surgical. The manner of procedure will, of course, depend upon the site of the inflammation and its nature or stage of development. Without doubt many cases have recovered by such treatment as may overcome the irregular action of the bowels and cleanse the rectum or irritating faecal masses which tend to inhabit the diverticula and produce the pathological results which we have mentioned.

When pus is present or alarming symptoms appear, operation is the one possible hope, and this may be done best through a median incision above the symphysis pubis, rather than through one made on either side of the median line. It must be

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kept in mind that the rectum is practically in the middle of the pelvis and that the range of motion of the sigmoid is such as to allow free handling through a considerable arc. If pus is present the cavity of the abscess must be thoroughly cleansed and such openings as appear in the wall of the bowel must be sutured in a similar way to that employed in similar conditions existing in or near the appendix. Occasionally a small portion of the colon wall may require resection, in which case the diseased portion may, in many instances, be surrounded by a purse-string suture and turned in to the lumen of the bowel in much the same manner as one employs the Dawbarn suture around the stump of the appendix. In those cases in which suppuration is about to begin, simple drainage through the abdominal wound is sufficient, and large abscess cavities are treated according to the indications precisely as in similar conditions about the caecum.

Several cases have come under my observation during the last two years, three of which were reported in the paper previously mentioned, and one which by exclusion—if in no other way—I think we are justified in placing in the same list. With your permission I will again read the records of these cases and add the one just mentioned in conclusion.

Mr. D., aged 57, operation March 15, 1908. Diagnosis, carcinoma of intestines, appendicitis. Operation, exploratory incision, appendectomy.

Patient had been suffering for over a month with indigestion, constipation, attended by loss of appetite and some pain through the lower abdominal region. There was no tenderness over the appendix on pressure, nor over the abdomen and his physician had been unable to elicit any symptoms of acute appendicitis, although he had made definite efforts toward such a diagnosis.

After visiting the office of his physician on March 14th, 1908, and having received a remedy for his vagrant pain in the abdomen, and constipation, he was seized at about 9 o'clock in the evening with severe abdominal pain, and his medical attendant, when called a few minutes later, found him literally writhing on the floor of his bedroom on account of an agonizing pain situated in the left lower quadrant of the abdomen. He was at once brought to the hospital and exhibited symptoms of general shock, being extremely pale, with pinched face and the other classic symptoms of this condition.

An incision was made over the appendix. On opening the abdominal cavity, free, purulent fluid was found. The appendix was somewhat inflamed with a few ancient adhesions, but there was no evidence of perforation, and further search was made in the pelvic region. In the posterior wall of the pelvis, involving the upper rectum and lower part of the sigmoid flexure, a large, hard mass was found, which had every appearance of being carcinoma. The abdomen was washed out with hot saline solution. The appendix was removed in the usual way. A double drain-

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age tube was inserted into the abdominal cavity and the wound closed with catgut and silkworm gut sutures.

After an operation, the pain was practically relieved and the case ran the usual course to recovery without complication, except that considerable pus was discharged through the drainage tube and a quantity of sloughing material and mucus passed away through the rectum. The patient recovered without incident and the diagnosis was changed to slight intussusception of the sigmoid, instead of carcinoma, as had been originally thought. In the light of present knowledge this was, unquestionably, a case of diverticulitis.

Case 2. Mr. C., 58 years. Previous health good with the exception of occasional pains in the abdomen, especially in the region of the appendix veriformis and symptoms of indigestion at various times for several years. On October 15, 1909, was seized with severe pain low down on the left side of the abdomen, attended by constipation. Accelerated pulse (90) and slight rise in temperature. When I examined the patient, the symptoms were beginning to subside, but there was a small area of dullness over the left iliac fossa and a distinct area of pain on pressure in this region, in the centre of which area was a painful rounded tumor the size of a hen's egg. This was a diverticular inflammation without a doubt, subsequent to a former appendicitis of a mild form.

The treatment in this case was rest in bed, ice bag over the tumor and Bryonia 3x internally.

The local soreness persisted for several days and the swelling could be easily felt for at least a week from the time I first saw the patient—since which time everything has resumed its normal state and no operation has appeared to be expedient.

Mr. C. Age 71. Patient had been suffering for some weeks with abdominal pain, which had caused sufficient inconvenience to be noticeable in his ordinary work, which was accomplished usually without any difficulty. For three days previous to the operation, patient had suffered from constipation, pain low down in the abdominal cavity, more especially in the middle and if anything, a little more to the left than on the right side.

Suddenly, at about 9 o'clock on May 17, 1910, he developed severe abdominal pain, which became excruciating in character, and on consultation with Drs. Richardson and W. F. Wesselhoeft, it was decided that an operation should be performed. The pulse of the patient was gradually increasing in frequency, but the temperature remained practically normal. On removal to the hospital, it was decided that immediate operation was necessary.

Incision was made a little to the inner side of the usual appendix incision. This disclosed an appendix which was bound down by old adhesions and was evidently the source of some discomfort. After its removal in the usual way, investigation showed a large mass of an inflammatory character at about the sigmo-rectal junction. There was considerable flacculent serum

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in the abdominal cavity, and after the removal of the appendix, the abdomen was cleansed with hot saline. A double drainage tube was put down to the mass above mentioned.

This case has progressed in a similar manner to the one first reported and considerable discharge has come from the tubes and also from the rectum. The constipation has been entirely relieved, and unquestionably this was a case of diverticulitis.

The patient at the present time is entirely recovered.

Case 4:

C. A. 28. Quincy Hospital, April 20, 1910. Patient admitted with symptoms of peritonitis which have been present for over two weeks. **Exam.** Pulse 110. Temp. 100.5. Patient emaciated, pale and having an anxious, distressed expression, characteristic of peritoneal infection.

Physical exam. No abnormalities found in heart, lungs, liver and kidneys. In the lower abdomen a dull area existed, extending up to a line joining the anterior superior spinous processes across the front. This line of dullness was slightly higher on the left side than on the right, and a faint wave transmission was noticed on careful investigation. The diagnosis was abscess, and on making a median incision the pelvis was found to be filled with pus which was prevented from entering the general peritoneal cavity by strong intestinal adhesions which "roofed off" the pelvis. The case was one of great emergency, the patient showing distinct shock from even a small amount of anaesthetic and a comparatively short incision. The caecum seemed excluded from the pus cavity and there was much more pus on the left than on the right side. The pus was washed out with sterile salt solution and drainage was instituted with a large double tube. This patient recovered after a tardy convalescence, and I was able to learn at a later date that the original symptoms appeared in the left lower quadrant of the abdomen.

THE MISUSE OF THE CURETTE.—The reader will recall that but a few years ago it was the rule to curette the uterus after every abortion and premature labor, while not a few physicians thought the operation should be performed after every case of normal labor. Sharp curettes were then employed, and it was a very easy matter for a heavy-handed operator to scrape through the walls of a uterus that happened to be usually thin. In hundreds of cases there was such a denuding of the endometrium that other troubles followed in its wake. So much damage was done by unskilful curetting that it is a procedure that has almost been abandoned except in cases where there are retentions whose removal is imperative. We are learning that in the obstetric role nature provides protective secretions of her own and that too much scraping, manipulating and antisepticizing only tends to increase the danger of infection. The mucous and submucous tissues in the parturient canal strive energetically to manufacture their own anti-bodies to neutralize poisons.—Oklahoma Medical News-Journal.

Nan Goat—Ah, a dress shirt! What a meal!
Bill Goat—Not for me. My doctor has forbidden a starch diet.

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CLINICAL DEPARTMENT.

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

Case III.—Diagnosis: Potts Disease with meningitic and slight pressure-myelitis.

In this case at first glance one would think either of abortive infantile paralysis, hysteria or caries. There were many symptoms, as slight temperature, pain in back and legs and paralysis limited mostly to the left leg, and for a short time bilateral, which strongly suggested poliomyelitis. But the pain was distinctly localized in the lumbar region and the muscles were in a state of marked spasm. The patient could not lie on her back because the pain was distinctly worse in this position. It was found that if a pillow was placed under the small of the back to support the weight the pain was eased. And there had been no other case in the neighborhood. Hysteria was thought of, especially as the child had always been complaining and had just before going to bed in January been greatly frightened by a drunken man. However, she exhibited no hysterical moods, no disturbance of sensation, crises or tic. On the other hand the cutaneous tuberculin skin test was positive. Inspection of the back showed the erector muscles in a state of active spasm which she was unable to relax. Pain was constant and referred to a definite point about at the first lumbar vertebra, the spinous process of which was abnormally prominent, a beginning kyphosis. No abscess could be found, but the slight paralysis was evident. Add to these the general appearance of the child, and the diagnosis seems fairly positive. If one wanted to go further, a lumbar puncture would greatly aid. The skyagraphs taken did not materially aid, probably because as yet there is so little softening of the bodies of the vertebra that no marked deformity has yet occurred. Rest in bed and excessive feeding has done this little patient much good, but a plaster jacket would undoubtedly aid, and could do no harm.

Case IV: for diagnosis.

O. P. D. No. 54786. The patient is a tall, dark-haired man, slightly gray, and aged 42 years. Born in Massachusetts. Occupation: an actor and later a salesman. Normal weight about 145, now 130 lbs. He comes to the Dispensary complaining of inability to control urine long, especially at night, when he frequently wets the bed. He was a moderately healthy boy and had no acute illness in childhood but masturbated actively from the age of 14 to 25 years—two years after his marriage. Had gonorrhoea three times and when 21 had a chancer. Married twenty years and has been very active sexually, but wife has never been pregnant. Never used alcohol or other drugs. Seven years ago he became very nervous—could not sit still to be shaved—had to walk all the time. This improved under treatment. Doctors said then he would be in an asylum in two years. Three years ago began to have spasm of glottis, which would almost choke him at times and he always carries a bottle of water because it is liable to come on in the street. Also developed little mannerisms. Two years ago began to have difficulty to control water, and this has grown worse

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so that now he wets the bed every night and has some dribbling during day, but no knowledge of when water passes, i. e., no sensation. Has paroxysmal pains through rectum, penis and testis which are agonizing and last from a few minutes to an hour; relieved by hot applications. Also wandering sharp pains about chest and abdomen. He eats and sleeps pretty well. Bowels are regular.

Examination: General examinations negative save for enlarged inguinal glands and slight right hernia. Gait all right when he steps off with alacrity, but slow, careful walk very difficult. Rhomburg's symptom marked. Knee-jerks absent. Pupils small, but examination of eyes otherwise negative. The tongue protrudes in the median line and moves normally as do the face muscles—and he can whistle. He is anxious to tell all his story and is rather proud of the interest which his case creates. Is anxious to elicit sympathy, but talks well and tells a straight story. Seems to feel no anxiety because wife has to work to support him, and says he has a good time playing pool and cards. Has no grand ideas, but cannot repeat test phrosis very well or write Massachusetts or Connecticut correstly or legibly.

What are the diagnosis, prognosis and treatment?

WHAT DO WE NEED TO KNOW CLINICALLY ABOUT THE MIND?

Many dreamers have built castles in the air and most of the castles have fallen about their visionary heads. They have awakened only to find the inflexible laws of nature cold, fixed and unsympathetic. A few only of these aerial dwellings have been constructed by minds fundamentally mundane or, as Dickens says somewhere in "Hard Times," of the dirt, dirty.

There is a type of individual who, while possessing a large degree of practicality and a good grasp on the primal laws of nature, yet has also the tendency to castle building—the quality of combining elemental facts, subjectified as mind images, into hitherto unthought-of or unexplained resultants, the architecture of which is new and attractive though built out of the same material as the stereotyped pitch roofed shack—the creation of a cruder mind. To such "architects of fate," whose fund of knowledge and imaginative vigor has permitted them to form working hypotheses reaching far beyond the known, we owe the real advances of most scientific progress. Starting with the unknown they have been able to conceive how such a result, i. e., the movements of the solar system, might have been brought about by a given arrangement of the units, elements or forces, and so have ultimately been able to analyse a complex condition or thing and explain it. Inversely beginning with known elements they first imagined how these might be combined and built up into a complex thing, that is, synthatized to produce a given result, and then have devised experiments to prove such hypothesis. So, after all, a sensible kind of dreaming; that is, a good imagination is a useful thing.

THE REFLEX ARC: Just how the primary percepts become cognized perceptions (the point at which the objective world becomes subjectively recognized as such) or by what channels, we are able to deliberate upon

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them—think them over, compare them—give relative values to them and through intelligent motor responses act wisely through and upon them, we can only theorize. And yet we have a very well studied and understood starting point, anatomical and physiological, from which to build up the so-called thought complexes. And this starting point is the chain of neurons we all know so well as the reflex arc.

We need not concern ourselves here with the controversy of the neuron theory versus the neuro-fibrilar theory. The former gives us the better working basis, though the weight of evidence seems to demand that we must soon readjust our theories to agree with the latter. However that may prove to be, the reflex arc as now understood and widely taught, and upon which Shirrington's work embodied in his book "The Integrative Action of the Nervous System" is based, is most useful. In this scheme the simplest form of arc is that which starts with a stiumlus, i. e., a faradic shock, which irritates the end plates of a sense organ in the skin. This is conveyed to the ganglion on the posterior root where the tree-like arborization is contiguous (not continuous) with the finger-like dendrites of another cell whose single nerve process or axone conveys the stimulus to the spinal cord through the posterior root. Here it is similarly carried across through an association neuron to the anterior horn of the cord when the motor cell picks up the impulse and conveys it to the muscle group of that segment, resulting in the contraction of those muscles. Hence we see that the neuron is the anatomical unit of the nervous system, while the reflex arc is the physiological unit and involves at least four neurons. Notice that at the point where the energy passes from the axone of one cell to the dendrites of the next, the surfaces are not approximated. This differs from the neuro-fibrilar theory which makes them continuous and requires a much more elaborate apparatus of interposed resistance,—boxes, etc.,—to explain the mechanism. In the neuron theory this space is filled with a cement substance probably of the nature of lymph or visual purple, which has peculiar biochemical qualities. It or the cell body (or both) is capable of (1) preventing the stimulus or impulse from flowing in the reverse direction, i. e., from motor to sensory channels; (2) of refusing to respond until the stimuli have reached a certain force (threshold) or a certain amount (summation); (3) of responding with a definite rhythm no matter how rapid the stimuli; (4) of possessing a refractory or rest phase like the heart, no matter how frequent the stimuli. In tonic spasm and catonia we can assume that some change in the nutrition or chemistry of this cement substance or cell or both has interfered with this refractory phase and permits the nervous current to flow continuously through. Or again in rhythmic tremor such as paralysis agitans that pathological conditions have interfered with the co-ordinate rhythm of discharge to flexors and extensor muscles.

In all these items the reflex arc conduction differs from simple nerve conduction, the nerve being only a connecting wire. This space or spark gap between the arborization of the axone and the cell dendrites is called the synapse, and Shirrington says of it: "Such a surface might restrain diffusion, bank up osmotic pressure, restrict the movement of ions, accumulate electric discharge, support a double electric layer, alter the

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shape of surface tension with changes in difference of potential, alter in difference of potential with changes of surface tension and shape, or intervene as a membrane between dilute solutions of electrolytes of different concentration or colloidal suspensions, with different sign or change. It would be a mechanism where nervous conduction, especially if predominantly physical in nature, might have grafted upon it characters just such as those differentiating reflex-arc conduction from nerve-trunk conduction.

We can clinically deduce from this statement that a great variety of bodily errors might alter or interfere with the smooth working of this all-important mechanism of the mind—with the ready adjustment of the pretty pieces of the kaleidoscope and thus with the perfection of the resultant composite picture or thought complex. For there seems no good reason to doubt that this same reflex-arc, in virtue of its myriad interconnections, serves all the purposes of the higher intellectual faculties and that thought is only another expression of motor response entirely analagous to the muscle contraction of the simpler reflexes. Each is a motor end resultant of a stimulus whether received from the environment without, or from the functionings of our bodies within.

And now in order to build up a conception of how these reflex arcs become elaborated into mind processes we may turn to psychology, especially to physiological psychology. It would be fruitless to attempt an extensive elaboration of these arcs to account for the higher mind processes. However, we are in possession of ample material, through histological and pathological studies upon the brain, to give satisfactory evidence that it is doubtless through the compounding and interweaving of the reflex arcs through specialized nerve cell systems, organized thought processes are attained. It is undoubtedly in the brain cortex or mantle that thought takes place and in support of the idea that each division of the cortex plays a more or less definite and localizable part in the whole, comes the histological evidence that already over twenty different types of cortex cell arrangement have been observed, and this work is only in its infancy. There can be little doubt that a central or goal idea has its localized system of cells and well beaten paths of association spoken of in psychology as a thought complex, and that a relatively few of these goal ideas determine by their next synthesis our sentiments and beliefs. Then by still higher and more delicate association neurons these beliefs are fused in a still smaller group—often too loosely synthetized and in some easily disturbed—which results in that person we call me or ego. The firmness and vigor of these final complexes largely determine the type of men we are. The races in which thty are but loosely joined are the inferior races. Its pathological variations, especially cleavage, opens up one of the most interesting problems of abnormal psychology—that of multiple personality.

Did space permit it would be most interesting to follow the evolutionary genesis as brought out by the studies in comparative biology and comparative psychology and trace the steps by which man has attained his high state of development in the animal world. But we must content ourselves with this brief outline and turn from the mechanisms to a

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	Brain Stem and Rear Brain	Parietal lobes and upper temporal lobes		Parietal lobes Base of Fore-brain, lower part of Temporal lobe and Isle of Reil	Fore brain Higher Arcs	Highest Arcs
Physical Organ	Primary Mental. Percepts	Instinctive Affective Correlates		Localized Psychic Perceptive Correlate	Intellectual Apperceptive Correlate Goal Ideas	End Process
Eye second nerve	Space, Form Color, Brightness	Instinct.	Emotion.	The look of things, visual imagery	Comparison.	
Ear eighth nerve	Noise, Tone Timbre	Flight	Fear	Auditory imagery	Knowing the	Thought
		Repulsion	Disgust	tune	thing seen, heard,	Insight
		Curiosity	Wonder	rhythm time	felt, smelt, tasted	Reason
		Pugnacity	Anger			
Nose first nerve	Smells—about 50,000	Self-abasement	Subjection	Odors and their imagery	or touched in its	Judgment
		Self-assertion	Elation		relation to other	Decision
Tongue 5th, 9th, 10th nerves	Sweet, sour Bitter, salt, alkali	Paternal	Tender emotions	Taste and Thirst and their imagery	things	
		Reproductive	Sexual emotions			
		Gregarious	to Herd		Music	Will
Skin 5th nerve and sensory tracts of cord	Touch, pain, heat, cold, smoothness, pressure, vibration	Acquisition	to Hoard	Hardness, texture, sharpness, bluntness, degree of temperature and their imagery	Language	Action
		Construction	to Build		Figures	
Internal Viscera Sympathetic System	Somatic sensations, respiration, circulation. Digestive, sexual	The sense of Well- or Ill-being and Initiative		Orientation Steriognosis and their imagery	Knowledge of the feelings	Ethical feeling of Egoism and Altruism
Kinaesthesia All motor nerves	Movement Station Vibration					

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survey of its resultants, and tabulate what we need to know of mind as such. The following table is offered with apology and hesitation since any such scheme must necessarily be but tentative and incomplete. And yet it will serve the purpose of formulating what has been said up to the present time in these papers and lend material for the next step, which will be a brief outline of normal psychology.

1911 MEETING OF THE A. I. H.

Lowell, Mass., March 15, 1911.

My dear Editor:—

After a conference today with Dr. H. A. Whitmarsh of Providence, the Chairman of the Local Committee of Arrangements for the Narragansett Pier meeting of the Institute, the Press Committee is able to make the following preliminary announcement of the plans for entertainment of the visitors:

Monday evening, after the welcoming addresses and exercises, there will be a reception, followed by a ball.

Tuesday afternoon an excursion by steamer to Newport, probably a ride for the entire party along the famous eight miles of Ocean Drive.

Thursday a steamer trip to Rocky Point, where the whole party will enjoy a genuine Rhode Island clam bake.

Friday night will come the annual banquet.

The Meissen is arranging for a musical in addition to their usual constant courtesies. The exact date for the above event is not yet placed.

The space for exhibits is selling rapidly and under the energetic management of Dr. Bennett of Pawtucket, R. I., promises to be an unusually attractive feature.

The new Mathewson is an ideal place for our meeting, and everything points to an unusually successful event.

Cordially,
G. FORREST MARTIN,
Chairman, Press Bureau.

According to the field secretary of the American Institute, Dr. Arndt, at the reunion of homœopaths in Delaware there occurred a most remarkable meeting from the standpoint of attendance. Of the entire number of homœopaths in the State only two were absent at the time the Doctor delivered his address. If the other States could do as well proportionately we feel sure that there would be a great amount of enthusiasm everywhere manifest.

It is announced that the New York Department of Health is about to provide the sum of $40,000 annually for the establishment of fifteen milk stations throughout the city, and that these stations will be opened very shortly.

Mme. Curie, who has been a candidate for election to the Academie des Sciences, to fill the vacancy caused by the death of her husband, has been defeated for that position by a vote of 30 to 29. The reason for this, it is stated, is due to the prejudice against the admission of women into the Academie.

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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.

EDITORS:
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ARTHUR H. RING M.D., Assistant Editor.

Reports of Societies and Personal Items should be sent in by the 15th of the month previous to the one in which they are to appear. Reprints will be furnished at cost and should be ordered of the Business Manager before article is published.

THE AMUSING CYCLE.

Many of our readers have doubtless noted in recent numbers of certain journals of the dominant school of medicine, articles in which the application of bees for stinging purposes was recommended as a new cure for rheumatism. Unless we are mistaken the first case thus reported appeared in the British Medical Journal and was that of a man, a chronic sufferer from rheumatism, who, after being accidentally stung by bees, entirely recovered from his disease. Various writers have gone so far as to describe how many bees should be applied and the proper technic of application. This is, of course, very amusing to homœopaths who are familiar, and have been for years, with the efficacy of Apis mellifica or of Apium virus when properly indicated in rheumatoid conditions. It is, however, now lauded as a new discovery by our friends of the dominant school.

This is particularly amusing in view of the following facts: On January 29 the Boston Sunday Herald contained a reproduction of its publication exactly 50 years ago. In looking over the various contents of this old journal we find a paragraph entitled "New Medical Discovery." Among other things the following appears: "A distinguished Frenchman, M. de Gasparin, having heard of the facts cited by Dr. Desmartis, communicated to him a fact in his own experience. He had long been afflicted with rheumatism, which kept him almost constantly infirm. One day, in picking up a handful of weeds in his garden, he was stung by a wasp on the wrist. The arm swelled; but the rheumatic pain disappeared. Seeing this result he caused himself to be stung the next day along the seat of pain in his leg, and was again delivered from suffering, and was able to walk with ease. This happened three years ago, and every subsequent reappearance of the malady has been cured by similar means; and by a wasp-sting on his neck an attack of bronchitis was overcome."

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Thus we see another illustration of the oft-repeated case of a wonderful remedy now highly lauded, a short time later discarded as useless, only to be resurrected at some future date as another new discovery. Truly the discoveries in therapeutics apart from those that act as do the vaccines and sera in a sort of homœopathic manner, are so few and so comparatively insignificant as to make us question some of the wonderful advances that we are told are being made. Certainly it seems better to have a firmly fixed therapeutic faith based upon a sound and logical principle, one capable of demonstration, than to be continually vacillating from point to point without any definite advancement, merely moving about in an irregular circle.

WELCOME NEWS.

The January number of "The Clinique," our well-known Chicago exchange, brings news that will be welcome to all who may be interested in Homœopathy. This consists in the report of the meeting of the alumni association of Hahnemann Medical College, held in Chicago on December 5. The question of the future of the college was the topic of the meeting. Dr. Joseph P. Cobb, ex-president of the American Institute, was the first speaker. He covered in detail the report of the Carnegie Foundation and announced that the college was in Class A according to that report. He further announced that the sum of $5,500 had been donated by the Hospital for the complete equipment of certain laboratories. Arrangements have now been made whereby one man will devote his entire time to the supervision of this department. He strongly emphasizes, however, the need of an endowment fund for the perpetuation of the work. His suggestion was that the alumni association raise $50,000, after which he felt sure that outside friends would add to this fully $200,000.

Dr. Chrislett, the next speaker, suggested that all subscriptions be contingent upon the completion of the total amount of $50,000, and that all funds thus raised be placed in the care of one of the local banks as a trust fund whereby, if at any future time it was decided to discontinue the college, all subscriptions would revert to the original donors.

Other well-known speakers included Drs. Colwell, Pennoyer, Smith, George, Hazeltine and Calvert. Before the meeting was finished over $5,000 was subscribed to the fund. Among the subscribers and speakers we note with pleasure our former Boston University colleague, Dr. Mary E. Hanks.

The editors of the *Gazette* extend to their Chicago co-workers their most sincere interest in this campaign, and wish for them all possible success.

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BOOK REVIEWS.

The Treatment of Syphilis by the Ehrlich-Hata Remedy (Dioxydiamido-Arsenobenzol). A Compilation of the Published Observations by Dr. Johannes Bresler, Chief Physician to the Provincial Medical Establishment at Luben, Silesia. Second edition, much enlarged, with portraits of Ehrlich and Schaudinn. Translated by Dr. M. D. Eder, with an abstract of the most recent papers. Rebman Company, New York.

In this little volume will be found a compilation of the results of the European, mostly German, investigations concerning Salvarsan as reported in various medical journals.

As the work was translated by Dr. Eder in October of last year it must even now be considered to be more or less obsolete, so great has been the amount of work performed since then. It is of much value in giving the very striking results of the treatment as it was first applied abroad, and represents the high water mark of enthusiasm concerning its value. The opinions of such men as Weschselmann, Hata, Alt, Neisser and Schreiber, not to mention Erhlich himself, are always of much value and are usually very conservatively expressed.

We cannot here refrain from giving the contra-indications of the drug as defined by Dr. R. Sieskind:

1. Serious non-syphilitic diseases of the retina and optic nerve.
2. Severe diseases of the circulatory system.
3. Severe diseases of the respiratory system other than tuberculosis.
4. Severe non-syphilitic kidney diseases.
5. Progressive degenerative diseases of the central nervous system.

Unquestionably there has been introduced into medical knowledge a drug, the exact importance of which is certainly great but which is as yet not exactly defined.

Makers of Man. A Study of Human Initiative. By Charles J. Whitby, M.D. (Cantab.) Author of "The Logic of Human Character," "The Wisdom of Plotinus," etc., etc. With forty-seven half-tone and other plates. Price $3.00. Rebman Company, New York.

It is doubtful if any book on the review table of the *Gazette* for a long time has received more prolonged and detailed attention than this notable one by Whitby. Not necessarily because it merely deserved such scrutiny was the time thus given, but it was a willing offering by one to whom the perusal brought much pleasure. The author has selected forty individuals from among the greatest and best known names of all history and has subjected them all to a careful psychological study, comparing one with the other and with all the rest in regard to their various characteristics. Thus one chapter is given up to a comparative study of the predominating motives of their lives, another with some other phase, and still another with a third. Differing extremely from many such studies of the various psychic elements, the book is very readable, so much so that once having begun a chapter the reader is unwilling to let go until at least that subject has been concluded. From the actual standpoint of utility to the physician not much can be said, as its purpose was not such. But as a recreation combining both pleasure and profit it is very warmly recommended to every physician who may have a desire to emerge from submergence in a sea of professional cares and to constantly strive for a little higher level.

Atlas of Microscopic Diagnosis in Gynecology. With Preface and Explanatory Text by Dr. Rudolf Jolly, Pri. Doc. Chief Physician of the Gynecologic Clinic University of Berlin. Only authorized English translation by P. W. Shedd, M.D., New York. With 52 litho-

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graphs in color and two textual figures. Price $5.50. Rebman Company, New York.

In the minds of not a few the careful differentiation of many of the diseases of the uterine mucosa is somewhat indefinite, the general idea that a given condition is "malignant" or is "merely endometritis" usually being sufficient. To combat such an impression and to give carefully noted distinguishing characteristics of the various diverse conditions has been the purpose of the author. The title might better have been something such as "microscopic diagnosis of uterine fragments obtained by curette" as the subject matter covered is limited to that field.

After an introductory chapter descriptive of methods of technic in which we are surprised to find the alum carmine stain given preference, comes the main part of the book. This consists essentially of fifty-two beautifully colored lithographs illustrative of as many diverse conditions encountered in examination of tissues removed by curettement. Accompanying each is a section fully descriptive of the condition and of the clinical picture produced thereby.

In excellence of preparation and scope we are somewhat reminded of the earlier book of Cullen. It well combines much of the clinical with some of the pathological, and in this way will give the truest idea to the properly trained physician of the actually existing condition and thus often shows the best form of treatment.

Handbook of Treatment for Diseases of the Eye. (Ophthalmic Therapeutics.) By Dr. Curt Adam, Assistant-Surgeon in the I. University Clinic for Diseases of the Eye, Berlin. With a preface by Prof. von Michel, Berlin. Translated from the second German edition (1910) by William George Sym, M.D., F.R.C.S., Ed., and E. M. Lithgow, M.B., F.R.C.S. Ed. With thirty-six illustrations. Price $2.50. New York, Rebman Company.

The author states the purpose of this book to be for assistance to the surgeon in practice and has as its particular object the careful description of various forms of treatment, medicinal and otherwise. In a somewhat indefinite manner we might divide the book into three parts: general methods of treatment, treatment of special diseases or conditions and first aid in ocular injuries. In the first part tuberculosis and syphilis are given prominence. The various diagnostic tests, the cutaneous, the percutaneous, the ocular and the subcutaneous are all fully described and their relative value described. In tuberculin treatment the method of Trudeau rather than that of Wright is followed. Tulase is also mentioned.

In syphilis the recognition of the spirochaetae is explained, also the value of the Wasserman reaction. "806" was discovered a little too late to be included. In the section devoted to special diseases glaucoma and cataract stand forth prominently, although an appropriate amount of space is given to all the various diseases.

The first aid section covers such topics as foreign bodies penetrating and non-penetrating wounds, injuries from violence, burns, caustics, rupture of globe and gunshot wounds. This book cannot be considered (and it was not intended) to be a complete work on the subject as not infrequently it presupposes considerable knowledge upon the part of the reader. As one that contains many valuable differential diagnostic suggestions it is valuable. Its principal worth comes, however, in the careful description of the various methods of treatment for a great variety of affections, conditions concerning which the average physician is too often at a loss to know what form of medication to apply. It has apparently been well written and at least well translated into good readable English.

Golden Rules of Diagnosis and Treatment of Diseases. Aphorisms,

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Observations and Precepts on the Method of Examination and Diagnosis of Diseases, with Practical Rules for Proper Remedial Procedure. By Henry A. Cables, B.S., M.D. Professor Medicine and Clinical Medicine of the College of Physicians and Surgeons, St. Louis; Consultant at Jefferson Hospital, St. Louis; formerly House Physician at Alexian Brothers' Hospital, St. Louis, etc. C. V. Mosby Company, St. Louis, 1911.

This is one of the "golden rule" series prepared by this house and brings a very common topic home to the physician who reads it in a very unique manner. It has been prepared as a summarization of the entire subject as obtained from both personal experience of the author and from his extensive reading. Concerning treatment, Dr. Cables in his preface speaks as follows: "It can be said that quinin is an exceedingly useful friend in small doses in certain affections, because of its power of increasing or calling out the body defenses, but in large oft-repeated doses it will have a disastrous effect, causing paralysis of the body defense by destroying the ameboid functions of the cells."

No definite attempt has been made to prepare the text for connected consecutive reading, but rather to condense into small space a large number of facts, such as might easily slip from the mind of most of us.

We believe that the practitioner will obtain valuable suggestions from possession and study of this book.

Manual of Cystoscopy. By J. Bentley Squier, M.D., Professor of Genito-Urinary Surgery, New York Post-Graduate Medical School and Hospital, and Henry G. Bugbee, M.D., Instructor in Genito-Urinary Surgery, New York Post-Graduate Medical School and Hospital. Price $3.00 net. Paul B. Hoeber, Publisher, New York, 1911.

The art of cystoscopy has become so important as to demand of every practitioner a working knowledge of the technic and the simpler interpretation. Such a working knowledge this book is intended to give.

In a very clear, terse style the authors describe first the technic of examination of the normal bladder, giving a home-made method of obtaining the first indiments. This is accompanied by illustrations of conditions normally seen, a fact of much importance. Following this is a series of excellent colored plates demonstrating various pathologic conditions, each accompanied by a section devoted to description of the particular disease shown. In short, the book well fulfills its purpose, i. e., it gives a very plain description of cystoscopy and its interpretation couched in such language as to be pleasing and readily understood. It is bound in flexible leather covers and is neat and attractive in all ways.

The Testimony of the Clinic. By E. B. Nash, M. D., Author of "Leaders in Homœopathic Materia Medica," "Leaders in Respiratory Organs," "Leaders for the Use of Sulphur," "Leaders in Typhoid," etc. Boericke & Tafel. Price, $1.50. Philadelphia, 1911.

The author of this book is becoming one of our most prolific writers upon subjects relating to homœopathic application of drugs. Several of his works have already been reviewed in the *Gazette*. The present one consists of a series of one hundred cases carefully, and fully described. They are grouped under fifty-one different remedies by which they were treated, and were under the care of twenty-five different physicians. We are glad to note the emphasis placed upon the statement that the potency question has nothing to do with the principle of Homœopathy, a point too often overlooked. To probably the majority of the members of our fraternity the stress given to the indicated remedy in diphtheria to the complete exclusion of antitoxin will be a distinct disappointment.

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The Treatment of Disease. A Manual of Practical Medicine. By Reynold Webb Wilcox, M.A., M.D., LL.D., Professor of Medicine (retired) at the New York Post-Graduate Medical School and Hospital; Consulting Physician to St. Mark's and to the Nassau Hospital; formerly President of the American Therapeutic Society; Fellow of the American Academy of Medicine and of the American Association for the Advancement of Science, etc. Third edition. Thoroughly revised and enlarged. Price, $7.00. P. Blakiston's Son & Co. Philadelphia, 1911.

If this book had been called "Practical Medicine" or a "Practice of Medicine" it would, in our opinion, have been more accurately named. It is really a treatise upon practical medicine, including all its various phases, etiology, pathology, symptomatology, diagnosis and prognosis, but with particular attention given, as it always should be, to treatment. It is therefore rather more inclusive than its name might seem to indicate.

It is classified in a manner in no way unlike that common in texts upon pathology, diagnosis and practice, beginning with infectious diseases, constitutional affections, then followed by those disturbances of the alimentary, circulatory, respiratory, urinary, nervous and muscular systems, and is concluded by a very full index.

In such a book it is always possible to select some points for criticism or refutation, and it is unfair to judge by any such minor points. If any criticism is to be made it would be along the line of the fact that the author seems to leave too much to the knowledge of the reader, assuming that his information is greater than that often possessed by the average practitioner along new or special lines. To illustrate: the use of Flexner's serum in meningitis, while described, is given but comparatively slight attention, by no means adequate to enable one to administer it to a patient. The use of tuberculin lacks clearness in description. At times a number of different methods of treatment for some disease are described, but nowhere is it stated which is the most successful or which the author prefers. In the treatment of morphinism no mention is made of specific antidotal treatment with which some of our New York confrères are reported to be obtaining such good results. Occasionally conditions are described rather than diseases. Otherwise, however, the book is very satisfactory. It certainly contains a great amount of condensed information neatly arranged in a manner that deserves much credit both to the author and to the publisher.

This new edition will doubtless receive, as its predecessors have so deservingly had bestowed upon them, a great degree of popularity among the members of the medical profession.

Bismuth Paste in Chronic Suppurations. Its Diagnostic Importance and Therapeutic Value. By Emil G. Beck, M.D., Surgeon to the North Chicago Hospital, Chicago, Ill. With an Introduction by Carl Beck, M.D., and a Chapter on the Application of Bismuth Paste in the Treatment of Chronic Suppuration of the Nasal Accessory Sinuses and the Ear by Joseph C. Beck, M.D. With eighty-one engravings, nine diagrammatic illustrations, and a colored plate. Price, $2.50. C. V. Mosby Company, 1910.

During the past two or three years the name of Beck has to a large proporton of the medical profession come to suggest the topic of the bismuth paste method of treating chronic sinuses and fistulae. Much has been written about this method, in some instance doubtless by those not well qualified to discuss it. It is, accordingly, doubly gratifying to obtain a full and satisfactory account by the originator of the process who has, naturally, had the widest experience with it. There is the unavoidable objection of possible bias in favor of the product of one's brain when the topic is thus discussed by the one who introduced it. In the present instance that personality is very carefully

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subordinated to the real purpose of the work. It begins with an introduction by Dr. Carl Beck, a brother of the author, who describes the manner of the discovery and the first one or two cases tested, and closes with a chapter by another brother, Dr. Joseph C. Beck, upon its application to rhinology and otology.

Early in the work the proper cases to treat are indicated as follows: "All chronic suppurative sinuses, fistulae, or abscess cavities, whether of tubercular or other infectious origin, with the exception of fistulae of the gall bladder, pancreas, or those communicating with the cranium, are suitable for the bismuth paste treatment. Very acute inflammatory conditions are not suitable for the injections, and, while some good results have been reported, I have noticed even aggravation after the treatment."

The use of the paste as a diagnostic adjuvant is fully described and illustrated. Then follows a chapter on its therapeutic effects. Detailed notes are then given concerning the method of use on all the various diseases suitable for treatment, such as sinuses, fistulae, empyema, tuberculous abscesses, etc. A chapter is devoted to the subject of bismuth poisoning and one to the limitations and causes of failure of the method.

The book throughout has been pleasing reading, accompanied as it is by numerous very satisfactory illustrations, a large proportion of which are x-ray reproductions. The reviewer has learned much from this perusal and is more optimistic concerning the method than he has been heretofore.

Anæmia. By Geh. Obermedizinalrat, Professor Dr. P. Ehrlich, Director of the Konigl. Institut. fur Experimentelle Therapie, Frankfurt, A.-M., ond Dr. A. Lazarus, Professor of the University of Berlin-Charlottenburg. Part I. Volume I. Normal and Pathological Histology of the Blood. Second Edition (enlarged and to a great extent rewritten) by Dr. A. Lazarus and Dr. O. Naegeli. Translated from the German by H. W. Armit, M.R.C.S., L.R.C.P. (London). With five illustrations in the text and five colored plates. Price, $4.00. Rebman Company, New York.

No one at all familiar with haematology is unfamiliar with one of the classics that appeared upon the subject, written by Ehrlich and Lazarus. It was undoubtedly the best known and most able description of various topics allied to blood disease that was then in existence, and even since that time, in spite of the great advance in our knowledge, it has well maintained its position of prominence. Such was its popularity and intrinsic worth that in response to a very widespread demand, it has appeared in a new edition, practically entirely rewritten. Ehrlich himself has only entered into the work so far as to write a short introduction, the actual work having been performed by Lazarus and Naegeli.

The introduction by the original author, while doubtless correct from the German standpoint, seems to be a somewhat undue presentation of the ego when viewed through American eyes.

Concerning the book itself, no detailed commendation is required. It is a classic and will remain so, with the present added advantage of being thoroughly up to date. It is not necessary to agree with all the statements in order to admire a book, and so here, while the future will undoubtedly show some of the statements to be erroneous, we warmly endorse the work itself. It will be interesting to see in future whether or not the work of Ross will be so accepted as to transform the present ideas concerning the origin of blood platelets as here indicated.

A series of beautiful colored plates are of much interest and value.

This book will, we believe, prove to be one of the notable books of the year.

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Evolution and Heredity. By David Berry Hart, M. D., F. R. C. P. E. Lecturer on Midwifery and Diseases of Women, School of the Royal Colleges, Edinburgh; sometime Examiner in the Universities of Edinburgh, Oxford, Birmingham and Liverpool, and also to the Royal College of Physicians, Edinburgh. Price $2.00. Rebman Company, New York.

This subject, of so much interest and yet so difficult of ready comprehension, the author has succeeded in expressing in terms readily understood. He has also couched it in enough of the common-place to make most interesting reading. He discusses briefly the revolutionary work of Darwin and Weisemann and the more neglected though equally important work of Mendel, to which he adds an interesting chapter on Mendel's life. Biometry and Mnemism are explained and an intrinsic theory of variation and its transmission is considered. The author reviews the essence of the earlier researchers, correcting them to agree with the latest knowledge, and finally "urges that in the primitive germ cells, while they are undergoing the phenomena of mitosis in the sexual glands, the determinants of the unit characters in them are arranged according to the Law of Probabilities."

The succeeding more popular chapters are on Heredity, Heredity in Disease, The Community of Bees and their Evolution, Evolution and Controversy, The Handicap of Sex, Evolution in Religious Belief, and a final chapter on Men who have Revealed Themselves, in which is given a brief glimpse of the lives of Shakespeare, Pepys, Amile and Rousseau. Of the latter Hart says "There is no antiseptic in which one could dip one's pen even to allude to his mawkish sensuality." He cites these men as types unusual to their time and place, as reversions to older types.

This book, like its companions reviewed above, is in good type on light paper, and all three would be a credit to any library, scientific or lay.

Care of the Patient. A Book for Nurses. By Alfred T. Hawes, A.M., M.D. With six illustrations. Price, $1.00 net. P. Blakiston's Son & Co. Philadelphia, 1911.

This little book has been written for nurses, the purpose being to give to them that exact knowledge of various medical aspects of disease that is essential to satisfactory work, whether medical, surgical or obstetrical.

Two chapters are devoted to medical, two to surgical and two to maternity nursing. The various procedures are all carefully described from the standpoint of the nurse, many in much detail. We are glad to note that the author strongly advises against the use of chloroform by the nurse. Technic for administration of ether and the dangers to be anticipated are fully described. The preparation of a formalin solution 1 to 500, is given without any specifications concerning its use in that strength.

The section upon generaly medical nursing seems very commendable.

In our opinion this is a book that is admirably adapted to be put into the hands of the partly trained nurse by the physician who is attending a given case. Any of the desired points can be indicated and the description of the technic can be fully mastered without the danger of misunderstanding and forgetfulness when such facts are verbally stated.

Induced Cell-Reproduction and Cancer. The Isolation of the Chemical Causes of Normal and of Augmented, Asymmetrical Human Cell-Division. By Hugh Campbell Ross, M.R.C.S. (Eng.), L.R.C.P. (Lond.), Surgeon Royal Navy (Emergency List); Director of Special Researches at the Royal Southern Hospital, Liverpool; and Honorary Clinical Pathologist to the Royal Liverpool Country Hospital for Children. Being the Results of Researches Carried Out by the Author, with the Assistance of John Westray Cropper, M.B., M.Sc.

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(Liv.), M.R.C.S. (Eng.), L.R.C.P. (Lond.), Assistant to the Research Department of the Royal Southern Hospital, Liverpool. With 129 illustrations. Price, $4.50. P. Blakiston's Son & Co., Philadelphia, 1911.

It is comparatively rare that the reviewer has the privilege of reading in the course of his work a book that is thoroughly original from cover to cover, and that does not somewhere contain recapitulations of the work of others. Such an unusual experience is ours in the present case. This book describes in full detail "the results obtained by a new method of experimentation with individual living human cells, their importance in the elucidation of the phenomena of healing and in the causation of cancer and other growths."

The method of study is itself entirely original with the author. It consists of the use of a thin coating of agar jelly placed upon a glass slide. Upon this is inverted a drop of blood hanging from the under side of a thin cover glass. The preparation thus made is incubated for a varying time and then is examined microscopically. To the agar are added different ingredients such as methylene blue, alkalies, acids, nuclein, morphine, azur dye, etc. The results were readily noted and consisted of inhabiting or accelerating the normal leucocytic movements, hastening or retarding staining and delaying or advancing the time of cell death. By means of a specially constructed camera photo-micrographs were taken in large numbers, clearly substantiating the claims of the observer and thus removing the possible objection of personal prejudice for obtaining certain results. Thus, to illustrate: the question much discussed for years among pathologists, the origin of the blood platelets, is definitely settled if we accept the conclusions of the writer, who says that he has seen them produced as pseudopodia that have become detached from the leucocytes. Photographs are shown of this process, also of amoeboid movements in these minute structures analagous to those of the protoplasm of the leucocyte.

Much space is given to the new light thrown upon the various phases of mitosis as it has been frequently observed both in the lymphocyte and in the neutrophile. These various forms of reproduction can be induced or hindered at will according as the agar jelly contains one or another ingredient in proper amount.

One strong contention is made that cancer is due to some chemical substance akin to that accelerating mitosis in vitro whereby the cells are stimulated to rapid and asymmetrical development. The source of this substance in vivo is supposed to be in the products of the death of cells adjoining those thus affected. In other words, "cell death" means "cell life," certain cells are continually dying and in their death liberate substances that stimulate neighboring cells to reproduction. As long as this continues in an orderly manner, no abnormality is noted, but when on account of some severe injury or long-continued irritation there is an unusual amount of this material liberated, an atypical and actively proliferative growth begins, that is constantly producing more material for self perpetuation. Following these theories to their natural conclusion the author has treated a number of patients with various preparations, and with apparently hopeful results. He is very conservative, however, claiming that he has by no means proven his case, the very conservatism tending to give one more confidence than the ultra-radical claims so frequently encountered.

Much more might be written concerning the book, but perhaps sufficient has been said to enable our readers to gain a fair insight into the general trend of the work.

From the standpoint of medical research it offers an entirely new and fertile field for investigation. If the reported findings are substantiated later, it has already been of much service in settling debatable questions, and promises even more for the future.

A large number of photo-micrographs give to the reader a very clear

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idea of the phenomena described in the text. Taken as a whole, the work is a remarkable one, and represents an amount of work that only a laboratory worker can fully realize.

Hints for the General Practitioner in Rhinology and Laryngology. By Dr. Johann Fein, Privatdocent at the University of Vienna. Translated by J. Bowring Horgan, M.B., B.Ch., late House Surgeon at the Hospital for Diseases of the Throat, Golden Square, London, W. With forty figures in the text and two photographic plates. Price, cloth, $1.50. Rebman Company, New York.

This small volume of two hundred pages is entirely devoted to practical methods of diagnosis and treatment of diseases of the nose and throat. It is well illustrated and is very interesting reading. The author writes from an extensive personal experience in a large Vienna clinic ,and has been able to condense into small space a great number of practical suggestions that will be much appreciated by those in general practice. It is too brief to be of value to the specialist, having been purposely prepared for those who merely desire a good working knowledge of the subject.

Some of the methods of procedure, for instance the treatment of epistaxis, will differ considerably from those to which American medicine is accustomed, and to some may not appear to be the best. It must be remembered, however, that the writer is giving personal experience, not merely theorizing, and that his statements are based upon that which he himself nas found to be best. Except for an occasional slight awkwardness of expression in translation, Dr. Horgan has well succeeded in expressing in pleasing language the thoughts of the author as originally put forth in German.

THE MONTH'S BEST BOOKS.

Diet in Disease. Pattee. $1.50. A. F. Pattee.

Practical Treatment. Vol. I Musser. $6.00. W. B. Saunders Co.

Diseases of Children for Nurses. McCombs. $2.00. W. B. Saunders Co.

Differential Diagnosis. Cabot. $5.50. W. B. Saunders Co.

Physical Diagnosis. O'Reilly. $2.00. P. Blakiston's Son & Co.

Practice of Medicine. Hughes. $2.50. P. Blakiston's Son & Co.

Foods and Their Adulteration. Wiley. $4.00. P. Blakiston's Son & Co.

Diseases of the Joints and Spine. Marsh. $3.00. Chicago Medical Book Co.

Serum and Vaccine Therapy. Hewlett. J. & A. Churchill Co.

Gynecology. Eden. $5.00. P. Blakiston's Son & Co.

Prevention of Infectious Diseases. Doty. $7.50. D. Appleton Co.

Vicious Circles in Disease. $2.00. Hurry. P. Blakiston's Son & Co.

Inebriety. Crothers. $3.00. Harvey Publishing Co.

Physical Diagnosis. O'Reilly. $2.00. P. Blakiston's Son & Co.

Text-Book of First Aid. Italian edition. Lynch. P. Blakiston's Son & Co.

This book has also been published in Polish, Slovack and Lithuanian.

Cystoscopy. Squier & Bugbee. $3 00. Paul B. Hoeber.

Otology. Barnhill. $5.50. W. B. Saunders Co.

Brights Disease. Oertel. $5.00. W. B. Saunders Co.

Diagnostic Methods. Sahli. $6.50. W. B. Saunders Co.

Vaginal Celiotomy. Bandler. $6.50. W. B. Saunders Co.

The Annals of Otology, Rhinology and Laryngology, for December, comes as a large magazine of over 300 pages. Within its covers are found a number of articles of vital interest to specialists in those diseases covered. In addition to this is included a quite full summary of current literature having to do with diseases of the ear, nose and throat.

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CHICAGO LETTER.

The Chicago Homœopathic Medical Society at its January meeting discussed "Medical Legislation," under three headings:

Impending Bills before the State Legislature.

Possibilities at Springfield.

The Proposed National Bureau of Health.

Dr. W. Henry Wilson, a member of the Legislative Committee of the State Association, gave the first paper. Three bills were pending at that time:

1. A bill prohibiting any physician from dispensing his own medicine.

2. A bill asking for a State Examining Board, outside of the State Board of Health.

3. A bill requiring every student to have had two years in a university before entering a medical school.

Dr. Wilson, who is doing a great amount of work, not only as a member of the State Legislative Committee, but as Registrar of Hahnemann College, is familiar not only with our own medical laws, but with those of other States, and is well equipped to discuss the situation. He told the import of each bill to the homœopathic physician and the probable interests behind each. The first, manifestly in the interest of the druggist, met opposition from all schools of medicine, and would, undoubtedly, be withdrawn. The second would probably share the same fate, because of the vigorous antagonism of the State Board of Health.

The third he discussed more at length, as being the only one likely to come up for legislative consideration. He gave all the arguments, pro and con, the advantages it would give to university colleges, the disadvantages to the independent college, and the hardships it would present to many prospective students. Personally, he believes it would add nothing to the practical equipment of the doctor. At present it is doubful if this bill, even, will be brought before the Legislature. If rumor be true, this change of front is due, in part, to the severing by Chicago University of its medical alliance with Rush College. The recent large endowment of the University by Mr. Rockefeller carried a provision for medical laboratory research, but forbade the use of any part of it for any medical college. At the recent meeting here of the A. M. A. Educational Conference, a year in a hospital following the regular medical course was advocated.

Dr. H. V. Halbert, editor of The Clinique, discussed the second topic. It was a vigorous arraignment of the old school in its efforts to oppress, and to drive out of the profession all other schools of medicine. He advocated a watchful and aggressive policy on our part and the use of every element of strength and influence with the Legislature and Governor, calling to our aid the most potent forces outside of the profession.

The last topic was well handled by Dr. T. Bacmeister. He reviewed the Owens Bill, and all phases of the question up to that time. He surveyed carefully and fairly the personnel of its advocates and opponents; he gave no opinion as to what might be the animus of either side, but felt that it marked an epoch in national medicine. Forewarned being forearmed, our school should keep a watchful eye on the doings at Washington.

At present there is considerable agitation over a request by President James of the State University for an annual appropriation by the Legislature for the maintenance of its State Medical College. The University really has no medical school. It leased the grounds and buildings of the College of Physicians and Surgeons, a private allopathic corporation. In view of the fact that the allopaths have talked long and

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loud that there are too many medical schools and too many doctors, it seems absurdly inconsistent that the Legislature should be asked to appropriate so large a portion of the people's money for the support of an allopathic college, when, already, there are about four allopathic colleges in the State, to one of any other school of medicine.

The Legislative Committee of the State Homœopathic Medical Association are out with a circular letter, asking every Homœopathic physician to write his senator and representatives asking that the measure be opposed.

Rhoda Pike Barstow.

Chicago, March 9, 1911.

PENNSYLVANIA NOTES.

THE HOMŒOPATHIC MEDICAL SOCIETY OF THE COUNTY OF PHILADELPHIA held its regular monthly meeting at Hahnemann Medical College on Thursday evening, February 9. Subjects of timely interest presented were:

"The Passing of the First Decimal Dilution," by Dr. Thos. H. Carmichael.

"The Prevailing Epidemic of Conjunctivitis," by Dr. Percy A. Tindall.

"The Presentation of a Case Illustrating the Diagnostic Features of Pernicious Anemia, with Demonstration of Blood Specimens by the Reflectoscope," by Dr. G. Harlan Wells.

The discussion was opened by Dr. O. S. Haines, and participated in by a large number of the members present.

THE PHILADELPHIA ACADEMY OF MEDICINE held its third annual banquet at Kugler's Café at 9 o'clock on the evening of Thursday, February 23. The guest of honor was Dr. W. Alvah Stewart, of Pittsburg, president of the Homœopathic Medical Society of the State of Pennsylvania, the subject of whose address was "The State Society." Prof. Gilbert J. Palen also addressed the society, his subject being "The Young Man in Medicine." Toasts were well responded to by Drs. H. L. Northrop and W. W. Speakman. Dr. W. M. Sylvis acted as toastmaster. The "Honorary Fellowship" was presented to Dr. Clarence Bartlett, the presentation being made by the president of the Academy, Dr. G. Harlan Wells.

THE GERMANTOWN HOMŒOPATHIC MEDICAL SOCIETY held its regular monthly meeting on February 20, at the Hotel Walton. The program of the evening consisted of a very able address by Dr. Joseph C. Guernsey on "Medical Licensure." The meeting was well attended and the evening voted a success.

THE CLINICO-PATHOLOGIC SOCIETY OF PHILADELPHIA held its regular monthly meeting at Hahnemann Medical College on Saturday evening, February 18. The scientific program of the evening consisted of the following excellent papers:

"Observations on Malignant Disease," Dr. H. L. Northrop.

"A New Macroscopic Method for Widal Test, Useful for the General Practitioner," Dr. S. W. Sappington.

"Report of a Case of Atrophic Cirrhosis of the Liver in a Child 7 Years of Age," Dr. C. S. Raue.

"Demonstration of Patients Treated with 606," Drs. W. C. Hunsicker and S. W. Sappington.

The name of Dr. George Earl Raiguel, 1819 Chestnut Street, Philadelphia, was proposed for membership.

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THE PHILADELPHIA SOCIETY FOR CLINICAL RESEARCH held its regular monthly meeting on Wednesday evening, February 15. Drs. H. P. Leopold and J. G. Wurtz were the guests of the evening, Dr. Leopold giving a demonstration of the Wasserman Reaction. The meeting was well attended.

THE WEST PHILADELPHIA GENERAL HOMŒOPATHIC HOSPITAL AND DISPENSARY SOCIETY held its regular monthly meeting on Friday evening, February 24. The scientific program of the evening consisted of a paper by Dr. H. M. Gay on "Some Remarks on Injuries of the Knee." Dr. Gay's paper was ably presented and well received, and hearty discussion entered into. The meeting was well attended.

THE HOMŒOPATHIC SOCIETY OF THE 23rd WARD OF PHILADELPHIA held its regular monthly meeting on February 11, at the office of Dr. E. Humphreys, 1925 N. 32nd Street. The subject for discussion was a paper presented by Dr. Humphreys on "Foreign Bodies in the Eye"

THE HOMŒOPATHIC MEDICAL SOCIETY OF ERIE COUNTY, Pa., held its regular monthly meeting on March 1, at the Erie Public Library. The scientific program consisted of a paper by Dr. E. Cranch, entitled "A Study of Materia Medica," which was well received.

THE WOMEN'S HOMŒOPATHIC MEDICAL ASSOCIATION OF PITTSBURG held its regular monthly meeting at the office of Dr. Ella D. Goff, Library Place, Allegheny, on Thursday evening. March 2. The scientific paper of the evening was presented by Dr. Goff, the subject being "Pruritis." Hearty discussion was entered into by the members present.

THE HOMŒOPATHIC MEDICAL SOCIETY OF CHESTER, DELAWARE AND MONTGOMERY COUNTIES held its regular monthly meeting on February 14, at the Central Young Men's Christian Association, 1417 Arch Street, Philadelphia, the meeting as usual being well attended The principal address was delivered by S. F. Jenkins, Physical Director of the West Chester Y. M. C. A., on "Corrective Gymnastics," which was followed by a "Round Table Discussion" which proved very interesting.

THE WEST BRANCH HOMŒOPATHIC MEDICAL SOC ETY held its regular bi-monthly meeting at the office of Dr. E. C. Blackburn, Williamsport, Pa., Dr. John H. Yeager, of Philadelphia, being the guest of honor. He addressed the society on "Stomach Cases from the View Point of the General Practitioner."

THE DELAWARE COUNTY HOMŒOPATHIC MEDICAL SOCIETY held its regular meeting on March 9, at Chester, Pa. Dr. D. P. Maddux, of Chester, presented a paper on "Medical Education and Licensure," which was ably presented and well received.

A TOKEN OF APPRECIATION: During the course of the recent meeting of the New York Homœopathic Medical Society, held in Albany, a banquet was given on Tuesday evening, February 14, at the Hotel Ten Eyck, at which a former member of that Society, Dr. DeWitt G. Wilcox, now of Boston, was honored. The chair was occupied by Dr. Royal S. Copeland, of New York, who introduced Dr. L. A. Martin, of Binghamton, New York. The post-prandial exercises were as follows:

Dr. Martin: Had I the grace of manner and felicity of speech which the occasion demands, I would try to speak of the love we bear a friend of ours, a friend of the State Society, a friend of the American Institute, one who is *ex* only in having been our president; who is always with

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us, physically, morally, mentally and financially, one who has "fought, bled and died" for Homœopathy, one whom we love present or absent. It has always been man's attribute to be a lover of flowers. He twines them about the cradle, the marriage altar and the tomb; and, Dr. Wilcox, it is my pleasure to bring to you this tribute of the love and gratitude of the Homœopathic Medical Society of the State of New York (presenting bouquet to Dr. Wilcox amid prolonged applause).

The Chairman: We consider that Dr. Wilcox's removal to another State was a distinct loss to the profession in New York. He is able as a surgeon, brilliant as a writer, and scintillating as a speaker. Dr. Wilcox, we want to hear from you. (Applause.)

Dr. Wilcox: Mr. Toastmaster and my good friends of the dear old State of New York,—God bless her: I have appeared before you in various capacities, but I do not recall that I have ever before appeared before you in the capacity of a corpse. (Laughter.) The man who said that an ounce of taffy is worth a pound of epitaphy must have had some such experience as this, or he never would have been able to give birth to such a truism. No doubt he appreciated, as I now appreciate, that the finest oratorical epitaphy, spoken by the most renowned silver-tongued orators of the world, has ever failed to bring forth a single sign of recognition on the part of the recipient; it has never produced a smile upon the face, a quickening of the heart beat or a dimness of the vision due to a wetting of the eyelashes; but a few simple words of "taffy," if I may use the expression, from a sincere friend, will do all of that and much more. It must be a man with a heart of steel, or a heart which has ceased to beat entirely, whose whole being would not throb at such words of endearment, and who would not be made to feel thankful that there were such things as friends and such institutions as friendship. You have done many nice things in this good old State Society to your fellow members, but I assure you that you have never done anything which has so touched to the quick the heart of this recipient as this little thing that you have done tonight. I cannot tell you what this means to me at this juncture. I am enough of a fatalist to believe that we are punished for our mistakes of judgment quite as much as for our mistakes in morals, and for the last two years that I have been away from you, I have been sort of "doing time" for the mistake of judgment I made in leaving you. (Applause.)

I have had some disappointments. I thank God I have lived through them, and I hope I am the better for the experience; but this little thing which you have done tonight goes a great way toward making me forget all of the disappointments, and seems to come as a sort of benediction at a time when I felt that I had sort of won out in the struggle and had forgotten all the disappointments.

And now, lest you may really regret that this is not epitaphy, or the occasion for it, I will stop, but I cannot do it without getting back to my old New York habit and telling you "that reminds me of a story." (Laughter.) I haven't heard a good story for the two years I have lived in Massachusetts (laughter), begging the pardon of my friend, Dr. Howard, who is here. Once or twice I have had to go down to New York to get a fresh supply from Copeland and Buchanan.

There was once an old darky preacher who was called upon to preach the funeral sermon of a deceased colored gentleman, concerning whom he knew very little, and what he did know wasn't very good; so he spoke in a general way of the uncertainty of life and the certainty of death, and finally summed up by saying: "Now, brudders and sisters, coming down to this poor old nigger, he didn't know very much about life; he didn't know where he came from; didn't know where he was going to; didn't even know where he was going, but, my friends, we got dis blessed assurance, dat is going to stay wid us always,—we know he's gone." (Laughter and applause.)

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PERSONAL AND GENERAL ITEMS.

Dr. Harriet E. Reeves, class of 1892, B. U. S. M., has removed her Nervine for mental and nervous patients from West Medford to 283 Vinton Street, Melrose Highlands. The house contains 20 or more rooms, modern in every respect, with the latest system of ventilation. It is situated on high ground, has piazzas, sun parlors, and an extensive lawn.

Drs. Mildred Frances Babcock, B. U. S. M., 1907, and Harold L. Babcock, B. U. S. M., 1910, were married on March 8 and sailed at once for Europe, where Dr. Harold will spend some time in post-graduate study in Berlin. Upon their return to this country they will locate in Dedham, Mass.

Dr. Andrew H. Cleveland, class of 1910, B. U. S. M., has located at O'Fallon, Illinois.

Sir Wilfred T. Grenfell, the well-known medical missionary of the Labrador coast, has been appointed Noble lecturer for Harvard University for 1911-12.

The appointment is reported of Dr. Fred T. Murphy of Boston as Professor in the Surgical Department of Washington University, St. Louis.

Dr. Owen Copp, for many years a most active worker of the Massachusetts State Board of Insanity, has been appointed physician-in-chief and superintendent of the Pennsylvania Hospital for the Insane.

The Hahnemann Hospital of Philadelphia is a beneficiary under the will of the late George Platt of that city to the extent of three-twentieths of the residue of his estate after the death of his sister.

The Hahnemann Hospital at Yonkers, N. Y., has received one thousand dollars under the will of the late Mrs. Caroline Lawrence.

FOR RENT.—Use of a physician's Boston office for part of any or every day in the week. Centrally located in an office building exclusively for physicians. Continuous telephone service, day and night. Apply to "B. L.," care of New England Medical Gazette, 422 Columbia Road, Dorchester, Boston.

PHYSICIAN'S PRACTICE FOR SALE.—Homœopathic physician's practice now paying a good income, established 13 years; family reasons compel sale. Horses, buggies, sleighs, etc., all in excellent condition. Owner will personally introduce buyer to families. Price $650. Details and pictures at CHAPIN FARM AGENCY, 294 Washington St., Boston.

Dr. August A. Klein takes pleasure in informing his friends that he has opened an Eye Clinic at 168 Massachusetts Avenue, where he will attend on the same days as formerly in the Out-Patient Department of the Massachusetts Homœopathic Hospital,—Tuesday and Friday mornings, 9 to 12. Physicians who wish to send free patients to this clinic are assured that such patients will receive the best attention. All physicians are welcome to witness cataract operations, of which Dr. Klein makes a specialty. Dr. Klein retains his office at 185 Summer St., Boston. Telephone, Oxford 2861-2.

Dr. Prince T. Woods, class of 1895 B. U. S. M., has removed from Middleton to Silver Lake, Kingston, Mass.

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Dr. D. C. Pierce of Ludlow, Vermont, spent a few days in Boston in the latter part of March.

It is with much sorrow that we learn of the death of Dr. Percy W. Shedd, which occurred in January last.

Dr. Shedd has during the past few years become widely known to the homœopathic profession on account of his valuable contributions to medical literature and of his very satisfactory translations. He was an unusually gifted linguist, translating with freedom from sight different languages. His best known work is probably his "Clinic Repertory," which has recently been translated into Spanish. He graduated from the New York Homœopathic Medical College in 1904, and even at that time was afflicted with chronic interstitial nephritis. Four years ago an attack of acute cardiac dilatation supervened, and from this he never fully recovered.

Those favored with his personal friendship speak highly of him as a man of much reserve, with many lovable qualities and of intense loyalty to all his friends. His loss is one that will be deplored by the entire profession.

The Executive Committee of the Connecticut Homœopathic Medical Society has decided to change the date of the next annual meeting of the Society to Tuesday, April 25, in order to improve the opportunity of a visit from Dr. H. R. Arndt, Field Secretary of the A. I. H., who will tell the Society of the present condition and future prospects of Homœopathy and of the work of the Institute. The meeting will be held at Hotel Garde, New Haven, beginning at 10 o'clock A. M. The medical program will be devoted to "Obstetrics."

Dr. J. F. Shattuck, formerly of Wells River, Vermont, has retired from practice and has removed to Kingston, Mass.

Dr. Fredrika Moore, 1910 B. U. S. M., after a term of service as interne in the Massachusetts Homœopathic Hospital, has opened an office at 16 Norwood St., Winchester, Mass.

Dr. Ray C. Hart, B. U. S. M. 1907, who has been at Melbourne Homœopathic Hospital for the past three years, is on a visit to Boston and will spend the next two months in this country. He expects to return to Australia, by way of England, in June.

WANTED.—Resident physician and surgeon at Grace Hospital, New Haven, Conn. Salary for one man $200, or $100 each for two men. Hospital contains 90 beds besides separate maternity house beautifully equipped. For further particulars address Stuart E. Skiff, M.D., 1193 Chapel St., New Haven, Conn.

Dr. Elizabeth Wiltshire Wright, 1909 B. U. S. M., has opened an office at 146 Elliott Ave., Yonkers, N. Y.

FOR SALE.—Books and instruments of a retired homœopathic physician, located in Worcester, Mass., for 23 years. Would introduce successor to former patients. For information inquire of New England Medical Gazette, 422 Columbia Road, Dorchester, or at 80 East Concord St., Boston.

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The late Dr. Huchard, whose name has recently become so familiar to Homœopathy, donated in his will 100,000 francs, the income of which will be made a prize to assist young students, who have been in one way or another victims to professional fidelity, to continue their studies.

The sum of $100,000 has been donated to the Cleveland Babies' Dispensary and Hospital as a memorial to Mrs. Anna R. Wade. The bulk of this sum will be devoted toward the construction of a new dispensary and laboratory.

MEDICAL SCHOOL AND HOSPITAL MERGE.—We learn that a form of union has been consummated between the College of Physicians and Surgeons of Columbia University and the Presbyterian Hospital. The union has been made possible by gifts amounting to upwards of $1,500,000 made for the purpose of endowing educational and scientific departments of the Hospital. By the agreement the Hospital will ally itself with the medical school, to which institution will be given the right to make nominations for all positions on the hospital staff. The professors of the various departments in the school will hold corresponding positions on the hospital staff and must not be connected with the work of any other hospital. This seems to be a further step toward the amalgamation of these two closely allied institutions, a step that has already been taken in two or three of the other principal American cities.

THE LARGE DISUSE OF DRUGS.

By a Homœopathic Layman.

Of the Massachusetts General Hospital, so important and old, it is told that the cost of medicines within perhaps 20 years has fallen to a fraction of the earlier one. In the former time the amount per year was upwards of $50,000. Recently it has fallen to nearly $13,000. As reported by a late student there, at the Harvard Medical School, the tendency of the instruction towards the neglect of drugs is strong.

It is held that Homœopathy is largely to be credited with this important and, it seems, undoubtedly beneficial change. Minute, accumulative doses are homœopathic, and the older school who cannot accept the potency of little sugar pills, but who know that Homœopathy is doing very well, are, it seems, inclined to believe that the small use of drugs explains the newer school's success.

Homœopathy has a clearly defined system; has settled, proved, single remedies for diseases. It was said of a certain interesting case for which a considerable number of physicians were induced to prescribe, that of the homœopaths "no one could be for a moment in doubt as to the medicine that was demanded"; all named the same remedy with only slight differences in method. Of the older school prescribers every one had his separate remedy. There was no agreement.

An Instance:

It is a blighting matter to have a bad spine, to have a fault from which one of the vertebræ does not keep its place. From interference with that big bundle of nerves, the spinal cord, much harm may come. Depression and irritation may affect the vasomotor system. Thus the skin nerve terminals may not provide heat upon the surface as they should do.

With one such invalid coldness, along with other evils of nervous ailment, had gradually increased for many years. Hot water bottles had been of use to him, but preferring blankets he had at one time the large number of 50 layers over him. These were folded so as not to go over the bed sides, or he could not have endured them.

Now came homœopathic help. His physician prescribed one little sugar pill before each meal, and within two weeks the coverings fell to only 10 or 12 thicknesses. It relieved him much. Also his head, which had been very dull and weak, became stronger. He was greatly benefitted.

What did this? A virulent poison reduced to a one-hundredth dilution. Of this each pellet absorbed one drop. For so much evident and positive relief he was very grateful.

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THE NEW ENGLAND
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ORIGINAL COMMUNICATIONS.

CANCER OF THE BREAST,

With a Study of Seventy-Six Primary Operations and End Results.

By J. EMMONS BRIGGS, M.D., BOSTON, MASS.

In presenting this topic for consideration a few words in introduction seem necessary. The list of cases comprises all the operations which I personally have performed upon patients suffering from primary carcinoma of the breast and covers a period of fifteen years. It includes my first as well as my recent efforts.

The last decade and a half has been marked by great progress in early diagnosis, and the radical operation of today was not born when my early experience commenced. These facts, lack of experience, an undeveloped operation, and especially delay in diagnosing and in recommending operative treatment, are, I believe, in no small degree responsible for the results herein enumerated. If these results are not all that we might desire we ought to be encouraged in the thought that a fair percentage are actually cured and a much greater proportion greatly relieved of a disease which would otherwise have been fatal.

With these facts in mind, it behooves us to strengthen our efforts and to renew our zeal, for in fighting cancer we are contending with the arch enemy of life, occupying an almost impregnable position.

In trying to obtain the end results in these cases great difficulty has been experienced, and it is deeply to be regretted that so many patients escaped the drag-net of our investigations. They fail to report, change their addresses, escape from the knowledge of their family physicians who referred them for operation, or die unbeknown to us. All patients before leaving our hospital are requested to report at specified intervals in person, and when impossible to do this to report their condition by letter; but things have not materially changed since the healing of the ten lepers when only one returned to give thanks. We are, however, in receipt of information from a sufficient number of cases to warrant this publication as an addition to the literature on this subject.

It is a fact that different surgeons may present widely differing statistics as regards end results in cancer, inasmuch as they may entertain widely divergent views upon the type of case

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suitable for operation. For example, one may contend from his experience that a given case is too far advanced to justify an attempt at radical operation, where another may feel in duty bound to render such aid as possible as long as a ray of hope exists. One may contend that an advanced case may be treated by X-ray with greater benefit than by being subjected to a severe operation, with little liability of improvement. This view may not be shared by his brother in the profession. Experience may lead one surgeon to recommend operation, and equally extensive experience with unfortunate cases may influence another in the opposite direction. Both men are honest in their convictions, but the man who sees the limitation of surgery in the least advanced cases will be able to show a greater ratio of cures from cases operated upon. The measure of success is, however, not to be determined by the best showing in statistics, but rather by the amount of service rendered our fellow men. The question may well be asked: What, then, is the value of all the carefully compiled statistics which appear on every hand? Just this, that in the aggregate they closely approach the truth, for they represent the work of honest men of both types, conservative and cautious, or liberal and courageous.

Let us consider for a few moments some facts relative to the increasing prevalence of cancer during recent years.

In this period, it is significant to note that there has been a marked decrease in the mortality of most of the infectious diseases, notably consumption, diphtheria and typhoid fever. Hygiene, serum-therapy and sanitation have wrought wonders along these lines. During this period, while science has been robbing many diseases of their toll in human life, cancer has been insiduously creeping to the front, and presents an increased mortality which is truly alarming. Take, for instance, our own city of Boston. With a mortality rate from cancer of 28 to the 100,000 living persons in 1863, it had a mortality rate of 101.4 to the 100,000 in 1910, nearly quadrupled in 47 years. Baltimore, with a mortality rate from cancer of 16 to the 100,000 living persons in 1870, in 1909 had risen to 77.6, nearly five times as many deaths as occurred 29 years ago. San Francisco, with a mortality rate of 16.5 per 100,000 living persons in 1866, has crept up to 98 in 1910, nearly six times as many deaths as occurred 44 years ago. New York shows a mortality rate of 35 per 100,000 living persons in 1866, which has risen to 77.3 in 1910, or more than doubled in 44 years. Philadelphia, with a mortality rate of 32 in 1861, has risen to 70 per 100,000 living persons in 1903. St. Louis, mortality rate of 10 per 100,000 living persons in 1867, in 1910 shows 44. New Orleans, with a mortality rate from cancer of 15 per 100,000 living persons in 1844, in 1910 shows 78.

I have selected these cities because they are among the largest in our land and geographically well distributed. Figures from England, Ireland, Scotland, Austria, Holland, Norway and Germany show the same alarming increase to a greater or less extent.

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Heredity.—Formerly cancer was considered hereditary, but this view is not widely accepted today. There are occasional instances where a strong family predisposition exists, but it is impossible to classify cancer among the hereditary diseases. In the cases operated upon by me, only three per cent. gave a history of a parent dying of the diesase.

Sex.—I have seen three cases of carcinoma of the male breast, but they did not occur in my clinics. Women who have borne children and nursed them are somewhat more liable to carcinomatous invasion of the breast. This is probably due to the increased trauma to which the breast is subjected and to the infection and abscesses incident to lactation and subsequent scar formation.

Trauma.—Six per cent. of cases operated upon by me have given a distinct history of trauma, such for instance as falling upon, or being struck upon the breast with violence, followed within a few months by cancer.

Age.—An analysis of the 76 cases reported shows the age of patients when the operation was performed, as follows:—

Between	20	and	30	years,	1
"	30	"	40	"	6
"	40	"	50	"	22
"	50	"	60	"	25
"	60	"	70	"	10
"	70	"	80	"	6
"	80	"	90	"	2
Age not known,					4 Total, 76
Average age,					52.5

Period Elapsing Between Discovery of Growth and Operation.

The period elapsing between the discovery of growth and operation has been recorded in the histories of cases tabulated.

6	cases with	interval of	one month or less
2	" "	"	between one and two months
1	" "	"	" two and three months
6	" "	"	" three and four months
2	" "	"	" four and five months
1	" "	"	" five and six months
4	" "	"	" six and seven months
3	" "	"	" seven and eight months
2	" "	"	" eight and nine months
2	" "	"	" nine and ten months
2	" "	"	" ten and eleven months
1	" "	"	" eleven and twelve months
14	" "	"	" twelve and eighteen months
11	" "	"	" eighteen and twenty-four "
1	" "	"	two and one-half years
2	" "	"	three years
1	" "	"	four and one-half years

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1 case with interval of five years
1 " " " eight years
13 " " " not recorded

The time which elapses between the onset of the growth and the time when operative measures are instituted is impossible to determine. It is almost inconceivable that a woman should allow a tumor to attain the size of an orange before she detects its presence. In a large breast they frequently escape observation until far advanced. The more frequent cause of delay is the timidity and secretiveness of women with this affliction. Frequently, they go months after discovering a tumor in the breast before they tell any member of their family or obtain medical advice. A physician is occasionally very culpable in making light of small growths in the breast. This, he does in order to allay the extreme apprehensiveness under which the patient is laboring. Such patients with minds put at rest may fail to return until the condition has passed the stage when radical operation will prove curative. Oftentimes, in examining cases, I have asked a patient why she did not consult a surgeon earlier and have been told that she was examined several months ago by her family physician, who assured her that the growth was insignificant. The fact is, that no physician has sufficient diagnostic acumen to positively assure any patient over thirty years of age with a solitary bunch in the mammary gland that it is benign. He may feel reasonably sure that such is the case, but this is no argument against operation, for benign growths of the breast frequently become malignant, and the progressive medical man who would keep pace with the times must recognize the wisdom of excising all such growths. I shall have more to say upon this subject when considering the question of diagnosis.

The length of time which elapses between the commencement of the growth and the discovery and operation is frequently the key to success or failure, for it bears a direct ratio to the extent of the growth in the breast, the amount of invasion of the lymphatics, skin and muscles. Other conditions being equal, in the case operated upon early, the prognosis is good; in delayed cases, bad. In this connection my conviction is that there are varying degrees of virulence in cases of carcinoma, as there are in infectious diseases. Some cases run a mild course, slow but progressive in their invasion. Others simply overpower the resistance and sweep the patient on to rapid dissolution. In such cases no operation, however thorough, can check the progress of the disease and it is quite possible that life is even shortened by our efforts. There is no method of determining the degree of malignancy except by noting the progress which the disease has made during the period which has elapsed from the time of discovery to the date of operation.

Lymphatic Involvement.—It is evident and now universally recognized that carcinoma extends by way of the lymphatic chan-

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nels. These communicate with lymph nodes, which act as a filter and seem to arrest the disease temporarily. Were it not for the free intercommunication of these lymphatic channels, one might reckon with accuracy upon the lymph nodes which would be involved by noting the location in the breast of the primary focus. To illustrate, a cancer of the external part of the mammary gland would invade the lymphatics along the pectoral muscles and extend into the axilla, while a focus located in the internal portion of the breast would empty into the internal mammary lymphatics by passing through the second, third and fourth intercostal spaces. Thus, it would follow that a cancer in the internal portion of the breast, by draining into the mediastinum, would quickly extend beyond the reach of the surgeon, while a growth in the external half of the breast would localize in glands which could be readily reached and would therefore present a better prognosis.

In cases where the local focus was specified the outer and external one-half of the breast was the seat of the growth in four cases, with one radical cure; the inner one-half of the breast in nine cases, with two cures. It will be seen that there is scarcely any difference in this particular.

Although the first drainage is probably in line of the anatomical distribution, by the time the growth is recognized all the lymph nodes and all the lymph radicals of the overlying skin, of the surrounding fat with pectoral fascia and muscles and of the entire breast tissue are involved.

The lymphatic glands which are diseased must be thoroughly excised with as little mutilation as possible and without severing the lymph channels where it can be avoided. Those in the axilla follow the course of the axillary vein, in close contact with it. They commence as soon as the axillary space is entered and extend to the very apex of the axilla. Higher up they are continuous with the subclavicular glands which are always involved when the apex is infected.

Following this line, we soon get involvement of the supraclavicular glands of the posterior triangle of the neck. Another group of glands is to be found midway between the anterior border of the scapula and the serratus magnus muscle. Other clusters of glands exist under the pectoralis major and between the major and minor muscles. Anteriorly, we may find glands involved along the level of the second, third and fourth ribs where the lymph channels perforate the intercostal muscles to drain into the mediastinal glands. A thorough knowledge of the whole lymphatic system associated with the breast becomes a matter of the greatest importance in dealing with cancer of the mammary gland.

Diagnosis.—Cancer of the breast, when well developed, offers no difficulties in diagnosis. In its very commencement the time most favorable for operation, a positive diagnosis is well nigh impossible. Tumors of very small size may be detected even in a fleshy breast by very careful palpation. By inspection of both

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breasts and change in position a slight retraction of the skin can usually be detected. Shortening of the trabeculæ from the tumor to the skin is of great importance as pointing to malignancy. In order to detect this, both breasts should be simultaneously examined by moving them in similar directions over the chest wall. Beneath the skin any difference in its adherence, as noted by the formation of a crease over the site of the tumor, is suspicious. Unfortunately, tumors of the breast must first be recognized by the patient before suspicion is aroused. Therefore the disease is usually well advanced before the surgeon is consulted. The age of the patient should be given due consideration. Comparatively few cases develop before the thirty-fifth year. Then follows twenty years of what is termed the cancer period, when any growth in the breast should be looked upon with grave suspicion.

The tumor should be very carefully palpated and its size, shape and consistency carefully determined. Special attention should be given to the mobility or attachment to underlying fascia or muscle. A slight fixation to the pectoral muscle can best be detected by elevating the arm so that the muscles will be placed upon the stretch. The involvement of the skin over a tumor is significant of infection of the lymph radicals of the skin and retraction of the skin or nipple, of trabecular contraction. In all cases the lymphatic nodes should be carefully scrutinized. Those in the base of the neck cannot be palpated except in advanced cases. The finding of no palpable axillary glands should be given no weight in declaring a tumor non-malignant, but is of importance in determining the extent of operation necessary and in estimating the prognosis.

In all cases where a small tumor exists and the patient is over thirty years of age excision should be undertaken. In every breast operation except where a positive diagnosis of cancer is evident a competent microscopist should be on hand to examine a frozen section in order that a definite diagnosis may be made immediately. The extent of the operation necessary must depend upon his report: if malignant, the type of new growth must be considered in regard to the magnitude of operation.

Prognosis.—To the patient and her friends the question of prognosis is of vital importance. There are few diseases more positively fatal than cancer. In carcinoma of the breast the average duration of life when no operation is performed is two years. In cases where operation is undertaken the following points in reference to prognosis are given. The sooner the operation is performed after the discovery of the growth, the better the prognosis. The less malignant the growth, as determined by cell distribution and proliferation, the better the opportunity for cure. In this connection the most malignant growths are medullary carcinoma, next the scirrhus, followed by the adeno-carcinoma and least of all, the colloid variety. Glandular involvement is of extreme importance with reference to freedom from recurrence and

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duration of life. The more extensively they are involved the worse the prospect. When the supraclavicular glands are noticably enlarged, the prognosis is hopeless. Carcinoma in the young has been found to follow a more rapid course than in the aged.

Operation.—We are indebted to Halstead more perhaps than to anyone else for the radical operation for carcinoma of the breast. The first step in the operation is the excision of the tumor, which involves the removal of the entire mammary gland, an extensive area of skin, the pectoralis major and minor muscle, the dissection of the axilla, the removal of the subclavicular glands and when necessary those in the lower triangle of the neck. It will be seen at a glance that this is in reality a formidable operation requiring skill, time and an infinite amount of patience. There are surgeons who spend much time before making the primary incision, figuring out in their own minds the problem of closing the wound. This, I believe, is entirely unwarranted and is the very last thing which should be considered when operating upon cancer of the breast. The important question is the removal of a wide area of skin surrounding the diseased focus. The closure of the wound is the last stage in operative technic. As soon as the skin incision is completed the free skin is undermined until the knife reaches the pectoralis major muscle, well outside of all gland tissue. The posterior incision is made like the anterior, until we reach the fibres of the serratus magnus muscle. The skin incision is now carried along the under border of the pectoralis major muscle into the axillary space, undermining the skin for a short distance. The fibres of the pectoralis major are divided near their attachment to the humerus. The hand is then pushed beneath the pectoralis major muscle, between that muscle and the thoracic wall until the point of attachment of the muscle to the thoracic wall is reached. Here the muscle is cut from its attachment. This allows the breast and pectoral muscle to be removed in a mass. Its axillary attachment is, however, undisturbed. The pectoralis minor is next severed near its bony attachments. We now have a free entrance to the apex of the axilla and subclavicular region. Here the gland dissection should commence from above downward. In this stage of the operation great caution is necessary that no gland be left and that the lymphatic channels be not torn or cut through. All lymph nodes should be carefully removed in the apex of the axilla and along the axillary vain. A search should next be made for aberrant glands.

Bleeding points must all be ligated, a small wick of gauze inserted in the axillary space through a counter opening and the axilla closed. In some cases a closure may be effected by direct suture or by a little sliding of flaps. It is, however, unwise to attempt extensive plastic operation. If we find the denuded area too large to be comfortably closed a few grafts are placed in position.

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End Results.—In trying to arrive at ultimate results in regard to the surgical treatment of cancer we are forced to the conclusion that cancer is at first a purely local focus. It remains as such for a short period only, when it reaches out along the lymphatic channels by continuity, involves the neighboring structures and later forms metastases which destroy life. If thorough operative measures are undertaken early, when the disease is local, a very high percentage of cures may be expected. In looking over my own statistics, very few cases appear which could be classified as purely local. I have tried to arrange the cases under three classifications which will be descriptive of the extent of the disease when operation was performed.

1. Will include early operation, with 11 cases.
2. " " intermediate operation, with 42 cases.
3. " " late operation with 23 cases.

Group 1. Under early operation we include those cases which were operated upon within a reasonable time after discovery of the growth, where enlarged axillary glands were not palpable prior to operation and upon opening the axilla were found very slightly involved; with tumor freely movable and skin not macroscopically involved.

Group 2. Intermediate operation. All those cases where the tumor has existed for a long period; movable or partially fixed. In the majority of cases showing local skin involvement over the tumor, with palpable axillary glands and at the time of operation showing quite extensive glandular involvement.

Group 3. Late operation. All those cases where the tumor is firmly fixed to the pectoral muscles or the thoracic wall, perhaps ulcerating, where axillary, subclavicular and perhaps supraclavicular gland involvement is present, with probable internal metastasis; in other words, cases which are absolutely hopeless and where operation is undertaken merely as a palliative measure, or to relieve the patient and family from a loathsome, ulcerative lesion.

It is manifestly of no importance to include under these classifications cases which have escaped our observation, concerning whom we can obtain no information as to end results. They are therefore eliminated from Groups 1, 2 and 3, as well as from the table of deaths. We have fifty-nine cases about which we have definite reports.

Tables.—There follows a table of deaths from operation and from recurrence of cancer, the mortality rate from operations and deaths which have occurred from diseases in no way associated with cancer, and classifications under Groups 1, 2 and 3.

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Group 1.

10 Cases of Whom 6 Are Living on Feb. 1, 1911.

Living without recurrence within 1 year	0	
" " " " 2 "	1	
" " " " 3 "	1	
" " " " 4 "	0	
" " " " 5 "	1	
" " " " 6 "	1	
" " " " 8 "	1	
" " " " 15 "	1	
	—	6
Died of cancer, within 3 years	1	
" " " " 4 "	1	
	—	2

Died without recurrence from diseases in no way associated with cancer:

Pneumonia within 7 years	1	
" " 3 months	1	
	—	2
		10

Group 2.

32 Cases, of Whom 19 Are Living (Feb. 1, 1911).

Living without recurrence within 1 year	7	
" " " " 2	2	
" " " " 3 "	1	
" " " " 4 "	1	
" " " " 5 "	1	
" " " " 9 "	1	
" " " " 11 "	1	
" " " " 12 "	2	
	—	16
Living with recurrence within 9 months	1	
" " " " 2 years	1	
" " " within 9 years	1	
	—	3
	—	19
Died of cancer within 1 year	6	
" " " 2 "	3	
" " " 4 "	1	
" " " 5 "	1	
" " " 9 "	1	
	—	12
Died of meningitis within 1 month	1	
	—	13
		32

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Group 3.

17 cases, of whom 1 is living with recurrence.
0 " without recurrence.

Died with recurrence within 1 year	11	
" " " 2 "	2	
" " " 4 "	2	
Died of pneumonia following operation	1	
	—	16

(Total number of cases, 59).

Deaths from Cancer.

From effects of operation or while in hospital		2
Died within 1 year	19	
" " 2 "	3	
" " 3 "	1	
" " 4 "	4	
" " 5 "	1	
" " 8 "	1	
	—	29
		31

Deaths from Other Causes.

From pneumonia, within 7 years	1	
" " " 3 months	1	
	—	2
		33

Deaths from recurrence of cancer . . . . . 52.5 per cent.
Total mortality rate from operation . . . . . 2.6 "

Conclusions.

1st. That cancer is greatly on the increase.

2nd. That cancer of the breast is more malignant in the young than in those far advanced in life.

3rd. That a diagnosis of cancer of the breast is always easily made in advanced cases, but that it can never be stated positively that a growth in the breast is non-malignant.

4th. That, if we are to get malignant tumors early, we must excise all growths, many of which under the microscope will prove malignant.

5th. That early and radical operation is the most effective treatment for cancer of the breast: that, if discovered early and radically operated upon, the mortality rate is very low, probably under one per cent., and the cures are about seventy-five per cent.

6th. That late operation offers no hope of radical cure, and is only of service inasmuch as it disposes of a foul and ulcerating area.

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OF BREAST

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17 cases, of wh

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" "
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From effects c
Died within 1
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" " 5
" " 8

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" "

Deaths from
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SALVARSAN: FRIEND AND FOE.

By Orren B. Sanders, M. D., Boston, Mass.

The venereal diseases constitute collectively the arch enemy to the moral and physical well being of the American people. This truth is recognized by many enlightened men and women; it is dimly perceived by many half-enlightened; it is unknown or ignored by the great majority. There is a hopeful movement on foot, however, to change this crass ignorance, this criminal indifference, to commendable knowledge and compulsory action.

The medical profession has been inexcusably dilatory in exerting itself to prevent these diseases. It is even now infinitely more concerned with discovering effective methods of cure, than of eliminating this blight, this blot upon our manhood and womanhood, this insult and menace to the clean, this deeper degradation of the unclean.

It may be said that to cure one case of venereal disease is to prevent the development of others. This is true, but it still fails to reach the root and source of this abundant evil—the distorted viewpoint, the moral callousness, the dominance of lustful passions which undermine that foundation of mental, moral and physical integrity upon which only the superstructure of a great nation enduringly rests. It is the aim, therefore, of an increasing number of good citizens, lay and professional, to secure such a widespread comprehension of sexual truths, as shall conduce to the rearing of a generation not less strong in virile instincts and normal passions, but far more enlightened than the present, far stronger in right knowledge, in honor and self-control, a generation additionally defended from itself and from its inherited and acquired degenerates, by laws rendering propagation of the insane, the feeble-minded and the idiotic, the rapist, the chronic inebriate impossible, and the marriage of such and of those having a venereal disease difficult and punishable by law.

It is not my purpose in this paper to touch upon gonorrhea, although it is most difficult not to do so, it being a disease so prevalent, and so underestimated in its disastrous results that one feels in duty bound to seize every opportunity to earnestly urge the help of one's confrères in controlling it. But there is at the present moment a very special reason for concentrating attention upon that widespread and intractable malady, old as time itself in human history for aught we can prove to the contrary, that filthy and persistent pollution of the system universally known as syphilis or lues.

Where is its stronghold? The skin? Answer yes, and as the endless line of syphilitics pass before your mental vision, you shall say in turn: the eye and ocular appendages, the ears, hair, nose, mouth and tongue, larynx, lungs, heart and blood-vessels, stomach, liver, spleen and pancreas, rectum and anus, bones, joints and

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bursae, tendons, tendinous sheaths, muscles, lymphatic glands, the genito-urinary organs, and the entire nervous system.

The affected fetus in utero is fortunately born dead, murdered by ancestral or parental sins, or wizened and wailing lives to die in a few months, or worst of all survives to reach manhood or womanhood with a systemic taint evidenced at if not before puberty, or in later life, by one or many of the manifestations of the acquired form.

There is no need to delineate the features and forms of the victims of this fell disease at its worst; memory reproduces them in all their distortions, loathly disfigurements, nervous degeneracy. Syphilis has been accorded one merit, with a very large interrogation point after that commendatory word, namely, that it does not cause death. "Syphilis in its worst manifestations and activities," says an eminent syphilographer[1], "often mutilates, paralyzes and cripples, but it rarely kills."

This statement, made but little more than fifteen years ago, is receiving a constantly diminishing credence. Our rapidly increasing knowledge of the power of this infection leads us rather to adopt the pronouncement of modern science which identifies by laboratory methods so many diseases leading to the grave as of syphilitic origin, in which otherwise the etiology could not have been determined. But leaving out the reassuring factor of fatality, for why should there be this unreasoning eagerness for the mere survival of poison saturated humanity? how conscientiously have specialists labored to stay the course of syphilis, modify its manifestations, and eradicate it from the system! How almost without hope at times of lasting benefit has treatment been prosecuted! How especially has the profession been burdened with the knowledge of the never ceasing danger of communication of contagion through superficial lesions!

What have been our therapeutic resources once the disease has been diagnosticated? Passing by for the moment hygienic measures, the medicinal remedies regarded as standbys are not numerous, nor ever have been. Mercury first and foremost for the early, and the iodides for the later, periods make a not lengthy list. The chief changes have been rung through the variety of the preparations of these two mighty allies in the fight, and in the method of their administration.

Generations of syphilitics came and went mercurialized and iodized, and still no noteworthy progress was made until within the last few years two new factors have given a tremendous impetus to our therapeutic advance, namely, the serum reaction of Wassermann which, although not infallible, is a valuable diagnostic test, and the demonstration by Schaudinn and Hoffman of the treponema pallida as the cause of syphilis. These two valuable contributions to our approximately exact knowledge of this terrible scourge, hitherto so imperfectly comprehended, and concerning which we have yet so much to learn, have been largely

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instrumental in furthering Ehrlich's endeavors to give the world a new and, we trust, effective curative agent. Without the identification of the spirochæta, indeed, there could have been no intelligent search for a cure, but only a blind groping in the dark. With a knowledge of the cause, however, the goal was clearly indicated, that is, the finding of a substance fatal to the parasite, innocous to the affected individual. Without the Wassermann test or its modifications, also, the absence or presence of the spirochætæ could not have been even approximately demonstrated.

It is needless to recapitulate the successive steps taken by Ehrlich and his associates before he was able to offer to the profession for ultimate acceptance or rejection the popularly known "606," the chemical compound dioxydiarmidoarsenobenzol, now to a limited extent procurable under the distinctive name of "salvarsan."

The use of arsenic in syphilis has long been not uncommon. Before the introduction of the new—as applicable to syphilis—arsenical compounds atoxyl, soamin, and arsacetin, dermatologists and syphilologists prescribed not unfrequently arsenic in the form of Fowler's solution, Donovan's solution and arsenious acid. Their object was to obtain not only its supposed specific action on certain intractable cutaneous manifestations[2], but also its tonic and alterative effect, which is not yet perhaps sufficiently appreciated.

The synthetic compounds atoxyl, soamin and arsacetin were discredited by the blindness attributed to their use in a number of cases, and by certain gastro-intestinal by-effects. Salvarsan, we are told[3], is but a modification of one of the main reduction products of atoxyl. To the general practitioner or even to the average specialist this statement is of little interest. What he primarily wants to know is: Will salvarsan cure syphilis and with safety to the patient? Yet upon reflection he will find that even if these questions could be answered promptly in the affirmative, many others of no inconsiderable importance would arise. But, as it happens, we are in no position as yet to assert that salvarsan can be relied upon as an unfailing specific in the cure of syphilis. We can not even say that it can be injected without fear of any untoward results following. We do not even know definitely what dose should be employed. Michaelis[4] gauges the dose by the body weight of the patient, giving one centigramme per kilo. But while the kilo of living matter in one individual represents the same weight as in another, it represents little really intrinsically identical. The action and reaction of all drugs prove this, were other evidence lacking. Consequently it behooves the prescriber of salvarsan to proceed with caution in the selection of the dose. But before the decision as to dosage, must come the selection of the case.

It is being increasingly shown that here there is not only room for the exercise of discretion, but also an imperative necessity for the application of the greatest skill and judgment pos-

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sessed by the expert. Ehrlich strongly emphasizes this point. Elsner in the Journal of the American Medical Association, December 10, 1910, who was privileged to make observations at Ehrlich's laboratory at Frankfort during the previous summer, mentions among other contraindications for the use of salvarsan, an unfavorable general condition of the syphilitic, that is, sickness of any kind, particularly acute infections however slight, including ordinary colds, bronchial disturbances and acute indigestions. Such affections, he says, positively contraindicate the use of arsenobenzol. It is not often we hear of this wholesome advice originating at headquarters. We have known for some time that Ehrlich deprecates, if not forbids, the use of his powerful new remedy in advanced stages of degenerative diseases of the nervous system, including cases of paresis and locomotor ataxia, with associated optic neuritis, and in all cases in which organic diseases of non-syphilitic origin are demonstrable. The latter whether syphilitic or non-syphilitic are to be set aside as unsuitable when occurring in those advanced in years, and affecting the cardio-vascular system.

To rehearse the triumphs of salvarsan is unnecessary. They are numerous and important, and it is no part of this paper to minimize or depreciate them. But at first, and in the enthusiasm and relief incident to the discovery of a powerful remedy against so fearful a foe, it is most natural that a very optimistic viewpoint should obtain, more especially when the salutary changes wrought in superficial lesions are little less than marvelous. It is natural that the insidious nature of this foe, its capacity for latency, even the limitations of its host to sustain both the invasion of virulent parasites and the abnormal systemic condition arising from the introduction of a concentrated poison, the sudden destruction of millions of hostile bodies, the equally sudden release of endotoxins, or even the possibility of a maximum of absorption with a minimum of elmination of the drug, or of special intolerance of arsenic, might all recede into the background.

But a danger ignored is not a danger eliminated, and it is therefore the duty of the specialist to sound a note of caution, and particularly to call attention to those incidental dangers outside the province of the scientist, exclusively engaged in arduous clinical or laboratory research.

What are the prerequisites to the administration of salvarsan? Among them the intelligent selection of the case. In a general way the contraindications have been referred to. The indications for its use—always keeping the above in mind—have been summed up by Blaschko as follows[5]: "(a) Malignant cases of syphilis which have not reacted to mercury. (b) All forms and stages of syphilis in individuals who show an idiosyncrasy towards mercury. (c) Cases in which recurrence occurs soon after mercurial treatment. (d) Cases in which recurrence occurs while the patient is taking mercury. (e) Primary lesions before the appearance of secondaries. (f) Constitutional syphilis not

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hitherto treated in the primary or secondary stages. (g) In late recurring secondary lesions it should be used in combination with mercury and iodides. (h) In parasyphilitic affections of the cardio-vascular and nervous systems, it should be used only in the early stages. Ehrlich recommends that primary lesions should be treated as early as possible, before the appearance of secondaries, together with energetic local treatment such as excision, cauterization, etc., to aid in causing complete sterilization."

The case selected, all competent authorities are agreed that prior to the administration of arsenobenzol a careful examination should be made of the lungs, heart, arteries and abdominal organs, and especially of the eye and by an ophthalmologist. The urine should be tested, as the presence of sugar, albumin and casts in large quantity contraindicates the use of the drug. In addition, MacRae[6] of New York insists that no patient should be treated without previous Wassermann reaction. It is to be remembered that salvarsan should not be used in ambulant cases, but that the individual should be in a hospital, sanitarium, or private home where a nurse can be had, and the patient be under observation for ten days or more.

Two other factors must be taken into consideration, namely, the preparation of the drug and the method of its introduction. The point I wish to make does not require the description of either of these, it merely necessitates calling attention to the fact that the greatest nicety is demanded in so preparing the solution as to secure its being perfectly neutral, while in the matter of injecting the fluid it is obvious that, especially if the intravenous method is to be adopted, a high grade of technic is indispensable. Ehrlich now advocates this method of injection rather than the intramuscular or subcutaneous. Perfect asepsis must be observed whichever is chosen. Wechselmann[7] of Berlin says that while the intravenous administration, if carefully carried out, is painless, it is followed by chill, vomiting and fever. He therefore prefers the subcutaneous beneath the scapula. The intramuscular has been followed by severe pain, swelling, rise in temperature, increase in pulse rate, urticarial or erythematous eruptions, gastrointestinal disturbances and ocular complications, these by-effects of the intravenous and intramuscular administrations of the drug emphasizing the need of after care and observation. The Wassermann reaction should be obtained at intervals, and if not negative within three or four weeks the dose can be repeated.

What, therefore, do all these essentials to the successful application of salvarsan show: the discriminating selection of the case and determination of the dose, the expert preliminary examination of organs and functions, the use of the Wassermann reaction before and after the treatment, the skillful technic in drug preparation and administration, perfect asepsis, and the insistence on proper surroundings and care?

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They show that this remedy above all others is not one which should be used by that large proportion of general practitioners who are without both the requisite knowledge of the disease and the proper facilities enabling them to comply with the conditions under which alone, at the present time, salvarsan can be safely used, if, indeed, safety can be guaranteed.

If then this drug is not suited to adoption in the treatment of syphilis by so many legitimate members of the profession, and if at the same time, as is the case, accounts of the marvelous cures or at least apparent cures, are being daily more widely circulated and more generally known, how real is the danger threatened by its adoption as a new bait and money-getter, by the fraudulent practitioner, the quack, the so-called medical institutes, the pseudo-scientific advertisers of the "sure cure!"

No difficulty whatever will be experienced by these medical fakirs, in assembling for their pernicious advertising literature, testimony from the most reputable medical journals of extraordinarily good results from the use of salvarsan. What the public and especially the infected public will not know is all that successes evidence of special skill and knowledge on the part of the experts who had charge of these cases. The syphilitic public will willingly believe what it most ardently desires to believe, namely, that the "pox" is to be reduced to the level of a harmless affection; that its 75 per cent. of contagion through sexual congress and 25 per cent. of contagion through extragenital infection will equal 100 per cent. immunity from serious effects if only the confident quack will inject a dose of 606. That large portion of the public, ruled by its lustful desires, will still more confidently go about the gratification of its sexual passions.

That these dangers proceeding out of the very excellencies of the new remedy, and the utter unscrupulousness of the medical charlatan are already upon us, is shown by the following advertisements quoted in February by the Journal of the American Medical Association as having appeared in the newspapers: "606. Prof. Dr. P. Ehrlich's Cure for Blood Poison. Now on Sale. All Symptoms Removed in 2 Days. One Dose Cures. Remember, All Symptoms Disappear in Two Days. One dose cures permanently. Salvarsan can be taken in the privacy of the home. For thirty dollars the '606 Laboratories' will ship in plain unmarked package the necessary dose with simple directions."

And this: "If you are threatened with blindness, paresis (complete loss of memory), rotting bones, decaying brain, ALL caused by contagious blood poison, 606 WILL SAVE YOU."

Here we have the most misleading and damnable lies, and the proffer of a drug dangerous and poisonous in inexpert hands, if, indeed, the advertiser really supplies it; a drug put up in vacuum tubes in single doses, namely, 0.6 gm., which contains 0.2 gm. arsenic or fifty times the amount that, in the usual pharmaceutic combinations, would cause poisoning[8].

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Such advertisements are positively criminal. On the Continent the same heartless trafficking has begun which American Medicine editorially appropriately characterizes as positively "ghoul-like." In many cases, says this journal in effect[9], the manifestations of the scourge of syphilis have been removed by ordinary mercurial treatment unknown to the patients, who have nevertheless been charged fabulous rates for the supposed use of 606. As is well said, these victims will go forth unconscious that the real menace to their future still lurks in their polluted blood or in some distant nidus of infection that salvarsan itself might not have reached. They will neglect precautions they might have otherwise observed, will unwittingly run the risk of infecting others with this loathsome disease, and in later life probably develop some one of its numerous and often intractable forms.

The protection of the public from the merciless exploitation of a great discovery for mercenary ends only, is one more burden and responsibility resting primarily upon the profession. Men who will cure (?) the drug habit with morphine mixtures, inebriety with potions saturated with alcohol, and gonorrhea with a few capsules or injections, will not refrain from deluding the syphilitic, for a price, into believing that the "pox" is now robbed of all its terrors.

Nothing in this paper should be construed as an endeavor to minimize the importance of Ehrlich's great discovery. If it did nothing more than heal superficial syphilitic lesions, as it does with marvelous rapidity, thus often preventing the system being still further invaded, and immeasurably lessening the probability of infection to others, it would be a greatly prized ally in this endless warfare. But its results in all stages of syphilis and in hereditary syphilis have been most remarkable, although as to their permanency a favorable verdict must be withheld until the passing of many years. That there have been many relapses, merely modifies the first extravagant claim that one or at most two doses of salvarsan would permanently sterilize the infected human system. Relapses, promptly identified, are cause for congratulation in so far as they prevent the optimist as well as the pessimist from losing sight of the very great need of conservatism and caution, the application of every known test to discover actual conditions, of strenuous effort to keep the patient under observation and treatment for a considerable length of time, of warning him and the public of the continued necessity for all to avoid acquiring or spreading this horrible disease.

Again, whether we have a specific or not, the profession must increasingly give its attention to obtaining an exact knowledge of the symptomatology of syphilis. Thousands of unrecognized cases form foci of contagion, and result in late and often serious manifestations. That when recognized syphilis should receive unremitting care and treatment, goes without saying. Morrow[10] is authority for the statement that in New York City there is not

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hospital accommodation for one in five hundred of the prostitutes who ply their trade there. There should be accommodation provided for such unfortunates, for, if they have not syphilis, practically all of them have gonorrhea—two contagious diseases as deserving of quarantine as leprosy, an even absurd comparison if it is true that 18 per cent. of the people of the United States are syphilized, and 80 to 90 per cent. of males alone, affected at one age or another with gonorrhea. The existence of such a state of affairs is evidence enough that no medicinal remedy or group of remedies, however effective, will ever solve the problem of the control of venereal diseases, or even of syphilis, though we were able to reverse Keyes' pregnant words in his admirable treatise on the subject, words the more forceful coming from a man who gives opinions and reports findings based on 2,500 cases of syphilis observed by his father and himself, and adequately recorded in their office case-books.

These are the words to which I especially refer:[11] "All syphilis is relapsing syphilis. It breaks out when and where it will, and no man shall say when it is finished. One may cruelly but truthfully say to the patient who asks for an absolutely accurate prognosis of his disease, I will tell you whether your syphilis is grave or not after you are dead. Prognosis, in a certain sense, we can assuredly give; but swear, and sign, and seal, we never can."

Venereal diseases do not seek men, but men go about ignorantly and constantly exposing themselves to the chance of infection. To cut off the branches by curing the infected individual (if one can), will not reach the root of the evil. Like the reglementation of the prostitute, the withdrawal of the syphilized for treatment will leave more room for the new supply and demand. Not that all possible measures of control should not be taken, but that we should above all else, educate our youth of both sexes from the cradle up in the truths of right living and its rewards in the sexual as in any other sphere. They must also learn the perils of ignorant rashness and wilful wrongdoing; but it is not by penalizing the passions they will be bridled and bitted. Where there is no will to do right, there is no security, though the ways be many by which evil may be escaped. The cultivation of clean manhood and womanhood through right knowledge and discipline must precede, as it must paradoxically accompany, the cleansing of the augean stables of sexual filth now threatening to increasingly contaminate all classes of society.

Let us hold fast to this rule of action while using salvarsan and every other beneficial new and old discovery, hygienic measures, legal enactments, all that science and altruism can suggest. The ultimate results in generations to come do not concern us, are none of our business, compared to the duty laid upon us in the passing hour. Wrangling and speculating over them, we waste time we had better devote to work for practical betterment along the lines indicated, as knowledge and opportunity serve us, grate-

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fully recognizing that logical necessity which automatically forbids the real failure of any laudable and persistent effort.

BIBLIOGRAPHY.

[1] Hyde and Montgomery: Syphilis and the Venereal Diseases, p. 63.

[2] Fordyce: Journal of the Amer. Med. Association, Jan. 21, 1911.

[3] Marks: Interstate Med. Journal, Jan., 1911.

[4] Fordyce: N. Y. Med. Journal, Nov. 5, 1910.

[5] Wolbarst: Interstate Med. Journal, Jan., 1911.

[6] MacRae: N. Y. Med. Journal, Dec. 31, 1910.

[7] Wechselmann: N. Y. Med. Journal, Sept. 3, 1910.

[8] Montgomery: Journal of the Amer. Med. Association, Feb. 18, 1911.

[9] American Medicine, Nov., 1910.

[10] Morrow: Interstate Med. Journal, Jan., 1911.

[11] Keyes: Syphilis, p. 21.

THE CANCER QUESTION. A POSSIBLE METHOD OF TREATMENT.*

By W. H. Watters, A.M., M.D., Boston, Mass.

"Onward and onward the highway runs to the distant city, impatiently bearing
Tidings of human joy and disaster, of love and hate, of doing and daring.
This life of ours is a wild Aeolian harp of many a joyous strain,
But under them all there runs a loud perpetual wail, as of souls in pain."

Thus speaks the poet of life, a joyous side always presented to the world, but to one possessed of the proper senses of perception invariably associated with the undertone of suffering and anguish. To no one do these undertones come more frequently than to the physician, a man by training skilled in their recognition. And to the physician possibly more than to anyone else is given the power to render such sounds less and less distinct until they are finally completely eliminated, and leave unmarred the full, majestic symphony of the joy of life and well being.

If the question were asked of this audience: what is at present the cause of the greatest amount of these undertones, of the greatest intensity of physical suffering, the answer of the majority, if not all, would be: cancer. Never since history began have the eyes of all mankind been so generally centered upon any one ailment as they are at present upon this dread afflic-

*Read before the New York Academy of Pathological Science.

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tion. Faced with a very material increase in its occurrence, the medical profession stands today baffled at almost every turn by an unknown, imperfectly understood agency, with whose methods it is fairly familiar, but against whose ravages it is able to offer but feeble resistance.

Consideration of this subject in some of its phases will occupy our attention for a time this evening, our efforts being particularly directed toward etiology and methods of treatment.

Before beginning the topic of etiology, let us for a moment speak of the question having to do with the relative and absolute increase in the occurrence of the disease. Unquestionably, cancer is now given as the cause of death in a greatly increased percentage of cases over earlier years. This has been explained in a number of ways, all doubtless having their influence. Thus, we are told that the present population is greater and that diagnoses are now more accurately made, many cases at present readily recognized being formerly called by some other name. Again it is stated that on account of our better hygienic knowledge more persons now reach that period of life in which liability to cancer becomes great, and that the less resistant now mature, when in earlier years they would have succumbed to the grim reaper early in life. In other words, more persons are now protected from death by other diseases, and are thus rendered more liable to cancer. All these reasons are not, however, adequate explanations of the full amount of the increase in frequency of the disease.

Statistics quoted by Adami show that in San Francisco the mortality increased from 16.5 per 100,000 in 1866 to 103.6 in 1898, nearly sevenfold. In Boston it was three times greater in 1887 than in 1863. In New York State in 1887 there were 2,363 deaths from this disease; in 1898, 4,456 occurred. From 1861 to 1870 in England and Wales the mortality for men per million was 242; from 1891 to 1900 it was 597. During this time the mortality for women increased seventy-five per cent. Even the autopsy reports of the older and more reliable hospitals show an increasing percentage of cancer cases.

It must then be admitted, we believe, that cancer is steadily and fairly rapidly becoming more and more a menace to humanity. In our studies of the subject we first make inquiry as to the causes. These may be divided into two general subdivisions: predisposing causes and exciting causes. The former class is quickly disposed of and brings up but few debatable topics.

Age, as all are aware, has a distinct influence upon the occurrence of cancer. In the great majority of cases it is found in those past thirty-five or forty years of age, where the tissues are becoming old. Exceptions, not a few, can be cited of much earlier appearance. In the personal experience of the writer, a mammary carcinoma with very diffuse carcinomatosis of the entire body was seen in a patient of twenty-four, a uterine devel-

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opment in one at eighteen, and a diffuse transformation of the liver into what possessed all the characteristics of adeno-carcinoma, at one year. The average age incidence seems to be distinctly falling.

Sex. If the organs peculiar to man and to woman be excluded, the occurrence of malignant disease in the two sexes will be about equal. But on account of the very common appearance of cancer in the mammary gland, the uterus and the ovary, the female shows a much larger percentage of cases.

Heredity plays a much less important part in the causation of the disease than was formerly supposed. As in tuberculosis, a predisposition or susceptibility to the disease may be inherited, but there is no evidence to support the idea that the actual disease is thus transmitted.

Occupation. If we accept as adequate the theory of chronic irritation, about to be considered, then occupation may occasionally be of etiologic importance. The classic illustration of this is the peculiar form of carcinoma found on the scrotum of chimney sweeps, and but seldom found in other persons.

Environment. Certain careful investigations in a number of English villages showed a greatly increased percentage of cases occurring among those who lived near the banks of some small streams on low land. This was so uniformly noted as to be almost beyond the possibility of coincidence, and must be classed accordingly among those features to be considered as predisposing to the disease.

When we pass from consideration of predisposing causes to that of actual exciting agencies, we go from a field of comparative unobstruction into a dense jungle with only here and there faint indications suggesting the possibility of a path. In this jungle patient investigators have literally passed their lives, wandering from point to point, occasionally progressing slightly, but only too often returning to their starting point, and here also hundreds of others are now living and working, sometimes in association with each other, sometimes within speaking proximity, sometimes pursuing an absolutely lonely trail, without companion's help or encouragement.

In the various paths thus attempted but few are worthy of mention. There is an occasional one that on account of a hopeful beginning or because of a somewhat wider vista opening from it, does seem to be deserving of a little more than passing mention.

In spite of much study and more theorizing during past decades it was not until about the middle of the past century that Rudolf Virchow, the father of modern cellular pathology, advanced a really scientific theory in explanation of the cause of cancer. He claimed that cancer is due to local irritation usually continued over a long period of time. His opinions are still held by not a few, and for them are several strong arguments. He

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and his followers point to cancer of the lower lip in pipe smokers seldom appearing in others; to cancer of the uterus more common in married women who have borne children and who suffer from laceration, to the very frequent association of cancer of the gall bladder with gall stones, and to cancer of the alimentary tract being located just where the greatest amount of irritation presumably comes; that is, the pylorus and the rectum.

The same idea is also seen in the popular opinion that mammary carcinoma is associated with some preceding traumatism as actual exciting cause, an idea shared by some physicians and a few pathologists, but one with which the writer can by no means agree. It does seem probable that traumatism may be of distinct influence as a predisposing cause, giving rise to a local deficient degree of resistance, but that it is more than that seems to be highly improbable.

Somewhat later than Virchow, Cohnheim advanced his theory of embryonal rests. This theory is based upon the assumption that in the embryonal life certain groups of cells ("rests") become separated from their normal location, and find themselves in surroundings entirely foreign to them. Here in due time and for due causes the cells begin to grow, proliferate rapidly and give rise to tumors. Certain parts of this idea are certainly true, as we do not infrequently find evidence of such cell inclusions or "rests." This seems to be the best explanation of certain classes of tumors, notably dermoid cysts, tumors containing cells and tissues entirely foreign to those in which they are growing, and hypernephroma of the kidney, neoplasms undoubtedly of adrenal origin.

Rather frequently small cell collections, evidently of pancreatic origin, are found in the walls of the stomach, and it is not an impossible supposition that they might give rise to cancer. At times also, it seems quite evident that a malignant growth may start from post-natal cell displacement. Illustrations of such are apparently seen in those cases of cancer developing in an old scar or at the base of a chronic gastric ulcer. The theory, while partially explaining some phases of the subject, does not by any means explain why these "rests" or cell masses sometimes undergo proliferation, but more frequently do not. Neither does it render more clear the cause for other cells, demonstrably not displaced, to start such an atypical method of growth.

Oertel claims, and Adami, Hauser, Tolot and others fully concur, that it is possible for certain individual cells or groups of cells in the liver to undergo direct malignant transformation from their normal state of hepatic activity. If we grant this statement, as apparently we should, the possibility of embryonal rests must be here entirely excluded.

Still another theory, that of Ribbert, rests upon the assumption of altered tissue resistance. It is one now advocated by but

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few, and will be given but brief attention. From it we learn that all epithelial cells show a distinct tendency to proliferate freely, and are held in check by the resistance of the sub-epithelial tissues. When, therefore, for some reason, cause unknown, this outside resistance becomes lessened, the epithelium is allowed to proliferate freely and malignancy appears. Apart from the fact that no explanation is given for the cause of the lowered resistance, the theory is inadequate, as it can be proven that the vegetative and proliferative ability of cells can be altered at will, and that growth can be made more rapid or less so, independent of any local tissue resistance.

That line along which the largest number of investigators have worked has been that of parasites. So many diseases have recently been demonstrated to be due to micro-organisms that it is but natural to search for one as a possible cause of carcinoma. As might be expected when bacteria were being particularly studied, various forms of cocci and bacilli were described by various men as etiologic factors. Perhaps the best known of these was that of Scheuerlin, who, in 1887, announced the discovery of his "cancer bacillus." After receiving quite wide acceptance it was demonstrated by Senger to be merely the well-known "potato bacillus," bacillus mesentericus vulgatus.

Later trend of opinion passed from bacteria to protozoa and other low forms of animal life, as those latter organisms were being shown to be of increasing importance in human pathology. We accordingly heard of various forms of amœbæ, of sporozoa, of coccidia and of gregarines, the best known of which are probably the "fuchsin bodies" of Russell, and the "Plimmer bodies." It seems to have been proven that the majority of these micro-organisms thus described have been either illustrations of secondary infection of the tumor or cases where various forms of cell degeneration have occurred within it.

The most carefully worked out of these various ideas has probably been that of Gaylord and his associates in Buffalo. Only a few years ago we all read of his parasites isolated from cases of cancer, cultivated under artificial conditions, with their life history well worked out and capable of producing the disease when inoculated into animals. These conclusions were soon proven to rest upon entirely insufficient evidence, and as with the other earlier ideas, were discarded.

At present the popular organisms to study happen to be spirochetes, and accordingly we are hearing of these as the cause of cancer. Gaylord has been able to demonstrate a certain peculiar form in quite a large proportion of cases of adeno-carcinoma of the mouse. He is, however, much more conservative at present than at the time of his former "discovery."

In summarizing the entire subject as viewed in the light of our present knowledge we can say that the adherents of the

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infectious theory, while doubtless having the most plausible and probable explanation, have by no means proven their contention beyond danger of contradiction. The question of the cause of cancer is, therefore, about where it was years ago, an unknown quantity, although from prolonged research a number of signs have been discovered, suggesting that we are slowly but steadily approaching the goal of our efforts.

Dropping this phase of the question, let us consider what is our present knowledge of the manifestations of the disease, and ask whether from this knowledge we may obtain any clue of a rational and successful form of treatment.

A statement has been repeatedly made that cancer in human beings cannot be transmitted from one individual to another or from one member of the human race to one of a lower species. In so far as our present knowledge goes this is perfectly true, but how soon we may be compelled to modify our present opinion is uncertain. It is very possible that were as careful experimental studies made in artificially transmitting fragments of the abnormal tissue from man to man as can be followed with white mice for instance, the results of human inoculations would be different. We must, instead, study these lower animals and reason by analogy concerning what might occur in man. Reasoning by this means we come to the question: Does any of our present knowledge suggest that there may be a cure for this condition, and does nature show any indication of producing an immunity against its ravages?

Clark, in his admirable summary of the cancer question in Progressive Medicine, thus makes reply:

> **"If it can be established that the human body does have some means of checking the growth of tumors, either to a certain extent or entirely, one may entertain a reasonable hope that malignant neoplasms will not always be incurable. It may be assumed at the start that no malignant neoplasm ever succeeds in growing to the extent to which its innate proliferative ability entitles it. Ehrlich has calculated, from studies of the rate of growth in experimental cancer in mice, that if a single cancer graft proliferated at the usual rate observed in one of his experimental series, and if every descendant graft was implanted into other mice and the process repeated as fast as the tumor reached a size of 1 mm., leaving out of consideration all difficulties in the way of space and nourishment, at the end of one year the total production of tumor tissue would form a mass, which, if cubical, would have an edge one thousand billion kilometers long and would require a ray of light one hundred and five years to travel its length."**

In experimental work with the lower animals we know that at times spontaneous recovery from cancer has occurred. We also know that in such animals it is impossible to obtain successful reinoculations of the same variety of tumor. A certain degree of immunity appears to have developed, preventing further liability to the disease. It was further demonstrated that by a proper course of preliminary inoculations, immunity could

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be secured experimentally, of such a degree as to prevent successful inoculations.

It has not yet been possible to arrest, at will, the growth of a transplanted tumor, once that tumor had become fully started. Bearing these results in mind, let us turn to certain phenomena of the disease in man. Complete spontaneous cure of cancer without operative interference is very rare, and even those few cases that are on record are probably very questionable. Not a few authentic cases could be cited, of complete recovery occurring after a part only of the tumor had been removed by surgical operation, and still more frequently has it been noted that subsequent to complete removal of the primary tumor, secondary nodes already present at the time of operation, have ceased to enlarge, and finally have completely disappeared with complete recovery.

Probably all of us have noted the temporary arrest of growth of metastatic growths following some operation upon the original tumor. Doubtless the best known of recent cases illustrative of this phenomena is the patient that came under the observation of the late Dr. Hodenpyl. This woman had an extensive cancer of the breast with advanced secondary foci in the liver. Following extirpation of the primary tumor came a complete disappearance of the secondary nodes, due apparently to an artificial acquired immunity. With this disappearance there was an accompanying obstruction of the portal circulation with the development of ascites that required repeated aspiration. While this was unfortunate for the patient it was of benefit to science, as will be described later.

One further fact concerning resistance of the body. Whereas we formerly believed that metastatic growths always followed the liberation of cells from the primary cancer at that point where they lodged, we now know that such a course is comparatively rare and occurs only when the part is overwhelmed by the foreign invaders or when the local resistance is deficient. Without much question the great majority of embolic cells from a cancer are disposed of by the natural resisting powers of the body. A good illustration of this is given by Wells. As is well known, there is a great tendency for melanotic sarcoma of the eye to give rise to metastases in the liver. In order to be thus transmitted the cells must pass by the venous circulation to the heart, through the capillary system of the lungs to the heart again, from whence they are distributed to the entire body. The liver receives a small amount of its blood from the hepatic artery and the great majority from the portal vein. It is, therefore, very probable that these cells pass through a second capillary filter, that of the portal system, before they reach the liver. They do not produce secondary growths in any of the many places through which they pass, and where presumably many of them lodge, apparently because such tissues are resistant to their action.

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All of these things suggest an accidental or sometimes, in the lower animals, an experimental auto-immunization, not unlike, perhaps, that vague degree of resistance developed in rabies by the injection of an emulsion of the spinal cord of an infected rabies animal. In other words, immunity to cancer seemed to be a possible goal toward which one might strive even without knowledge of the exciting cause, because it was one that had been attained in this other disease of equally indeterminate etiology. Accordingly a method somewhat analogous to the anti-rabic treatment was devised after considerable study and investigation.

Before entering into this in detail, let us pause for a moment to consider the present status of treatment of cancer. Of course, first and foremost, now and probably in the future stands surgery, the measure par excellence for recourse at the earliest moment of recognition of the disease. Nothing, we believe, should take the place of surgery whenever the diagnosis is definite and whenever the case is an operative one. And yet surgery stands self-confessed as unable to offer much more than meagre hopes of permanent elimination of the disease. It does not pretend to cure. If it is sufficiently early to render possible the complete excision of all the tissues involved, then indeed it has removed the disease by mechanical means, and we say, loosely, that a cure has been achieved. But, unfortunately, how seldom does this take place! There is great need of some adjunct to surgery in order to make the results more permanently effectual and more complete. Such adjuncts have been introduced almost from time immemorial and their name is truly legion. Some have been based upon scientific grounds, but more have been fantastic or empiric in their form. Arsenicum as an internal remedy has been advocated in certain cases, as well as various other drugs. By such means it is doubtless possible to render more satisfactory the general condition of the patient, but of reliable evidence proving that there is any direct influence on the malady itself there is a complete absence. Drugs and caustics of one form or another applied locally form the stock in trade of the cancer quacks, the "cure-without-the-knife" specialists. With the results of such treatment we are all unfortunately only too familiar. While with some forms of preparations an occasional complete destruction of the neoplasm is undoubtedly possible with resultant cure, yet, let me ask anyone here if he has never seen any of those pitiful unfortunates who, misguided by high-sounding promises, have allowed the time of operability to pass and have become absolutely beyond any chance of hope for even temporary benefit. Possibly the most fantastic of the many forms of treatment advocated by truly scientific men is the trypsin method of Dr. Beard, the Scotch biologist and embryologist. His theory cannot now be considered, and the treatment suggested by him, of trypsin and amylopsin, has become practically obsolete.

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Soon after the discovery of the X-ray many in the medical profession considered that here had been found an efficient method of combating the disease. The earlier work seemed very encouraging and a bright future seemed imminent. Gradually, as a better knowledge of this agency was obtained, its limitations became more apparent until although today we believe it to be a method worthy of consideration, its use is by no means often followed by complete cure. Various other forms of electricity, particularly fulguration, have had their vogue, only later to fade into obscurity. The same might be said of radium. The acetone treatment of cancer for palliative purposes is now enjoying a considerable degree of popularity, as it seems to deserve. A few years ago much was heard about the micrococcus neoformans and the treatment of malignancy by vaccines made therefrom. It also proved to be a disappointment.

In view of the practically uniform failure of all these and many other empirical methods not here mentioned, and taking into consideration certain apparently definitely known facts, it seemed wise to approach the subject from another side. These facts are, in brief, as follows:

Cancer of the lower animals can be transmitted.

Its virulence can be artificially increased by rapid passage through several animals.

Not infrequently tumors thus produced spontaneously disappear.

Animals in whose bodies such spontaneous disappearance has occurred are thereafter immune to further inoculations.

Immunity may be conferred by preliminary inoculations of tumor.

In human beings distinct but temporary improvement of symptoms frequently follows operation upon the primary tumor.

At times secondary deposits become inhibited and decrease in size following operation upon the primary growth, thus suggesting auto-inoculation.

Very occasionally this retrograde change goes on to complete disappearance of all secondary manifestations. From such facts it seems reasonable to assume that an immunity to cancer is a goal toward which we might strive with some reasonable hope of success. We do not, however, know the cause of the disease and are confronted with the same problem that Pasteur found when he was investigating rabies. As he was so successful in his contest against the unknown contagion in his day, it has seemed wise to attempt somewhat similar methods of attack against our present antagonist.

Influenced by these ideas, about a year and a half ago we decided to put the matter to actual test upon selected cases. Accordingly the attempt was first made upon a man suffering from an inoperable and far-advanced cancer of the pylorus, with his full consent and understanding. At an exploratory operation

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several enlarged mesenteric lymph nodes (later shown to be adeno-carcinoma) were removed and prepared in our pulp apparatus. The resultant emulsion was carefully measured, when by noting the amount of saline added it could be readily determined how many grams of tissue were present in every litre or fraction thereof. To this was added lysol sufficient to make a .4% solution. Glass beads were added and the bottle was shaken violently for several minutes and strained through a single layer of sterile gauze. It was then sterilized at 65° C. for one hour and later placed in the refrigerator after bottling. In this first case, bearing in mind the occasional disasters from the early use of tuberculin, the dosage was primarily very small, beginning with .0001 mg. and gradually increasing to one, five and ten mg. In this case no benefit was anticipated, and none was noted, the case being far advanced when first seen. That which was very carefully watched, however, was any possible evidence of injury or aggravation. Such watching was fortunately entirely barren of results, even when the larger doses were administered. As was anticipated the disease followed its usual course to a fatal termination.

Following this came another inoperable case of involvement of the caecum. An earlier operation had been performed, followed by a steadily enlarging fistula. Very little fecal matter was passed per rectum, the great proportion coming from the fistula. Here autotoxin and the X-ray were used. Profiting by former experience the dosage was begun at .5 mg. and steadily increased to 100 mg. with a similar complete absence of all symptoms of aggravation. Instead of exacerbation, the tumor, for about two or three months, seemed to be held in check, or even possibly was somewhat decreased in size. The clinical symptoms were correspondingly good, appetite continuing to be excellent and a condition of well-being was manifest. Later there was an increased growth of the tumor with the usual fatal termination but accompanied by decidedly less of the unpleasant symptoms so frequently noted. At about the same time several other cases, all inoperable, were treated, always watched for the earliest signs of any symptoms suggestive of aggravation and always in vain.

Having thus somewhat satisfactorily demonstrated the inocuousness of the treatment when used either as an autogenous or as a stock preparation, its use was extended to those cases not hopeless and where benefit was expected or at least hoped for. From the results of our work on pulmonary tuberculosis we had become convinced that even in hopeless cases distinct benefit very often followed therapeutic immunization, that in less advanced ones the likelihood of cure was distinctly greater. So in cancer it seemed that the most we could at present hope for was amelioration of symptoms in very advanced cases, but that in those taken earlier or when but little of the tumor was pres-

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ent, the outlook should be comparatively good. As we very seldom recognize the condition in a really early stage, the next best time seemed to be just immediately following surgical removal. At such a time all the gross part of the tumor has been removed, leaving a minimum of the disease for nature to combat. Several such cases were thus treated over a year ago, with quite a number since. Too short a time has elapsed to give any very definite results, as the percentage of recurrence must be compared over a period of years with that from surgery alone. Possibly before concluding the paper a few cases may be commented upon.

Miss A. A lady, 50 years of age, noticed a small tumor in the breast about two years ago. This gradually became larger and larger until it finally ulcerated upon the inner segment of the gland, leaving a cup-shaped depression five inches in diameter. Operation was not advised. Autotoxin combined with X-ray (the usual combination) was employed over a period of nearly four months. At present this ulcer has entirely disappeared and but for cicatricial bands of fibrous tissue the breast seems to be in a perfectly normal condition. The case is reported through the courtesy of Dr. W. N. Miner of Calais, Me., who administered the treatment.

Mrs. S. This is a lady operated upon last spring in London for complete hysterectomy. About four months later (June) she was again operated upon for recurrence. In September last still further metastasis was found, so situated as to be inoperable. In October autoxic treatment was begun. At first the secondary nodes seemed to be held in check, but gradually they have increased until at present the entire pelvis is full of the mass. It was impossible to obtain autogenous material and so a stock preparation was used. That which is gratifying here is the complete absence of cachexia, so almost universally the very troublesome accompaniment of the disease. The patient has been in really surprising general condition in spite of the local growth and requires but a very slight amount of narcotic to be entirely comfortable. Her physician, one of our most experienced gynecologists, says that she is in the best clinical condition of any patient ever noted who had an equally severe local process.

Mrs. G. Dr. Winfield Smith operated upon this lady in January, 1910. The uterus was double its usual size and very soft. Upon examination it was found to be the site of a diffuse adeno-carcinoma of great extent. So marked had been the infiltration that after scraping away the soft tumor mass the wall in places was less than one-tenth of an inch thick and could be readily perforated. Complete hysterectomy was performed, but without hope of cure. Cachexia and much weakness were prominent. An autogenous emulsion was prepared and was administered at varying intervals for more than a year. At the

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present time, nearly fifteen months after operation, there is absolutely no sign of recurrence either clinically or upon physical examination; as far as can be ascertained the patient is well.

Mrs. S. An advanced cancer of the breast with extensive axillary involvement was operated upon in January, 1910. An autogenous emulsion was prepared and used quite constantly for several months. At the present time no indication of recurrence is evident and the general health is excellent.

Mr. G. Adeno-carcinoma of rectum. This condition had become so severe as to necessitate colectomy with its resultant discomforts in addition to the cachexia and other symptoms of the cancer itself. The tumor was also largely removed. Following operation the patient was confined to the house in a state of comparative inactivity and weakness. Conditions steadily grew worse, the carcinoma continued to develop, and a second operation was necessary. At this time tissue for autotoxin was obtained and emulsion prepared. Following this came a decided improvement in the general condition of the patient, strength and appetite returned and he insisted upon resuming business. This has continued now for about ten months, the local condition slowly returning, but without other symptoms than very recent ones due to the mechanical position of the growth. This will again be shortly excised and fresh material prepared, not with great hopes of ultimate cure but in the belief that there may be a decrease in rapidity of the proliferation and distinct amelioration of symptoms that would otherwise be most distressing.

Miss P. Carcinoma mammae. Operation nine months ago. Treatment continuous since. No present sign of recurrence. Patient apparently perfectly well.

A number of other cases might be cited of from six to nine or ten months' duration without recurrence, but the time has been too short to enable one to make any definite deductions. It is possible to say, however, that in the majority of these cases there is a surprising increase in the general feeling of well-being and a clinical improvement that is at times very pronounced.

It would be folly for me to try to leave the impression that every inoperable or hopeless case was permanently benefited, nor would it by any means be my desire so to do. We have, of course, had a number of such where nothing more tangible or definite than possible psychic influence was noted, and where the disease progressed to its usual termination unaffected.

In conclusion, therefore, we may state that after treating upwards of thirty patients with various dosage, both large and small, no demonstrable injury has been done. In both inoperable and in post-operative cases the treatment has rather frequently been followed by better clinical conditions and in the latter by at least apparent delay in recurrence. Whether such

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delay will mean disappearance cannot at present be stated. Our personal opinion is that surgery should be the first recourse in every case and that this should be followed by a period of therapeutic immunization by this substance to which we have given the name autotoxin. In this way we hope that recurrence may diminish in frequency and that even advanced cases may be benefited. But what the ultimate future of this may be can only be surmised today. The morrow still remains a closed book to us, but one always attractive and enticing, as was so well expressed by Longfellow when he wrote:

"And Thou, O River of Tomorrow, flowing
Between thy narrow adamantine walls,
But beautiful and white with waterfalls
And wreaths of mists, like hands the pathway showing.
I hear the trumpets of the morning blowing;
I hear thy mighty voice that calls and calls;
And see, as Ossian saw in Morven's hills
Mysterious phantoms coming, beckoning, going:
It is the mystery of the unknown
That fascinates us, we are children still;
Wayward and wistful; with one hand we cling
To the familiar things we call our own,
And with the other, resolute of will,
Grope in the dark for what the day will bring."

It is reported that Mrs. Whitelaw Reid has recently given the sum of $60,000 to the hospital at San Mateo, Calif., that was established by her a few years ago in memory of her parents. This latest donation is for the purpose of constructing new buildings.

The Jordan Hospital, of Plymouth, Mass., is a beneficiary to the extent of $100,000 under the will of the late Mrs. Leander S. Cole of Kingston, Mass. This bequest comes to the hospital without restriction or stipulation concerning its use.

The *Gazette* learns with pleasure of the award of the medal for bravery by the Massachusetts Humane Society to Dr. Francis E. Park of Stoneham. The award is made because of the rescue of a laborer overcome in a sewer by tannery fumes.

Dr. S. B. Wolbach, Assistant Professor of Bacteriology in the Harvard Medical School, has gone to West Africa for the purpose of studying sleeping sickness.

Dr. Paul Carson has been transferred from the position of port physician of Boston to the division of school hygiene. The place thus vacated has been filled by Dr. W. M. Gay.

A small Cuban town, Sagua la Grande, has erected a statue in honor of "its most illustrious son," Professor Joaquin Albarran, who held the position of chief of the clinic in Paris for diseases of the urinary system. To this position he was elected in 1906.

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CLINICAL DEPARTMENT.

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

Case IV. Diagnosis: Locomotor Ataxia.

The diagnosis is almost self evident from the symptoms as given, yet the case is not of the common type. There have, for example, been no distinct lightning pains and there is as yet no Argyll-Robertson pupil. The patient is just merging from the first or pre-ataxic into the ataxic stage. He walks with the feet apart, but the gait is not distinctly ataxic. The crises,—spasm of the glottis and painful attacks through the rectum, penis and scrotum, are not very common, the gastric crises being met with more frequently. The mood of this patient and his nervous attacks and irritability suggest that some of the sensory links of the higher association arcs are involved, that is, that paresis might be looked for later, though the absence of the Argyll-Robertson pupil argues somewhat against it. His hand-writing, too, suggests this, for besides the ataxic tremor he cannot write and spell Massachusetts correctly though he has had a fair education. There is apparent weakness due to the muscular inco-ordination. There is also a hyperaesthetic band extending around the body for about five inches below the crest of the iliae, corresponding to the distribution of the twelfth dorsal and the first lumbar segment of the cord, and similar bands above corresponding to the fourth and sixth dorsal cord segments. The prognosis is of course bad, but much can be done in the line of palliation. Hydrotherapy, especially warm tub baths, are of use, and if the patient can live in an even, dry climate it brings comfort. Dampness and cold spells are badly borne.

It is stated that about 80% of the cases are post-syphilitic; and a systematic course of inunction and iodides should be tried whenever a history of chancer can be elicited.

The consensus of opinion so far, regarding Erlich's "606" Salvarsan is that it is of great use in the primary and secondary and tertiary lesions. It has not, however, proven of much benefit in the post-syphilitic affections. Remedies should be given on their indication. This patient is taking causticum at present, which has helped his dribbling urination. Electricity is said to be of little use, but I have been able to give one patient much comfort with the Morton wave-current from a static machine. The patients who suffer from stomach disturbances and gastric crises are apt to get dietary hobbies, but they probably do little good and may do much harm as such patients need much good nourishment. An open air life and wholesome diversion should not be neglected.

Case V. for Diagnosis:

The patient is a man 40 years old. His family history and his own early history are unimportant. Venereal disease is denied. He is unmarried, musical and a well-educated American in active business. The last of January of this year he had a disfiguring mark an inch or so square removed from about the middle dorsal surface of his left forearm. In order to make it bloodless a tourniquet was placed tightly above the elbow, the buckle pressing deeply in at the inner border of the lower third of the biceps. No anaesthetic was used. The skin was incised down to the fascia and the mark removed. By blunt dissection the skin was then loosened up and brought together and stitched. All this consumed about an hour. When the tourniquet was removed the hand hung loose at the wrist. There was complete inability to extend the hand or fingers or to supinate the forearm. Sensation was blunted but not destroyed. For three weeks static and high frequency sparks were applied daily without benefit.

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When first seen touch, temperature and pain sense were normal, except that light touch was not felt over the palm. He said the left fingers felt numb. No tendon reflex could be elicited at the wrist or elbow, but they were normal elsewhere. The left forearm was atrophied, and the muscles flabby. The extensor and supinators responded very feebly to a strong foradic but fairly well to the galvanic current; i. e., there was a slight partial reaction of degeneration. The patient could, of course, not use the hand or pick up even light objects in the fingers. There was a peculiar laxness of the wrist ligament and the hand took the position of a silver fork fracture.

What are the diagnosis, prognosis and treatment of this case?

Because of the paper on Mental Complexes which follows, kindly written by Mr. Ricker, one of the assistants in Professor Munsterburg's course, our paper on "What Do We Need to Know Clinically About the Mind" is omitted this month, but will be continued in the next issue.

THE MENTAL COMPLEX AND ITS PRACTICAL SIGNIFICANCE.

By Charles Sherwood Ricker, A.M.

There is little need today for any elaboration of psychological principles in any presentation of new experimental data before the medical fraternity. The regular practitioner is now beginning to realize that the experimental results of this comparatively new science do offer valuable and clarifying facts to the study and treatment of disease. Hardly two decades have elapsed since the neurosis was the sole concept of the physiologist and the practising physician. Now they realize that the accompanying psychosis (and in the majority of instances there is one) is a valuable diagnostic aid. It is about one of the more recently established facts in the mental realm that I wish to speak now and endeavor to show wherein it presents great practical significance to the physician interested in the fields of psychopathology and neuropathology.

The mental complex is a recently accepted unit of consciousness, and for this reason has received little treatment in the literature of psychology. It may be defined as a consistent and largely habitual grouping of sensations, feelings and ideas about a central or "nucleus" sensation, feeling or idea. As the greater part of the experimental work has been done here, in connection with associations, I shall confine myself to certain data showing the structure of the mental complex in some recent research work in the voluntary suppression of ideas. I had found in this research work that by certain methods suppression was possible and even very effective at times, and that the suppressed idea apparently passed into the truly amnesic realm. I became curious at this point to find out if possible exactly where the idea had gone, whether it had been merely pushed from the foreground of consciousness, or whether it took on the aspect of a

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lost or forgotten association. I was curious, too, to know, if this idea was not lost, whether it had grouped itself heterogeneously or associationally.

The method used finally was one analogous to the hypnoidal tests. A metronome was set in motion, and the subject was asked to write down a word for every tick. As a matter of fact, the metronome was set a little too fast for the subject to really keep time with it, and in the course of about two minutes the whole concentrated attention of the subject was devoted to the physical effort of trying to carry out the wishes of the experimenter, and the writing itself, so far as attention and will went, was practically automatic.

These tests, extending over periods of from three to five minutes (usually up to the time of a definite fatigue process or a fear on the part of the experimenter that the condition of the subject was approaching the first stages of hypnosis) brought out some new and interesting facts concerning these ideational groupings.

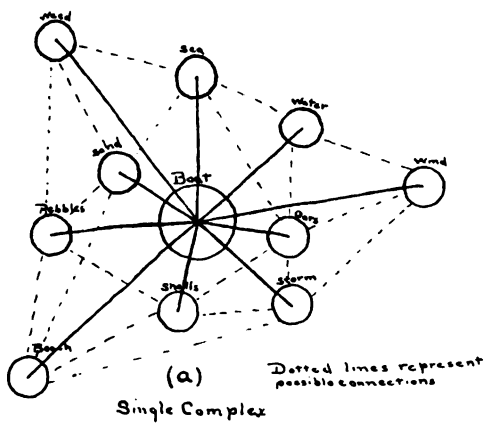
In the first place, we always have a nucleus idea in every complex. It may not necessarily be the first association in the complex; it might appear second, sometimes in the middle, and occasionally at the end. It is characterized by a strong emotional tone, and from the introspection which I was able to gather from the subjects in these experiments, recency and vividness were the determinants of its position. The immediately adjacent associations are almost wholly determined by place and time. It is not infrequent to have both the nucleus idea and its surrounding associations appear more than once in a given mental complex. In many instances, too, these mental complexes were delineated in a curious sort of way. At the end of a series of associations about a nucleus idea, there would appear an unrelated word, sometimes two, and then a return to the former, or some other complex. Such a state of affairs I have characterized as an hiatus. In nearly every case, such an hiatus is traceable to the fluctuation of attention, and follows the curve of such normal fluctuations very closely. Sometimes the tick of the metronome is the disturbing factor, and the word "tick" or "sound" expresses the hiatus. Many times objects about the room were the interposed words breaking the continuity of the association group, and occasionally the unrelated word would be of an indefinite and inexplicable nature, offering no introspective data to the subject nor any reason for its position in the general context of the group, to the experimenter.

Although the distance between two given hiatuses may be said to be co-extensive with the attention wave, there were some strange contractions and expansions at times. Perhaps the first presentation of a mental complex would contain only four asso-

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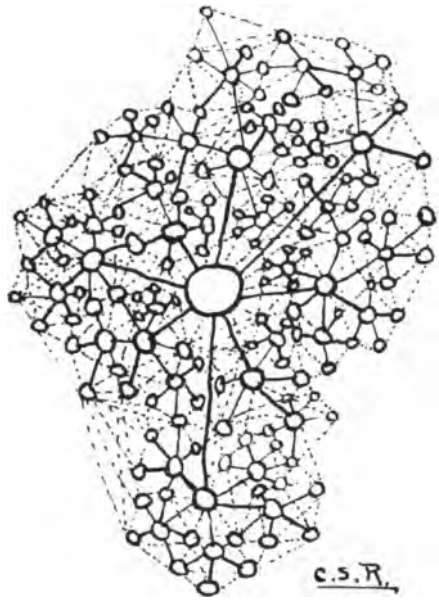
ciations and then suffer a break. The next time it occurred there might be seven associations, and finally upon a third appearance there would be eleven, and that maximum would never be increased. There were times after the maximum was reached that the complex would occur again, containing only the nucleus idea and three or four associations around it. In such instances the experimenter felt that these ideas formed the basic structure of the mental complex itself. The following series of complexes will give an idea of some of the points just referred to. The hiatus will be preceded in each instance by a capital H. The italic word is the nucleus idea.

(*Boat*, sand, sea, salt, water, rocks, pebbles, shells, sea, cloud, rain, sea, weeds), H-girl, man (*boat*, house, sand, sail, sailor, salt, water, land, rocks), man, H-boy, girl, cow, dog (*boat*, sand, sea, salt, water), H-girl, boy, house, men, trees (sand, sea, storm, sea, *boat*, hulk, wreck, oars), H-tick, tock (oars, wood, splinters, wreck, *boat*, sand), H-girl, weep, man, sound (sea, salt, water, cloud, wind, storm, rocks, shells, wreck, hulk, oars, *boat*, sand, sea, weeds), H (girl, weeping, drowned, sad, sailor, lover, brother, sister, *girl*, looking, longing, sighing), H-sound, cough, tick, tock (wreck, hulk, *boat*, sand, sea, salt, water, weeds, rocks, pebbles, shells, storm, cloud).



It will be seen here that what at first appeared to be an hiatus turned out to be a closely related complex, and this fact brings to mind a point which should have been mentioned in the discussion of the general structure of the complex, namely, that mental complexes are for the most part connected to one another by distant associations. The diagram showing figure a and b tells how the mental complex may be plotted and how a series of such complexes would fit together.

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(b)
Group of Complexes.

For the physician this test offers great possibilities. It may be put into operation where the psycho-analytic method could not be used, either because of lack of training on the part of the physician or because of resistance on the part of the patient. It may also replace the now familiar association test and fill up gaps whose only clue to a possible suppression is an abnormally long reaction time, and has been demonstrated as successful in certain cases of negativism where the association test was useless. It is undoubtedly a slower method of getting at the desired facts than is the association test, but it has the two advantages of giving far more details than the latter, and it induces that passive hypnoidal state which is definitely advantageous in any search for suppressed complexes.

A word should be said here about a confusion that has recently arisen as to the difference between a mental complex and a psychic complex (really a psychophysical attitude and misnamed a psychic complex). The mental complex I have already defined. The attitude is a motor setting capable of becoming active and expressing itself, either through an initial peripheral or central excitation. It has come to be confused with the mental complex, largely, I believe, because of its volitional origin. Atti-

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tudes come into being almost wholly through purpose, or a desire to behave or think in a certain way under given conditions. Once an attitude becomes established and has conscious concomitants, it may be said to be a mental complex, but it then has all of the characteristics of a habit and no longer needs purpose or volitional conditions to set it free. It is possible, too, to conceive of a mental complex which has come into being through volitional effort, but the moment it is an established mental complex it becomes automatic so far as its presentation is concerned. As the greater part of our associations are formed without any assistance from the will, and as the grouping of these associations into their new units of consciousness (i. e., mental complexes) seems fairly well established, we may safely conclude that these mental complexes need no purposive activity and for the most part have none to induce their expression in the foreground of consciousness.

Only a word remains for a brief survey of this new unit. The physician can be of inestimable value not only to his associates but also to the psychologist, if he will only put into practical use this mental complex test. The values which would be immediately forthcoming are fourfold. In the first place, no matter how abnormal the individual may be who is undergoing the test, the physician is obtaining far more normal conditions than the psychologist can ever hope to reach in the general artificiality of laboratory work. Secondly, he has a ready means for obtaining a large number of results and the consequently greater value coming from conclusions reached through these results. Thirdly, trained as the physician is on the practical side of mental and physical conditions, he is the better able to judge the practical points of value in the test itself and in the individual variations that are bound to arise. And, lastly, he will be able to correllate certain differences of expression and structure in the complex, which may be considered as symptomatic of a certain psychopathic condition, if not an established neuropathic condition. Once the physician comes to the point where he can and will make a careful analysis of the mental states accompanying certain diseases, then will Applied Psychology have received its deserved impetus, and then will the unworthy attacks upon the applied psychologist from his own co-workers on the theoretical side get a lasting quietus.

The announcement is made that the Keene Research Fellowship of Jefferson Medical College has an accumulated income from which an annual grant of $1,000 can be made. This fellowship will be awarded only to graduates of Jefferson Medical College who have been in practice not less than one and not more than ten years. The fellow thus elected must spend at least one year in such an institution where he can obtain the best facilities for the particular work under investigation.

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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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ARTHUR H. RING M.D., Assistant Editor.

Reports of Societies and Personal Items should be sent in by the 15th of the month previous to the one in which they are to appear. Reprints will be furnished at cost and should be ordered of the Business Manager before article is published.

CLINICAL WEEK AT BOSTON UNIVERSITY.

The annual clinical week exercises at the Medical School of Boston University will be held this year during the week immediately preceding the meeting of the Institute at Narragansett Pier, or from Monday, June 19 to Saturday, June 24, inclusive. As in past years it will consist of six clinics, lectures or demonstrations daily, each one hour in duration, covering a large variety of subjects allied to medicine. It will be different from its predecessors, however, in that in place of all of the exercises being given by members of the Faculty, a number will be placed in charge of eminent teachers from other parts of the country. In fact, a majority, if not all of the sessions, will be thus manned by visitors, many of whom are brought to Boston by the Institute meeting.

Already about fifteen letters of acceptance have been received from men whose names are household words to every one of us, with quite a number yet to be heard from. With the co-operation of such men as Halbert, Tenney, Fisher, Dewey, Phillips, Wood, Laidlow, Dearborn, Burrett and Carmichael, the guarantee of a strong representation of visitors is assured.

As in the past the course will be free to all physicians of whatever school or form of medical belief. The tickets will be limited to two hundred and fifty, which, if the result of past years is a criterian, will be applied for comparatively early.

As this seems to be an unusual opportunity for our readers to take advantage of this combined course representing the best of several medical schools, we urge those who may be able to attend to apply for tickets early and thus be sure of not being disappointed at the end.

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SALVARSAN—"606"—EHRLICH-HATA PREPARATION.

The much-lauded specific for syphilis, discovered by Prof. Paul Ehrlich and his associate, Hata, and called by them "606," after the number of the preparation to be tested, having been duly patented and protected, was placed upon general sale during the first week of January last. Never before, with the possible exception of tuberculin, has any medicinal product been given such wide-spread publicity, not only in medical journals but in all forms of periodicals from the daily press to the quarterly reviews. Claims of the most extravagant nature have been made for its curative powers, and it is probably no exaggeration to state that the world has been expectantly awaiting the time of its public sale. If the product had been advanced merely for purposes of commercialism it could not have received better advertisement than has been given to it. It is stated that its production is so exacting in detail that Ehrlich decided that it be prepared by only one firm and accordingly patented it under the name of Salvarsan. At the same time we learn that the profits are to be divided between the manufacturers and Speyer house. Of course the former merit moderate profit, but why the price should be made so high as to bring an income to an outside concern, however meritorious that concern may be, is not explained. Incidentally from various sources comes the statement that the stock in this manufacturing firm has more than doubled in value since the patent was taken out. This, of course, has nothing to do with the merit of the drug itself. An earlier editorial in the *Gazette* sounded a note of warning against too great enthusiasm before the facts were all fully known, and at the present time we desire to repeat it.

As with tuberculin, so with salvarsan, all the early reports were most optimistic. Only one treatment was necessary, not merely to destroy the spirochaeta but to repair in a few days the pathologic lesions of months' or years' duration. No case, apparently, was too far along or too severe to be beyond the certainty of cure. Then we began to hear of some refractory cases that did not respond readily or even at all. Shortly after the advisability of repeating the dose was suggested. Some did this two, three, or more times. It was then found that in lesions where the spirochaeta were immediately driven away, they sometimes returned after a varying interval. Again lesions, at first healed, started up again. Then certain unaccountable deaths were heard of, following the use of the drug. And finally, horror of horrors, some cases entirely refractory to salvarsan were readily and quickly cured by the older mercurial methods. At the present time—chaos. Every writer seems to present a different idea about it. Some assert that the original claims of Ehrlich are fully substantiated in all detail, forgetting, apparently, that Ehrlich himself now recognizes certain modifications. At the opposite extreme others say that salvarsan is not more beneficial than the now recognized methods, particularly the mer-

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curial. As usual, the truth doubtless will be found at some intermediate point. Let us hope that it will not require fifteen years to determine that point, as was the case with tuberculin.

In a recent article in the Journal of the American Medical Association for January 14, 1911, Pusey of Chicago states his present opinion of the value of the drug as follows:

"There is good ground for the belief that a larger proportion of serious accidents are occurring than would be estimated from the present literature. And that serious accidents should occur is not surprising. Salvarsan is the lineal successor of atoxyl, soamin and arsacetin. All of these were introduced as safe, arsenical preparations—atoxyl so safe that its atoxic character was 'blown' as it were in its name—and all have a train of arsenical fatalities and optic atrophies in the wake of their use in therapeutic doses. Salvarsan has about 35 per cent. arsenic content; it is administered in an average dose of half a gram—8 grains—that is, a dose of 2.8 grains of arsenic. There is no doubt that such a dose of arsenic has in it immediate possibilities of optic atrophies and other dangers. The dangers of its use, however, are as nothing in the face of a severe syphilitic crisis, or if the remedy were able to cure syphilis.

"There is great diversity of opinion about technic of efficient administration, with much striving for a new technic that will be more effective. Injections in neutral emulsion, in alkaline solution, or mixed with oil, into the subcutaneous tissue, into the muscles, or into the veins, or combinations of these various methods of administration are succeeding each other. The hope of a therapia sterilisans magna—the complete destruction of the spirochetes of syphilis in an infected patient—is practically abandoned, and two or three or more injections are being used. And, finally, the recommendation of the use of salvarsan and then mercury, as heretofore, is the last evidence that the new agent is not equal to its proposed mission.

"It cannot be emphasized too strongly that the situation with 606 is still experimental—and more experimental than it was thought to be when the drug was introduced. Its position is not established; the degree of its usefulness—even of its immediate usefulness on the active manifestations of the disease—is not established. The amount of beneficial effect it will have on the after-history of syphilis is, of course, with our present brief experience with 606, purely theoretical—with grounds existing for different theories. Our present experience shows that it does not cure syphilis, and that we are not justified in holding out to patients any hope of cure by it, but that it is likely to prove a useful remedy in syphilis, with mercury, however, as before, our chief dependence."

Mr. and Mrs. William D. Sloane have recently contributed a surgical department to the Sloane Maternity Hospital of Columbia University. It has been erected at a cost of more than $200,000, is eight stories high and contains an operating amphitheatre entirely of marble.

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BOOK REVIEWS

Clinical Diagnosis. A Text-Book of Clinical Miscroscopy and Clinical Chemistry for Medical Students, Laboratory Workers and Practitioners of Medicine. By Charles Phillips Emerson, A.B., M.D. Late Resident Physician, The Johns Hopkins Hospital; and Associate in Medicine, The Johns Hopkins University. Second Edition. J. B. Lippincott Company. Philadelphia and London.

This is the latest and without doubt the most complete book upon a subject of constantly increasing importance. The earlier edition made an excellent reputation in a field already well covered.

The entire subject of clinical laboratory diagnosis is covered in a manner that is decidedly practical. After a first chapter upon sputum comes a very full section upon the urine, covering in all nearly two hundred and fifty pages. Next in importance to this comes the chapter covering the subject of haematology. As in all such tests one might take issue with the author concerning certain isolated ideas, but the general arrangement is excellent. Thus, to illustrate: the Talquist haemoglobinometer is criticised very harshly in spite of its well-known clinical worth, which is attested by no less an authority upon the subject than Cabot. Certain other minor points might be taken up. A more important question comes, however, in the matter of practical adaptability of the book to the needs of the physician. It would seem that a somewhat greater emphasis might be well placed upon those tests, particularly in uranalysis, that any general physician might be able to perform even if it had to be at the expense of some more complicated investigations.

Taken all in all, we have here probably one of the best printed books in the English language covering the work of the clinico-pathological laboratory.

Many of the illustrations are excellent.

Leucorrhœa and Other Varieties of Gynæcological Catarrh. A Treatise on the Catarrhal Affections of the Genital Canal of Women: Their Medical and Surgical Treatment. By Homer Irvin Ostrom, M.D., Surgeon to the Metropolitan Hospital; Surgeon to the Hahnemann Hospital. Author of "A Treatise on the Breast and Its Surgical Diseases," "Epithelioma of the Mouth," "The Diseases of the Uterine Cervix." Boericke & Tafel, Philadelphia, Pa., 1910.

This little booklet contains a lecture treatise upon a topic that is often of great importance to the practitioner. It gives a classification of the various types, a short and rather clear description of each, and notes upon treatment, local and operative. The final chapter is devoted to suggestive therapeutics and a repertory, and from the standpoint of the homœopath is the section that will be of most value for reference.

Compend of Gynecology. By William Hughes Wells, M.D., Associate in Obstetrics in the Jefferson Medical College; Assistant Obstetrician in the Jefferson Medical College Hospital; Fellow of the College of Physicians of Philadelphia, Etc. Fourth Edition, Revised and Enlarged, with 153 Illustrations. Price $1.00 net. P. Blakiston's Son & Co., Philadelphia, 1911.

The quiz compend series published by Blakiston is familiar to every recent medical student and the value of the individual issues is beyond possibility of cavil. The present one, now in its fourth new dress, does not differ in essentials from the others in merit and the present attire is not very unlike that of its past appearances.

Diseases of the external genitals, of the vagina, of the uterus, of the tubes and of the ovaries are all taken up seriatim while an additional chapter upon vesical and urethral disorders is found in the very end.

A number of illustrations are included, some very good but a few bad and better omitted, particularly the one on p. 94.

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The book will be of no special service to the practitioner; it is not intended to be. It will enable one to give himself a very efficient quiz upon an important subject such as is necessary prior to examination in college or before state board.

In general appearance it is uniform with the series and is very compact for pocket use.

Practical Dietetics. With Reference to Diet in Disease. By Alida Frances Pattee, Graduate Department Household Arts, State Normal School, Framingham, Mass.; Late Instructor in Dietetics, Bellevue Training School for Nurses, Bellevue Hospital, New York City. Sixth Edition, Revised and Enlarged. Price $1.50. A. F. Pattee, Publisher, Mount Vernon, New York, 1910.

During the past eight years six editions of this book have appeared for each of which a very evident demand has been noticeable from medical and non-medical sources. The book, we are now told, has been adopted as a text for nurses in a large number of hospitals throughout the country. It has been favorably commented upon in the *Gazette* in its earlier editions and the present one fully justifies the favorable things expressed concerning it heretofore.

It takes up the subject of food and cooking from a strictly scientific standpoint and clearly demonstrates the various nutritive values of food in its various preparations. A large number of recipes is given. The last part covering hospital dietaries, diet in disease and feeding of infants and young children, will be of particular value to the medical profession in so far as it is interested in dietetics.

Case Histories in Pediatrics. A Collection of Histories of Actual Patients Selected to Illustrate the Diagnosis, Prognosis and Treatment of the Most Important Diseases of Infancy and Childhood. By John Lovett Morse, A.M., M.D., Assistant Professor of Pediatrics, Harvard Medical School; Associate Visiting Physician at the Infants' Hospital and at the Children's Hospital, Boston. W. M. Leonard, Boston, 1911.

The method of class instruction by case teaching has been one of the distinct advances in the didactic medical world, proving in the larger proportion of the work decidedly more beneficial than the usual lecture. So far as we have noted recent books, it has not as yet been widely applied in printed works in medicine. Such is the present book, however, based, we presume, largely upon similar instruction given verbally by the author to his classes. A total of one hundred cases has been taken and classified so as to cover all the important topics and classes of disease of particular value in pedology. Each case is carefully described as to history, present condition, physical examination, diagnosis, prognosis and treatment. Twenty-nine cases are given illustrative of gastro-enteric diseases, all of which are freely and fully discussed. Other conditions such nutrition disturbances, infectious diseases of the lungs, head, liver, kidneys and nervous system are included. The book should prove to be interesting reading, although one misses the regular sequence with which he is familiar in the usual books upon the subject. Coming from this author the various statements are very authoritative.

It is unfortunate that illustrations were attempted, as the very limited number are almost of microscopic size, not well prepared and entirely inadequate. Upon the whole, the book will probably receive, as it doubtless deserves, a quite favorable acceptance by a large number of physicians.

Hughes' Practice of Medicine. Including a Section on Mental Diseases and One on Diseases of the Skin. Tenth Edition Revised and Enlarged. By R. J. E. Scott, M.A., B.C.L., M.D., Attending Physician to the Demilt Dispensary; formerly Attending Physician to the Bellevue Dispensary, New York. With 63 Illustrations. Price $2.50 net. P. Blakiston's Son & Co., Philadelphia, 1911.

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This volume is one of the leather-bound series of medical manuals published by Blakiston. Other members of the group already noted in these columns are Green's Medical Diagnosis, Sluss' Emergency Surgery and Thorndike's Orthopedic Surgery. Without question the best known of these is Hughes' Practice. It brings up many associations to the reviewer of his earlier work in medicine as a student and of the confidence that he felt when turning to this book for information. It has received and has undoubtedly richly deserved very cordial commendation from the medical profession throughout the country. The present, which is the tenth edition, has been considerably enlarged and several complete sections have been added. In several instances we might take distinct exception to statements particularly along the line of treatment. It would seem, for instance, that the emphasis given to the use of whiskey, brandy and other alcoholics in treatment of tuberculosis is not justified by the results of later investigation and clinical experience. In view of much recent work with tuberculin we are rather surprised to note that the initial dose of the refined product is given, at least by presumption, as about .2 milligram, because by almost universal concensus of opinion the present dosage begins at about .0001 of a milligram. Certain statements might be emphasized with much benefit. One is: "Be guided by the fact that you are not to treat pneumonia but a patient with pneumonia." Another concerning the open-air treatment of pneumonia: "Fresh air bears about the same relation to canned oxygen that good porter house steak does to embalmed beef." A large number of physicians will not agree with the unqualified statement that "there is no remedy that can exert a favorable influence upon the pneumonic process."

Apart from these minor points, however, such as may probably be found in almost any book, we feel that this manual deserves hearty commendation. Most of our readers are doubtless already familiar with the earlier editions, and we believe that those who procure the present one will be equally as well satisfied as those who obtained the earlier ones.

A Manual of Physical Diagnosis. By Brefney Ralph O'Reilly, M.D., C.M. (F.T.M.C., Toronto; M.R.C.S., Eng.; L.R.C.P., Lond.); Demonstrator in Clinical Medicine and in Pathology, University of Toronto; Assistant Physician to St. Michael's Hospital, Toronto; Physician to Toronto Hospital for Incurables. With 6 Plates and 49 Other Illustrations. Price $2.00 net. P. Blakiston's Son & Co., Philadelphia, 1911.

In these modern days, when diagnosis is the ultimate sum of so many and an earnestly sought objective of all, any book enabling one to attain a greater degree of skill in this aim is to be commended. In the book now under consideration the author has attempted to bring together into a small compass the most important diagnostic measures of clinical medicine and of the laboratory combining the same in proportion to their true worth. The general plan as laid down and followed appeals to the reviewer as an excellent one.

Following the clinical history comes the actual centre of the entire work, the general inspection with its various connecting branches along special lines. Special directions are then given for more minute examation of the skin, the respiratory, the circulatory, the digestive, the genito-urinary and the neuro-muscular system. Additional chapters are prepared upon topographical anatomy, upon hæmatology, uranalysis and various other laboratory methods.

The book is well written throughout, not in a single flowing manner but of necessity in short concrete paragraphs. We have studied it with much interest and as a result sincerely believe that any one, be he general man or specialist, will be better able to pursue his work by an accurate knowledge of the material herein contained. The few illustrations vary much, many of the wood cuts being rather poor, but the colored plates are very commendable.

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Progressive Medicine. Vol. 1, March, 1911. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 355 pages, with 18 engravings. Per annum, in four paper-bound volumes, containing over 1,200 pages, $6.00 net; in cloth, $9.00 net. Lea & Febiger, Publishers, Philadelphia and New York.

The March number brings some very interesting reading. In the surgical section the article upon the thyroid gland is of much value, while in that upon infectious diseases the resumés of poliomyelitis, typhoid fever and tuberculosis are of particular worth. In otology a report of the papers of the recent Congress is given, in which the vaccine treatment receives warm praise. Other sections cover laryngology, rhinology and pedology and are of the usual grade of excellent merit.

THE MONTH'S BEST BOOKS.

Clinical Symptomatology. Pick & Hecht. $6.00. D. Appleton & Co.

Vicious Circles in Disease. Hurry. $2.00. P. Blakiston's Son & Co.

Enlargement of the Prostate. Moullin. $1.75. P. Blakiston's Son & Co.

Gynecologic Surgery. Berkeley. $5.00. Funk & Wagnalls Co.

Diagnostic and Therapeutic Technique. Morrow. $4.00. W. B. Saunders.

SOCIETIES

BOSTON HOMOEOPATHIC MEDICAL SOCIETY.

The regular monthly meeting of the Boston Homœopathic Medical Society was held on Thursday evening, April 6, in the Natural History rooms on Berkeley street, Boston.

The program of the evening was as follows:

A Study of Hydrocyanic Acid, by Walter Wesselhoeft, M.D.; Perforations in Typhoid Fever, by Charles H. Thomas, M.D.; Empyema, by William F. Wesselhoeft, M.D.

The following named were proposed for membership in the society: Susan M. Coffin, M.D., Nathan M. Goodman, M.D., Fredrika Moore, M.D.

NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS.

At the 21st annual convention of the National Confederation of State Medical Examining and Licensing Boards, recently held in Chicago, the following officers were elected: President, Dr. Charles A. Tuttle, New Haven, Conn.; First Vice-President, Dr. James A. Egan, Springfield, Ill.; Second Vice-President, Dr. A. B. Brown, New Orleans, La.; Secretary-treasurer, Dr. George H. Matson, Columbus, Ohio; Executive Council: Dr. N. R. Coleman, Columbus, Ohio; Dr. James A. Duncan, Toledo, Ohio; Dr. Charles K. Cook, Natick, Mass.; Dr. Joseph C. Guernsey, Philadelphia, Pa.; Dr. W. Scott Nay, Underhill, Vt.

AMERICAN MEDICAL EDITORS' ASSOCIATION.

The 42d annual meeting of the American Medical Editors' Association will be held at the Alexandria Hotel, Los Angeles, Cal., June 26 and 27, under the presidency of Dr. J. MacDonald, Jr.

Unusual efforts are being made for this annual convention, and members are urgently solicited to be present. Plans already matured enable the executive committee to assure those who will attend a most interesting session both from a literary as well as a social view-point.

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INTERNATIONAL HAHNEMANNIAN ASSOCIATION.

The International Hahnemannian Association will meet June 21, 22 and 23, at the Hotel Brunswick, Asbury Park, N. J. All physicians practicing and interested in the Homœopathy of Hahnemann, Bœnninghausen, Hering, Lippe, Dunham, Farrington, are invited and urged to attend and help make this, the thirty-second annual meeting, the most successful in the history of the association.

While the homœopathic law is as true today as when first promulgated by Hahnemann, and its employment attended by as good results—better than under any other treatment—yet the erroneous opinion prevails that the law is difficult of application. Hence there is recourse to unhomœopathic methods, attractive because of ease in selection of treatment, which is based, in almost every instance, on the disease name.

It is expected that this most important matter will be dealt with at the meeting, and illustrations given of simplified, easily understandable ways in which the similimum may be readily found.

The chairmen of the various bureaus report the promise of interesting and valuable papers; that much enthusiasm is manifest. A good attendance and a profitable meeting is thus assured.

The bureau chairmen, to whom communications may be addressed, are:

Homœopathic Philosophy—Dr. Frank Wallace Patch, Framingham, Mass.

Materia Medica—Dr. Margaret Burgess-Webster, 1703 Chestnut street, Philadelphia, Pa.

Clinical Medicine—Dr. Richard Blackmore, Bellevue, Pa.

Homœopathic Treatment in Obstetrics—Dr. William H. Freeman, 263 Arlington avenue, Brooklyn, N. Y.

Homœopathic Treatment in Surgery—Dr. Henry L. Houghton, 419 Boylston street, Boston, Mass.

The hotel rates are as follows: One person, single room, without bath, $3 per day; with bath, $4 per day. Two persons, double room, without bath, $6 per day; with bath, $7 per day.

MAURICE WORCESTER TURNER, President.

Brookline, Mass., April, 1911.

OBITUARY.

Dr. E. E. Whitaker, for thirty years in active practice in Newport, Vermont, died in Montreal General Hospital on March 25, of pneumonia, following operation for cancer of the tongue. Dr. Whitaker was born in Lawrence, Mass., in 1848, and received his medical education at Long Island Medical College, New York, and at Hahnemann Medical College of Chicago. He was a prominent and useful citizen and an able and successful physician. He was deeply interested in the civic and educational welfare of the community and was for many years health officer of the town of Newport, serving also on the school board and as village trustee. He will be greatly missed as a wise physician and friend.

Dr. Roland A. Davis (class of 1893, B. U. S. M.) died suddenly on April 19, at his home in Somerville, Mass., aged 65 years.

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PERSONAL AND GENERAL ITEMS.

TO LET. For a part or all of the month of June a six-room cottage on an excellent bathing beach and within about one hundred yards of yacht club at Point Independence, Buzzards Bay; running water and sewer connection. Rent cheap. Apply to Dr. W. H. Watters, 80 East Concord St., Boston.

One of our number, Dr. Mary R. Lakeman of Salem, Mass., has for the past five years been conducting at Holderness, New Hampshire, a summer camp for girls. Associated with her in the work is Elizabeth Mitchell Fessenden, an experienced physical director. The life of this camp is entirely out of doors. At night the walls of the tents are rolled up so that the campers are practically sleeping in the open. The girls eat outdoors. They work and play outdoors. They read and write outdoors. They live outdoors. Only rain drives them to the open fire of the cottage. The food is simple and wholesome. Pie tins and doughnut kettle are banished from the kitchen, and emphasis is laid on eggs, milk, cream, fruit and fresh vegetables.

The sports are swimming, diving, rowing, tramping, mountain climbing, active games, etc., and the greatest possible care is taken that no girl, however frail, shall overdo. Experience has abundantly justified the wisdom of these methods. The frail have learned what it is to be strong and well, and the strong have grown stronger. In spite of the active exercise the thin have grown fat, and sometimes the fat have had the satisfaction of growing thinner.

Such camp life as this is we believe the best means of counteracting the evils which result from the high tension at which our young girls are living through the winter season. A number of the medical brethren and sisters have expressed their approval of this mode of living by sending girl patients into the wilderness for the nine weeks of the camp season, and their enthusiasm over results has been as warm as that of the delighted parents.

Dr. Alonzo G. Howard has removed his offices, gymnasium and workship from 520 Commonwealth Avenue to a much larger and better location in The Belvoir, 636 Beacon St., corner of Raleigh St., Boston.

Dr. P. J. Haigis, of Foxboro, Mass., was married recently to Miss Ruth Hodges. During Dr. Haigis' temporary absence from home his practice was taken by Dr. Denny W. Livermore.

The June meeting of the Maine Homœopathic Medical Society is planned to be of unusual interest. Dr. John T. Palmer, the president, has been travelling throughout the State arousing enthusiasm. It is planned to have the session extended over two days instead of one as in the past. The first day will be devoted to a business meeting, and later to a sail down the harbor of Portland and a dinner at the Peak's Island Hotel. The second day there will be a clinical meeting at the Trull Hospital, in which Dr. N. W. Emerson, of Boston, and Dr. W. V. Hanscom, of Rockland, Me., will participate.

Dr. Arthur H. Ring, of the Arlington Health Resort, has opened an office at Warren Chambers, 419 Boylston street, Boston. Hours: 11 to 1, daily, except Thursdays and Sundays. Practice limited to nervous and mental diseases.

Dr. Elizabeth E. Shaw, of Brookline, was married on April 10 to Waldemar H. Ritter, a nephew of Dean William F. Warren, former president of Boston University, and son of the president of the University of Zurich, Switzerland. Dr. Shaw is a graduate (magna cum laude) of Boston University School of Medicine of the class of 1905, and of Smith College.

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Dr. Robert Weller French (B. U. S. M., 1907) of Malden, was married at Wellfleet, Mass., on April 18, to Miss Grace Freeman.

Dr. Carl Crisand, for twenty-three years in practice in Worcester, Mass., has retired and removed to Brookfield, Mass. On the evening of April 8 the homœopathic physicians of Worcester met at the home of Dr. J. P. Rand to say good-bye to Dr. Crisand and to welcome his successor, Dr. John E. Willis (B. U. S. M., 1898) who left Somersworth, New Hampshire, to take up Dr. Crisand's practice. In token of the friendship of his colleagues, Dr. Crisand was presented with a handsome sterling silver pitcher, suitably engraved. Dr. Crisand has built up a large and successful practice in Worcester and will be greatly missed from the city.

The office and practice left vacant by the death of the late Dr. Osmon Royal, of Portland, Oregon, have been taken by Dr. Chas. Billington, B. U. S. M., 1903.

The Gregory Society of B. U. School of Medicine in carrying out the work inaugurated last year, has given a number of lectures to women on subjects of general hygiene. Dr. Mary E. Mosher and Dr. Grace G. Savage have given lectures to Mothers' Clubs at the South Bay Union, and Dr. Susan M. Coffin to a Girls' Club at Shawmut Congregational Church. Other lectures have been given at mothers' meetings in the public kindergartens by members of the student body. In addition to this work warm clothing has been provided for needy babies, and in cases of financial inability prescriptions have been filled.

Dr. Denny W. Livermore, B. U. S. M., 1908, has removed to Walpole, Mass.

A graduate of Boston University School of Medicine who has had considerable experience in laboratory and in hospital work is desirous of obtaining summer work in general practice or in pathology during the months of June, July, August and September. Any physician desiring a substitute for a longer or shorter period of time may obtain further information by addressing Dr. W. H. Watters, 80 E. Concord street, Boston.

The sum of $250,000 has recently been donated by Mr. and Mrs. W. C. Osborne to the Bellevue Training School for Nurses for the purpose of erecting a club home and registry for nurses of that institution.

It is reported that in accordance with the recent ruling of the Johns Hopkins Hospital, all members of the medical and surgical staff will be required to give up private practice and to devote their attention exclusively to hospital work.

The Children's Hospital of Boston is beneficiary to the extent of $25,000 by the will of the late Mrs. George Worthington of New York and Pittsfield.

The *Gazette* is in receipt of a little folder entitled "Retrospect and Forelook," emanating from Woodside Cottages at Framingham, Mass. Dr. Patch has within the last ten years certainly made a very attractive colony here, the buildings have increased from the original one in 1900 to six at the present date. Dr. Patch also announces that further enlargement and improvement is contemplated for the near future. We wish for him and his work all possible success.

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On March 18 the German Hospital of Philadelphia celebrated with appropriate ceremony the laying of the corner stone of the new addition to that institution, made possible by the recent gift of $100,000. This addition will include a maternity hospital and a nurses' home.

The Hahnemann Hospital of Philadelphia receives the sum of $5,000 under the will of the late Anton W. von Etassy.

FOR SALE.—A $5000 cash homœopathic practice for sale within easy access of Boston, in the best town in Massachusetts. Population, including tributary towns, over 20,000. First class roads; nolong drives. No homœopathic opposition. The present occupant is giving up practice because of failing health. An excellentopportunity for an energetic man. Terms for practice and first class new garage, $1000. Will accept half cash and balance secured, with six per cent. interest on deferred payment. Thorough introduction given to successor. Address "G. X. M.", care New England Medical Gazette, 422 Columbia Road, Boston, Mass.

THE TRIALS OF THE COUNTRY DOCTOR.—In the September number of Northwest Medicine, Appleby gives an article upon the above topic, particularly in relation to the specialist. As this approaches the subject in a somewhat different way from the accustomed ones, it is of decided interest. Among other things he says:

"Have you referred patients to the specialist? Surely you have, and may I ask, with what result? Let us suppose that you are a plain country doctor, attend all the family ills from lancing the baby's gums to confining the mother. Finally Willie visits the city cousin, snores during the night and perhaps wets the bed; he is taken to the specialist, his adenoids and tonsils removed, is deprived of his prepuce, the rectum dilated and lastly his eyes fitted with glasses; he returns home minus much of his anatomy and some cash, but proud that he can show the home doctor something that he doesn't know. In time other ills appear. The family doctor is called, watches by his bedside and nurses him back to health. However, his prestige is gone, and when Willie's appendix gives trouble, after a mess of green apples, he is rushed off to the city and the family doctor forgotten.

You have no doubt referred patients, after making a correct diagnosis, to the great surgeon who has spent months on the top seat of Mayo's, Senn's or Kelley's surgical clinic and viewed their work through a field glass, or possibly crossed the pond and spent many weary hours in the Latin quarter of Paris, took a jaunting trip through Ireland, seen London by lamplight, and lastly Berlin and Vienna, where the language and customs of the people are so familiar to him. . . . . .

There is a lack of good feeling and much professional jealousy existing between the country and city physician, mostly on the part of the country man, due often to the treatment received from the city brother. Why this jealousy? We graduate from the same schools, study the same text-books and treat the same class of cases. . . . . .

Some years ago I called to my assistance from the city an elderly, capable physician and gentleman, who carefully looked over my patient and said to the family during my absence: 'Your physician is handling this case in a satisfactory manner, his treatment is excellent, and I cannot suggest anything more. Follow his directions and you will no doubt recover.' At another consultation (different stripe of physician), after agreeing with another local physician and myself, the consultant secretly informed the patient that we were in error, and advised him to come to him in the city for treatment."

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THE NEW ENGLAND
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ORIGINAL COMMUNICATIONS.

THE PRINCIPLES OF HOMŒOPATHY IN PRESENT-DAY PRACTICE

By George F. Laidlaw, M.D., New York, Professor of Medicine in the New York Homœopathic Medical College and Flower Hospital.

Ladies and Gentlemen:—I am neither a preacher nor a prophet, as suggested by your president. I am a Diogenes come over from New York with my lantern to look for homœopathic principles in the present-day practice of Boston. Now, present-day practice is a broad term. I do not know how it is in Boston, but in New York present-day practice includes the wicked allopath, the good homœopath, the osteopath and the Christian Scientist. In which of these divisions of practice I am to look for homœopathic principles, the president did not say. I am sure that he does not expect me to look for homœopathic principles among the homœopathic physicians of Boston. As for the osteopath, he is like Lord Dundreary's bird of a feather. Having only one feather, he had to flock by himself. It is useless to look for homœpathic principles among the osteopaths and the Christian Scientists because the osteopath has only one principle and the Christian Scientist has no principles at all. At least, that is what I understood a distinguished ex-Senator to declare yesterday before the learned judges of Boston.

If I am not to look for homœopathic principles among the homœopaths nor the osteopaths nor the Christian Scientists, it must be that I am to look for them among the wicked allopaths, who constitute nine-tenths of the physicians of this country today. If you had invited me twenty years ago to look for homœopathic principles in allopathic practice, I would have replied that there was plenty of homœopathic practice among the allopaths but very little principle. What homœopathic practice there was among them was very unprincipled. It was petty larceny. There was plenty of copying of homœopathic cures into allopathic text books without the slightest credit for their origin. If I borrow an automobile tire from my neighbor's car because

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it is handy and I need it, the court might acquit me of stealing if I acknowledge that it was his and pay him for it; but, if I take a tire from his car and burn off the number and the name so that it cannot be identified and stoutly deny that it ever was his, that act might be termed larceny, and that is exactly what the allopathic authors of books on materia medica and therapeutics have done for the past thirty years. Ringer and Brunton and Bartholow and the rest are full of recommendations of aconite and pulsatilla and ipecac and tartar emetic in small doses for conditions in which the homœopaths have always used them, and Brunton, in relation to the mode of action of these drugs, even has the effrontery to say that he knows of no principle that explains how a drug can cure a disease that it is capable of causing. Therefore, I say that the allopathic literature and practice of the past thirty years has had plenty of homœopathic practice in it but none of its principles; for, the allopath recognized no therapeutic law on which these drugs were administered.

We homœopaths have known these things for many years and we have borne them with a patient shrug. We have even turned our injuries to good account and made Presidential Addresses out of them. Rosalind says that when good orators are out of matter, they will spit and when lovers are short of conversation, they will kiss. In like manner, when any homœopathic orator in the past thirty years has been short of ideas, all he had to do was to take down a copy of the most recent allopathic materia medica and belabor the poor author for stealing.

However, you did not ask me what happened thirty years ago, but what is happening today, and today I can give you a very different answer. Allopathic practice today begins to present the principles of homœopathy as well as the practice. When we see Koch and Wright and the shining lights of the allopathic school using tuberculin to cure tuberculosis and the poisons of boils and carbuncles to cure boils and carbuncles, when we see them using the most minute dose of the poisons of disease to cure that disease, when we see these things given not haphazard but *on the definite principle that the poison of a disease in minute dose is a cure for that disease,* we are then justified in claiming that not only the practice but the principles of homœopathy are appearing in allopathic practice.

However, in this new development of the allopathic school, we can no longer use the word larceny. The allopath did not get his use of the poison of disease to cure disease from homœopathic books. He developed this practice independently through the science of bacteriology. This to the homœopath is a cause of mingled shame and congratulation, shame because he himself neglected this fruitful field of therapeutics, and congratulation because the allopath with his newly-found bacterial therapeutics is verifying step by step every principle that homœopaths believe and follow.

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Let me bring before you clearly this difference in the line of descent of homœopathy and bacteriology. The chairman has reminded you of the chief events in the career of Samuel Hahnemann. During the early years of the nineteenth century, while Hahnemann was experimenting with his drugs upon the healthy and upon the sick, the pathologists were laying the foundations of modern diagnosis and pathology in Vienna, Berlin and Paris. Between the homœopath and the pathologist there has never been either sympathy or understanding. The pathologist has looked upon the homœopath as a visionary fanatic, while the homœopath always ridiculed the man who puttered over dead tissues in the autopsy room and the laboratory. So, through the nineteenth century, the school of homœopathic therapeutics and the school of diagnosis and pathology lived side by side but seldom intermingled. During this entire nineteenth century and to the present day, homœopathic therapeutics has undergone little or no change. Diagnosis and pathology, on the contrary, have undergone great changes and have moved step by step until today, through bacteriology, we see them assuming one of the old homœopathic positions of curing disease by a small dose of that which will cause disease. These successive steps were first the development of gross pathology by Morgagni and Bichat. Then came the microscope, the discovery of the animal cell and the founding of cellular physiology, which took place only in the nineteenth century. Next the work of Virchow in establishing cellular pathology. Lastly, through the further development of the microscope and cellular pathology came bacteriology, which found its first practical development in the hands of Pasteur and Koch.

Bacteriology differed from homœopathy in that it was not at first an attempt to cure disease. Bacteriology was at first a matter of hygiene, an effort to prevent disease. The ideal of bacteriology was the vaccination of Jenner, the prevention of disease by using a weakened virus or a similar virus. Bacteriology learned only accidently that the same virus that would prevent disease would also cure it; and in this way bacteriology entered the field of therapeutics.

The first practical cure made by the bacteriologist was the cure of diphtheria by its antitoxin. Now, at last, the homœopath sat up and took an interest in bacteriology, or the study of bugs, as he has always irreverently termed it. In this remedy, many homœopaths saw a verification of homœopathy, but the conclusion was premature. The action of antitoxin is a purely chemical reaction and has nothing to do with the homœopathic system. The question of dose distinguishes it at once. With antitoxin, the more you give the better, and the stuff is harmless in the majority of cases. In homœopathy, on the contrary, we use poisons in minute doses and are always afraid of aggravating the disease by a large dose.

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The next development of bacteriology was the anti-microbic serum. This, too, is purely chemical. It is given in large doses and cannot in any way injure the patient. This was not homœopathy either.

The next step in bacteriology was the use of the vaccine, the use of the very microbe that caused the disease to cure the disease. Here at last we find the principles of homœopathy entering allopathic practice. The bacteriologist soon learned by experience that these simple dead microbes were powerful remedies to be used in small doses at long intervals, with great danger of aggravating the disease by giving too large a dose. Thus it was that when the bacteriologist came to use his medicines in a homœopathic manner, he came to the same conclusions to which Samuel Hahnemann had come a century before. Thus it was that the well-known homœopathic principles of the small dose, the infrequent dose, the similar remedy and the medicinal aggravation from a large dose have been established by the bacteriologist in his laboratory entirely independently of the homœopathic school.

This does not mean that the homœopath has been asleep. Well-known and able bacteriologists among them, as Professor Watters, of your own city of Boston, vie with the best of the allopaths in their scientific investigation of these vaccines; but the work originated in the old school and has spread like a ferment among them, breaking up old prejudices and old practices of a thousand years. Vaccine therapeutics has done more to prepare the allopathic mind to accept homœopathy than the writings of all the homœopaths put together, ancient and modern.

Thus through petty larceny the practice and through bacteriology the principles of homœopathy have come into the allopathic school.

A final word to my homœpathic brethren. Some of them fear that because the allopaths have learned to cure a few boils and carbuncles with vaccines, the homœopathic school is doomed to extinction, that its mission is ended. I do not think so. The homœopathic school stands for something far greater than anything that the allopath yet knows. It stands for a simple and practical method of selecting the remedy in disease by provings on the healthy. This, to my mind, is the greatest work of Samuel Hahnemann. This is his personal achievement that no prejudiced historian can take away. Not the small dose. Long before Hahnemann, Paracelsus had recommended that. Not even the principle of similars. Hippocrates and von Haller had in a general way mentioned that. The crowning personal achievement of Samuel Hahnemann and that which entitles him to lasting memory is the patient development and perfection of a simple method of selecting the remedy for disease by provings upon the healthy. Bacterial therapeutics is necessarily limited to infectious disease. In the presence of non-infectious disease, bacterial therapeutics

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is helpless, but the method of Hahnemann is applicable to all diseases, infectious and non-infectious.

This method of selecting the remedy by provings is our great possession. With all its bacterial therapeutics, this, our greatest principle, is not yet understood by the allopathic school. Until the allopath finally grasps this principle and puts it in practice, there will still be need of the sectarian homœopath with his separate schools and hospitals.

Another final word to my allopathic brother. I know that the word allopath is hateful to him. He says that he is not an allopath. He is a physician. But the tag allopath fastened on him by Samuel Hahnemann still sticks. However, I see that he is in a fair way to get rid of it by continuing on the way he is going, by adopting one more homœopathic principle. He has adopted the similar remedy and the small dose and the danger of medicinal aggravation. When he finally grasps the idea of selecting the medicine by provings and puts it into practice, he will no longer be an allopath. He will be a homœopath, and the union of the schools will be complete.

BASIS OF A NORMAL PREGNANCY.

By Sarah M. Hobson, M.D., Chicago.

There has been a paragraph afloat in popular science columns recently to the effect that the physique of woman has undergone a radical change during the past twenty-five years, that she is rapidly approaching the masculine type. Coupled with this is the sad prediction that such a change will affect seriously the purely feminine qualities and functions, and thereby be a detriment to the maternity of the race. Curiously, too, and maybe from the same pessimistic source, there arises the lament from New York that the type of man is changing; that he is becoming feminized, citing the beardless face and fastidious dress as sad evidences of decay.

The optimist is inclined to look upon this improved muscularity and enjoyment of out-door life as a token of increased pleasure in living, and upon fastidious cleanliness as the direct outgrowth of the principle of asepsis. It would be a serious charge if in our effort to better the physical well-being we should make maternity more destructive to health than it has been, or to hinder gravely the reproductive process.

A recent work on obstetrics devotes one page to the hygiene of normal pregnancy and one hundred pages to the pathology of pregnancy. Meanwhile millions of women go on bearing children in varied degree of comfort or discomfort, but on the whole

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with a small mortality at delivery and a large mortality during the child-bearing period. Is pregnancy a close relative to morbidity? If not, is there no possibility of freeing the mind from the obsession that childbearing is chiefly pathological, no mode of life which will make pregnancy a period of physical strength as a basis for the psychic delight which any artist has for creative production?

On the other hand, a single experience with puerperal eclampsia is sufficient to stir the imagination to every possible peril of pregnancy, and to stimulate the student to diligent search for the obstructions to adequate elimination during a period when the mother is eating, respiring and excreting for two organisms instead of the customary one. An extra supply of food is needed, an extra amount of oxygen to renew the double blood current, additional facilities for excretion to get rid of a double metabolism. The fetus thrives at the expense of the mother. And both suffer unless the conditions are decently good.

American women, as a rule, have adequate pelvic diameters and a sufficiently spreading pubic arch to ensure safe delivery. Evolution is too slow a process for twenty-five years of most strenuous physical culture to change materially the skeletal contour. It is rather the factors of elimination and muscular expulsion which concern the pregnant woman today.

Dress, diet and emotional environment have been worn threadbare with theories right or wrong. Dress usually can be disposed of by the simple esthetic motive, plus the anatomical fact that a growing uterus will rise either directly upward if there is ample space increasing every girth from the armpit down, or with waist constriction the uterus must rise obliquely up and forward. It would seem as if the simple appeal to beauty would directly determine the lines of dress from the axilla to the floor. Certainly only the blindest puerile following of tradition accounts for the usually unhygienic ugly gowning of the pregnant woman.

Diet has been met already by the simple statement that the mother is eating for two. The rapidly growing fetus demands generous nutrition, a full supply of all the elements of tissue growth. If the mother's daily diet does not furnish it, the mother's tissue suffers in making up the deficiency, and she comes to the time of delivery with less than normal reserve. Pages have been written relative to the psychic environment of the pregnant woman, the obligation of each member of the family to relieve her of all annoyance, the lifting of every burden. But why should her little world be turned upside down, why should she be treated like an invalid while going through a physiological process? The average unselfish mother holds by right the highest place in creation. But that type of woman doesn't want to be catered to on the plea of invalidism. It is the selfish, morbid, self-centred woman who willingly makes pregnancy a plea for all manner of indulgence. If maternal impres-

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sions count for anything, this is the time to continue the fight of the will over the impulses. And it is the physician's province to further the physical well-being as a basis for intellectual control.

To this end, diet intoxication and proper elimination have come prominently to the fore in the past decade. Theoretically the ground is well covered. Practically, women are apt to come under the physician's care too late to get the full benefit of his skill. Uranalysis has become a routine procedure. But often an effort to correct a faulty metabolism allows too limited a diet, and the mother suffers, because a fairly healthy fetus in simple biological fashion of every man for himself will extract from the maternal blood current what he wants. He has no altruistic principles.

The final important factor is the expulsive power. This resolves itself into the problem of the integrity of the muscle-nerve unit. So important a muscular organ as the uterus cannot be in good muscle-tone unless the muscles throughout the body are in good condition. And every function of the body is conditioned upon the controlling nerve centres. Then the integrity of the muscle-nerve unit depends upon a well-developed general muscularity and a well-poised nervous system. Indolence and self indulgence give no opportunity for a normal development. Another frequent factor in American life is fatigue-intoxication. This may be mental fatigue of worry and anxiety with their deadly depressing effect upon the functions of organic life. It may be the fatigue consequent upon prolonged work, either mental or physical, with rare and short intervals of rest. This often occurs wherever women are earning money, in the school room, the office, in the trades and factories, or at day labor. Business has an eye single to the amount of work accomplished in the working hours of a day with small regard for the physical condition of the worker. To be sure, fatigue exhaustion may prevail under similar conditions in the home. But in the home these conditions can be modified. The home provides a great variety of exercise and occupation. There it is possible to intersperse periods of work with rest. Hard work is wholesome, provided the subsequent sleep and rest is sufficient to full recuperation. If a woman has been in the habit of scrubbing floors, there is no reason why she should not scrub floors during her pregnancy. If she does not scrub floors habitually, the knee-elbow position taken passively is the next best gymnastic exercise for removing the downward pressure of gravity off the growing uterus. If she plays golf or tennis, there is no reason why she should not continue as long as the increasing size of the uterus does not impede her movements or her personal comfort. But the rule of alternating exercise and rest must be strictly enforced, with lucid explanation of the reason why. Loss of sleep means inevitable loss of nervous energy. It should be a routine measure to take

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a daily rest during the forenoon and again in the afternoon if the night's sleep is broken. The day nursery, the kindergarten, the hourly nurse, the elimination of less important family expenses may be imperative to secure this recreation to the mother in a home of small income. If a woman cannot be out of doors one or two hours in the early forenoon, then she should turn her house into an open porch while she does the morning work. With active exercise in the open air, it is comparatively easy to form the habit of muscular relaxation and sleep. If this sleep is secured in the latter part of the forenoon it will not interfere with the night's sleep; and sleep in good measure is absolutely necessary to proper metabolism and elimination.

These demands are quite elementary and obvious, but they are sadly neglected on every hand. Because they are so simple they are not reiterated, and a short-sighted policy of daily fatigue is tolerated. The uterus and abdominal muscles cannot do good expulsive work unless there is a general muscularity. Muscular activity, oxygen and sleep are the natural defence against toxemia.

Into this problem of a normal pregnancy and morbidity of the child-bearing period comes inevitably the question of prevention of conception or the early termination of a pregnancy on the score of "a menace to health." America has not yet become Utopia, and the physician as well as the wife is compelled to face conditions as they are. For the sexual dissipate or the selfish irresponsible we make no defence. But no penitentiary penalty, no church edict will convince the fair-minded that the ultimate dictum on this subject can be given righteously by State legislators under present-day mode of election, or by a body of clergymen.

The experience of twenty years of practice, following up successive pregnancies under varying social and financial conditions gives authority to this conclusion. The basis of a normal pregnancy is adequate elimination, good muscular development and a well-poised nervous system, secured through free dressing, fresh air, muscular activity without exhaustion, frequent relaxation and rest, generous diet, and long hours of sleep. So important are these things, so impossible is it to secure them in the wage-earning world that no pregnant woman should be employed in wage-earning industries where she comes into competition with other workers. If necessary, the principle of socialism should prevail and the State should re-imburse the family for the inevitable drain upon a limited income. In the development of our civilization, there will surely come some provision which will make it worth while to improve the quality of race production through the conservation of maternal vigor.

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THE OPEN OPERATIVE TREATMENT OF FRACTURES OF THE PATELLA.

By Aimé Paul Heineck, M.D., Professor of Surgery, Reliance Medical College, Adjunct Professor of Surgery University of Illinois, Surgeon to Grace Hospital, to the Cook County Hospital, etc., Chicago.

For the treatment of fractures of the patella many different operative methods have been devised, suggested, advocated and practised; many observations have been collected and published, descriptive, condemnatory and commendatory of these various methods. However, by far the greater number of the methods proposed have been abandoned, have been superseded by a few less objectionable, more preferable methods. Operative and clinical experience has led to the omission from the operative procedure of such steps as were found to be needless, of such steps as were found to be harmful, and to the introduction, to the general employment, of some great desirability.

This diversity of methods employed by men of recognized surgical attainments suggested questions to my mind. It is of practical importance that these questions be accurately answered. These answers, we think, should be determined, partly by theoretical consideration, partly by the study of the pathological anatomy present (as revealed at the operating table or at the autopsy room) in knee joints whose patella have been fractured, and, largely and mainly, by the clinical observation and clinical comparison, from the anatomical and functional standpoints of the results obtained, by the employment of the various methods of treatment advocated and practised.

Among the questions calling for a definite answer are the following:

1. Is the patella essential to the functional integrity of the knee-joint?

2. Are permanent displacements of the patella, in whole or in part, congenital or acquired, deformities significantly impairing the functions of the knee-joint?

3. Are there other traumatic lesions, simulating from the symptomatic standpoint, by the functional disturbances which they entail, fractures of the patella? What are these conditions? How are they best treated?

4. Which is the treatment of choice for fracture of the patella?

5. Is operation, at times, contraindicated? If so, when?

6. If operation is not always indicated, when is it indicated?

7. How should the treatment of old fractures differ from that of recent fractures, or is the same treatment applicable to both? If not, why not?

8. Which of the principal various open operative procedures that are now in vogue for the treatment of fractures of the patella is the most universally applicable, the most satisfactory from the

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standpoint of early and of late results: transverse or longitudinal osseous suturing, looping of the patella (cerclage Berger), hemi-cerclage (Quénu), or suturing of the peri and para-patellar fibrous tissues (suture des ailerons, Vallas; retinaculæ patellæ, B. N. A.) (reserve extensor apparatus, Mickulicz)?

Questions of operative technic, concerning equally all the different open operative methods, for fractures of the patella, must also be decided. Among them are the following:

a. Should one operate on the day or on the morrow of the infliction of the injury, or should one wait till the soft tissues have recovered from the immediate effects of the traumatism?

b. What should be the nature of the anæsthetic employed? Local, lumbar, or general anæsthesia?

c. Should the operative field be rendered bloodless by the employment of an Esmarch bandage?

d. By what type of incision is the operator best enabled to perform the repair work which he deems appropriate and necessary?

e. Is it advisable in operations for fractured patellæ to irrigate the articulation? Or is the mere sponging out of the extravasated liquid and clotted blood, from the synovial cavity, productive of the most satisfactory results?

f. Should non-absorbable, or absorbable, suture material be used?

g. Shall the completely detached bony fragments be removed?

h. Shall the articulation be drained?

i. Shall the peri-articular tissues be drained?

j. What should be the duration and the nature of the post-operative treatment?

"Is the patella essential to the functional integrity of the knee-joint?" can be answered as follows:

A careful study of the reported cases amply justifies the statement that congenital absence, unilateral or bilateral, of the patella, is always associated with some impairment of the functional integrity of the anatomically defective knee-joint or joints. This impairment in some cases is very slight; in other cases it is considerable.

Acquired Absence of the Patella.

The patella has been removed for inflammatory affections, chronic or tubercular in nature; for fracture, transverse or comminuted in type; for primary malignant disease. A cursory study of the collected cases shows, among other things:

a. That the removal of the patella can be successfully performed under spinal or under general anæsthesia.

b. That though the patella seems under certain conditions to be unessential for locomotion, nevertheless its removal is invariably followed by impairment of power, by some functional loss. It cannot be gainsaid that as a general rule, knee-joints without

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patellas are impaired joints. To preserve the continuity of the extensor apparatus of the leg, to conserve, after removal of the patella, the stability of the knee-joint, the gap left by its extirpation must be obliterated by suturing the tendon, of the quadriceps to the ligamentum patellæ, and by such operative measures, plastic or other, as may be indicated in the individual case. The extirpation of the patella is always a sacrifice. Its loss deprives the knee-joint of the protective influence which this bone affords to the articulation, this sesamoid bone, the largest in the human body, being an important factor in the distribution over a considerable area of any force applied to the front of the knee. The patella provides considerable leverage for the quadriceps muscle and its removal is followed by a weakening and an impairment of the action of the quadriceps extensor tendon upon the leg. All sesamoid bones are mechanical accessories of the tendons in which they are partially or completely embedded. By this sesamoid bone the tendon of the quadriceps is kept spread out and prevented from being gathered up in a round cord. The patella forms a much more suitable pulley for movements round the condyles than the tendon itself, and in addition serves a minor purpose in keeping the upper end of the patellar ligament in a plane well in front of the axis of flexion and extension. In uncomplicated transverse fractures of the knee-cap the extirpation of the patella as a form of treatment is to be condemned. In comminuted fractures it deserves consideration only as a measure of last resort. In inflammatory and neoplastic disease of the bone, extirpation is a valuable resource. In primary malignant neoplastic disease, no one questions the wisdom of its removal.

Are permanent displacements of the patella, in whole or in part, congenital or acquired, deformities significantly impairing the functions of the knee-joint?

The patella, being a sesamoid bone, cannot undergo any upward displacement unless there be an associated relaxation or rupture of the ligamentum patellæ, cannot be dislocated downward without either an associated relaxation or an associated rupture of the quadriceps extensor tendon.

Our first statement was, that absence of the patella, congenital or acquired, is always associated with some impairment of the functional integrity of the knee-joint. This functional impairment may be slight, may be markedly disabling. Our second statement is, that any dislocation of the patella, be it intermittent or permanent, complete or incomplete, congenital or acquired, is also always associated with some impairment, slight or severe, of the functional integrity of the knee-joint. The fact that operations have been devised and performed for the remedying of congenital dislocations of the patella, is another proof that anomalous location of the patella entails disability.

Are there other traumatic lesions, simulating from the symptomatic standpoint, by the function disturbances which they entail,

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fractures of the patella? What are these conditions? How are they best treated?

All permanent upward or downward displacements of the patella as a whole, if dependent upon rupture of the quadriceps extensor femoris tendon, or of the ligamentum patellæ, will cause symptoms somewhat analogous to those which are caused by complete transverse, oblique, stellate or comminuted fractures of the patella. Violence of the same nature can determine a solution of continuity of either the tendon, the patella or the ligament. The force that indirectly produces the solution of continuity is obviously exerted equally on the quadriceps tendon, on the ligamentum patellæ, on the tuberosity of the tibia and on the patella; but fracture of the patella is by far the most common result of such indirect violence.

Traumatic or pathological, open or subcutaneous ruptures of the quadriceps extensor femoris tendon or of the ligamentum patellæ, may, like fractures of the patella, be simple or complicated, be complete or incomplete, be unilateral or bilateral. They may be associated with, precede, or follow a fracture of the patella.

The quadriceps extensor femoris muscle, the patella and the ligamentum patellæ are the main structures by which extension of the leg on the thigh is effected. The integrity of each of the main component parts of this extensor apparatus is indispensable for the proper performance of the functions of the knee-joint. The restoration of the continuity of a completely fractured patellæ is just as essential for anatomical and functional recovery of the affected extremity as is that of a completely divided quadriceps extensor femoris tendon or that of a completely torn ligamentum patellæ. The careful approximation of the divided ends of the quadriceps extensor femoris tendon, the exact coaptation of the separated ends of the torn ligamentum patellæ can be done effectively only by the aid of sight, that is, through an open operation. The same applies to the fractured patella, the exact apposition of whose fractured surfaces is frequently prevented by obstacles removable, only by an open operation. The ideal function only exists when each and all of the aforementioned elements are anatomically and functionally absolutely normal. The study of the subject conclusively demonstrates that the absence of any single one of these elements (patella, ligamentum patellæ or quadriceps extensor femoris tendon) or the presence of a pathological state of any single one of them, manifests itself by impairment of function. It leads to the conclusion that perfect function presupposes and demands anatomical integrity.

Treatment.

The following indications have to be met in fractures of the patellæ:—

1. The fracture must be reduced.

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2. The bony fragments must be maintained in intimate apposition until organic union has been effected.

3. The continuity of the overlying and contiguous soft tissues must be re-established.

4. The functional integrity of the knee-joint must be restored.

5. The value of any form of treatment is dependent upon its ability to meet the above indications. All forms of treatment can be classified into one or the other of two main classes: the non-operative and the operative. The latter admits of further subdivision into the subcutaneous and into the open methods. Each method has advantages and disadvantages, indications and limitations.

The numerous non-operative methods of treatment that have been employed, the large number of percutaneous and subcutaneous operations for approximation of the fragments that have been proposed, lauded, tried and then abandoned, the comparatively great number of patients, who, having been subjected to non-operative treatment, of themselves seek operative treatment in order to lessen or entirely overcome their disability, all these are proofs that all the non-operative, and the subcutaneous operative methods as well, have deficiencies which debar them from ever being elective methods of treatment.

In the literature of the subject, occasional cases are to be found in which, though the operator succeeded in restoring to the patella its normal anatomical contour, functional integrity of the knee-joint was not secured. Our explanation for these cases is that some essential step in the operation has either been completely overlooked or unskillfully performed, or that the post-operative treatment has been injudicious. The extravasated blood may not have been removed from the synovial cavity; the lacerations of the soft tissue may not have been repaired, etc.

A distinction must be made between the short-comings of the operator and the short-comings of an operative procedure, as such. A few, a very few cases, such as the following, can be found in the literature.

Sonnenberg showed two patients, who, despite a separation of from 3 to 4 inches between the fragments of their fractured patellæ and noticeable atrophy of the quadriceps extensor femoris, had fairly good function. In one of these the bone was in three fragments owing to a twice fractured patella. An explanation of these exceptional cases is to be found in the fact that the reserve extensor apparatus of the leg either was not injured, or if injured, that its integrity was restored and thereby the loss of continuity of the patella is fairly well compensated. Though in isolated cases good functional results may follow non-operative treatment, as a rule, its employment in fractures of the patella is followed by very unsatisfactory results. Facts confirm what logic had led us to expect. Anatomical and functional integrity go hand in hand. In the treatment of fractures of the patella we have come to discard

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all the subcutaneous and percutaneous operations. In scientific conception and in the practical results obtained by their employment the inferiority of the various subcutaneous methods to the various open operations is manifest. We acknowledge that under exceptional circumstances the operator may feel compelled to resort to them.

Why do we advise the abandonment of the various subcutaneous and percutaneous operations? Because: 1. They do not enable the surgeon to accurately coapt the fractured fragments. After an arthrotomy, either by bone suturing, or by circumferential looping or ligaturing, or by careful sewing of the torn soft tissues, the fragments can be closely apposed and held immovably together. This intimate apposition of the fractured surfaces lessens the liability to an excess, either in length or in width, of callus formation. Any change in the contour of the patella is liable to interfere with the normal adaption of its articular surface to the femoral articular surface.

2. They do not enable the operator to freshen the fractured surfaces. In the repair of old fractures the resection of the interfragmentary fibrous bond of union and the freshening of the fractured surfaces are among the essential steps of the operation.

3. They do insure against union of the bony fragments in a faulty position. Impaired function results from union in a faulty position. The open-operation enables the surgeon to overcome any tilting of the fragments, as well as any tendency to union in faulty position.

4. The subcutaneous methods make no provision for the toilet of the synovial cavity. The open operation allows of the early and complete removal of all articular effusions, of all extravasated blood, intra or extra-articular, liquid or clotted, of all completely detached bone fragments.

5. The tears in the capsule, the lacerations in the aponeurotic expansions of the vasti, demand repair. Only by means of an open operation can they be repaired. The extensor apparatus of the leg must be considered as one organ. Structural impairment of any of its constituent parts entails a corresponding impairment of function. The insertion of the vastus externus and of the vastus internus into the capsule of the knee-joint and the lateral prolongations of their insertions down upon the head of the tibia and fibula are of assistance in the extension of the leg on the thigh. Solutions of continuity in these tissues must be repaired.

6. None of the subcutaneous operations allow of the removal of the fibro-periosteal shreds which so frequently overlap the fractured surfaces and which in some cases have been found to adhere so tightly to bony projections that for their liberation it was necessary to use forceps and curette. These fibro-periosteal shreds are an obstacle to osseous union; they can be removed by an open operation.

7. The subcutaneous and percutaneous operations create

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openings which are inadequate for the escape of intra-articular and extra-articular extravasates and exudates, but which are ample for the introduction of infection.

Before proceeding, let us determine the dangers, their nature and their gravity, to which patients are exposed by the employment of the open operative treatment.

The probability of ankylosis, joint suppuration or pyæmia following an aseptic arthrotomy, for practical purposes, can almost be disregarded. We concede that the general dangers inherent to other major operative procedures are also present in these cases. These dangers, anæsthesia, shock and suppuration, are common to all operations. Shock can be minimized by rapid operating. The time consumed in the performance of any operation should be the shortest consistent with the careful and complete execution of the different steps of the operation. We will not at this time discuss the other two dangers.

We believe we are fully justified in stating that the dangers of the open operation, if it be performed with due precaution by careful and skillful hands, are practically nil. There is always plenty of time to reach hands well able to perform the operation.

What are some of the advantages of the open operative method?

1. Refracture of the patella is more common after massage and other forms of non-operative treatment than after the open operative treatment. Refracture is more frequent in the patella than in any other bone. By more closely restoring the bone to anatomical perfection, the open operative treatment lessens to a considerable degree the tendency to refracture.

2. In any fracture, the union between the fractured fragments which is considered the most desirable is osseous union. Modern surgeons do not expect to obtain osseous union in fractures of the patella which are treated non-operatively. Its occurrence under such conditions, though possible, is so rare that it is considered a pathological curiosity. One of the main justifications of the open operative treatment is the frequency with which osseous union follows its employment.

It being a demonstrated fact that osseous union can be obtained, it behooves us to employ that method of treatment which most frequently secures it.

It cannot be contested that the solidity of the patella contributes, in a great measure, to the stability of the knee-joint. Fibrous union of the fractured bone imparts to the articulation a weakness, an uncertainty, an instability, as a result of which patients with fibrously united patella, frequently fall. This lack of stability, this impairment of control predisposes to refracture of the fibrously united patella. It is exceptional for fibrous union to be associated with absolute functional recovery. A fibrous bond of union has a tendency to elongate under use.

3. The open operations enable us to obtain a more rapid, a

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more complete recovery. The more active the patient is the more his occupation involves work on different levels, the more is operative treatment indicated.

4. The open operation enables the operator to mitigate all and to remove most of the conditions that tend to cause imperfect union and its consequence, impaired functional integrity. Let us enumerate and briefly discuss the most important of these unfavorable conditions.

a. Separation of the fragments.

b. Tilting of the fragments. Either or both fragments, often, are or may be, everted or inverted. In the presence of tilting the fragments can never be maintained with the fractured surfaces exactly towards each other either by bandages or by retentive appliances, or by any subcutaneous operative method.

c. Rupture of the tendinous expansions of the vasti and of the lateral portions of the capsule of the joint.

d. Prolapse of the prepatellar tissues into the breach caused by the separation of the fractured fragments.

e. Atrophy of the quadriceps femoris due to disuse, arthritis, marked contusions of the muscle, extravasated blood from the joint through the rent in the upper part of the capsule, etc.

f. Arthritis of the knee-joint.

g. Adhesions of the patella. The upper fragment has been found adherent to the femoral condyles.

h. Union of the fragments in bad position, mechanically interfering with proper function of joint.

The open operation enables the operator to void inflammatory exudates, to make the toilet of the synovial cavity. If a loose spicule of bone be found between the fragments, its removal is easily effected. The open operative method allows us to completely overcome the tilting of the fragments and to coapt them with a nicety attainable by any other method.

If, shortly after a fracture of the patella, the knee-joint is opened, it will be found that the articulation contains blood. The quantity of the extravasated blood is not the same in all cases. In some cases it is small; in others, considerable, filling the joint to distention. The blood may be liquid, clotted or semi-organized. Not infrequently it originates intra-articular adhesions or loose foreign joint bodies. It is easy to conceive how a large intra-articular liquid collection, can, in transverse or oblique fractures, rotate the upper or lower fragments, or both, about a transverse axis.

Rupture of the Tendinous Expansion of the Vasti and of the Lateral Portions of the Capsule of the Joint.

In fractures of the patella, as in other fractures, in addition to the bone-lesion, we have co-existing injuries of the contiguous soft tissues.

When one recalls the intimate relations with the patella, of the fascia, muscles and ligaments which surround it, no stretch of

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the imagination can possibly conceive a fracture of this bone without some associated damage to the surrounding structures. The more extensive that damage, the greater the separation of the bone fragments, the less the liability to spontaneous functional recovery. From the diagnostic standpoint, it is important to determine, if after falling, the patient got up, or if he made any attempts at walking. Attempts on the part of the patient to arise determine further lacerations of the parapatellar ligaments and consequently further separation of the fragments.

Upon the proper repair, upon the proper reunion of these soft tissues is dependent, in an important measure, the functional integrity of the knee-joint. Andrews states that the patellar union is only an incident in the ligamentous and tendinous repair by suture. So important is the approximation of these torn tissues, so essential is the restoration of the continuity of the aponeurotic fibres of the vasti, of the rectus femoris and of the deep fascia of the leg and thigh, that many operators in the treatment of fractured patellæ limit all their suturing to the torn soft tissues.

Prolapse of the Prepatellar Tissues into the Breach.

This prolapse of the prepatellar fibrous tissues between the fragments of the fractured bone is one of the important obstacles to non-union. The prevention by these intervening soft tissues of the exact apposition of the fragments is one of the most valid reasons for resorting to the open operation. When present, these interposed soft tissues constitute an obstacle to osseous union, removable only by the open operation.

This fibro-periosteal curtain may overlap the fractured surface of either fragment. In some cases both fractured surfaces are either pretty or completely covered by this prolapsing prepatellar tissue. These prolapsed tissues may be easily removable, may be hooked to the underlying bone. When hooked to the fractured surfaces, their removal, at times were attended with some difficulty. In many fractures of the patella, be they tear or blow fractures, or due to both factors, the prepatellar bursa is contused. Blood and portions of the prepatellar bursa can enter into the formation of the prolapsed prepatellar curtain, being superimposed upon the aponeurotic tissues.

By the aid of the open operation all interfragmentary soft tissues are easily removable. Bony union presupposes an exact apposition of the osseous surfaces. Blood interposed between the fragments, we do not consider as a foreign body, it being well known that between fractured surfaces the presence of blood is constant. Intervening tissues of other description act as foreign bodies and are productive either of fibrous union or of non-union. We concede that massage relieves pain, promotes the circulation and aids in the removal of exudates, but can it accomplish anything towards the removal of soft tissues that have prolapsed in the breach between the fragments? The attempt to remove the

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interfragmentary soft tissues by rubbing the fractured surfaces one upon the other is illusory. Interposed soft tissues can be removed only by means of the open operation.

(To be concluded in the July number.)

INFANT MORTALITY—ITS CAUSES AND PREVENTION.*

By Francis H. MacCarthy, M.D., Boston, Mass.

The subject which I am about to bring to your attention covers a wide field, and there are certain phases which I cannot hope to consider in a paper of this length—therefore, I hope the omissions will stimulate profitable discussion.

Undoubtedly you are all more or less interested in the subject, for it is attracting the earnest attention of students of medical sociology both in this country and abroad. Two large books have been published in England, and some excellent papers have appeared in the medical journals of this country. The American is apt to think that all good things have their beginning in America, and the loyal British subject claims the utmost prestige for all English institutions, but in this matter the United States as a country has been backward, for it is only during the last two or three years that there has been systematic study of the question of Infant Mortality, its causes, its prevention and adequate birth registration.

In European countries the question has long been recognized as a matter of the greatest economic importance, and has been studied very exhaustively, especially by the governments of France and Germany, where there is a steadily declining birth rate. Nor can we congratulate ourselves that the birth rate in the United States is holding its own. While the decline is not so apparent in our country, owing to a steady inflow of foreigners, there is a marked decline in the birth rate outside of the congested districts.

During the last few years, however, the United States has been trying to make up for lost time, and some very definite movements have been set on foot for the study of the causes and prevention of infant mortality. The Russell Sage Foundation in its Department of Child Hygiene, and the Clark University society known as the Child Conference for Research and Welfare, are doing work of the greatest value, while in November, 1909, the interest of medical men culminated in a conference at New Haven, the outcome of which was the formation of a new national society, and the American Association for Study and Prevention of Infant Mortality held its first annual meeting at Baltimore in November, 1910.

Back of all this interest there must be some strong purpose. Put into simple English, it may be said that we are losing too many young children in this country, out of all proportion to the birth rate, and that we are face to face with a serious social problem.

*Read before the Massachusetts Homœopathic Medical Society, April, 1911.

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Let us isolate from columns of statistics a few of the figures. They are somewhat impressive. Quoting from the Mortality Report just issued by the Bureau of the Census for 1910: "Of the total number of deaths that occurred in 1909 (732,538), no less than 196,534 were of children under five years of age, and 140,057 were of infants under one year of age." These figures show that the deaths of infants under one year of age constituted nearly one-fifth of the total death rate in the registration area for that year, or one death out of every five is that of a baby less than a year old. Consider that the registration area includes only about half of the total population of the country, and we can judge somewhat of the extent of this waste.

To bring the matter nearer home, quoting from the latest available figures, of the total number of deaths in the city of Boston for 1909, something over 11,000, 3000 were of children under five years of age, and over 2000 were infants under one year of age. It is estimated by Prof. Fisher of Yale that 47 per cent., or "nearly one-half of the diseases of infancy of the median age of one year are preventable." There are those who consider this estimate as very conservative.

Now, it would be discouraging indeed if, in spite of all the various preventive measures instituted during the last ten years, no apparent decrease in the infant death rate could be recorded. Up to a very recent date this was the opinion held by some of the men interested in the subject, but during the last few years in this country at any rate, we are beginning to see some result of good work, and the figures would seem to indicate a decrease. In the latest Massachusetts Registration Report for 1910 the ratio as compared with the number of births of 12.72 per cent. is the lowest for twenty years. A decline is also plainly indicated in the latest report of the State Board of Health. The most accurate method of estimating infant mortality is comparison of the death rate with the birth rate, and although some authorities claim the decrease is owing to a decline in the birth rate, the latest available figures from several sources clearly indicate a decrease in infant mortality.

It may be questioned by some whether the saving of thousands of infants will not interfere with the law of the survival of the fittest, and tend to the survival of the unfit—that is, if thousands of weak lives will not be prolonged only to fall by the wayside when weakened by the wear and tear of adult life. This is certainly a pertinent question, and tends to make one thoughtful, but it may well be answered by calling attention to the unhygienic habits which characterize adult life. Hygiene must not stop with infancy and childhood. We are a wasteful nation; men are not only living beyond their financial income, but are wantonly spendthrift when it comes to their powers of physical and mental endurance. Thus we see a people wasteful of human conservation at both periods of life. Is it any wonder, then, that thousands fall by the way from the effects of degenerative diseases at middle life?

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Right here a few words might well be said in regard to the contagious diseases of childhood. We know that these diseases often leave in their wake a crippled heart, weak lungs and damaged kidneys. I am beginning to believe that this aftermath of weakness effects very materially the mortality statistics of middle life, and that the marked reduction of diphtheria and scarlet fever especially, which has been accomplished of recent years, must eventually reduce the number of deaths at middle life.

A very important point which looms up out of this whole question, it seems to me, is that the same diseases or causes or diseases, which tend to destroy the life of the weak child, also tend to undermine the health and retard the development of the strong child. Therefore, if we can improve conditions which surround infancy, and thus save weak lives, we shall at the same time be carrying out improvements which will tend to prolong and fortify the lives of the strong.

Causes of Infant Mortality.

When we come to study the causes of this loss of infant life, we are impressed at once with the fact that these causes are many and complex, and that any thorough study of the subject must not only concern itself with some consideration of the direct causes of death, such as appear on the death certificate, but that the investigation must lead one into the realm of the sociologist, for back of the direct causes are those underlying evils which are so largely productive of the ills of society in general.

Briefly, then, let us consider for a moment the direct causes, giving each its relative importance. Undoubtedly the most important factor in loss of life during the first three months is the feeble resistance of infancy, about 25 per cent. of the whole number of deaths occurring during the first month, and 48 per cent. during the first three months. The causes are prematurity, malformation, injuries at birth, syphilis, effects of alcohol and vice. By far the greatest fatality during the remainder of the first year is caused by diarrhoeal diseases, the percentage being variously estimated in different cities from 28 per cent. to 31 per cent.

Next in importance as causative factors are pneumonia, bronchitis and influenza with a mortality of 20 per cent., while the four principal contagious diseases, whooping cough, measles, diphtheria and scarlet fever, cause something over 3 per cent. of the total.

We have thus enumerated what might be designated as the most important direct causes of death, but back of the causes which are given on death certificates, are the fundamental causes which tend to weaken vitality, to increase the natural feebleness of infancy, and thus prepare a favorable soil for the propagation of disease. To me these causes seem the most important, since they represent in a very large measure, the real conditions which underlie the loss of infant life, and are also concerned with the mortality of later life.

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When something like 2,000,000 infants die in a country during a decade, it would seem to be indicative of rotten threads running through and weakening the social texture. Indeed, I feel that I am not stating it too strongly when I say that a steadily lowering birth-rate, and a high infant death-rate must certainly indicate the presence of depraved conditions inevitably tending toward decadence in national life.

About 24 per cent. of the deaths occurring during the first two or three months are due to prematurity, or feeble resistance. Then there are certain malformations of the heart, brain and other organs, which render proper development and life of the child impossible. Now these are regarded as "unfit," that is, in plain language, their continued existence is not considered desirable, and, of course, this would seem to be right, since the future of such children would be miserable at the best.

It should be noted, however, that back of many of the deaths due to prematurity and feebleness at birth are such factors as alcohol, vice and syphilis, and that there is some possibility of these deaths becoming preventable.

The two most important underlying conditions are poverty and ignorance, two enemies of right living which seem bound to accompany all civilization. Any successful effort to combat this loss of infant life must take these into consideration. It has been estimated that in wealthy families the mortality of the first year is 10 per cent., in the middle class 21 per cent., and the laboring class 32 per cent. It is stated by Hale that of 170 infants dying of acute intestinal disease in 1903 and 1904, there were 161 children of the poor, nine among the well-to-do, and none among the rich.

For the children of the well-to-do and the rich money buys good food, sunny living rooms, the best of nursing and medical care. Life for the children of the poor is a constant struggle for existence in wretched surroundings and under the poorest conditions of over-crowding in dark, sunless rooms, insufficient and unsuitable food. Mothers work late into pregnancy and while nursing their children; they know little in regard to hygiene, and indeed, could not follow it out if they did know. Add to these, lack of sufficient nourishment during pregnancy and also while nursing, and absolute inability to change conditions, such as obtaining sufficient fuel in winter, also to avoid excessive heat in summer, and to change environment—such are the results of poverty, and the sacrifice of infant and child life must inevitably follow in their wake, for under such conditions do the two great causes of infantile mortality thrive.

The death rate from intestinal diseases is the direct result of faulty feeding, congestion of city life, and excessive heat, and as we know, thousands of children die during July and August each year. It is the causes working together which produce the fatal results. While city life is not desirable, if children are given

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good care, proper food, and fairly clean surroundings, they will thrive tolerably well. On the other hand children living in the country, but lacking good food and proper care, often fail most miserably.

Reduction of Infant Mortality.

What has been said concerning the causes, suggests measures for the reduction of infant mortality.

What goes into the child's stomach, and the manner in which it is given, is probably the key to the whole situation, since upon proper nutrition depends the child's very existence. Undoubtedly the encouraging decrease in mortality during the past few years has been brought about very largely by improving the milk supply, instruction of mothers in regard to proper methods of preparing food, and urging the necessity of nursing whenever possible. It is estimated that 85 per cent. of all infantile diseases are in those artificially fed. It is not difficult to see why this is so. The most ignorant mother can usually successfully nurse her infant. It requires no experience; but artificial feeding requires considerable intelligence, much care, and what is often unobtainable, money to buy suitable materials and clean milk.

The conditions of poverty and ignorance, then, must be looked squarely in the face, and intelligently and hopefully met. Milk depots are being provided, and more will be provided for the distribution of clean milk for a small pittance, or free where needed, and these depots will become centers for the instruction of mothers as to the care of children, with a corps of nurses to follow up the work and keep track of mothers and babies.

If the work is to be at all effective it must go even further and provide for women just before, during and immediately after confinement. As long ago as 1876 a society was formed in England which provides food and clothing for the pregnant woman, and even care for some time after confinement when necessary, and this is done today in France and Germany. Nor is it at all unlikely that we shall eventually have a law to prevent women working in factories during the weeks just before and after confinement, but, of course, there is no use in doing this unless some provision is made for mothers to whom such work may be a necessity in order to keep body and soul together.

Our child labor laws are not all that might be desired, and there is urgent need of reform along these lines. We can hardly expect a healthy development of manhood and womanhood in boys and girls who slave from seven in the morning until six at night under conditions which are well nigh beyond description on account of the filthiness and degradation present in the factories of the manufacturing towns of the country.

But when all is said and done it is to the encouraging of breast feeding that we must direct our efforts. Four-fifths of the deaths in the first year are in children artificially fed.

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When we come to consider the reduction of mortality from respiratory diseases and tuberculosis, the situation is not so hopeful. These diseases are the result of overcrowding and bad housing conditions. Improvement must come from instruction concerning the importance of fresh air, erection of sanitary dwellings, and the advantage of country living.

Poverty, ignorance and vice are back of most of these early deaths, and probably alcohol is the underlying evil back of all three. We cannot say that poverty is entirely the result of laziness, lack of training, or lack of stamina in a people. These are all present surely, but other forces are at work in society which constantly tend to pull men down.

Now I am not a temperance lecturer, but it seems to me that before very much headway is made in reducing infant mortality, there must be developed an enlightened public conscience which will not tolerate the manufacture and sale of liquor except for medicinal purposes,—or, which will not tolerate the open saloon and selling of liquor to the laboring man, who receives his pay envelope only to empty it on the counters of the saloon. This is where a very large proportion of the money goes which should provide proper care and feeding of mothers and children.

So also must we develop a public opinion which will not tolerate fifthy, tumble-down, rat-infested crowded tenements, where children die by the thousands.

There should also be considered the matter of making and enforcing laws which shall prevent the marriage of the unfit, such as those having syphilis, tuberculosis, the feeble-minded and the alcoholic. At present marriage laws are extremely inadequate, and thousands of miserable weaklings are born annually to swell the list of those who are too feeble to successfully make the fight for life.

In conclusion of the whole matter, let me say, that it is the mother who dominates the situation. Poverty and intemperance, the two most important fundamental causes of infantile mortality, bear down the hardest on the mother. It is toward the betterment of conditions which effect the welfare of the mother, then, that we must direct our efforts. She it is who controls the destiny of the child.

It is an open question whether our system of education is planned to develop the right kind of fathers and mothers. It is one-sided and poorly balanced; there is lacking the training of conscience and character, and, say what you will, these are very largely concerned in the making of good fathers and mothers. There is needed a more wholesome ideal in the education of boys and girls. We are getting too far away from the fundamentals of simple living. There is needed less of the embellishments of education, and more of the kind of training which shall prepare for the everyday life experiences of men and women.

There is also lacking in our country, it seems to me, a proper

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appreciation of the tremendous value and importance of the work of the mother. The work of the conscientious wife and mother in the household of moderate means is never done.

No amount of written heroics in regard to the glory of motherhood from the pens of wealthy sociologists can do away with the deadly drudgery and monotony which falls to the lot of the average wife and mother of moderate means; nor can it obliterate the fact that a large proportion of the inmates of insane asylums are overworked and worn-out mothers. May not this to some extent explain the rapidly declining birth rate of our country?

I venture to say that the nearer we can come to some betterment of these fundamental conditions which so affect the lives of mothers; to a better training of girls; to a higher appreciation of the value of the mother's work, and to a realization of a more wholesome ideal of motherhood, the nearer we will come to the solution of the problem of a declining birth rate and an excessive infantile mortality.

OCULAR CHANGES OCCURRING DURING PREGNANCY, AND THEIR DIAGNOSTIC IMPORTANCE.

By Albert E. Cross, Worcester, Mass.

In the presentation of this paper, I make no claim to originality of the views expressed, and neither do I expect to present any new truths, but rather in a general way to discuss the ocular changes which may occur in pregnant women, and their importance to the obstetrician.

The role of ophthalmology in preventive medicine should occupy a more important place than at present in this class of cases, and all that is necessary is the co-operation of the obstetrician in all cases, showing ocular symptoms during this period.

You all recognize the importance of ocular examinations during the progress of many systemic diseases, and your prognosis is often dependent upon the character of these changes.

Pregnant women are perhaps especially liable to diseases of the kidney, and it is not unlikely that many women become pregnant when there is an existing chronic nephritis of which they are ignorant.

Obstetricians have paid but little attention to the effect of pregnancy on diseases of the eyes, and none to these diseases as an indication for premature labor, but at the recent congress at Rome, these were more definitely defined, and only in exceptionally rare cases would the termination of pregnancy be justified in eye diseases, yet a question might arise as to whether the sight of the mother was not of as much importance as the life of the child.

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Albuminuric retinitis, and uraemic amaurosis caused by nephritis would by all be considered as unqualified indications for the termination of pregnancy, as experience has shown that in the majority of cases both the nephritis and the accompanying retinitis, are either greatly improved or become entirely well.

It is of course understood that the desires and social position of the parents, the nutritive condition of the mother, the extent of the pathological changes in the fundus, must all be carefully considered before deciding whether artificial termination of pregnancy is necessary or not.

There are many ocular conditions which have been observed during pregnancy which are not dependent on renal changes, and many others in which ocular symptoms are present where examinations of the urine are negative.

It would be exceedingly interesting to know just what effect repeated pregnancies would have upon cases of high myopias. Here is a condition where the eye is easily distensible, where the oculist is always careful in giving advice against any eye strain. Feger reports one case where after each pregnancy there was a marked increase in the myopia, and sums up by saying that nine months of disturbed metabolism, the clogging of the circulation, the straining of parturition, and particularly the abdominal pressure on the patient, cannot help but affect this type of case.

Scholer reports two cases of detachment of the retina in pregnant women, albuminuria was absent and no causal relation could be found, but when we investigate our own cases of retinal detachment we find that most of them occurred during some special stress, as in coughing, sneezing, lifting or jumping. In one case of my own, detachment of both retinae occurred immediately after a fall. It is surprising that more cases have not been reported as a result of straining during parturition.

I have found other cases of blindness transient and complete as a result of jaundice, occurring during pregnancy, and yet no cases so far as I know have been reported from jaundice when occurring distinct from pregnancy.

We are all familiar with the ocular symptoms accompanying renal disease, especially when albumin appears in the urine; on this account obstetricians frequently send their cases for ocular examinations, and the prognostic importance of retinitis albuminu rica gravidarium is well understood.

Disturbances of vision may also occur in the form of transitory blindness without any retinitis being present. The patient complains of everything suddenly becoming dark before the eyes; this may increase very rapidly until blindness is complete, and yet when blindness is absolute the ophthalmoscopic examination may be negative. With these attacks the accompanying headache, nausea and vomiting and dyspnoea help us to determine the diagnosis of uraemic amaurosis due to nephritis.

Yamaguchi reports a case of xanthopsia, occurring during

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pregnancy, vision reduced to counting fingers. In this case, the nerve was pale, the retina oedematous but no hemorrhages. The urine was loaded with albumin.

Pregnancy may, however, be complicated by a serious condition known as toxaemia, in which albumin does not appear in the urine. There is no condition occurring during pregnancy upon which so much has been written, and is even now so little understood as the toxaemia of pregnancy. It seems to be a symptom complex, characterized by headaches, nausea, vomiting, visual disturbances and finally ending in delirium and coma, or possibly in eclampsia.

The frequency of this condition is hard to determine, as probably only a small percentage end in eclampsia—yet we find 250 cases of eclampsia reported in 14,899 labors, or about 1.7 per cent., the frequency being nearly double in hospital records to those in private practice.

There seem to be two distinct views, one that toxaemia and eclampsia are different manifestations of the same primary disorder, and the other that each disease shows distinct and characteristic pathological changes.

Often in these cases, repeated examinations of the urine give negative tests for albumin, and as the tests for urea vary so from day to day, it is impossible to draw any accurate conclusions from the urinalysis.

Williams divides toxaemia into three types (1) Acute yellow atrophy (2) Pernicious vomiting and (3) that type which produces eclampsia. In all of these types the liver and kidneys are unequal to the task put upon them by the excessive tissue changes accompanying the pregnancy. He further states that only in the third type are there marked urinary changes, and here the change is only in the nitrogenous content, the proportion excreted as ammonia is much increased.

It is in these very doubtful cases where analysis of the urine is negative, and where the vague general symptoms lead us to suspect a toxaemia, that ophthalmoscopic examination is particularly indicated; any corroborative tests would be of great value in determining the severity of the disease.

When you remember that very often retinal changes precede the appearance of albumin in the urine in diseases of the kidney, so may ocular changes occur in toxaemia, which may precede more serious lesions in other organs.

The ocular signs of toxaemia do not as a rule appear before the fourth month of pregnancy and may be delayed until the seventh month. Randolph states that when these symptoms appear before the sixth month, they are positive signs for the induction of artificial labor, and if during the last seven weeks they should be carefully watched unless the lesions are very extensive.

Although the ocular lesions of toxaemia have not been dif-

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ferentiated clearly from those due to nephritis, we have the objective symptoms of dimness of vision, flashes of light before the eye, floating specks, etc. Opthalmoscopic examination may show all grades of irritation from a simple hyperaemia of the retina to a choked disc. The more severe cases showing a neuro-retinitis, outlines of the disc very lazy, arteries much contracted and the veins congested and tortuous. Lymph extravasations may be seen throughout the retina, but hemorrhages are usually absent.

Knapp reported some time ago a series of cases, all multiparae, of neutritic atrophy with no other charges in the fundus, and were not due to albuminaria, and he further states that he has often been impressed with the frequent appearance of pale optic nerves in women with normal vision, who have borne children, and raises the question if this is not an evidence of some toxic influence, occurring during previous pregnancies.

I would especially call your attention to complaints of transient loss of vision in your patients. These cases cannot be regarded as uraemic or hysterical amaurosis, because of its slow progression and long duration, but Groeno states that they are rather due to a transient neuritis, secondary to auto-intoxication, and are evidently warning signs of more serious optic or retrobullar neuritis, that the pregnancy is the reason is proven by its recurrence with each succeeding pregnancy.

Hurst also reports a case in the second month of pregnancy in which there was persistent nausea and vomiting, headache and dimness of vision. Ophthalmoscopic examination revealed a neuro-retinitis and lymph extravasations into the retina, with no improvement after a period of eliminative treatment. Labor was induced, when all symptoms were rapidly ameliorated. In this case, at no time was there any albumin in the urine, and the urea test varied so from day to day that it was of little value. He reports another case of similar type, which in spite of the induction of labor, the condition progressed and the patient died.

I have had five cases of the eclamptic type in my own practice, two of which I feel of sufficient interest to report:

Case 1. Mrs. ———— primipara, age, 34; married three years. Patient had always been well and strong; early in the pregnancy there was persistent nausea and vomiting. In the seventh month there was transient periods of dimness of vision; these increased in frequency and headache was persistent. Early in the eighth month, vision was reduced so that it was hard to recognize friends in her home. Ophthalmoscopic examination revealed an intense neuro-retinitis, general retinal appearance was that of a choked disc.

The blood vessels were full and tortuous, and both retinae were dotted with retinal hemorrhages. In the macular area were the typical signs of albuminuric retinitis, yet no albumin had appeared in the urine until a week previous to my examination

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of the fundus. Artificial labor was induced. Prognosis of the ocular condition was given as grave.

This case has been under my observation now a little over two years, vision has gradually cleared until it reached normal in each eye some seven months after labor. There are still to be seen evidences of a previous serious retinitis. The eyes are very sensitive to bright light and fatigue is manifest after continued close work. Her present condition is fairly good, yet her endurance is much below normal. Urinalysis during the first year showed varying amounts of albumin and occasional costs, but during the past year analysis have been negative.

Case 2. Has an identical history with case 1. Patient, Mrs. ———— primipara, age 38. Labor induced at the beginning of the ninth month because of severe neuro-retinitis, associated with a serious nephritis. This case I am reporting because six months after the induction of artificial labor, she became again pregnant. At this time the retinal symptoms of the previous pregnancy had not disappeared. On account of the recurrence of the ocular trouble, the termination of pregnancy was advised, but was refused.

Toward the end of the eighth month, the retinal lesions were so extensive, that labor was induced with the delivery of a viable child which lived about six months. Following labor, the urine was loaded with albumin, the ocular symptoms remained stationary for about three weeks, when there began a steady but slow improvement. This case has been under my observation now three years; there is still a trace of albumin in the urine, but the retinal symptoms have sufficiently cleared so that she has vision of .7 in the right and .8 in the left eye. The eyes are extremely sensitive to light and become fatigued after a very moderate amount of close work.

NEW REMEDIES: The following paragraph is taken from "Pocket-Book of Treatment" by Leftwich:

"The young practitioner purrs when he is told he is up to date. When he becomes more experienced he will have discovered that it is safer to be, say, six months behind the times. In fact, the up-to-date physician may be defined as a man who experiments on his patients. Leaving on one side remedies which are introduced to the profession for purely commercial reasons, a new remedy, or a new application of an old one, is to its discoverer what a new baby is to its mother—wonderful and unparalleled! In both cases, and without any dereliction from good faith, the judgment is biased. The remedy is introduced with a fanfare of trumpets loud in proportion to the status of the originator. Chemists (druggists) stock it, and other manufacturers not only imitate it, but puzzle their brains in coining fresh trade-marks which they hope will induce the public to think that theirs is the real original product, et puis bon soir! For, twelve months afterward, it is forgotten by all but the exasperated chemists (druggists) who have stocks of it left on hand. Sometimes, as in the case of a well-known preparation of arsenic, it is found to be downright dangerous."

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CLINICAL DEPARTMENT.

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

Case V. Diagnosis: Pressure Neuritis.

This is not an uncommon type of neuritis to meet with in an out-patient clinic as a result of sleeping off the effects of an alcoholic debauch with the head resting upon the arm in such a manner as to press upon the musculo-spiral nerve. It is a splendid illustration of the physiological fact that the motor neurons are more susceptible to injury than are the sensory and lose the power of functioning earlier in slowly acting trauma or poisoning, as from pressure, lead, etc.

In this case the wrist drop was marked and the condition clear from the start, being directly due to the pressure of the tourniquet. The everted hand was due to the unequal tension of the tendons at the wrist.

The prognosis is generally good, but progress is slow; three to six months or more may elapse before nerve repair is complete and conduction re-established.

The active application of the static sparks and high frequency current applied in this case at the start was a mistake. Much rest is indicated and the daily use of the galvanic current up to the strength comfortably tolerated by the patient. The kathodal electrode placed over the part injured and the andal pole peripheral to it has given the best results.

Case VI. for Diagnosis:

The case is that of a woman, 45 years old, of New England stock. Family history: The grandfather and his two brothers and one sister all died of apoplexy, one of the brothers at 31 years. The father, a stern, quiet man, who does things, is living at the age of 75 years. This side of the family was dogmatically religious.

The mother, a highly-strung, idealistic woman, given to emotionalism, is also living at the age of 72 years. There were eight children; two died in infancy. Of those remaining, all are well excepting two girls, one of whom is markedly hysterical, and the patient.

The patient was a healthy baby. One day, when a child, having been berrying in a very hot sun, she remembers being unable to speak and the mother crying about it. When ten she had a similar but more severe attack lasting a few hours, and a little later a spell when she could not walk home from school as her legs gave out. When thirteen, she had some chronic movements of the left face muscles. Menstruated at fifteen normally; was bright at school and became a teacher.

During the summer vacation of her twenty-second year, she had some emotional worry, slept poorly, and one morning at breakfast found suddenly that she could not feel things with her left hand and her speech got thick. She went out and walked up and down the street and found that left foot dragged and the houses looked different. Then she vomited and went to sleep. Next day she was all right, but a weak later the mouth became drawn to the left and she was unable to close the right eye, which condition lasted some weeks. At this time she would go to sleep easily and anywhere, and once did so when the children were filing out of school.

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From this time there were moments when she could not move her left arm, or the left foot would stick to the floor. Also she had a gassy dyspepsia, which was a source of great discomfort.

She married at twenty-six, at which time she weighed ninety-nine pounds (usual weight 118 pounds). From this time on, life was easier and very happy and she improved and was relatively well, using both sides of the body equally. Eight years later she had a miscarriage and a year later a normal girl baby. Labor was difficult and she thinks that she was never completely recovered from it. Before it, she was very religious and a regular attendant at church, but afterwards, prayers and hymns lost their significance. She was then relatively well for ten years, excepting for occasional attacks of gassy dyspepsia. She has never evinced any emotionalism and has always kept an even, placid temperament, free from anything that might be styled hysterical.

Now followed two severe emotional shocks which greatly changed the current of her life. Then in January, 1910, she would at times feel as if her left foot dragged. In February she struck her head against a hot-air furnace pipe and immediately her left foot hung loose and useless, but after an hour was sufficiently better for her to take a train and go to the city. Next morning at breakfast she had a sudden feeling as if her head was being pushed through the ceiling and had to lie down, her left foot dragging. However, she took another trip on the cars and train. From this time on she has not been able to use the left foot properly and has never been able to flex the foot on the leg. She became an invalid with many neurasthenic symptoms, severe back-ache, unable to read or talk or be talked to, and noise was unbearable.

Next came an epileptiform seizure one morning in March, during which her mouth was drawn to the left, the eyes rolled up, speech got thick and she was unconscious. There have been several such occurrences since, with minor attacks in the left arm and neck, and sometimes in the left rectus abdominalis muscle. They always begin in the left hand. In May, 1910, pain in the abdomen led to an operation for appendicitis. She was then somewhat better, until in September, when she had another convulsion and again in December another, after each of which the neurasthenic symptoms re-occurred and her mind was much confused and clouded.

The patient is now dressed each day and able to hold connected conversation. She has told this story as recorded. She has black hair and a muddy complexion, and is rather emaciated. There is a large scar from a burn gotten from a hot water bag during a convulsion last September. The temperature, touch and pain sense all are intact except that it is a little difficult to tell the sharp from the dull point on the inner surface of both legs. Left knee-jerk is slightly spastic, and there is a marked clonus and upward planter reflex on left side. On right there is a slight pseudo-clonus, and knee-jerk is normal.

Small articles placed in her hands she can recognize by the feel. The pupils reach to light and distance and are equal. There is no nystagmus, but lateral movement of the eyeballs is limited to both right and left side, and in conversation the eyeballs occasionally assume an eccentric

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position, probably from unequal tension of the muscles. The tongue protrudes slightly to the left of the median line.

Heart sounds are distinct but normal, and position is good. Blood pressure 100. Abdomen negative. Except that she is exacting of the nurses and seems to place an unreasonable importance upon drugs, etc., she could not be called emotional.

What is this probable diagnosis and from what would it have to be differentiated?

It has been necessary to postpone the papers on the mind until after the June medical meetings.

A case lately shown in Dr. Frederick B. Percy's clinical lecture and discussed by Dr. Fred T. Murphy, who operated upon the patient, is worthy of report.

It was that of a man forty-eight years old who was perfectly well up to the last of December. While attending to his duties in his office, his left hand suddenly felt numb and queer. He was conscious of feeling faint, and dropped to the floor unconscious and was convulsed. After twenty minutes he revived and was taken home in a carriage. In half an hour he had a similar attack and was taken to the Massachusetts General Hospital. There he remained for a few days. A positive diagnosis was not made, but he improved and went with his friends to a camp at the shore, where he remained about two weeks. The last day at the camp, while picking up to go home, he felt his left hand getting numb again and got to a sofa in time to save falling, when he was unconscious again for twenty minutes. He then came to Boston and was admitted to a private hospital, where he was seen by Drs. F. B. Percy, F. T. Murphy and E. W. Taylor.

Systematic examination revealed the fact that the patient had lost his ability to recognize objects held in his left hand (loss of stereognostic sense). It is known that the centers for this sense are in the upper posterior convolutions of the parietal lobes. This fact, together with the other, i. e., that the spells always began in the left hand, led to the theory of some cortical irritation in the right parietal region.

Dr. Murphy operated, making the usual horse-shoe flap, and came down upon an inflamed dura mater under which was found a rapid growing glioma. As much as possible of this was scraped away without entering the ventrical, and the patient made a good early recovery, appearing at the clinic four weeks after the operation in excellent condition. At this time the patient's mind was well collected and oriented. He could with a little hesitation name articles placed in his left hand.

Dr. Murphy described the case in detail, but said that such a glioma cannot be safely extirpated sufficiently to insure recovery and that the chances of relapse were great. This has proved true; the tumor has recurred.

The New England Society of Psychiatry held its semi-annual meeting with Dr. G. Alder Blumer at the Butler Hospital, Providence, R. I., on March 28. Dr. Henry R. Stedman of Brookline was elected president

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and Dr. Henry I. Klopp of the Westboro State Hospital secretary for the ensuing year.

The program was a symposium on Dementia Præcox. The papers were as follows:

I. Dementia Præcox as a Family Psychosis. Arthur H. Harrington, M.D., State Hospital, Howard, R. I.

II. Heredity in Dementia Præcox. Henry W. Miller, M.D., Maine Insane Hospital.

III. Predisposition in Dementia Præcox. H. M. Swift, M.D., Danvers State Hospital.

IV. The Pre-hospital Stage of Dementia Præcox. Benjamin F. Burley, M.D., Worcester, Mass.

V. Dr. A. Meyer's Theory of the Psychogenic Origin of Dementia Præcox. A Criticism. E. Stanley Abbott, M.D., McLean Hospital.

VI. Note on Cephalic Asymmetry in Dementia Præcox. H. M. Adler, M.D., Danvers State Hospital.

VII. Recent Trends in the Psychopathology of Dementia Præcox. Isador H. Coriat, M.D., Boston, Mass.

It was voted to print these papers in the American Journal of Insanity. The weight of evidence from the data presented was that there is a large hereditary element in the disease—that the tissues of certain individuals seem predisposed from the start and that more work is needed to establish the kind of behavior in children which may be considered as the probable antecedents of the acute stage.

Dr. Packard discussed Dr. Adolph Meyer's theory of the psychogenic origin of the disease and did not believe that Meyers had proved his point. He himself seemed to favor the idea of an organic base. Dr. Coriat's opinion that much could be learned by the psycho-analytic methods did not seem to meet with the approval of the majority of those present and Dr. P. C. Knapp said that he had never seen any results from such methods and believed that the whole psycho-analytic scheme was fantastical and impracticable.

VACCINES IN OTITIS MEDIA: A carefully written article by Weston and Kolmer has recently appeared in the Journal of the American Medical Association dealing with the effect of vaccines upon the post-scarlatina otitis media. They summarize as follows:

1. The best time, all things considered, for commencing vaccine treatment in cases of otitis media, is from the eighth to the sixteenth day of the discharge.
2. Continued high fever, nephritis, toxemia and various intercurrent affections are contra-indications to the administration of vaccines.
3. Under vaccine treatment, three times as many patients are cured within thirty days and permitted to go home as under the usual treatment. This means that the average residence of a patient in the hospital has been considerably decreased.
4. In general, cases of otitis media offer a fruitful and encouraging field for the employment of vaccine therapy.

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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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ARTHUR H. RING M.D., Assistant Editor.

Reports of Societies and Personal Items should be sent in by the 15th of the month previous to the one in which they are to appear. Reprints will be furnished at cost and should be ordered of the Business Manager before article is published.

CLINICAL WORK AT BOSTON UNIVERSITY.

In accordance with established custom, the Medical School of Boston University offers to the medical profession a series of lectures, clinics and demonstrations to be held at the School and in the adjoining buildings of the Massachusetts Homœopathic Hospital during the week of June 19 to 24.

Work will commence at 9 A. M. daily and will continue until 4 P. M. Because of the meeting of the American Institute of Homœopathy which is to be held at Narragansett Pier, R. I., upon the following week, it has been possible for a number of eminent physicians from other parts to the country to accept the invitation of the Faculty to participate in the program. As at present arranged, this program will be about as follows:

MONDAY.

O'clock
9 A. G. Howard, M.D. Orthopædic clinic.
10 Herbert C. Clapp, M.D. Lecture: A Few Interesting Points in Tuberculosis.
11 Horace Packard, M.D. Surgical clinic.
12 E. P. Colby, M.D. Neurology: clinical lecture.
2 F. M. Dearborn, M.D., N. Y. Dermatology: clinical lecture (lantern demonstration).
3 John L. Coffin, M. D., and J. H. Urich, D. M. Dermatology: clinical lecture.

TUESDAY.

9 Geo. H. Earl, M.D. Orthopædic clinic.
10 Geo. B. Rice, M.D. Rhinology: operative clinic.
11 J. Emmons Briggs, M.D. Surgical clinic.
12 Frank C. Richardson, M.D. Lecture: The Aims and Purposes of the Evans Research Department.
2 J. P. Sutherland, M.D. Lecture: Hahnemann and Homœopathy.
3 O. B. Sanders, M.D. Clinical lecture: Syphilis.

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WEDNESDAY.

9 J. Herbert Moore, M.D. Clinical Medicine.
10 Geo. R. Southwick, M.D. Clinical Lecture: Conservative Gynæcology.
11 Frederick B. Percy, M.D. Clinical Medicine.
12 C. E. Fisher, M.D., Chicago. Lecture: Is Homœopathy Worth While?
2 H. P. Bellows, M.D. Otology. Lecture.
3 De Witt G. Wilcox, M.D. Clinical lecture: Surgery.

THURSDAY.

9 G. Forrest Martin, M.D., Lowell. Clinical lecture: Minor Surgical Emergencies.
10 E. M. Gramm, M.D., Philadelphia. Clinical lecture: Differential Diagnosis of Diseases of the Skin.
11 J. E. Wilson, M.D., N. Y. Clinical Neurology.
12 Mary E. Hanks, M.D., Chicago. Lecture: Ovaries: Practical Points for the General Practitioner.
2 W. A. Dewey, M.D., Ann Arbor. Lecture: Homœopathic Prescribing and Near-Homœopathic Prescribing.
3 C. A. Burrett, M.D., Ann Arbor. Lecture: Vaccines.

FRIDAY.

9 T. E. Carmichael, M.D., Philadelphia. Lecture: Pharmacology.
10 W. H. Phillips, M.D., Cleveland. Rhinology: operative clinic.
11 A. C. Tenney, M.D., Chicago. Clinical lecture: Diagnosis of Tuberculosis.
12 H. V. Halbert, M.D., Chicago. Clinical lecture: Exophthalmic Goitre.
2 Geo. F. Laidlaw, M.D., N. Y. Clinical lecture: Puncture Diagnosis and Autogenous Treatment.
3 R. H. Stevens, M.D., Detroit. Lecture: Subcutaneous Injection of Sea Water.

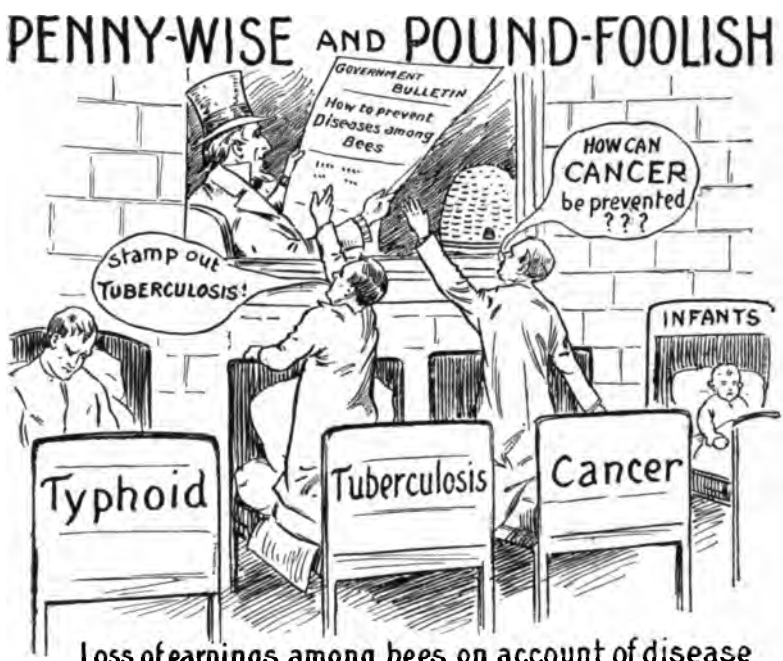
SATURDAY.

9 W. H. Diffenbach, M.D., N. Y. Differential Diagnosis of Diseases of the Bones: X-ray and stereopticon demonstration.
10 J. C. Wood, M.D., Cleveland. Surgical clinic.
11 H. D. Schenck, M.D., Brooklyn. Nasal Tamponage with Argyrol.
12 A. L. Blackwood, M.D., Chicago. Clinical Medicine.
2 to 4 Emerson Hospital, Forest Hills. Surgical clinic.

IS IT JUST?

In connection with the accompanying cartoon, kindly loaned by the Committee of One Hundred, much might be said with justice and right about the unequal value in the eyes of the government (judged from its activities) of a human infant and a young pig, with the balance of weight far to the side of the latter. This has all been said only too often and will doubtless long so continue to be discussed without much avail. The picture so well illustrates the point in a striking manner that it may (and we hope it does) impress someone who might not prove amenable to the written argument.

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BUFFALO (NEW YORK) HOSPITALS.

Those who are acquainted with the history of Homœopathy in this country and who have kept in touch with its steady extension, are familiar with the reputation Buffalo, New York, has had as a strong homœopathic centre. Loyal and sturdy homœopathists have practised in that city and have established a clientele which may be envied by less progressive and successful municipalities.

The latest news from that quarter is to the effect that by the amalgamation of the already existing hospitals, a large and vigorous institution will result. A quotation from the Buffalo Commercial News presents the matter in a concise form, as follows:—

With the granting of an order by Justice Wheeler on May 18 in special term of Supreme Court consolidating the Buffalo Hahnemann and the Buffalo Homœopathic Hospitals under the latter title, came the first public announcement that such a step had been considered. The petitions of the two hospitals were presented to the court by Attorney Carl H. Smith of Chester, Smith & Gratwick. The order effecting the consolidation becomes operative at once.

The Homœopathic Hospital was organized in 1872. It owned property at the corner of Maryland and Cottage Streets valued at about $55,000 and cash and securities worth about the same amount. The Hahnemann Hospital owned ground worth about $40,000 and a building,

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not yet finished, worth about $226,000, from which should be deducted a mortgage of $10,000. It had cash on hand of about $16,000.

The petition recites the actions of the two respective corporations at which the consolidation plan was adopted and refers to the property and liabilities of the parties to the agreement. The order reads as follows:

"That the name of the new corporation formed by such consolidation shall be Buffalo Homœopathic Hospital; that the particular object of such consolidated corporation shall be to establish and maintain in the city of Buffalo a homœopathic hospital and dispensary in which shall be received such persons as may require medical or surgical treatment and where medicine may be provided and dispensed for their benefit and where they may receive all necessary care and suitable medical and surgical treatment, and that, while the attending medical and surgical staff of the hospital shall be members of the homœopathic school, residing in Buffalo, the institution shall be operated on the broadest lines, the rooms, wards and practice of the hospital being open to any reputable physician who complies with the regulations; that the principal office shall be located in Buffalo."

Our friends in Buffalo are to be congratulated on this consolidation of their hospital facilities and the prospects thus offered of doing a larger work for the benefit of humanity.

The *Gazette* takes this opportunity to extend its felicitations and congratulations.

VIVISECTION AND ANTI-VIVISECTION.

The New England readers of the *Gazette* have looked with some unconcern and possibly with amusement on the efforts that have been exerted in other sections of this country and abroad, during recent years, to so restrict animal experimentation as to largely, if not completely, nullify the results to be obtained therefrom. In the minds of many, the anti-vivisection movement is classed with woman's suffrage, the aims and results to be obtained being about as little practical in the one case as in the other. Recently, however, the subject was brought more nearly to our attention by the late anti-vivisection exhibit and convention in Tremont Temple, Boston. Here for one week were exhibited the choice selections of the entire movement, and here, also, appeared Dr. Herbert Snow, of London, England, who gave several addresses from the standpoint of the "anti's." Dr. Snow was described as the "leading English surgeon," etc., etc., in spite of the fact that he has not, we understand, been in active practice for twenty-nine years, and probably knows about as much (or little) as does the average doctor elsewhere who graduated several decades ago, when it comes to discussing the results of modern laboratory experimentation.

The writer did not have the privilege of attending any of the lectures, but did study with much interest the various parts of the exhibit. This consisted of paintings in oil or water colors and of many mounted specimens of animals in the torture (?) chamber, illustrative of the various forms of cruelty to be experimented with. It was certainly a chamber of horrors, and as such must

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have had its effect upon a trustful public invited to attend without charge.

As a sample of the exhibits, there was shown just within the entrance of the Temple, a mounted specimen of one of the common household pets, presumably undergoing intense suffering, as a result of some experimentation.

Now, we do have a certain amount of sympathy for some forms of the anti-vivisection movement. In so far as its purpose is to suppress needless and useless suffering and to prevent cruelty, it will meet with the approval of every humanitarian But when it goes beyond that point and says that no experimentation shall be performed, it has exceeded the limits of right. No one will contradict the statement that there have been brutal investigators in medicine who have not taken precautions to eliminate unnecessary suffering or that at times certain experiments have been needlessly repeated. And no one will desire a continuation of such So far—good.

Our friends, the anti-vivisectionists, however, go far beyond this, and not only so suppress facts for the purpose of proving their points, but even seem to misrepresent other facts, so as to give them a meaning exactly the reverse of the correct one. Thus in the many illustrations of animal operations much stress was given to instruments to hold the creature firmly in place in spite of struggles, and not a word was said about anæsthesia or unconsciousness, the evident purpose being to convey the impression that no anæsthetic was ever used. This is, of course, absolutely and positively false. As well might we exhibit wax figures, illustrative of hysterectomy, of appendectomy, of thoracostomy or of amputation of an arm or leg to prove the needless suffering of surgical operations.

All this has been repeated so frequently that its truth value has become lessened by falling upon ears already fatigued. When an apparent actual misrepresentation of facts was made, the exhibit seems even more culpable.

To illustrate: it was so stated that the idea was given that the mortality from diphtheria at the Boston City Hospital was increasing under the use of antitoxin and that in New York City the mortality from cerebro-spinal meningitis has been greater since the introduction of Flexner's serum than before it.

The entire object of the movement seems to be to prove points, rather than to present facts, and if facts do not agree with the conclusions, so much the worse for the facts.

The writer listened with much interest to a discourse by one of the demonstrators who was attacking the benefits obtained from vaccines and various forms of anti-sera. This person said that nature never intended to have such "filthy" substances injected into the blood for any purpose whatsoever.

So familiar was she with the desires of nature that she stated it to be perfectly in accord with these desires to introduce hypo-

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dermatically "pure fruit juices," milk, or even a mixture of bread and milk. Of course such pitiable exhibitions of abysmal ignorance are merely ludicrous, and will convince no one.

When persons, or associations, from which we expect more intelligence, assume the same attitude, the influence for error becomes proportionately greater. Thus, one of the well-known comic magazines has for some years warmly espoused the cause of anti-vivisection. It has presented the sentimentalist's side of the question, surrounded by all the assumed and professed horrors, and has undoubtedly done its share in influencing others.

To combat this influence, "Puck" has recently taken up the opposite side of the question, and is presenting in a very striking manner the common-sense viewpoint. Several cartoons have already appeared, the first being the most striking. It depicts fairly accurately a supposed operating room with an animal being carefully anæsthetized by one doctor, and a second about to begin the operation, his hand poised as he listens to two groups giving opposing advice. On one side is a rabid collection of men and women, ignorant of the very fundamentals of medicine, loudly crying: "For mercy's sake stop." On the other is a shadowy band of spirits that have temporarily assumed their original form, showing the maimed, the blind, those who were victims of tuberculosis, of typhoid, of malnutrition and of the numerous diseases made less severe by animal experimentation. This second band is crying, earnestly and piteously, but from necessity less vigorously: "For humanity's sake go on." "Puck" deserves much credit for these presentations of the subject, in their true light, in a manner that will appeal to the layman and thus neutralize the pernicious influence of a false view offered by those whose one purpose is to stop a study which they have decided should not continue, regardless of its great value.

BOOK REVIEWS.

What Shall I Eat? A Manual of Rational Feeding. By Dr. F. X. Gouraud. Formerly Chief of the Laboratory of the Medical Faculty of Paris. With a Preface by Prof. Armand Gauthier, of Paris. Only Authorized Translation into the English Language. By Francis J. Regman. With a Glossary Containing Definitions of the Principal Technical Terms, and an Index of Diseases Referred to in the Text. Price: Cloth, $1.50. Rebman Company, 1123 Broadway, New York.

After a rather careful examination of this book we fully agree with its translator, Mr. Rebman, that it is one well worth placing before the public of another nation and another tongue. In a very pleasing manner it discusses the various topics of dietetics in a manner clear alike to the practitioner and to the layman. The varieties of foods are each taken up singly, meats, fish, milk, cheese, fats, eggs, cereals, vegetables, fruits, etc. Each receives careful description of preparation when necessary, of food value, of digestibility and of indications and contra-indications for its use.

The book is well written, well expressed, and lends itself as readily to the reading of the idle hour as to careful study and to the ordinarily intelligent layman as to the physician. We have personally received

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much benefit from it, and while it expresses at times the more local Parisian opinion concerning debatable questions, we are very glad to recommend it to our readers.

Handbook of Regional Anatomy. By Francis C. Ford, A.B., M.D. (University of Michigan), Professor of Anatomy, Head of the Department of Anatomy and Senior Demonstrator of Anatomy in the Hahnemann Medical College and Hospital, of Chicago, and in the Littlejohn College and Hospital; Member of the Chicago Anatomical Association, etc. Francis C. Ford, Chicago, 1910.

A convenient little book by one of our Chicago colleagues intended to present the subject of regional anatomy in a somewhat novel way. As a guide to the dissector and as a means of reviewing the subject of which it treats, it should prove to be of distinct value. The directions for procedure and the explanations of the various steps are clear and well classified.

Urine Examination Made Easy. A Plan of Examination with the Common Tests Fully Described. By Thomas Carruthers, M.A., M.B., Ch.B. Second Edition. Price, 60 cents, net. J. & A. Churchill, London, Eng. P. Blakiston's Son & Co., Philadelphia.

This is a little book written in a very plain manner for the purpose of instructing nurses It gives the more simple tests for chemical examination of the urine and contains blank pages for jotting down notes at lectures.

Vicious Circles in Disease. By Jamieson B. Hurry, M.A., M.D. (Cantab.), Ex-President, Reading Pathological Society. With illustrations. Price $2.00 net. P. Blakiston's Son & Co., Philadelphia. 1911.

Among the books that have recently reached the reviewer, this is certainly unique in many ways. It takes up the consideration of a subject that is perhaps not very often brought to our attention in a very striking manner; that is, those conditions in which two or more disorders are so intimate in their inter-relation as to be each dependent upon the other and each to react on the other. A simple example of this is the vicious cycle seen in the inter-relation of pericardial effusion, compression of the lymphatics and diminished absorption, each of which tends to cause the others. The author has divided these circles into those connected with the nervous system, with the cardio-vascular system with the respiratory system, with the degenerative system, with the urinary system, with the sexual system and with the ophthalmic system. He has given cuts illustrative of a number of such circles in each of the various sections, and in the last two chapters takes up the question of breaking a circle by natural means and by treatment.

The book has not been written in a distinctly connected manner, it being from necessity in the form of many short paragraphs, and does not therefore lend itself to very attractive continuous reading. It does contain, however, much that should be considered by every practitioner and is accordingly, therefore, believed to be a book well worthy of recommendation.

THE MONTH'S BEST BOOKS.

Practical Physiology. Pembrey. $4.00. Longwoods, Green & Co.
Differential Diagnosis. Cabot. $5.50. W. B. Saunders Co.
Practical Treatment. Musser & Kelly. $5.50. W. B. Saunders Co.
Intestinal Surgery. Bidwell. $2.25. Wm. Wood & Co.
Prevention of Infectious Diseases. Doty. $2.50. D. Appleton & Co.
Practical Hygiene. Parks & Kenwood. $3.50. P. Blakiston's Sons & Co.
Physical Diagnosis. O'Reilly. $2.00. P. Blakiston's Sons & Co.
Medical Diagnosis. Anders. $6.00. W. B. Saunders Co.

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Dermatology. Walker. $4.00. Wm. Wood & Co.
Bandaging. Davis. $1.00. P. Blakiston's Sons & Co.
Ear, Nose and Throat. Pyle. $3.00. P. Blakiston's Sons & Co.
Medicine. Strumpell. 2 Vols. $12.00. D. Appleton & Co.
Clinical Symptomatology. Pick & Hecht. $6.00. D. Appleton & Co.
Diseases of the Skin. Sequeira. $8.00. P. Blakiston's Sons & Co.
Plain Talks on Materia Medica. Pierce. $5.00. Boericke & Tafel.
Practical Cystoscopy. Pilcher. $5.50. W. B. Saunders Company.
Studies in Cardiac Pathology. Norris. $5.50. W. B. Saunders Company.
Hospital Management. Aikens. $3.00. W. B. Saunders Company.
Text-Book of Medical Diagnosis. Anders. $6.00. W. B. Saunders Company.
Diseases of Children. Sheffield. $4.50. F. A. Davis Company.
Operative Surgery. Kocher. 2 Vols. $12.00. The McMillan Company.
Diseases of the Stomach and Intestines. Reed. $5.00. E. B. Treat & Co.
Dermatology. Pusey. $6.00. D. Appleton Company.

SOCIETIES.

The Southern Homœopathic Medical Association will meet in St. Louis, Missouri, October 18-19-20, 1911.

The following appointments of Chairmen of Bureaus have been made by President Dr. John T. Crebbin: Clinical Medicine, Dr. R. F. Rabe, New York; Materia Medica, Dr. George A. Millies, St. Louis, Mo.; Opthalmology, Othology and Laryngology, Dr. E. P. Howell, Houston, Texas; Gynecology, Dr. E. S. Bailey, Chicago, Ill.; Pedology, Dr. Lewis P. Crutcher, Kansas City, Mo.; Sanitary Science, Dr. Chas. D. Hulbert, Ocala, Fla.; Surgery, Dr. Wm. Boies, Knoxville, Tenn.; Homœopathic Propagandism, Dr. H. R. Stout, Jacksonville, Fla.; Neurology, Dr. Benj. F. Bailey, Lincoln, Neb.; Obsterics, Dr. A. L. Smethers, Anderson, S. C.

Application blanks for membership and all other information regarding the Association may be obtained from Secretary Dr. Lee Norman, 451 Third street, Louisville, Ky.

A TWENTIETH CENTURY WOMAN'S MOVEMENT. CO-OPERATION.

During the Jubilee recently held in Boston many hundred women were thrilled as they listened to the stories of the sad conditions of women in foreign lands. The lack of sanitation, the superstitious barbarities that comprised the medical treatment, the native custom prohibiting the medical attendance upon women of men physicians, the scarcity of women physicians, made the women physicians of Boston feel the necessity for organized effort to help our sisters in China, India and other countries.

Since the close of the Jubilee a number of women physicians, without distinction of school or denomination, have organized The Medical Women's Association for Aiding Women in Medical Work in Foreign Countries.

The Association plans to raise money to endow already existing medical institutions for women in foreign countries; to provide scholarships for native women in medical schools; to take a personal interest in women medical students who are studying to enter the foreign fields; to provide equipment and hospital facilities as far as possible.

Membership in the Association is not limited to women physicians, but any woman may become an associate member upon payment of one dollar annually. Two sections have been formed, one for work in India, and one for work in China. To these sections contributions are de-

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sired, and donors are requested to designate the branch of work for which they wish their money used. Already eleven hundred dollars have been contributed toward the work, a thousand dollars of which is to build a bungalow for Dr. Belle Allen, of the Mrs. Wm. S. Butler Memorial Hospital in Baroda, India.

We have nearly enough money for two scholarships. Seventy-five dollars annually pays for a scholarship for a native woman in both the Woman's Medical College, Loodiana, India, and in the Union Medical College for Women in Pekin, China. Fifty dollars annually meets the expense of educating a native nurse.

On Friday evening, May 12, a meeting was held in Perkins Hall, Women's Educational and Industrial Union, 264 Boylston street, which was addressed by Dr. F. F. Tucker, of Pangkiachwang, China. This meeting was open to the public and was attended by a number of keenly interested women, and several new members were added.

The officers of the Association are:

President, Dr. Frances M. Morris, 803 Boylston street.

Vice-Presidents, Dr. Helen I. Woodworth, Hotel Cluny; Dr. Edith Hale Swift, 110 Bay State road.

Treasurer, Dr. Mary R. Mulliner, 803 Boylston street.

Secretary, Dr. Blanche A. Denig, Hotel Bristol.

LONDON HOSPITALS.

In view of the fact that the International Homœopathic Congress meets in London in July, the following abstract of an article which appeared in the "Medical Brief" may be of value to prospective attendants. It gives a list of the prominent hospitals in London and their comparative value and accessibility:

"St. Bartholomew's is probably the oldest hospital in London. It is in the city, or, rather, on the edge of the city, and occupies a large block of buildings in Smithfield, close to the general post-office. It contains seven hundred and forty-four beds, and the whole structure is in process of slow rebuilding.

Charing Cross is at the west end, and close to the Charing Cross Railway Station. It is a comparatively small hospital, but as it is within three minutes' walk of the Royal Dental Hospital, it attracts a good many dental students.

St. George's is at Hyde Park Corner, one of the most fashionable and expensive situations in London. It is a small hospital, and has only a small school, but it is patronized by many men from both Oxford and Cambridge.

Guy's is in the city; it is a large hospital, and has over six hundred beds. It is somewhat remote from the West End, and the large hotels where, as a rule, American visitors take up their residence, but it is well worth a visit.

The London contains nine hundred and fourteen beds, and is in Mile End, Whitechapel. It was, at one time, almost a day's journey to get there, but thanks to the introduction of "tubes" and motor cabs, it is now fairly accessible.

St. Mary's is at Paddington, and is fairly convenient for residents in Bloomsbury and Bayswater.

The Middlesex has a special cancer department, and is close to Oxford street, and not far from Portland Place.

St. Thomas's is on the "other side of the Thames"; that is to say, at Lambeth, but it is fairly accessible. Its buildings face the Houses of Parliament, and are considered to possess architectural features of merit.

University College is in the north of London, not far from Middlesex

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Hospital. The hospital has recently been rebuilt, and its college enjoys a high reputation.

Westminster Hospital is in the Broad Sanctuary, immediately opposite Westminster Abbey and close to all the big West End hotels. From its situation it is largely visited by American and colonial students.

The medical schools confine their instruction to men students, but there is one for women.

The London School of Medicine for Women is carried on in the Gray's Inn Road in connection with the Royal Free Hospital. The entire school has of late years been entirely rebuilt, and greatly enlarged. The laboratories are large and well lighted, and are fully equipped. There are also libraries and common rooms for the use of the students, and sets of chambers to accommodate seventeen women.

The hospital has one hundred and sixty-five beds, all of which are available for clinical instruction. There are separate departments for gynecology and obstetrics, and diseases of the eye, ear and skin. Instruction is given in anesthetics, bacteriology, etc., in addition to the ordinary clinical lectures and demonstrations and tutorial classes. Students also attend the practice of one of the fever hospitals of the Metropolitan Asylums Board, and receive special instruction in lunacy at one of the hospitals under the Asylums Board of the London County Council; they are also admitted to the practice of a number of special hospitals.

All these medical schools are constituent colleges of the University of London. The University is itself not a teaching body, but simply examines candidates and grants degrees."

LETTER FROM LONDON.

May 9, 1911.

To the Homœopathic Physicians and Surgeons of the United States.

Dear Colleagues:—

The International Homœopathic Congress, to be held in July next, bids fair to be the most brilliant, historic and epoch-making of Homœopathic Congresses. To it the professors of homœopathy from most parts of the globe will send their representative men. Not merely the homœopathy of any one country, but that of the whole world, will here take its place and play its part. This Pan-Homœopathic Congress is a great event in our annals: it represents the high-water mark of all that is best and most progressive in our science.

All shades of opinion in our profession will here be represented. Opportunity will be given for the free discussion of subjects interesting to the high and to the low schools among us, to the physician, the surgeon and the specialist. The records of interesting original work will be presented. The results of mature experience will be brought forward. The values of new methods will be declared.

The predominant voice in world-homœopathy is that of America; and the predominant influence in this Congress naturally falls to the distinguished citizens of the Great Republic. The whole homœopathic world looks to America for stimulus, for example and for mature counsel.

We, as officials of this International Congress, send to each one of you a personal pressing invitation to be present at this assembly and to take part in its deliberations. The success of the Congress will react on the status of homœopathy in America as elsewhere. To make this success great and impressive, the co-operation of every homœopathic physician the world over is invited. Each and all can take his and her part in ensuring this triumph.

We cordially urge all the men and women of light and leading in the American homœopathic fraternity to lend their aid. Personal assist-

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ance in the deliberations of Congress we earnestly appeal for. The contribution of a paper embodying special and interesting experience we also specifically invite from each. The crowning felicity would be the presentation of a paper backed by the personality of the author. COME!

We are, dear colleagues,

Faithfully yours,

GEORGE BURFORD,
President-elect.
C. E. WHEELER,
Hon. Secretary of Council.

NOTES FROM CHINA.

The following notes recently received by one of the Faculty of Boston University, while not intended for publication, and therefore somewhat personal, so well explain the work and the success of one of the recent graduates of the University that it has seemed wise to quote them as they stand.

"My dear Doctor: My son, Edwin M. Kent, who was in B. U. Medical School, Class of '09, has told me so much about how kind you were to him during his senior year that I thought you might be interested in what he has been and is doing. He was in Hai Ju, Korea, for ten months and had all the surgical work he could do, limited only by his ability to properly care for patients after operation.

In September last he went to China and has been at Shanhaikuan studying Chinese and assisting Dr. Keeler when called upon.

On January 17th last he wrote he was going to the station to meet Dr. Mullainey of Peking and several Chinese officials. They are trying to make Shanhaikuan a stopping point in the march of the disease from Manchuria into China. On Jan. 24th he writes that the doctor had been inoculated for the plague; was quite sick for a couple of days, and is now employed by the Chinese government in an effort to stamp it out of Shanhaikuan. He is out all day searching for cases. When he finds one he quarantines it, and when a death occurs buys the house with money which he carries for that purpose and burns it immediately. He calls it pneumonic plague and not bubonic, and describes it as a fulminating disease. Yours truly,

(Signed) S. W. KENT."

Notes From Dr. Kent's Letter.

"Shanhaikuan, North China, Jan. 30, 1911.

"Today is the Chinese New Year. No trains, no mails and no one works who can help it. Coolies won't dig graves; carpenters won't build houses, and even I have spent most of the day at home. Made one call in the city today to examine a dead case. It was not plague. Seven days have now passed since the last case. We have about concluded that we have wiped the disease out of the city. Hope so. It has never been done before so quickly. Almost too good to be true. It started here Jan. 14th. We have had fifteen cases and now the city is plague free. It took about a week to do the work. My! how we did work! I was just dead tired every night. Have had a fine experience, but it looks as though it were ended. I have had charge of Shanhaikuan work, and it has been done promptly and efficiently, so I ought not to kick, but I do wish there was another spot near, for it is fun to clean up things. Possibly I can get sent elsewhere, but am afraid not. Have been riding horseback some each day on my rounds of inspection. Lame, tired, sore and weary. Mornings I worked with the men to make sure they did things O. K. and argued quarantine measures with families, while afternoons I galloped about to see how much was done. It was great fun."

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Later Letter.

"For ten days there were no cases of plague here, and then a switchman or pointsman in the freight yards died suddenly. I examined his blood and found the plague germ present in large numbers, the field was just covered with them. Then down went our pride. We had been boasting of a clean Shanhaikuan, but we can do that no longer. We have shut up seven railroad men who are supposed to have been with the sick man. How he caught the plague is the question. So far as we can learn he had not left the city and no one from elsewhere had visited him. Anyhow, we buried the body and burned the house, so he, at least, will not infect others. He died Friday night and no new cases since.

"Tientsin is bad. It begins to look as though it would be destroyed almost. Five or six new cases are reported daily now. At this rate it will soon be hopeless. Of course there are probably many unreported cases. The Legations went crazy when the first cases occurred and threatened all sorts of things, so since then the Chinese have redoubled their efforts, but have kept pretty quiet. The Japanese are trying to make a lot of political material out of the plague. They claim its presence is due to Chinese inefficiency, while fact is that the plague was carried to Harbin by the Russian railroad and to Mukden—clear inside of China—by the Japanese Railroad. Over these two lines the Chinese government has absolutely no control.

"Everyone acknowledges that plague is carried almost entirely by the coolies who are returning to Shantung from Harbin at New Year's. They go home for the holidays. They all buy third class tickets. So the Japanese did the noble thing and stopped issuing third class tickets. Of course the coolies preferred second class to walking, so the South Manchuria Railway made a great haul on coolie traffic. They dumped the coolies at Mukden. Mukden got the plague and the Imperial Railways cut off all traffic between Mukden and Shanhaikuan. From Mukden the coolies started to walk to Shanhaikuan. Chinese troops were stationed along the Great Wall to keep them out. Next came an imperial edict forbidding passengers between all stations from Shanhaikuan to Tang Kunear Tientsin. Now the edict has been modified somewhat and trans-Siberian passengers are allowed after undergoing quarantine in Mukden and Shanhaikuan. Shanghai passengers are also allowed to enter the Capitol after undergoing quarantine at Chung Wan Toa.

"In Boston when I had to add Bacteriological Technique to Histology I was not over pleased, but now I can see the value of it. I can prepare a specimen for microscopical examination as quickly as any of the others and do it as well. I guess there will be no occasion for regretting the possession of any knowledge or skill I may have acquired.

"This branching out into public health is an entirely new line for me. Haven't even one book on the subject! Now that the plague is here and so well established it will probably require the services of medical men for some time to come. Its eradication is not easy. It is endemic in India after years of fighting. Oriental cities are not built like San Francisco nor is it easy to arouse public sentiment against plague. The public, however, do object to enforcement of health regulations.

"Have been riding horseback quite a lot lately. It saves time and is jolly good fun. Have a horse that used to race and he goes to beat the cars. Last night the mail train brought a special car for our use. If things are quiet here we'll visit the nearby stations and try to put out the plague."

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PERSONAL AND GENERAL ITEMS.

PRESIDENT-ELECT MURLIN. The Gazette is glad to be able to announce that Boston University, after long and careful consideration, has finally been able to obtain such an able successor to President Huntington as Dr. Lemuel Herbert Murlin. As is well known, President Huntington has for the last year been remaining in office against his personal desires, purely on account of his loyalty to the University. During this time the trustees have been carefully considering his successor, and have had under consideration the names of many able men. For one reason or other all of these have been gradually eliminated until finally the present happy selection has been made. Dr. Murlin is at present President of Baker University, Kansas, a position that he has held for sixteen years. During his incumbency the institution has forged rapidly ahead and is at present very influential in the Middle West.

We bespeak for the new president the cordial co-operation of the medical faculty and trust that the relations may be as sincerely friendly and filled with mutual respect and admiration as have been those recently entertained for the retiring president.

With our pleasure at making this announcement comes sorrow on account of the necessity of bidding a final farewell to President Huntington, who has proven so loyal to the medical school and who occupies such a warm position in the hearts of all, both faculty and students.

The Civil Service Commission of Boston has recently confirmed the reappointment of Dr. N. W. Emerson as one of the trustees of the City Infirmary Department.

On May 1 Dr. J. Herbert Moore removed his office from 520 Commonwealth avenue, Boston, to his former location, 1339 Beacon street, Brookline.

Dr. A. G. Howard announces the removal of his offices from 520 Commonwealth avenue, to 536 Beacon street, Boston.

Dr. Winfield Smith has removed from 520 Commonwealth avenue to 538 Beacon street, Boston.

Dr. DeWitt G. Wilcox has removed his Boston office from 520 Commonwealth avenue to 419 Boylston street.

Dr. Joseph E. Sternberg announces that during June, July and August his office at 100 Boylston street, Boston, will be open on Tuesdays from 1 to 5 P. M., and on Wednesdays from 9 A. M. to 3:30 P. M. His address during these months will be Dennisport, Cape Cod, Mass.

Dr. Chas. A. Eaton, who has for several years held the position of Assistant Pathologist at the Massachusetts Homœpathic Hospital and instructor in Pathology at Boston University, has removed to Portland, Maine, where he will occupy the house and take the practice formerly held by the late Dr. Edward F. Vose, at 417 Congress street.

Dr. and Mrs. Frederick V. Wooldridge, of Pittsburg, Pa., are receiving congratulations upon the arrival of a little daughter, born April 1.

Dr. Florence M. Ward has recently opened a new private sanatorium in San Francisco. This, we are told, is one of the most completely equipped institutions of its kind in the far west. We bespeak for Dr. Ward much success in this work, as we believe that she thoroughly deserves it.

Dr. Frank O. Cass, B. U. S. M., 1909, of Derby Line, Vt., will remove in June to Provincetown, Mass.

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Dr. Annie I. Lyon (class of 1889, B. U. S. M.) has removed from Melrose to 268 Pleasant Street, Malden, Mass.

FOR SALE—The medical library of the late Dr. David Foss. Publications date from 1810 to 1903. Send to Ernest Foss, Newburyport, Mass., for list.

WANTED: A HOMŒOPATH—Only four homœopathic physicians in a city of over 100,000 population. Owing to illness I have not disposed of the medicines and instruments of the late Dr. B. H. Byam. There is no other physician's office within easy walking distance, and I am asked daily as to the prospect of another's locating here. Will rent office furnished or unfurnished. An excellent opening for the right man. Terms very reasonable. Address B. G. Byam, Admx., 24 B Street, Lowell, Mass.

The will of the late Robert A. Barnes of St. Louis has recently been upheld by the Supreme Court of Missouri. In it three million dollars is donated for the purpose of erection, maintenance and endowment of a non-sectarian hospital in St. Louis.

Dr. Alfred Stengel, the well-known pathologist of Pennsylvania, has recently been appointed Professor of Medicine in the University of Pennsylvania.

The hookworm commission upon investigating the condition of students at the State University of Louisiana has announced that about 25 per cent. of them are infected with hookworm.

The American Red Cross announces, in connection with the International Conferences of the Red Cross which will be held at Washington, D. C., in May, 1912, that the Marie Feodorovna prizes will be awarded.

These prizes, as may be remembered, represent the interest on a fund of 100,000 rubles which the Dowager Empress of Russia established some ten years ago for the purpose of diminishing the sufferings of sick and wounded in war. Prizes are awarded at intervals of five years, and this is the second occasion of this character. These prizes in 1912 will be as follows:

1 of 6,000 rubles
2 of 3,000 rubles each.
6 of 1,000 rubles each.

The subjects decided upon for the competition are:

(1) Organization of evacuation methods for wounded on the battlefield, involving as much economy as possible in bearers.

(2) Surgeon's portable lavatories for war.

(3) Methods of applying dressings at aid stations and in ambulances.

(4) Wheeled stretchers.

(5) Support for a stretcher on the back of a mule.

(6) Easily portable folding stretcher.

(7) Transport of wounded between men of war and hospital vessels and the coast.

(8) The best method of heating railroad cars by a system independent of steam from the locomotive.

(9) The best model of a portable Roentgen-ray apparatus, permitting utilization of X-rays on the battlefield and at the first aid stations.

It rests with the jury of award how the prizes will be allotted in respect to the various subjects. This is to say, the largest prize will be awarded for the best solution of any question irrespective of what the question may be.

Further information may be obtained by addressing the Chairman, Exhibit Committee, American Red Cross, Washington, D. C.

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DOES INTERNAL MEDICINE TEND TO ABORT OR CURE ABSCESS AND THE TENDENCY THERETO?—Robert E. Coughlin believes that if individuals predisposed at all times to the development of abscess were examined carefully at different times when supposed to be in a condition of health they would undoubtedly show some abnormality in their makeup that would give some light on the etiology and predisposing factors. Abscess of the appendix may be anticipated by attention to the etiological factors. The use of serum to produce immunity in typhoid and the antiseptic treatment of the disease may prevent extension into the gall bladder and a subsequent abscess. Internal medication in the case of pyelitis may abort a suppurating kidney. Internal medication in a case of dysentery, malaria, or tropical fever may prevent a liver abscess. Vaccines have been used with some success in pyemia, pyosalpinx, and tube-ovarian abscess by indicating opsonins, etc. Following out this line of reasoning abscesses of the skin, boils, furuncles, furunculosis, and carbuncle are due to a disordered condition of the system, and in the latter staphylococcus serum has worked well along with supporting treatment; as for instance, strychnine as a stimulant with opium to relieve pain. Calcium sulphide is effective in modifying all suppurative processes in a most decided manner, the dose used being one-half to one grain three times daily in adults, and for children one-tenth to one-twentieth of a grain three times a day. When indications have been carried out in the manner suggested one cannot fail to be convinced that internal medication does tend to abort or cure abscess.—Medical Record.

PHYSICIAN AND PATIENT. A little pamphlet called "Treatment" has just been received by the *Gazette.* In it we find a quotation from the New York Evening Sun for October, 1910, that discusses a problem frequently encountered by us all and one which demands our attention. It deals with the relation of the physician to his patient, and is as follows:

"The unusual case of Dr. Merriam, the Washington physician who is sued for $5,000 by a patient for being absent in time of need, raises interesting points. The relations between physician and patient as to these points it would profit both parties to have cleared up.

A great many patients are much inclined to impatience over the fact that their physicians are not available when called for. A rather large number of physicians suffer in health, once they attain to what is called a successful practice, owing to their overexertions in trying to answer all their patients' calls. Each party naturally feels that the other is somewhat unfair to him.

The patient's point of view is typically this: "I don't know anything about medicine, but I know my physician, and have confidence enough in him to intrust my health to his keeping; when I deal with a grocer or a butcher, I expect to find him at his stand whenever I need him; so when I call upon the only physician that I deal with, I expect to find *him* at *his* stand."

The physician's way of looking at it is somewhat different: "I appreciate the confidence of my patients, but I deplore their lack of understanding of my limitations; they seem to think that I can be in several places at a time; they demand the same prompt service of me that they do of their telephone exchange; they don't realize that a physician cannot devote himself to a single patient; they are foolishly touchy about anything that they can construe as neglect; and yet they are just as touchy if in case of emergency I send them a substitute or an associate."

The solution, as it will be applied in the future, no doubt, is contained in the recourse to a substitute. There seems no other alternative. Patients do not want a physician who has no other patients. Yet an overworked physician cannot answer their needs either. Whether he is

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away on some other case or whether he attends a patient while himself under the stress of overwork and over-hurry, the medical attention is inadequate.

Abroad there is a tendency in some lines of practice for physicians to form firms. The patient receives the service not of the individual practitioner but of the partnership. The arrangement requires each of the firm to know the history of each of the firm's cases, and incidentally it gives each case the benefit of two or three medical heads instead of one. The fact that the junior partner is a partner and not a mere assistant gives him a greater share of the confidence of the patient. Division of labor makes it possible for the firm to attend to routine calls and emergency demands with a fair degree of certainty, and with much more comfort to the hard-worked practitioner.

If the public would learn, from the present case in hand and from such others as occasionally may come up, the advantages of tolerating an alternate physicians, it might make for good all around."

PUS IN THE ABDOMINAL CAVITY.—Deaver of Philadelphia, in the Annals of Surgery, contributes an important article upon this subject. Among other things he says:

"What is to be our attitude towards the pus already present within the abdominal cavity? . . . . . I am certain that I drain less and less every year. Where I once said, 'When in doubt, drain,' I am now likely to say, 'When in doubt, don't drain.' I do not hesitate to close up any case which shows only a small amount of seropurulent fluid within the abdomen. . . . . .

Thick, vicious-looking pus in considerable amount, especially if it be foul smelling, is in my mind still an indication for drainage. I waver somewhat even in certain of these cases, and I have closed a few of them without ill effect. . . . . Sodden, pus-soaked gauze is an obstacle to the flow of secretion instead of a conductor. As I remarked long ago, a cigarette drain is an excellent thing when there is nothing to drain. . . . . .

The advisability of washing away the exudate at the time of operation is, of course, another point to be considered here. My objections to irrigation in brief are that:

1. It consumes time that we cannot afford to lose.
2. It diffuses infectious material, a serious matter in generalizing peritonitis where there may be extensive areas of peritoneum as yet unaffected.
3. By causing us to manipulate the bowels it has a tendency to promote paresis.
4. My own experience, and I believe the combined experience of operators all over the world, show a higher percentage of cures without irrigation.

I do believe it to be good practice to aspirate any collection of fluid in the pelvis, or elsewhere, that is accessible, or to absorb gently with gauze any highly foul or purulent exudates about the source of infection, but to wash extensively or to go on any extended tour of the abdomen seeking for exudate to clear away, I believe is wrong."

THOUGHT IT SOMETHING DREADFUL.

Old Lady: "Doctor, do you think there is anything the matter with my lungs?"

Physician (after a careful examination): "I find, madam, that your lungs are in a normal condition."

Old Lady (with a sigh of resignation): "And about how long can I expect to live with them in that condition?"—Pharmaceutical Era.

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THE NEW ENGLAND
MEDICAL GAZETTE

VOL. LXVI JULY, 1911 No. 7

ORIGINAL COMMUNICATIONS.

THE OPEN OPERATIVE TREATMENT OF FRACTURES OF THE PATELLA.

By Aimé Paul Heineck, M.D.,
Professor of Surgery Reliance Medical College; Adjunct Professor of Surgery University of Illinois; Surgeon of Grace Hospital and to Cook County Hospital, Chicago.

Atrophy of the Quadriceps Femoris Muscle.

(Continued from June Number.)

This atrophy is due, partly to disuse, partly to extravasation of blood in the substance of the muscle, partly to associated injury to the muscle and to its contained nerve filaments. By the aid of the open operation all blood extravasates can be removed, fascial tears can be sutured.

The patients regain the use of their limbs in a comparatively short period of time; the period of immobilization is markedly shortened. Active use prevents and overcomes atrophy attendant upon disuse. It is said that "an ounce of voluntary exercise is worth a ton of massage in the treatment of muscle atrophy." The early removal of all extravasated blood, liquid or clotted, from the articular cavity and from the peri-articular tissues, limits the liability to the formation of adhesion, intra- and extra-articular in nature.

By the employment of the open operative method all the above mentioned obstacles to restoration of functional integrity can be more rapidly, more effectually overcome than by resorting to non-operative treatment, separate or combined. The open method makes possible the removal from the joint cavity of detached bony fragments; it enables the operator to absolutely prevent the union of the fragments in a faulty position, that is, in a position mechanically interfering with the proper function of the joint; the tendency to adhesion of the upper patellar fragment to the femoral condyles is lessened. Increase in the dimensions of the patella following the open operative treatment is a rarity. Any increase in the dimensions of the patella is very liable to interfere with the adaptability of the patella and femoral articular surfaces.

Is operation at times contraindicated? If so, when?

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Under what conditions is the open operative treatment of doubtful propriety or not indicated?

In formulating indications and contraindications for the open operative treatment of fractures of the patella, we give only slight consideration to age, sex and occupation. Individuals of either sex, at all periods of life and in all walks of society, need a good patella. However, in this, as in all other operations, the state of the tissues and the viscera must not be ignored. Such anatomical and physiological deterioration of the tissues may be present, as to compel us to regretfully substitute inferior therapeutic measures to operations of election. The facts can be stated to the patient and he can select between functional integrity and functional disability. We do not advise the open operation:

1. In fractures of the patella that occur in a diabetic patient. The tissues of diabetics offer very little resistance to infection. They are tissues of impaired regenerative power. Nevertheless, an absolutely bad prognosis need not be given in these cases.

2. In fractures of the patella, occurring in patients having advanced tubercular disease or suffering from well developed cardiac, renal or hepatic disease.

3. In closed longitudinal fractures, with no displacement or with but slight lateral displacement. In fractures of this type recovery almost invariably follows the combined use of such measures as massage, immobilization, full extension of leg on thigh, coaptation of the fragments by retentive apparatus.

4. Fractures of the patella in which the separation of the patellar fragments is so slight as to be barely detectable, do not call for the open operative treatment. The same applies to fractures in which the injuries to the accessory patella ligaments are unimportant.

5. Do not operate on patients who prefer to pass their lives partly disabled rather than to run the minimal dangers of an operation.

If operation is not always indicated, when is it indicated?

The popularity of the open methods is increasing. In careful and skillful hands, the dangers formerly incident to their employment can now be said to be non-existent. Kocher himself has become an earnest advocate of the open operative treatment. In von Bergmann's clinic, it is regarded since 1893 as the routine treatment for transverse fractures of the patella.

With increasing familiarity with the successive steps of the operation and a better appreciation of a judiciously carried out after-treatment, the results atending its employment are becoming more and more satisfactory.

For this very important addition to our surgical resources we are chiefly indebted to Lord Lister-Lucas-Championniere, one of the pioneers and also one of the most enthusiastic advocates of the open operative treatment for fractures of the patella, who states that the first antiseptic operation of patella suturing was

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performed by Cameron of Glasgow in 1877. Lister reported his first case in 1877. In 1883 he reported six more cases and then showed clearly that this new method of treatment was followed by perfect recovery, while previous to that time the condition had been looked upon as being, of necessity, followed by lameness. The adoption of this form of treatment, among German-speaking surgeons, is largely due to the efforts of Hackenbruch, Trendelenburg and Koenig. Trendelenburg performed the first open operation in Germany in 1878. Among the French-speaking surgeons: Charput, Berger, Lejars, Mayer, Lambotte, Vallas, are some of the ardent and most prominent supporters of the open operative treatment.

It was Berger who introduced cerclage.

It is our belief that, after ample preparation of patient and of the operative field, the open operative treatment is positively indicated:—

1. In all fresh fractures of the patella in the absence of contraindications.

a. If the surroundings are favorable..

1. An aseptic operating room.

2. Skilled surgeon, and assistants having "an aseptic conscience."

3. Dependable suture material, rubber gloves, etc.

b. If the patient is in the best possible condition.

c. If the fracture be of such a nature that a disabling defect is to be expected if one resorts to non-operative treatment.

d. When the bony fragments cannot be returned exactly by manipulation to their normal position and retained therein by retentive apparatus.

2. In all compound fractures.

3. In all cases associated with considerable intra-articular effusion. The separation and tilting of the fragments is partly produced and partly maintained by the intra-articular effusion, be the latter hemorrhagic or inflammatory in nature.

4. In all cases associated with marked laceration of the peri-articular tissues (ailerons, reserve extensor apparatus). After fractures of the patella a great distention of the joint capsule is suggestive of noticeable peri-articular lacerations.

5. In all cases in which the inter-fragmentary space or diastasis has at any time exceeded 3 cm. This extent of separation cannot occur without laceration of the accessory patellar ligaments, without rupture of the overlying fibro-periosteal tissues.

6. In such fractures as are very liable to cause serious functional joint impairment; among such may be cited cases in which bony fragments have escaped into the articular cavity; cases in which lower or upper fragment or both are completely inverted, or other such anomalous cases.

7. In all fractures of the patella occurring in individuals

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upon whom at one time or another a leg or thigh amputation of the opposite limb has been performed To such individuals complete integrity of function in the remaining limb is of the highest importance.

8. In all fractures of the patella occurring in individuals having some permanent functional impairment of the opposite knee.

9. In all individuals, who, having sustained a partial amputation of the leg, can for flexion and extension of an artificial limb derive benefit from the preservation of the integrity of the extensor apparatus of the leg.

10. In all bilateral fractures of the patella, be they of simultaneous or of successive occurrence. In bilateral patella fractures it is reasonable to assume some risk in an attempt to transform an almost certainly dependent individual into a self-supporting one.

11. In all refractures, in the absence of contraindications.

12. In old fractures of the patella, associated with marked impairment of function, if the functional loss be dependent, wholly or partly, upon one or more of the following factors:—

a. Long fibrous union.

b. Union in a faulty position, in a position that mechanically interferes with the proper function of the joint.

c. Absolute non-union.

d. Ankylosis of the upper patellar fragment to the femur.

e. Extensive non-repaired lacerations of the aponeurotic, capsular and other fibrous tissues. These lacerations hinder restoration of function, increase the fragmentary diastasis. The patella is only a part of the extensor apparatus of the leg; an important part, we admit, but not the sole part.

f. In all cases in which non-operative treatment has been followed by unsatisfactory results. In operating on old fractures of the patella it is imperative previous to the apposition of the fragments, that the fractured surfaces either be freshened or that a thin slice of bone be sawn off from each of the surfaces.

In old, as well as in all other fractures of the patella, we must in addition to repairing the tears in the soft tissues endeavor to obtain osseous union of the fractured bone. This desideratum can be effected only by securing an exact, an accurate apposition of the freshened fractured surfaces. Consequent to the fracture and to the disability which it entails there develops a retraction and an atrophy of the quadriceps extensor femoris. This muscular contraction, this muscular atrophy, is the most important cause of the great difficulty, a difficulty at times almost insurmountable which we encounter in our endeavors to approximate, to appose, to reunite the bony fragments. As easy as is the primary suture of a fractured patella, just as difficult can be the suture of an old fracture of the patella. It is convenient from the

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operative standpoint to classify old fractures of the patella:

a. Those in which the fragments can be approximated with but little difficulty.

b. Those in which owing to the co-existing atrophy and unusual retraction of the quadriceps extensor femoris muscle, the approximation or rather the exact apposition of the fragments is a difficult feat to accomplish.

In cases in which the fragments can be approximated with but little difficulty, the operation will differ from that performed in recent fractures only by requiring two additional steps:—

a. The resection of the interfragmentary fibrous callus.

b. The freshening of the fractured surfaces.

It is essential that the interfragmentary gap be overcome. To approximate the fractured surfaces pre-operative massage, position and traction at times suffice. Z-shaped incisions for lengthening of the quadriceps may have to be performed. If these measures fail to secure the relaxation, the lengthening of the quadriceps necessary to obliterate the interfragmentary gap, a plastic operation is indicated.

Which is the most universally applicable of the three main types of operation that are now in vogue for the treatment of fractured patellæ?

The results obtained by the employment of any of these three dissimilar operations, osseous suture, cerclage, suture des ailerons, have been, when the operation was performed by competent hands, so gratifying, that it is embarrassing to suggest that one of them be abandoned. With each of these different methods excellent functional and anatomical recoveries have been obtained. Osseous suture has given satisfactory results. Cerclage has secured excellent recoveries. As to the third method, it has been truthfully said: "In fractured patellæ absolutely perfect results from the standpoint of contour, solidity and function have been obtained, in a relatively short period, in cases in which all suturing was limited to the prepatellar and parapatellar fibrous tissues (Peyrot)." Whichever method be employed, the repair of the soft parts is all important. The importance of this step is emphasized by most of the advocates of osseous suturing.

In recent fractures of the patella I have abandoned osseous suturing. I have not yet seen a case of old fracture of this bone in which I felt that a good result could not be obtained without the employment of osseous suturing.

To my mind, osseous suturing, as a method of treatment for fractures of this bone, has the following shortcomings:—

a. It calls for special instruments.

b. The perforating instrument may break and the broken portion remain embedded in the patella

c. It is a procedure not universally applicable:—

1. It is unsuited to the treatment of comminuted fractures.

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2. It cannot be used to advantage in cases in which there is great inequality in the size of the fragments; one very large and one very small fragment. The lower or upper fragment may be that small as to afford only an insufficient hold to the sutures. In cases of this description many of the advocates of osseous suture resort to Quénu's homi-cerclage operation. In this operation, homi-cerclage, the larger fragment is perforated transversely and the binding ligature is passed through this perforation and either through the ligamentum patellæ or through the quadriceps extensor femoris, through the latter if the lower pateller fragment be perforated; through the former if the upper patellar fragment be the one perforated. Longitudinal suturing of the fragments, frequently, owing to the unequal volume of the fragments or to their multiplicity proves to be a very difficult operation.

d. In cases of abnormally friable fractured patella attempts to perforate the fragments may provoke further splintering of the same. The slow elimination of splintered fragments prolongs convalescence, retards recovery.

e. In cases of secondary operation the fragments may have become so atrophic that they are incapable of holding the sutures.

f. The proper boring in the patella, from before backwards, of channels for the introduction of the sutures, demands experience. At times, it is difficult of execution. The perforation of the bony fragments always complicates and always lengthens the operative procedure.

g. It is needless. It adds injury to injury. Equally good if not better results are obtained by less difficult and less laborious methods.

Open circumferential looping was introduced by Berger of Paris. It is employed by the advocates of osseous suture of fractured patella. In cases—

1. In which one of the fragments is too small to admit of perforation previous to the introduction of the silver wire, or other employed suture material.

2. In which one of the fragments is too small to be directly sutured to the larger fragment.

3. In fractures with many fragments or with comminution.

4. In cases of abnormal friability of the patella.

It has been and is still extensively employed in the treatment of fractured patellæ, as—

a. A supplementary measure to osseous suture.

b. As a preliminary, or as a supplementary, measure to suture of the prepatellar and parapatellar tissues. By many it is employed as the only operative step in the treatment of fractures of the patella.

The advantages of circumferential looping or cerclage are:—

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a. That its employment inflicts no additional traumatism upon the periosteal and osseous tissues. The osseous and cartilaginous surfaces are uninjured by the passing of the circumferential ligature. It respects the skeleton.

b. That the ligature material, which loops the patella, is totally extra-articular. It is introduced and embedded in the peripatellar tissues. Should a metallic ligature, such as silver wire, be used, and its presence subsequently cause real or imaginary disturbances, the removal of the real or supposed offending agent can easily be affected without opening the articulation. It respects the articulation.

c. The method is of easy and of rapid execution. The maneuvers incident to its introduction are extra-articular. It can be used as a preliminary or as a supplementary step to any of the various open operative methods in vogue. It no doubt contributes to the exact coaptation of the bony fragments. As far as it goes, this procedure (cerclage) is safe, logical and serviceable. No special instruments are required for its performance. To our eyes, circumferential looping as a method of treatment has the shortcoming of insufficiency. We use cerclage as a preliminary, or as a supplementary measure to suture of the prepatellar and parapatellar tissues.

Study of the literature of the subject, surgical experience and clinical observation have led me to consider that the following are the most universally applicable operative steps to be conjointly employed in the treatment of such fractures of the patella as demand operative intervention:—

1. The torn prepatellar fibre-periosteal tissues must be carefully sutured. E. Wyllis Andrews, instead of uniting these torn prepatellar tissues end to end, sutures them in such a way that they overlap one another, that is, they are imbricated one within the other, "shingled" as it were.

2. All tears in the parapatellar tissues must be sewed up. It is imperative that all capsular rents be carefuly repaired.

3. To contribute to the maintenance in apposition of the fragments, the patella is circumferentially looped by a ligature passed close to the periphery. This ligature is passed so as to be close to the periphery of the bone, so as to hug it as it were. It is inserted in such a way that it lies embedded in the substance of both quadriceps tendon and ligamentum patellæ midway between their anterior and posterior surfaces. If deemed necessary, two such looping ligatures may be used. These different maneuvers are all extra-articular. In some comminuted fractures in which the interfragmentary diastasis was slight and in which the prepatellar tissues were practically untorn, I have often united the operative procedure to looping the patellar fragments and to fortifying the prepatellar tissues with a few V-shaped kangaroo-tendon-sutures, not exposing the articular surfaces to inspection.

Should one, if he be an advocate of the open operative treat-

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ment, operate on the day, or on the morrow, of the infliction of the injury, or should he wait until the soft tissues have somewhat recovered from the immediate effects of the traumatism?

In all compound fractures of the patella, the time allowed to elapse between the injury and the operative intervention should be the shortest consistent with the modern surgical preparation of the operative field.

In compound fractures of the patella our practice is to have the patient conveyed at once to a well equipped hospital. Operation is performed soon after admission to the hospital.

The wisdom of operating immediately in compound fractures is, I believe, unquestioned. It is only in simple or subcutaneous fractures that there is great divergence of opinion among surgeons as to the elective time of operation; not only that, but many individual operators do not, as to the time-interval between injury and operation, observe a uniform practice. In subcutaneous fractures ample time should always be taken for the preparation of the patient and of the surroundings for operation. It has been our practice in fresh subcutaneous fractures of the patella to defer operation for from three to five days after the injury, being guided somewhat by the patient's general condition and also by the evidence of local trauma. The congestion and inflammatory exudate consecutive to the injury have usually by this time begun to retrogress. Our results having been satisfactory, we are averse to change.

The time interval between the day of injury and the day of operation enables the surgeon to become better acquainted with the patient's general condition, to better familiarize himself with the type of fracture which confronts him, and to better asepticize his operative field. Owing to the wrinkled, thickened nature of the skin of the front of the knee, its surgical purification presents some difficulty.

Should the operative field be rendered bloodless by the employment of an Esmarch bandage? What should be the nature of the anæsthetic employed? Local, lumbar or general anæsthesia?

As a prophylactic measure against hemorrhage, or as an aid to secure a bloodless operative field, it is rare for surgeons to make use of the Esmarch bandage, or band, in their operations for any great assistance in these cases. The Esmarch band, applied according to the ordinary rule, interferes, while in position, with the normal elasticity of individual muscles and of muscle groups, may hinder the bringing down of the extensor muscles of the thigh, and consequently render difficult the approximation of the patellar fragments. The oozing into the articulation and tissues that follows its use is another undesirable feature attending its employment. We know of no valid reason for its preliminary use in operations for fractured patellæ.

In Chicago, in operations of this nature, in the absence of

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contraindications, we almost invariably use general anæsthesia. General anæsthesia enables the operator to more thoroughly protect the patient from pain, to better guard against accidental septic contamination, to secure a more complete muscular relaxation, to proceed more deliberately, to modify his procedure so as to better adapt it to the needs of the case at hand.

Perusal of the literature shows that in these operations the employment of general anæsthesia is in accord with the practice of European and American surgical centers.

By what type of incision is the operator best enabled to perform the repair work which he deems appropriate and necessary?

Large, methodically carried out incisions are infinitely less dangerous than small openings. The latter fail to fully expose the operative field, do not enable the operator to satisfactorily cleanse the joint and do not facilitate the careful repair of the lateral capsular and aponeurotic tears.

The single median vertical incision, unless it is made very long, does not admit of easy manipulation of the fragments. The freshening of the old cicatrized surface on both the upper and lower fragments either with saw or chisel is not easily accomplished through it; it does not admit of easy cleansing of the joint. During kneeling the scar is in the line of pressure, and, therefore, remains tender for an indefinite time. The H-shaped incision has objections. The scar lies directly across the patella.

In operating for fractured patella, I generally employ for the exposure of the parts, a flap having its convexity downwards. The incision commences on a level with the upper margin of the patella, about one inch to one side, from here it passes downwards to a point a little below the apex of the bone, from where it is continued across the limb, and carried to a point corresponding to that from which it started. This incision does not interfere in any way with healing. It is thought that an incision with the convexity downwards better secures the vitality of the flap than one with the convexity upwards.

These convex incisions afford à good exposure of the parts, facilitate the removal of intra- and extra-articular exudates and extravasations, give good access to the bony fragments and allow of careful repair of all capsular pre- and parapatellar tears. If drainage of the peri-articular tissues is necessary it is easily secured. With a longitudinal incision, drainage is somewhat difficult.

Is it advisible in these cases to irrigate the articulation; if so, with what fluid, an antiseptic solution, irritating or non-irritating, or merely a bland, non-irritating, cleansing agent, such as normal salt solution; or is the mere sponging out from the synovial cavity of the extravasated liquid and clotted blood, productive of the most satisfactory results?

Joint irrigation with irritating antiseptics, such as carbolic acid and bichloride of mercury, we condemn. Any agent acting

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as an irritant upon joint endothelium, lowers its resistance to infection, predisposes it to inflammation. In flushings or irrigations of the joint cavities with normal salt solution, which solution is in itself unobjectionable, we fail to see much value. Of what advantage can it be to waterlog the tissues?

In arthrotomy for fractured patellæ we do not irrigate either the joint or the surrounding tissues. All liquid and clotted blood are removed by gauze swabs mounted on artery forceps. The swabbing is done with great care, the object being to minimize the trauma inflicted. Scrupulous care is taken to keep the fingers out of the articular cavity. In formulating our conclusion we repeat that though we are aware that many clinicians, for instance Ranzi, etc., prefer irrigation of the articular cavity to sponging of the articulation, we urge the discarding of joint irrigation and firmly advise dry sponging of the joint. Dry sponging for the removal of liquid and clotted blood from the articular cavity is in these cases productive of more satisfactory results. The subquadricepital synovial cul-de-sac is not to be overlooked, and all liquid and clotted blood therein contained must be removed.

Should non-absorbable or absorbable suture material be used? Are there any valid reasons for discarding non-absorbable suture material?

We refer here only to buried or irremovable suture material. If the suture material be so inserted as to be removable, once organic reunion of the divided tissues has taken place, it matters little (owing to the removability of the suture material) whether absorbable or non-absorbable material be employed.

In fractures of the patella it is not necessary that the fragments be held together with great firmness. Mere apposition is ample. Forcible tying of metallic sutures to some extent defeats its own purpose, as a suture drawn tight can cause in a bone, as well as in other tissues, a local pressure necrosis and absorption.

We consider it unwise to abandon non-absorbable suture material permanently in the articulation or in the peri-articular tissues, because:—

a. Clinical observation has shown that metallic sutures frequently irritate the tissues, lower their vitality, increase chances of infection, and may require subsequent removal. In longitudinal suturing of bone, the twisted ends of the suture being almost immediately subcutaneous, kneeling is painful. To avoid this postoperative annoyance some operators perform transverse suturing of the patella.

b. Metallic sutures may become loosened, may break, and fragments escape into the articular cavity by which they are poorly tolerated.

c. The embedding of wire sutures in the patella does not add to the solidity of the patella.

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d. Non-absorbable sutures, be they inserted transversely or sagitally, cannot be considered permanent splints.

Von Brunn as a result of his investigations came to the following conclusions:—

1. Silver wire has not sufficient resistance to guarantee bony union of the fragments.

2. Even when the fragments are healed together the wire may break.

3. Parts of the broken wire may wander into the articulation or into the peri-articular tissues and can excite disturbances at point of lodgment. It has been claimed by Thiem, etc., that metallic sutures suggestively hinder, in some patients, the cure of the subjective troubles.

Shall completely detached bony fragments be removed? If completely detached bony fragments be present, their removal is one of the essential steps of the operation. It has been repeatedly done, and satisfactory results have ensued. The escape into the articulation of completely detached patellar fragments and their non-removal therefrom leads to all the functional and anatomical articular disturbances inseparably associated with mobile foreign joint bodies.

Shall the periarticular tissues be drained? In order to allow the escape of excessive wound secretions, many clinicians, Hackenbruch and others, though they did not resort to tube or gauze drainage of the peri-articular tissues, always left the ends of the skin incision open. It did not unfavorably influence the ultimate results. In clean cases subcutaneous drainage is needless. Its employment serves no useful purpose. It retards the healing of the skin wound. Why complicate an operative procedure by a useless step?

Shall the articular cavity be drained? In simple fractures, no. In compound fractures, yes. Articular drainage should be discontinued as soon as the surgeon's fears as to the development of a suppurative arthritis have been dispelled.

The modern tendency is to employ drainage only in the presence of absolute indications, and to discard it when in doubt as to its utility in the case at hand. When unneeded, drainage instead of contributing to rapid aseptic healing has a tendency to act as an irritant. In the etiology of inflammation, irritants are considered predisposing and exciting factors.

What should be the nature and the duration of the post-operative treatment? As yet the practice of the different operators as to nature and duration of post-operative treatment is most dissimilar. We proceed as follows: Immediately after the operative procedure and the application of the protective dressing to the wound and while the patient is still anæsthetized, moulded plaster of Paris splint is applied to the injured extremity. This splint should be amply padded, should cover the posterior and lateral surfaces of the limb and should extend from about 10

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cm. above the external malleolus to the gluteal fold. The object of this splint is to immobilize the extremity in the position of full extension of the leg on the thigh, and of slight flexion of the thigh on the abdomen. The slight flexion of the thigh on the pelvis has for its purpose the relaxation of the rectus femoris muscle. During the patient's confinement to bed attention must be given to the heel and to the toes. So as to avoid the development of a pressure-sore upon former, the heel should be protected by a doughnut pad or other means. By the use of a "cradle" the toes will not be subjected to the weight of the bedclothes and talipes decubitus will not ensue. In the absence of a marked elevation of temperature, or intense pain, of saturation of the dressings, the protective gauze dressings on the joint remain undisturbed for from ten to fifteen days, then, if indicated, the removable sutures are ablated. The immobilizing splint is kept in position for about a month.

As to the duration of immobilization, the practice of the various operators is far from being in accord.

The first motions of the patella should be lateral motions. We do not begin flexion of the leg upon the thigh previous to the expiration of one month from the day of the operation. The first attempts at flexion should be cautiously made. With use, the range of motion gradually increases; in many cases the restoration of joint function is complete. When flexion to a right angle has been recovered, the patient is discharged from further observation.

Suit Following Operation.—The New York Hospital has been made defendant in a suit brought by Miss Mary E. Gamble to recover $50,000, on the ground that an operation performed without her consent has crippled her right arm. The hospital's defense is that the patient did consent to the operation, that this was skilfully performed by a competent surgeon, and that following it she received the best of care.

—Medical Record.

Good News From Chicago.—Our friends in Chicago seem to be reaping a very full share of the crop of prosperity that has recently come to homœopathy in this country. Notice has already been given of the donation of $75,000 for a nurses' home for the Hahnemann Hospital and of an additional $30,000 for general hospital purposes. Mrs. Anna W. Phelps has recently presented to the hospital a site for a new building as a memorial to her late husband, E. M. Phelps. The property extends from Prairie to Forest Avenues and is estimated to be valued at about $65,000.

We are also told that the hospital and college have now at their command over $500,000, with hopes of still more. With this they will build the new college and hospital, and still have a considerable amount for endowment purposes.

Two new cases of leprosy have recently been reported in the Boston newspapers. One came from Pawtucket, R. I., to Boston for diagnosis. The other was reported by a Boston physician and was a woman, a native of Sicily, 43 years of age, who had been a resident of Boston for four years. She will be sent, undoubtedly, to the leper colony at Penikese Island. The Rhode Island authorities applied in vain for permission to send their case to the same institution.

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GALL-BLADDER DRAINAGE.*

By Charles E. Walton, M.D., Cincinnati, O.

Modern geographical and surgical exploration are antipodal. The former has discovered the North Pole and is now busy in searching for the South Pole. The latter has solved most of the problems of the South Pole of the abdomen, and is engaged now in solving those of its North Pole. Every abdominal surgeon is engaged in this work. The stomach and duodenum, the pancreas, the gall-bladder and bile ducts, are the special objects of investigation. For the purpose of this paper we will consider gall-bladder operations.

It is a safe surgical dictum to spare every organ that can be made to perform its function. This applies to the much attacked foreskin, except for Hebraic considerations.

It does not follow that because a deer has no gall-bladder, that a human being is no worse off than a deer if it is removed. The deer cannot miss what it never had. The human body must adjust itself to the absence of what it should normally possess.

Better no gall-bladder than a diseased one, but better a half-bladder in good working order than none. Its action as a compression chamber regulating the bile flow makes the gall bladder a desirable organ even though it can be dispensed with when necessary.

A gangrenous, or cancerous, bladder should be removed, or one filled with pultaceous bile with a hopelessly impaired mucous membrane. But when possible the bladder should be saved. A mucous membrane has strong reproductive power when relieved of a permanent irritation. Relieved of stones, or impaired bile it soon returns to its normal function, if given time and opportunity. The frequent association of gall-stones and cancer of the head of the pancreas leads us to the early removal of the stones as a more than possible cause of the cancer. The restoration of a normal mucous membrane removes the probable formation of stones.

An inflamed bladder, with its impaired bile is very like an abscess in any part of the body. It calls for opening and drainage. Under drainage the mucous membrane of the cystic duct, congested even to the point of occlusion, frequently resumes its normal thickness, and patulency is restored.

Two recent cases are instructively illustrative of the value of drainage.

A young woman, that is, problematically young, as she was twenty-eight and unmarried, had been treated for five years for gall-bladder disease. There were frequent attacks of severe pain followed by jaundice. Diagnosis, gall-stone. Though repeatedly urged to have an operation, she refused. Finally, becoming incapacitated for work, she consented. A small bladder was found filled with grumous bile. There were no stones. The mucous

* Read before the Homœopathic Medical Society of Ohio, May, 1911.

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membrane was greatly thickened. A rubber tube was stitched into the bladder through which was passed, for several days, a large quantity of vitiated bile. The tube loosened on the tenth day and the sinus closed in ten more.

A peculiarity in this case was the location of the pain, which was behind the lower part of the gladiolus, which some of the more recent graduates will most likely remember is the second portion of the sternum. At the time of the operation the condition of the appendix was investigated and found to be greatly thickened. In consequence of this it was removed. The next day after the operation, the pain was gone. I am inclined to think that the pain was caused by the inflamed condition of the hepatic ducts incident to the cholecystitis. The patient today seems to be well.

The second case is especially unique, in that it was one of acute traumatic cholecystitis.

I was called on Thursday to operate for intestinal obstruction which had existed since Friday of the preceding week, in spite of copious enema and the most active cathartics.

I found a rugged man of sixty-three with the following history. Had been in perfect health. In felling a tree he had strained himself severely. This was followed the next day (Friday) by severe pain, vomiting, and immobile bowels. Had a chill with subsequent fever reaching one hundred and two degrees. Fever each day and persistent constipation for a week. Examination revealed a non-distended abdomen. This ruled out obstruction. He had, however, a very tender area in the right hypochondrium. There was the trouble, and whatever it might be, nothing but an operation would determine its character. An immediate operation was advised from the history of trauma, and severity of the symptoms. Consent was given, and the abdomen was opened over the tender point. I found a very tense gall-bladder the size of a base-ball. Several ounces of disintegrating bile were removed through an incision. The bladder was sewn to the peritoneum, and a tube introduced and fastened with catgut. Before I finished normal bile was coming from the tube. After a few day's drainage the tube became loose and was removed, the sinus closed rapidly, and we had a well man.

What caused the constipation? I think the pain from distention inhibited the peristalsis. In forty-eight hours after the operation the bowels moved, and recovery was uninterrupted. The trouble had not existed long enough to seriously damage either the bladder or the ducts. What would have happened without an operation can only be imagined.

What advantages are furnished by drainage? It enables us to save some bladders which otherwise would be sacrificed. It will sometimes open an occluded duct, and even if it does not, it leaves an uninfected bladder. It does not complicate the case and gives the patient a good chance of life. Should the sinus fail to close, it can be closed by a subsequent operation.

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THE SCHOOL GIRL AND COLLEGE WOMAN AS A CLINICAL STUDY.

By W. B. Hinsdale, A.M., M.D., Ann Arbor, Michigan.

What I shall say about the school girl in adolescence and early womanhood will be based, mostly, upon clinical experience and general observation, without reference to her as a psychological and pedagogical study, of which latter phases of girl and womanhood I do not claim any particular knowledge unless it be a few notions drawn from common, in contradistinction to scientific observations. During the period of childhood, boys and girls are very much alike, naturally, and quite unlike adults of their respective sexes. They will acquire about the same habits, if left to themselves, indulge in the same animated play and follow the impulses to which their environment may particularly contribute. However, they find out very soon that the proprieties of childhood as regulated by parent, guardian or teacher are considerably different for them, and, under such direction, largely segregate themselves. Little girls are told that it is improper for them to play horse, climb trees and to shout and yell. Little boys very soon learn that their place is more out of doors and that to play with dolls and to do patchwork is out of character for them.

Ethnologists, in making comparisons between uncivilized adults and children of civilization, place them somewhat on the same level intellectually. The former, after his crude training and education in the arts of his tribe, ranks not far above the latter before his education begins. Accepting this statement as fact, the domesticated child is, at birth, somewhat of a savage and, untutored, will develop into a rude and uncompassionate individual. How far this will be overcome by cultivation and schooling depends upon his educatability, his physical organism, and the disciplinary methods of his masters and associates. The child is born with certain vital potentialities. His preparation for usefulness in society and for his pleasurable and profitable presence among his friends and men in general must certainly react for better or for worse upon his physical structures or, in other words, involve his health. To be a vigorous person the best must be made to develop anatomical structures symmetrically and to keep functions within normality. Were I to suggest one of the important defects of the training of the female child, to say nothing about her brother, I would mention the liability of making unstable, even to the degree of morbidity, her bodily framework and her internal viscera.

As I have said, children of both sexes are very much alike up to the time when their latent capacities begin to awaken into fuller development and distinctive function. It is at this point that I wish to enter into the question suggested by my subject. I will state further, however, that from the standpoint of the

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clinician, children should be handled as eating, breathing, sleeping and over-active young animals, the best being made of ration, rest and modified exercise, so that they may be normal in every structural and physiological particular. The girl, being influenced by her mother's and older sisters' indoor vocations and properties; and the boy, imitating the too often rude behaviour of his father and older brothers, are susceptible of being permanently deflected from the line of best development. The one crippled by too much, the other by not enough physical restraint.

When men, or their progenitors, being driven by the evolutionary forces that changed their quadrupedal habits, began to walk upright, they assumed an attitude that puts at defiance certain forces of nature, particularly the force of gravitation. The quadruped, resting upon four supports, is in stable equilibrium. The biped, resting upon only two points of support, is unstable. The everlasting effort, unconsciously as the adjustment is made from moment to moment, that we make to maintain our postures has more to do with our bodily and mental functions than we realize. The four-footed beast, constructed upon the fore-and-aft-plan, has his body and its visceral contents in the best possible position to resist downward pulls, tortions, flexions, curvatures and prolapses. The upright attitude is the best possible one to facilitate these conditions.

The human brain is subjected to myriads of infinitesimal concussions which accumulatively amount to considerable. These jars produced by walking, running and jumping do not affect the brains of lower animals. The shock produced upon the heel of a man is transmitted directly to the encephalon and spinal cord because they are in a staight line above the point that receives the blow. Were it not for the two slight curves that serve the purpose of springs in the spinal column, we would all succumb to concussion of the brain. On the contrary, the structure of our four-legged ancestors, with their heads disconnected from their bodies, so far as any injuries from locomotion were concerned, and their body-springs so much better adapted to absorbing the shocks of contact with the ground when moving, could not have been exposed to such risk. When we are upon our feet our central nervous system as well as our abdominal organs pay a penalty in some degree for the privilege of the perpendicular position.

The animal mother during gestation is well braced and fortified against the ever-increasing internal burden. The human mother has to brace herself against such a weight and unconsciously acquires a kind of backward leaning or antero-posterior curvature of the body to keep her balance. Gravity prevents the quadrupeds from having hemorrhoids, and other varicosities among them are seldom observed. If we were to walk always upon our hands and feet varicose veins of the legs would not be so frequent and gravitation would cure our hemorrhoids without the interference of the proctologist. Human predisposition to

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hernias is also due to gravitation, although animals do sometimes become "breached."

There are at least three features of the female mechanism that strike me as of distinguishing clinical importance. First, her cerebro-spinal system; second, her anatomical, not including sexual, structures; third, her sexual appendages. In the first and second of these she is somewhat comparable with man, part for part. They both have the same nervous systems, acted upon by the same extraneous forces, but there is a difference in degrees of sensibility and the ease with which they react to internal causes. Extraneous irritants, as well as mental emotions play dances and dirges upon the woman's nervous organism, the like of which tunes the man never hears, as his own system is incapable of response to the fine touches to which hers is very sensitive. Hers is the wireless, his the metallic connection. He is only conscious of her high-pitched response to the ethereal waves through her reporting them to him. No one has so good an opportunity for observing these differences as the physician, although the teacher, if attentive and analytical, usually understands them somewhat. The old bachelor, the stoical professor, and political superintendent or principal probably can never know of a young woman's real normal feelings, much less of her morbid ones, as his own receptive capacities are not sensitized to them and his personality is not sufficiently confiding or sincere to have them impressed upon him. While the woman's nervous organism is responsive to delicate impressions, while she is more or less lachrymose upon occasions and responsive to multitudinous small influences, she can undergo bodily pain to a degree beyond man's endurance.

Between the ages of eleven and fifteen, there awaken in the girl the organs that distinguish her sexually. Up to this time, she is neuter and leads, or should lead, a kind of vegetative life, a life of growth rather than one of mentality. The organs that she has so far carried in a state of suspended development, and that have performed no part in her vital economy, begin to enlarge and to go through certain periodical evolutions. These changes require a greater blood supply and establish nerve connections that so far have not been important. The blood thus required must be taken from the general volume or the general volume must be increased to meet the demand. Which ever condition prevails, the change has great nutritional significance. Unless the change be natural, the girl becomes anemic and does not develop into a plump, vigorous young woman. Whatever be her condition, she requires consideration that she does not often get. Of course neither the school girl nor the college woman is going to discuss her organic mechanisms, of which she knows usually very little, with her teacher or professor. Neither is she going to disclose to him consciously the high-pitched nervous and mental modalities that she experiences. The school principal or who-

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ever happens to be her educational adviser, should be a kind of impressionistic diagnostician. He should be able to interpret her states and conditions without questions or apparent attempt at special observations. I would not convey the impression that the average girl is pathological, but enough girls and young women are so far across the line of perfect normality that they form a good percentage of cases. Up to the time her organs take on special activities, they are relatively so small and so well supported that they remain in place. But when they begin to undergo a kind of physiological congestion, they become heavier, pull upon their ligamentous attachments and loosen up in other respects. At this time, for these reasons, gravity, ever ready to drag downward, begins to be more effective and to cause displacements, tortions and flexions in the weakling, the anemic, and the exhausted.

Every four weeks there takes place in the organs that distinguish her as a woman the culmination of a periodic event which is the wonder of anatomists and physiologists. Nothing similar to it is possible in the bodily experiences of men.

So long as the young woman is normal, she stands the strains of work and life relatively as well as the young man, but her adjustments are so intricate and the inter-relations and inter-dependencies of her parts so many and so close, she is more liable to depressions and periods of low vital resistance. When her burdens are heavy for her, she drives herself by will power. She does this rather than to seem to lag.

Going up and down stairs is severe upon girls and women. All school buildings over two stories in height, not provided with adequate elevator service, should be burned to the ground and new ones constructed in their places upon physiological, hygienic, architectural and other sensible principles. The nearer the same level all school floors are kept, the better. The ideal school house is a one story building. Women, especially while menstruating, certainly deserve to be relieved from lifting their own bodies, step by step, to the tops of high buildings and letting them down again. The truth of this proposition is so apparent as to require no explanation.

At the time of beginning menstruation women had better be considered as pathological than to drive or be driven forward to invalidism. It would conduce wonderfully to the conservation of woman's health to give her at least one full day's vacation and relief from both physical and mental strain at this time. I am reminded of the working woman who said she did not object to a good many children as all the rest she ever had was the few days she lay in bed after her confinements. If all women during the productive years of their lives could lie in bed, if they wished to, every twenty-eighth day, the mass benefit would be incalculable. Such a rule would so disarrange schedules and other school duties as to make a perpetually perplexing as well as embarrassing situ-

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ation and is, I suppose, chimerical. As things go, the school girls, teachers, students will take risks that sooner or later will catch hundreds of them when either temporary or permanent ill health will result. Not many of them become so affected, of course, as to be bed-ridden or enforced into complete non-productiveness; but they will complain of not feeling well and will not manifest buoyancy and vigor indicative of good health. Aside from the remedies that are administered in doctor's offices, I do not know that there is anything, that can be adopted, that will reduce the percentage of invalidism among young women.

One may require that his own daughter have a day's rest when needed, or when health is at stake, but she is likely to suffer in her marks and to receive rank in her classes that touch her pride. She falls behind and it is said of her that she can not be a scholar. Once in a while there is a sagacious and considerate teacher who, without seeming to do so, makes individual exceptional rulings and easy days for those whom he is keen enough to recognize as being deserving of temporary leniency. But the scientific rule demands that all must struggle. In the struggle the strong may win, the feeble can not and should not do so.

I wish now to say a few words about the college woman. I understand the term to refer to women who take serious studies in advance of the common school. How far in advance, there is no fixed point. First; who, from a clinical standpoint, should enter college? The reply is easy. Those who, while passing through the grades, have survived with good health, regular bodily habits, and who really desire or, to use a dietetic term, crave more systematized education, such as is obtained in advanced schools, commonly called colleges. What shall she study? That's the point. Who can tell? Who shall outline her courses? By what principles shall her adviser be guided? It is probably preposterous for me to suggest. But like everybody else, I have a notion. My notion is that the college woman's educational pursuits must be selected very much as a physician selects a remedy for an invalid. What does he do? He individualizes. Each one has his peculiarities, either normal to him or abnormal, as the result of his ailment. To illustrate:

Some people with pneumonia have chill predominating, others have a turbulent fever, others suffer much pain; pain may have its time of aggravation and amelioration; some are delirious, some have spasms, others suffocate, some are lethargic, others restless. The circumtances of the onset also enter into the picture, the rate of breathing, the character of the cough, if there be any, the nature of the expectoration, the eliminations from the body, the feeling of the skin, the expression of the face, the attitude in bed, and many other things enter into the problem and individualize the particular sufferer, and to distinguish what may be called his personal pneumonia. I have seen it stated thus: "Your pneumonia is not that of your neighbor, for you are not

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he; he is a child, an adult, a senex, previously healthy or not, thin or fat, in good health, or run down with care, work or starvation, or he has a pneumonia of a different etiological character" (Jacobi). The mere naming of whatever be the etiology or character of pneumonia gives to the mind of the therapeutist, of course, a diagnosis of the disease, but not of the remedy. Our diagnosis is of two kinds: first, determining the nature of and naming the ailment; second, selecting the remedy that corresponds to the state of the patient. We treat patients, not diseases. The name of a disease gives a vivid impression of the morbid process at work in a vital economy, but it does not, in the least, give a clue to medicinal needs, as I have endeavored to indicate.

It would seem that before one outline or select a course of study involving more than the ordinary school curricula that not only the physical, but especially the mental and nervous endurance of the student deserves to be measured. Is she emotional? Is she stoical? Is she imaginative? Is she matter of fact? Is she a memorizer or a reasoner? Has she an aptitude of expression or a proclivity for investigation, or both? Has she latent that which can be transformed into kinetic power? Has she idiosyncracies? No doubt many women, as well as men, select or are advised to select mathematics when they should specialize in language; or they decide upon science when the decision should have been for history. The woman's psychological index must be read and interpreted. If all she wishes to prepare for is all around school-teaching, let her do it, even if it be indifferently done; because some school board will have a place for such a candidate; and the board may not necessarily be at fault either. The intelligence, the pay roll, the grade of average scholars in a community may not be such as to retain an advanced teacher. But if the woman desires to specialize, or if she seek high attainments, the most careful review of her individuality should be made before she starts. The method to be pursued is not different from that for men, except, as I have attempted to indicate, it usually requires a more finely graded scale. Her accurate measurements must be taken and considerable learned about her without asking too many direct questions. Some of her measurements are gross, some require subtilty of insight. Men, who are usually called upon to assist in classifying women and in arranging their intellectual pursuits, seem not always to realize the differences between themselves and women. Just as the practising physician learns by experience and long observation, so should the pedagogic consultant acquire acumen in diagnosing his clientele of girls entering college, who seek eventually to gain genuine scholarship.

Men often accuse women of shallowness, but women have no monopoly of that human characteristic. Women are not all shallow. A woman may appear shallow to a certain man because he himself is of no great depth, or because he has taken her

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wrong dimension, or sounded in the wrong place. Females are not males, and the difference does not lie altogether in the physical features, great as those differences are. All sexual characteristics are not matters of anatomy or even of physiology. One who does not believe that men know all about men can understand how men may know less about women.

What I have said may be a severe arraignment of the social and school order with reference to females for which men are largely responsible, owing to their misunderstanding and misinterpreting that complex of anatomical structure, physiological function and psychical manifestation termed, at one stage of life, girl; at an advanced stage, woman. But women themselves are not always innocent in this regard. Some of the severest managers and teachers I have ever known have been women. Sometimes they are most unreasonable task mistresses. Even some women teachers are relentless with dull, impoverished and nonresistant girls. Such women, I presume, are single, physically hardy and mentally pitiless, and give evidence to the notion that a woman is not quite womanly after all until she has had the experience of motherhood.

The conclusions of what I have been saying may be stated as follows:—

I. Children of both sexes are alike and can be handled alike up to the time of puberty, from the physical standpoint.

II. Nature imposed upon human kind as a penalty for special bodily privileges impediments of various kinds, chief among which are the action of gravity, unstable equilibrium, and insufficient visceral supports.

III. The penalty imposed upon woman by nature seems to be greater than that imposed upon man.

IV. Girls from puberty are possessed of a more delicate nervous system and respond more sensitively to depressing and straining influences.

V. Women and girls, as a class, must be considered as normal, functionating beings, but owing to their periodical, involuntary, cycles are liable to unbalance.

VI. Every menstruating human female should, at her cycle, have her burden of care, work and study reduced to zero; at least the maximum required of them should be far below what the customs of society, family and school life permit at present.

VII. College women, if not school girls, should be individualized and their choice of study, severity of mental application and bodily exercises studiously selected by a trained expert with particular reference to their individual, physical and mental capacity.

VIII. Regard should also be had of woman's sexual features as expressed by her psychic phenomena.

IX. While I have not thought of defending or opposing co-education, I am led, against my former conviction, to think,

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upon at least theoretical grounds, that girls after twelve, and boys after thirteen or fourteen could be handled and trained better if separate schools were provided for them.

X. Were separate schools to be provided by the public for the sexes, I should insist upon teachers being employed who have been trained in the anatomy, physiology and psychology of sex, and who understand the delicate, if not subtle, art of differentiation, otherwise a free-for-all will probably be beset with fewer dangers.

PERNICIOUS ANAEMIA.

By Lucy A. Kirk, M.D., Boston.

I should like to say before beginning this paper that I have not tried to write a scientific treatise upon the subject in question —merely to note some facts and opinions regarding the disease compiled from different authorities of the day.

Pernicious anæmia is a symptomatic disease of the blood characterized by a deficiency of some of its important constituents, notably the red corpuscles. It is more than sixty years since the disease became known, and most writers agree as to the symptomatology—but, according to Prof. Grawitz of Berlin, there is no agreement as to exactly what we should diagnose as pernicious anæmia.

Up to within a few years it was customary to summarize under the term all those diseases which showed the characteristic symptoms of anæmia without regard to any organic changes in the blood. Ehrlich's supposition offered was that the disease was a specific one; later, that it was a specific reaction of the bone marrow, characterized by a retrogression of blood formation with embryonal megaloblasty. In fact there have been many opinions and much discussion as to the disease and the blood changes, but I think that opinion regarding the latter has resolved itself into the following as to the principal evidences of blood degeneration.

The most remarkable feature of the blood is the lowering of the number of red corpuscles which may sink below 1,000,000 per cubic millimetre, the normal number being 5,000,000. One case has been reported in which there were but 143,000 just before death. The hemoglobin or coloring matter is also reduced but not in proportion to the cell reduction. Dr. E. P. Henry, in the American Journal of Medical Sciences, states that there is no disease, excepting pernicious anæmia, in which the number of red corpuscles is at any time reduced below 20 per cent, but this opinion is questioned. The relatively high percentage of hemoglobin depends upon the increased size of the red corpuscles, and in some cases upon the presence of an unusual number of minute and highly colored microcytes, or small red corpuscles.

Without going into details of the blood changes in the dis-

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ease, I think we may give as the principal ones, the marked lessening of the number of red blood corpuscles, the increase of megaloblasts, the high color index, a deficient number of leucocytes, abundance of lymphocytes, and evidences of marked blood degeneration. Some writers find all these conditions of the blood in other severe anæmias, consequently asserting as a fact that there is no specific blood-finding for pernicious anæmia.

We are all familiar with the ordinary, secondary, or symptomatic anæmia—that which follows hemorrhage, continued drain of chronic disease, inanition, results of poisoning, etc., but our experience with primary or pernicious anæmia is much more limited—that form in which the vast majority of cases tend towards a fatal ending. The two prevailing theories as to the pathogenesis are the following:

First, that the disease is due to the breaking up of the blood corpuscles (hemolysis), and second, that owing to some defects in the process of blood making (hemogenesis), the blood becomes vulnerable to the destructive influence of micro-organisms. I will not go into details as to the pathological condition. There is dilatation of the heart, also vaso-motor failure which causes the well recognized anæmic dyspnœa; and sometimes changes occur in the nerve supply of the body. The general condition of the patient does not seem to bear any definite relation to the blood-state, at least, so far as the number of erythrocytes is concerned, for one individual, with only 1,000,000 per cubic millimetre may be capable of prolonged effort, while another, with 4,000,000 may be weak and easily exhausted. Although the disease occasionally occurs in childhood, it is most common between the ages of 20 and 40 years, and men are attacked more frequently than women. It is perhaps more common among the better than the common classes and most common in Europe (especially in Switzerland) in regions where the people are badly fed and live in poorly ventilated and insufficiently lighted houses. Fright, grief and overwork are prominent etiological factors—and also among the established causes we find:

(I.) Gastro-intestinal diseases of long standing, poor food, impaired digestion, chronic constipation and irregular defecation which often occurs in women frequently pregnant, as well as those of hysterical temperament. In such cases it is due to auto-intoxication from the intestinal tract augmented, according to some writers, by a lack of free hydrochloric acid in the stomach.

(II.) Pregnancy. Here also there is probably an auto-infection due to the pressure of the gravid uterus upon the bowel. Chronic hemorrhages, often of small size, bad hygienic conditions, constitutional syphilis and chronic poisoning, may all have an indirect influence on causes of the disease, as well as certain parasites—the condition of the patient not being re-established after expulsion of the worm. Sometimes, of course, we have the disease with no distinct trace of the cause.

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Some writers have felt that a lesion of the bone-marrow is the primary anatomical disturbance, but that opinion is not commonly upheld; and hence we are obliged to assume that essential or pernicious anæmia is a disease of the blood itself—that it is a specific but unknown process which results in direct injury to the red blood corpuscles.

Symptoms. The most evident symptom is extreme pallor of the face and body, which gradually assume a lemon-yellow tint. This pallor is very different from the waxy whiteness of the benign form of the disease and deepens as the case progresses. It may appear suddenly, but in the majority of cases it develops gradually, following the insidious course of the disease. Weakness is marked, with all its attending symptoms; inordinate palpitation and dyspnœa upon exertion, sighing and slow delivery in speaking. Pains in chest or limbs are common. Temperature, extremely irregular. Usually some fever. Pulse rapid and regular. Very often the first symptom of the disease is disordered digestion. As the case develops, although the general nutrition is apparently preserved, gastric and intestinal disorders are the rule. The appetite is often voracious and the patient becomes obese. These two latter symptoms encourage the patient greatly and it is difficult to convince him that there is anything very serious the matter with him, with so good an appetite and such an increase in flesh.

Occasionally a pigmentation resembling Addison's disease occurs, usually resulting from the administration of arsenic. The whites of the eyes are bluish white and the mucous membranes markedly pale. The urine is of a low specific gravity and either light or a very dark color, according to the amount of urobilin (coloring matter of the urine) contained. Headache is common, and ringing in the ears, with other circulatory symptoms are noticeable. The pulse is large and full, and often visible pulsations of the arteries, capillaries, even of the veins are seen, accompanied by murmurs of functional type. Hemorrhage into the skin, mucous membranes or retinæ may take place, the retinal hemorrhage being of especial value in establishing a diagnosis. Disorders of the nervous system follow involvement of the cord, and jaundice is occasionally met with. As the end approaches the weakness increases, the temperature falls and the patient enters into a torpid condition, ending in coma and death.

The difference between essential anæmia and other grave anæmias lies in the clinical course—that of the pernicious form being characterized by the fact that even after removal of the apparent cause, the degeneration of the blood progresses, the cardinal symptoms of the disease, being the rapid course, its apparent gravity, the characteristic color of the skin and the results of blood analysis.

The prognosis is very grave, the majority of patients dying within two years—more often within six months to a year. Death

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usually seems to be the direct result of the extreme anæmia, special complications being exceptional. Nearly always there are periods of improvement or even apparent recovery, but relapses occur. The mortality from very nearly 100 per cent has been somewhat reduced since the introduction by Bramwell of Edinburgh of the use of arsenic. A guarded prognosis should, however, be given, and it is well not to attach too much importance to favorable results that may follow the special line of medication employed. Even if such improvement be continued for a long time, the conclusion must not be hastily reached that the disease is cured.

The remedy to be used is pre-eminently arsenic, preferably Fowler's solution. Arsenic cures the curable cases and benefits the others. Sometimes, however, the stomach of the patient rebels, which makes the prognosis even more doubtful. Iron is useless or worse than useless. Any disturbance of the stomach, or physiological action of arsenic must be watched for, and a temporary cessation of its use ordered.

Transfusion of blood as a possible curative measure has been receiving considerable attention of late. The benefit derived in some cases has been very apparent for a time—great relief often following its use even before the completion of the operation. But in the great majority of cases the improved condition has been only temporary and after a few months gives way to the almost inevitable ending of the disease.

There are many other modes of treatment recommended, among which are bone marrow, subcutaneous injections of defribrinated blood, etc. Serum-therapy has not been very successful as a whole. We must have more time to test its efficiency. Oxygen has been used to advantage. Rest is of the utmost importance, and of course we must provide the patient with nourishing and easily digestible food, and regulate all other hygienic matters.

And now may I cite a case of my own, if I am not taking up too much time? Mr. H. C. came to my office on the 26th of March, 1910. I was, as I remember, the seventh physician to whom he had been. He was a man of about 40, and as he expressed it, "had been going down hill for several months." He was an expert telegrapher in a large banking house, which business required his constant and careful attention. He had first noticed not feeling well about six or eight months before. At that time he went to New Hampshire for his vacation. He stayed there only one day as his feelings were so bad, and he was told by the doctor the cause of that was malaria, which he contracted as soon as he entered the town. If so, the malarial protozoa must have worked hard during that time, I think. However that may be, when I saw him he was suffering from faintness and dizziness on exertion of almost any kind, pain in chest and arms, ringing in the ears, palpitation and dyspnœa. These symptoms were all very marked and he was the characteristic lemon color. I advised a blood analysis which rather surprised him, as it was

the first time that it had been suggested to him. He consented, however, very readily, and it was made by Dr. Watters of Boston University School of Medicine. The result was characteristic —Dr. Watters writing me as he sent the report of the analysis, "On account of high color index, deficient number of leucocytes, abundance of lymphocytes, evidence of marked blood degeneration and a preponderance of megalo blasts over normoblasts, I feel that the condition is in all probability one of primary pernicious anæmia." At that time the number of erythrocytes was 1,500,000 to the cubic millimeter, the normal being 5,000,000. I put him on Fowler's solution and used the high frequency current of electricity. This last was an experiment because I wanted to do something—not from any knowledge of its efficiency in such cases. He grew better, very noticeably so; declared he felt "one hundred per cent better." Of course I did not put too much confidence in his improvement, knowing that such times frequently occur; but the dyspnœa became very much less, pains practically disappeared, appetite good, and certainly he appeared very much better. Then his stomach became upset. He declared he knew the whole trouble lay with his stomach, if that could be induced to work properly he was sure everything else would be right. Meanwhile, he met a friend who kept at him, in spite of the declaration of the patient that he was satisfied with his present treatment, until he practically forced him to go to his "doctor" who had done so much for him and who, as I found out, was a quack or something of the sort. Well, the man went down hill rapidly and died in October just about two years after first coming to the conclusion that he was not well. As you may imagine, I was very sorry to lose him, for I did want to see the result of the arsenic and the high frequency. Not that I expected him to recover—I did not, but I wanted him to so desperately that it seemed as if that must have some effect. However, he went away to the shore when he had been treated by my successor for awhile, and was brought home to live only a matter of some days. Another doctor finished up the case, making in all, I believe, ten of us.

DISCUSSION

Dr. Mosher: —

I think Dr. Kirk has made a very good showing of a very hard subject. It is hard to make a study of pernicious anæmia interesting because of its rarity, the difficulty in making a correct diagnosis and the great diversity of opinion among eminent authorities. Dr. Musser says the disease is not as rare as we are led to believe, that it is faulty diagnosis that makes us think so. He has been called by physicians who believed the case to be carcinoma of the liver, heart disease, kidney disease, typhoid fever and tuberculosis. This statement alone leads us to believe that we should give more time and study to pernicious anæmia, especially when it takes all classes and in the best time of their lives, — between twenty and forty.

Dr. Kirk's authority says it is more common in men. Dr. Kessler says it is more common in women, and gives multiple pregnancies as a cause. He

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says it may occur in men about forty. Another authority says that sex makes no difference at all.

As to the causes — I should say that the cause is unknown as yet, because everything has been given, from hemorrhage to a tapeworm. As for the diagnosis, it seems to be about as puzzling as the cause. Some authorities think the disease is infectious.

Fever is present in every case recorded, but not regular. It is either at the beginning or at the end. In one particular case in the hospital, the fever went to 100 at the time of death in a man 65 years old. Another case went up to 104 and back to nearly normal when patient was discharged improved.

Some claim that one of the early symptoms is a lemon hue coming out before any other symptoms, around the large joints. I presume it is something like the color that comes in the elbow in scarlet fever before the rash appears.

As to the treatment, I think the transfusion of blood would be the most efficient. I cannot find any case where treatment was persisted in. As soon as the condition came back again and they did not use the transfusion of blood, they did not get results. Persistence in this treatment would give the best effects, as far as I can find out. Fowler's solution has, in almost every case, upset the stomach, and in my cases, homœopathic remedies did as well as Fowler's solution and did not cause any aggravation. Dr. Kirk has had temporary benefit, at least, from high frequency, and Dr. Marion Coon has had benefit from high frequency in ordinary anæmias. I think we should be justified in trying this treatment.

Certain of these attacks are so fatal that they deserve research, and who knows but in our new buildings we may find both the cause and cure of pernicious anæmia?

Dr. J. Herbert Moore: —

To anyone who has had any experience in pernicious anæmia, every new paper presented and every new authority quoted is like offering cold water to a very thirsty man.

I want to offer just one suggestion, and that is the one touched upon by the writer and by the discusser — the infectious origin of this disease. The writer speaks of numbers of cases of pernicious anæmia which have followed temporary residence in Switzerland, putting this down to the low hygienic conditions of that country, but anyone who has travelled on the Continent knows that conditions in Switzerland are far above conditions found in other parts of the continent. We also know that Switzerland, above all other countries in the world, presents to a great degree this microorganism which has been suggested as the possible cause of pernicious anæmia through the infectious channel.

To relate one clinical case. A woman 63 years old, from one of the best families in Brookline. She had never had a day of sickness in her life until three months before she went to Switzerland, when she had herpes zoster, which left her, at her age, in a rather depressed state. I advised her to go abroad — not to travel, but to reside. The patient decided to locate in Switzerland for the summer. She spent four months in Switzerland and came back to Brookline. In less than three months she came down with symptoms of pernicious anæmia. The case was very progressive and very severe. It was like an infection. She had never had a day of sickness in her life — a strong, robust woman, with the exception of the attack of herpes zoster. She had been living in a country affording the micro-organisms of this condition, and not only this case, but one or two others, and in experience in consultations, has put me in the way of thinking that perhaps in the future we may find that the cause of pernicious anæmia is infection — that infection is due to some microorganism unknown. I throw this out just as a suggestion; the infectiousness of this disease was never more impressed upon me than by this case which went to Switzerland and came back in three months with pernicious anæmia.

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Dr. J. P. Stedman: —

I would like to ask if Dr. Moore attributes the infection of this pernicious anæmia to the resistance in the blood or to the opening made for infection by the herpes zoster.

Most people have to go on a trip abroad to become infected with pernicious anæmia. I have had three cases in which we made a diagnosis of pernicious anæmia. I had my diagnosis confirmed by the leading diagnosticians of our school. Each of these cases gave a history of an early abrasion of the skin and a mild infection. I saw a case the other day in the hospital in Brockton. The patient died in a few days. Had been diagnosed as a case of pernicious anæmia in which there was a mild abrasion of the top of the foot which travelled up and emptied itself below the knee.

We would naturally think those cases were nothing more or less than secondary anæmias, due to the infection. If so, why should these patients have all the characteristic manifestations of the blood incident to pernicious anæmia? I believe this question of infection is a vital one, and I believe discoveries are going to be made along that line in the same way as have been made along the line of cancer.

Dr. Willard A. Paul: —

One note struck by the paper just read was the absolute hopelessness of pernicious anæmia. Perhaps I am wrong.

I had one case — it was my brother, a homœopathic physician. He had all the symptoms of pernicious anæmia fourteen years ago. His case was diagnosed by me and by himself and by two or three physicians here in Boston, and an examination of the blood corroborated the diagnosis made by the physicians. It seemed to me to be a case of pernicious anæmia.

He was treated a year by himself and by me, and he apparently recovered and lived fourteen years. I believe that that was a case of pernicious anæmia. I believe he recovered. My brother passed away this spring, about a month ago, with hemorrhage of the stomach. He had been a well man, had apparently had no symptoms of anæmia during the last fourteen years. The hemorrhage of the stomach came on suddenly. He lived five days. Whether the disease was about him, I do not know. It passed in our books as pernicious anæmia cured, and was cured strictly according to remedies prescribed as they seemed indicated. Arsenic in the lower medium potencies was the principal remedy used.

I do not believe that pernicious anæmia is absolutely hopeless.

Dr. Kirk: —

I am quite sure there are cases on record that have been cured, but I think the consensus of opinion is towards the fatal ending.

Dr. Percy: —

I want to say that there is a very interesting drug study with which very likely you are all familiar. It is the study of picric acid in its relation to the blood, and in hospital experience I have been quite enthusiastic and believed that pernicious anæmia could be cured. I want you to recall one fact, a disheartening one, in regard to pernicious anæmia.. It has the appearance of getting better, and then, without any apparent reason so far as we know, there comes another attack, and the recovery from that is much more slow.

Human Bodies as Targets.—The German government has caused its soldiers at target practice to fire at human corpses for the purpose of accustoming them to aim at human beings. When this procedure was objected to it was declared that this shooting was by way of experiment made on bodies destined for dissection at the hospitals to test the results of rapid fire. These experiments were considered necessary "in the interests of humanity to enable surgeons to study wounds."

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CONSERVATION OF THE OVARY.*

By William A. Humphrey, M.D., Toledo, Ohio.

Conservation is the spirit of the times. As applied to the ovary we mean such measures in the practice of Gynaecological Surgery as will preserve as much of the gland as is possible, with the hope of retaining its function, and while every surgeon present can, no doubt, testify from clinical experience to the benefits to be derived from such practice, yet a discussion at this time of the extent to which it may be carried with the hope of good results, may not be untimely.

From its anatomical makeup the ovary is predestined to have its share of trouble. From its location in the human anatomy it is often the victim of its bad neighbor when it was only an innocent bystander. In addition to its glandular structure its investments are of such a nature that its vulnerability is much greater than might be imagined by those who have not considered carefully its origin and makeup. For instance, the ovary has for its outer coating a membrane which is derived from the posterior layer of the broad ligament which differs essentially from the peritoneum in being covered by columnar epithelium; thus the outer membrane of the ovary is mucous and not serous. Its arteries are derived from the abdominal aorta and anastomose with the uterine; its veins form the pampaniform plexus and empty into the ovarian vein which in turn empties into the renal vein on the left side and into the inferior vena cava on the right, similar to the spermatic veins in the male. The lymphatics anastomose with the trunks from the uterus and Fallopian tubes and terminate in the lumbar glands. In health the ovary is the only pelvic organ that is acutely sensitive, which, like that of the testicle, is especially characteristic.

From the nature of its outer mucous covering it is easy to understand why it should so readily accept any infection conveyed to it through the Fallopian tubes from the mucous surface of the uterus, whose membrane possesses a similar formation. For similar reasons infections are carried through the veins and lymphatics owing to the anastomosis with those of the uterus. For clinical reasons we should remark that the ovary can be palpated by bi-manual examination, and by way of contrast we might add that the Fallopian tubes cannot be palpated in health.

Attempts at conservative surgery of the ovary have their advantages and disadvantages. The advantages are mainly in retaining its function and the prevention of the psychic and physical disturbance by the artificial production of the menopause. Kelly says, "There is a growing conviction that the ovary belongs to the same group of organs as the thyroid, thymus and pineal glands and that in addition to the function of ovulation, it secretes a sub-

* Read before the Ohio Homœopathic Medical Society, May, 1911.

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stance which is absorbed and consumed in the animal economy, and which is necessary to its physiological balance."

Other authorities are of the same opinion, and the trend of opinion is toward the corpus luteum as the particular portion of the ovary possessing this function. Whether or not such a function exists has not been demonstrated, neither can we determine whether the mental and physical phenomena produced by the menopause, artificial or natural, are due to the cessation of this hidden function or whether it is due to the mental effect alone. The serious mental disturbance produced by induced menopause, especially in the young, is in many cases very grave, and this alone has induced operators to leave ovarian tissue whenever possible, and many times to the further hazard of the patient.

The disadvantages of conservatism are: first, the unlikelihood of restoring the function; second, the return of the disease to the part left; third, the occurrence of the disease on the opposite side; fourth, the failure to cure; fifth, the risk of ectopic gestation; sixth, the danger of infection following resection; seventh, the unnecessary risk of life from a secondary operation.

Ovulation is not usually interrupted in diseased ovaries so long as any functionating tissue is left. Diseased ovaries are not usually so without a badly diseased tube, and consequently the ovary left after the removal of the tube can only perform such office as may assist the mental equilibrium. Personally I believe such function does exist and can be shown by analogy in animals.

The possibility of the return of the disease to the remaining tissue must be admitted. Yet we are warranted in the risk, with the patient's consent.

Extension to the opposite side is not a great risk if the endometrium is attended to, or in case of doubt the tube on the opposite side may be removed and the ovary allowed to remain.

Failure to effect a symptomatic cure cannot be charged to conservatism, for post-operative pain is common after complete removal of the tubes and ovaries and is due to adhesions which are common in abdominal procedure.

Kelley says, "No authoritative case of extra-uterine pregnancy after conservative operation upon the tubes and the ovaries has been recorded."

Danger of infection in the presence of pus is extremely well taken, but in non-purulent cases there is no such risk.

The risk of secondary operation is remote in selected cases, and the fact remains that the patient should have the right to choose in all cases.

Conservative work has produced some remarkable results of pregnancy following operations upon the appendages. These operations have shown that conception has taken place after conservative procedure for almost all known pathological conditions of the appendages, viz., adherent tubes, ovaries and uteri have been restored to their normal functions. Pregnancy has existed

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after puncturing cysts of the Graafian vesicles and the corpus luteum; after resecting the ovary and leaving a small portion; and after excision of a hematoma. Kelly has reported the existence of pregnancy after leaving one tube and the opposite ovary. Atrophy does not necessarily interfere with ovulation and such an organ should not be sacrificed if the opposite side is removed, as pregnancy has been known to follow a conservative operation which left only a single atrophic ovary. (Ashton.)

The removal of the ovaries and thereby inducing early menopause is sometimes justified in cases in which there has existed severe endometritis with discharge for a long time, with fair promise of relieving the discharge. In such cases conservatism should demand careful removal of the tubes also, so that there shall be no traces of infection outside the uterus. Many of these cases will be cured after the atrophy has taken place, while others will not be improved. Opinions upon such cases should be most guarded.

General contra-indications for conservative surgery upon the ovary or tubes should be well understood lest we place at the door of conservatism failures which should never have been tabulated in that column.

The chief contra-indications to conservative surgery of the ovary are: the presence of pus, the age of the patient, and malignant disease.

When pus is present in the gland no attempt should be made to save any of the organs. The risk of infection as well as the probable failure to restore function, the few successful cases reported, all furnish sufficient argument to cause the abandonment of conservative means for the radical under such conditions.

Age is an important factor. In the young the functions should be preserved when possible, both for the mental and the physical effect. In those nearing the menopause in which, as a matter of course, the child-bearing age is nearing its close, the matter of preservation of function is not of the same importance, while the nervous phenomena are not so much to be dreaded as in the years of earlier menstrual life.

In the presence of malignant disease there is no place for conservatism except at the patient's own risk. Operative measures should always be thorough and complete in these cases.

After all, the limits of conservatism upon the ovary are very narrow: adhesions may be removed and, granting a patulous tube, with the released ovary in proper position, we may reasonably expect resumption of function.

Cysts of the Graafian follicles and the corpus luteum are seldom so numerous in a given ovary as to warrant its removal. If small they may be punctured; if they are large they may be incised and their walls removed, while the incision should be closed.

Hematoma, if small, may be removed without sacrificing the

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ovary, but if the hemorrhage should be profuse, involving the whole organ, it should be sacrificed.

In glandular dermoid cysts, where only one ovary is involved, the whole organ should be removed, while if both sides are involved, an effort to save some healthy ovarian tissue is justifiable. In benign tumors the same general rules hold good.

Prolapsus of the ovary is not sufficient grounds alone for its removal. Unless grossly diseased it should be anchored to the pelvis by shortening the infundibulo-pelvic ligament. This is a simple matter and done readily by passing a small ligature twice through the ligament at the outer edge of the ovary and carrying it through the peritoneum and underlying structures above the pelvic brim in front of the iliac artery. This will fix it outside of the pelvis.

In simple atrophy many times the ovaries are made so by adhesions. It is often wise to save the one in the best condition.

The procedure in each individual case is a matter for the careful consideration of each individual operator. In this day of rush and hurry with so many near-surgeons it is an easy matter for mutilation to be given first place over that of legitimate, careful, painstaking work. We have seen cases in which the tubes were grossly diseased from pus surrounded by dense adhesions, in which the ovaries were firmly bound, and yet producing fair promise of functionating under ordinary circumstances. Careful removal of these tubes with the release of the ovaries from the adhesions and, where possible to save only one, the patient would make a good recovery, the menstrual function would be maintained and premature menopause avoided. With even a part of one ovary left these cases avoid all the mental and physical symptoms of an enforced menopause and go on through life as if nothing had happened. Case after case might be recited with little profit perhaps, yet we should not forget that our duty to our patient, first of all, is to preserve all the tissue and every function possible while attempting to relieve her of pathological conditions. We have said nothing about internal medication in the management of these cases. Just how much can be done with internal medication toward relieving a real pathological condition in an ovary will always remain a disputed question. All of us, no doubt, have confidence in carefully selected remedies relieving certain conditions of the ovaries, but just how far we can go will always remain a disputed question because of the uncertainty of medical diagnosis in these organs. We should, however, be satisfied with a symptomatic cure and if the patient remains well there is no excuse whatever for surgical interference. The question, however, of careful diagnosis, and the recognition of pathological changes is one of the utmost importance to us in our efforts to handle these cases, because our own reputation and the success of the case depend a great deal upon our ability to determine when they cease to be medical and become surgical.

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CLINICAL DEPARTMENT.

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

Case VI.—Diagnosis: Cortico-Spinal Lesion on the Right Side.

This case offers food for much thought; certain things are clear at the outset. Its limitation to the left side with spastic knee jerk, toe drop and typical ankle clonus at once excludes the neurosis and places it in the organic group. The spasm always beginning in the left fingers and then extending to the left leg, but sometimes instead spreading to the neck and left face, especially the jaw, characterizes the epilepsy as Jacksonian, and places the lesion about the middle of the right pre-central gyrus. The fact that it is accompanied by epileptiform seizures makes it probable that the process is at the cortex and not sub-cortical. The question then arises: what sort if a lesion is it?

We must consider embolus, hemorrhage, pachymeningitis interna, and tumors, especially gumma. This last, however, is very remote and may be excluded, since there is no specific history or suggestion of it in the case, and no headache, vomiting or persistent vertigo.

If embolism or sub-cortical hemorrhage is to blame, then it occurred when she had the acute attack at twenty-two years of age and it left a small walled-off cyst which remained harmless until the slight blow on the head a year and a half ago, which trauma caused it to light up and spread somewhat. This theory, however, does not explain the hysterical attacks as a child which began with the sunstroke when about eight years of age. It is consistent with the facts that this sunstroke was the excitant of a pachymeningitis with the formation of a slight false, friable, sub-durable membrane on the right side, which became well organized and caused little trouble beyond occasional numb spells until the summer of her 22nd year, when a small vessel ruptured, the hemorrhage flattening downward and exciting by pressure the face centers. This in turn organized and the membrane again became innocuous until she became run down by trouble and received the blow which ruptured another vessel, this time further up and pressing upon the leg centers. This last clot was of larger size and had exerted persistent pressure upon the cortex with resultant degeneration of the left pyramidal tract. The latter hypothesis seems to most completely fit the fact.

Case VII.—For diagnosis:

A small, fair woman aged thirty years, married six years, has one child. F. H. unimportant. She has always had average health; does her own work. Has always had a clear, clean, somewhat pale skin. A week ago she noticed a pink eruption on the chest which soon spread to the hips, abdomen, back and thighs, especially the inner surface. The arms and face have not been attacked, but there are now a few spots appearing on the flexor surface of the forearm. The spots were at first a faint pinkish

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color, the size of a split pea, and but slightly raised above the surface. They rapidly enlarged over a day or two to a half inch in diameter and coalesced with those near by. The single lesions are round, but when they have run together they are very irregular. The older ones have a pearly scale which is merely dead skin and peels from the center to the margin, which is well defined. The younger ones have a glazed, shiny appearance and are reddish, but not angry, and do not weep. There is much itching, especially at night when warm in bed. About the time of the appearance of the eruption she ate some mackerel roe, but otherwise diet was not suggestive. She does not feel ill, and sleeps and eats well.

What is the lesion, and what its differential diagnosis and treatment?

WHAT DO WE NEED TO KNOW CLINICALLY ABOUT THE MIND?

(Continued from April issue)

In our first paper we attempted to show that to some extent, at least, the position in the brain where different kinds of sensory impulses are received and the thought impressions (motor responses) which result can be localized and used for diagnostic purposes.

The second paper dealt with the conception of the normal mind and its synthesis, and offered a physiological hypothesis of Will and Initiative, and a list of the primary sensations for which tests should be applied.

The burden of our third paper was to tell the position which the Reflex Arc and the Synapsis hold at present in the psycho-physical conception of mind processes. A tabular classification of our psychic functions and their anatomical correlates was added.

And in the May number Mr. Ricker explained with great clearness what is meant by a mental complex.

We next desire to take up in greater detail the importance of normal psychic synthesis; that is, the blending of each new experience with all that has gone before.

A conclusion which forces itself upon one who accepts the physiological origin of mental life is that it is extremely dependent upon a good healthy body, a good dynamo and motor which shall generate sufficient current to keep all the filaments (synapses) glowing.

The corollary of this idea is that each sense organ has the quality of converting each impulse received, whether from the eye, ear, abdomen or muscles, into kinetic energy, which once having been so launched, must find its motor outlet, must spend itself in actually doing something. It may accomplish this merely by diffusing itself through a chain of association neurons in the cortex, or at any point in any complex, may be voluntarily or involuntarily blocked and shunted into a motor (muscle) outlet resulting in action. At any rate the axiom seems established, that *every*

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sensory impulse is a bit of nervous energy which must find a motor outlet.

Popularly this idea has been tersely expressed thus: "A thought is a thing," "Thought is a force," etc., and these expressions have their value in conveying the idea. As babies we opened our eyes upon a wholly new set of experiences. Pryer tells us how at this early period we first learn to estimate space by grasping for the side of the crib or the bottle, thus getting the idea of distance and position.

Interest, the sensory phase of initiative, shows itself early, while its corollary, attention, which stands in a similar relation to will, is spasmodic and only comes purposefully much later with the development of the intellect (the fore brain) which is genetically the latest development of the animal world and the last to mature. It is for this reason that in discussing initiative, this function was placed anatomically in the parietal lobes. Interest and initiative, then, occurring early, lead the young animal to closely observe its surroundings and to rapidly gain a large number of experiences.

We cannot say at just what age the intellect begins to give meanings to things. Indeed, it is probable that it varies in different children from the third to the eighth year, but whenever it is, we may say that at that moment the ego is born. Up to that time the child has been merely an animal, but the moment at which he becomes conscious of himself as an individual, like and yet different from other individuals, the personality takes the helm and will directs initiative. About this time the ethical meanings begin to dawn. Up to this period right and wrong have been determined by the presence or absence of punishment. Now, however, wrong is known as detrimental and as bringing personal unhappiness, while right action comes to mean benefit and happiness. The good opinion of associates and their approbation is sought, and fear, which up to this time has meant only fear of bodily pain, now takes on a new meaning, a personal sensitiveness to the impressions of others. This quality, however, is but slightly developed until puberty, when it takes on a strong coloring toward the opposite sex. Shame also appears, and social values.

Over all this time one experience after another is brought through the avenues of the senses to the brain and there takes up its position, at first probably with more or less indifference, but as the meaning and significance of events become more and more evident there is probably an arranging and adjusting of the correlated mental complexes with reference to the kind and importance of the events. An incident, whether actually lived by the individual or heard or read by him, becomes stored in his brain, and joins itself to the appropriate mental complex by a kind of classification at the same time being given its proper meaning and significance. This latter, it will be seen, is purely an intellectual process, and is, therefore, higher up in the development scale.

Another and very important factor which determines the im-

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portance, and therefore the retention (memory) quality of an experience, is the degree of feeling tone (emotion), which it possesses for the individual. In order to make this clear we must revert to our psychology. Perhaps an example will serve us best. Suppose we are looking at our first tree; two elements at once become evident: the tree as an idea, an intellectual conception, and the feeling which the tree creates by its beauty, a feeling of pleasantness, or if it be a lightning-rent tree, a feeling of unpleasantness. If, however, we were in the midst of many trees and not attending to them, were accustomed to them, there would be neither a pleasant nor an unpleasant feeling regarding them, but the common indifference acquired by the habit of seeing them constantly. In other words, every idea or experience is at first accompanied by a feeling tone (emotion-mood) which is either pleasant or unpleasant. As the experience becomes habitual, it gradually loses its feeling tone and is experienced with indifference, i. e., it becomes neutral.

Now to return. The more intense the feeling tone accompanying any given idea or experience, the more intensely charged is the retention quality (memory) of the cells of the particular complex excited; hence the more vividly is such experience remembered. To put it in another way; the greater the feeling tone accompanying the goal idea the more highly sensitized do all the associated links of the complex become; hence the more readily is it touched off by any association avenue on its borders. The less vivid incidents fade out and give place to the happening of the present moment, the "moment-consciousness" of Sidis.

James has spoken at length of what he has called the stream of consciousness. For the most part, this stream is made up of habitual and commonplace events, which leave specific effect upon the mind, but certain incidents in each of our lives stand out with greater vividness than others, depending upon the factors just mentioned, though the recency of their occurrence is also important.

There is yet another element which is very important in determining the significance that shall be given to an incident, and that is the meaning which the recipient places upon it. It will be readily seen that this is in turn dependent upon the type of mind, the set, as Royce calls it, of the individual.

The country boy, brought up with strict observance of the New England Sabbath, is going to take a very different view of Sunday baseball from the youth reared in Milwaukee, and even if intellectually he sees no harm in it, it may take a long time for him to overcome a feeling which has become so thoroughly a habit of his thoughts. If, however, all the experiences of the individual of whatever kind, commonplace, tragic, pathetic, humorous, moral or immoral, awe-inspiring or humiliating, are received without repression and given their proper meaning according to the standard of value of that individual, and so properly "pigeonholed" so to speak, in their proper mind complexes, the ego of that

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individual remains unified. Each new experience is properly synthetized and he possesses a normal personality.

And so we go on through life receiving and storing away ideas, reflecting images of objective realities which have in some way or other crossed our paths. And each resultant mind is determined by two main factors: first, by the type of receptivity which his brain cells possess, as their inheritance, given normal or compensated sensory intakes, and, second, by the particular set of experiences through which he has lived.

If it were possible for any two persons to live through exactly the same experiences, eat the same food, sleep the same hours, hold the same conversations, read, walk, act identically, they would doubtless think much alike, and yet there would be marked differences, owing to the different quality and degrees of receptivity of the brain tissues. Inversely different experiences frequently lead persons who are far apart to similar conclusions, from which we may deduce that they possess in that particular, at least, similar types of brain cell organization.

And now what becomes of all these complexes, all these subjectively mirrored prints of the objective streams of life, for that is the question of our thesis?

Well, for the most of us, they blend harmoniously one with another, normally fading into oblivion, the intellectual value only remaining to pilot us on our way. The structures of some brains, however, do not permit of this normal adjustment, but because of ethical beliefs or teachings put up abnormal resistance, or under- or over-value incidents to the detriment of the temperament and harmony of the ego.

But this paper has already become too long, and we must leave the discussion of the split personality, the pathological ego, until the next time.

PULSATILLA

"A tincture of Pulsatilla if correctly made should contain iron. This can be showed by chemical tests. A competent chemist recently obtained various tinctures of this drug from a half dozen homœopathic pharmacists and made chemical tests to determine as to whether or not they contained iron. Out of the six tinctures examined only four gave a test for iron. Some physicians claim that Pulsatilla has always been a disappointment to them. The explanation may be due to the fact that they used a poor and improperly prepared preparation. Likewise, a good preparation of Spongia should show a test for iodine. Different preparations of Spongia, obtained from different houses, were examined, and all reacted to the test except one. The physician who uses this particular brand of Spongia must not be disappointed with failures. It is not supposed that it is the intent of this particular pharmacy to defraud, as a grade of sponge containing iodine is no higher in price than any other sponge, yet to secure a good preparation the sponge used should first be analyzed chemically to determine if it contains what it should." — *A. E. Hinsdale, M. D.,* Medical Century.

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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 MEDICIAL 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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ARTHUR H. RING, M.D., Assistant Editor.

Reports of Societies and Personal Items should be sent in by the 15th of the month previous to the one in which they are to appear. Reprints will be furnished at cost and should be ordered of the Business Manager before the article is published.

THE ENLARGED GAZETTE.

It may not be proper or appropriate for a person or a periodical to be continually discoursing concerning matters pertaining to self. There are, however, times during the lives of each when such personalities are entirely appropriate. Such a time seems to have come for the *Gazette* for reasons that will be apparent.

The New England Medical Gazette was estalished in 1866, during the period of very active homœopathic propagandism, under the able leadership of Dr. H. C. Angell. The purpose in its foundation and one invariably put forward by every editor since was the furtherance of the foundation tenets of Homœopathy and the enlargement of the scope of medical knowledge of all of its adherents.

Succeeding Dr. Angell were Drs. I. T. Talbot, H. C. Clapp, J. P. Sutherland (for a period of fourteen consecutive years), John L. Coffin, Walter Wesselhoeft, and A. T. Lovering. With each of these, pressure of professional life proved too great to permit of long continuance of the arduous and too often thankless work. Finally in 1906, the late Dr. William K. Knowles induced the present editors to take up the work. At that time the *Gazette* appeared in a forty-eight page monthly magazine as at present. It was printed, however, in eleven point type throughout and was almost entirely leaded. Gradually during the following years as more space has become necessary the leaded parts have been entirely removed. The eleven point type has been replaced by ten and this ten has in its turn been largely replaced by eight, except for the communications and the editorials. By these means the size of the journal has been increased fully fifty per cent as regards reading material without materially increasing the general appearance. The subscription price has remained unaltered even though our readers are getting much more material.

Even these enlargements have proven insufficient for the in-

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creasing amount of material that we wish to present. We have, therefore, been finally compelled to make an actual enlargement in the number of pages in each number. Accordingly, beginning with the present issue the amount of reading matter will be once more increased, this time by nearly twenty per cent over that of previous issues. It is perhaps needless to say that this increases by just so much the work of the editors whose already generous salary (consisting entirely of the joy of working) may or may not be proportionately increased as the case may be.

As they are willing to undertake this greater responsibility, financial as well as otherwise, they ask in return that their readers, or at least such as can do so conscientiously, say a good word for the *Gazette* to some non-subscriber and induce him to send in his name for a sample copy if nothing more.

By this means some of the increased expenses may be covered and perhaps, (who knows?) in the not distant future still further enlargement may be required.

It should be here stated that the subscription price remains the same as heretofore, two dollars a year.

PROPHYLACTIC INOCULATIONS.

At this time of the year two phases of bacterial prophylaxis are of particular importance and should receive somewhat careful attention. The first has to do with the celebration of our great national holiday, "The Glorious Fourth," and the rather numerous cases of tetanus resulting therefrom.

In past years one ideal has been placed before the youth of the country, to produce the maximum noise in the minimum time. In order to achieve this goal, guns, revolvers, cannon, fire crackers, cannon crackers and fireworks have all been called to assist. As a result injuries from premature explosions have been very numerous and the casualty list at all hospitals has been large. During the last few years, thanks to a campaign of common sense started by a Chicago newspaper, there has been an increasing tendency to have a "sane Fourth" devoid of the danger so often attendant upon the former celebrations. This idea is gradually becoming widely accepted and as a result the accidents are yearly decreasing in number.

As yet, however, some such occurrences are bound to happen and will probably come to the attention of many of our readers. When such are encountered, following explosion of one form or another, the possibility of tetanus should always be considered. And if such a possibility seems strong one should think of the anti-tetanic serum as a logical method of treatment. It has been demonstrated in a very evident manner that anti-tetanic serum can definitely immunize against tetanus when used early in a manner identical with that immunity conferred by anti-diphtheritic

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serum against diphtheria. The use of such measures has resulted in a marked decrease in mortality and should be one of the first methods to be taken into consideration when the probability of infection is strong.

The second prophylactic treatment of interest at the present season is the anti-typhoid inoculations.

We are all familiar with the "crop" of typhoid patients coming from the country each fall after their vacations passed in the pure air and in drinking the pure (?) milk and water of the farm. Here again the incidence of the disease is steadily decreasing, thanks to our knowledge of sanitation and hygeine, but its occurrence is always to be feared. Fortunately we now have in our hands an instrument with which we can immunize both ourselves and our patients with a fair degree of certainty. It consists in the hypodermic injection of three doses of typhoid vaccine in gradually increasing amounts and at intervals of about five to eight days. Little reaction, very frequently practically none, follows and the person is by no means incapacitated for work. The results attained among soldiers in camp, and physicians, nurses and orderlies in hospitals throughout the country all go to clearly demonstrate the utility of the procedure. We believe that by this means both morbidity and mortality will be materially diminished with an increased degree of resultant safety to all.

INNOVATIONS IN MEDICINE

In the recent pamphlet received from G. Frank Lydston upon "Medical Ethics," we read a very expressive and for the most part true description of the fate of various medical innovations:

"As I read the recent newspaper and magazine boom for '606' I began rummaging around in the dead lumber room wherein were stored memories of Sangrado and his hot water and bleeding, Perkins and his 'tractoration,' Déclat and his 'nascent' phenic acid, Charcot and his hypnotism, Bergeron and his stink-pots, Batty and his unspeakable mutilations of unsuspecting females, the Ramm-White castration for prostatic disease, the nitrogen gas-tank cure for tuberculosis, the story of tuberculin, and the hundreds of remedies that have been lauded as 'specifics' for diseases ranging in importance from gonorrhea to diphtheria.

"Alas! for some of our great discoveries. 'They come like water and like wind they go.'

"They make their grand stage entree to the blare of trumpets and the beating of drums — "snare" drums — in the market-place. Bedecked like a courtesan, they enter the professional door, escorted by newspaper enthusiasts who ever 'whore after strange therapeutic gods' and immediately fly up the chimney as malodorous smoke from the crucible of experience in which all things are tried."

FAULTY CONCLUSIONS

The *Gazette* has always been a firm believer in the efficiency and practicability of vaccines properly administered, and has repeatedly warned its readers against the fallacies of unjustified conclusions. Whether such conclusions favor or discredit the method has nothing to do with the matter directly. Conclusions, to be of weight and reliability, should be based upon extensive clinical experience rather than upon experiences derived from a few cases. Bearing this in mind it is therefore somewhat amusing to read

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the following abstract from an article that recently appeared in one of our exchanges, written by a man of presumably high standing. He says, "In this way I have had treated in all from 25 to 30 cases, and am now able to determine which are suitable and which are not suitable cases for treatment." As his 25 to 30 cases refer to tuberculosis one can see how truly vast (?) his experience has been and how he must be from such extensive experience qualified to determine which cases will definitely be amenable to treatment and which will not. Whether we agree or disagree with his conclusions we must certainly protest against the lack of judgment demonstrated in making such definite statements upon such slight foundation.

STATE BOARD STATISTICS.

The Journal of the American Medical Association has recently brought forth its annual tabulation of the results of the various Medical Colleges throughout the country as represented by the successes and failures of their graduates before the various State Boards. As heretofore they have made three classes. Class 1 contains those colleges having less than 10 per cent of failures. Class 2, those between 10 and 20 per cent. Class 3, those showing over 20 per cent. In the first class, as usual, comes Boston University School of Medicine with a failure percentage of 4.2 and other New England colleges showing the following results: Harvard 3.6, Yale 4.2, University of Maine 8.3, Tufts 9.4, College of Physicians and Surgeons 69.4.

MODERN TREATMENT OF DIABETES

Wallace has recently contributed an interesting article upon recent advances in the treatment of diabetes mellitus. His opinion based upon late research should accordingly be of value. He says:

> "In general the treatment of severe diabetes may be carried out along the following lines. It is as a rule practically impossible to keep the patient's urine sugar-free, and one should early give up the attempt. Since the main danger lies in the acidosis it is unwise to put the patient on a strict diet for any length of time. In the preliminary treatment there comes first a period of strict diet with 75 to 100 gm. of bread; then follows one of a low protein diet. consisting chiefly of vegetables, and finally one consisting of oatmeal. Each of these is of two or three days' duration. By repeating this procedure for two or three weeks there may be obtained a lowering of acidosis to such an extent that it ceases to be an immediate danger, and there may be obtained also a clear conception of the degree of sugar tolerance. The subsequent treatment is based on the results obtained. A carbohydrate-free diet can often be given for a week or so with marked general improvement. The patient is then allowed a small amount of carbohydrate, or a more prolonged oatmeal or vegetable diet may be given. Every few weeks a period of strict protein-fat feeding of two or three days may be ordered, and once or twice a year a longer period, two or three weeks, should be tried. In conclusion it must be emphasized that no general rule can apply to all cases. Each case must be studied individually and only by such study can the proper line of treatment for any particular case be determined."
>
> — Journal of the American Medical Association.

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OBITUARY.

Henry C. Angell, M.D.

Henry Clay Angell, M.D., one of Boston's noted ophthalmologists, died May 28, 1911, at his home 16 Beacon Street, Boston, from a complication of diseases.

Dr. Angell was in his 83d year, having been born in Providence, Rhode Island, January 27, 1829. He was a graduate of Hahnemann Medical College, Philadelphia, class of 1853, and later studied three years at Vienna University, after which he settled down to special practice in Boston.

Dr. Angell joined the American Institute of Homœopathy in 1853, the year of his graduation in medicine, thus making his period of membership the phenomenal one of fifty-eight years. For many years he was not an active member attending its meetings, but nevertheless was always interested in its progress and success.

He became a member of the Massachusetts Homœopathic Medical Society in 1856, his name being on its roll at the time of his death. In his early years he was one of its active members and exercised a wide influence in its affairs.

His loyalty to and interest in the cause of Homœopathy as well as his literary tastes and qualifications are testified to by his assuming the editorship of *The New England Medical Gazette* in 1866, by so doing becoming the first editor of this journal, although he later relinquished the post to the indefatigable Dr. I. T. Talbot, to devote himself to his specialty.

For many years he was a member of the staff of the Massachusetts Homœopathic Hospital as its first specialist.

He was one of the small band of homœopathists interested in the evolution and establishment of Boston University School of Medicine. He was a member of its first Faculty and remained its Professor of Ophthalmology until 1893, a period of twenty years, when he was succeeded by his able associate in the department, Professor J. H. Payne. Those who were privileged to sit under his instruction well remember his perfect ease and grace as a lecturer. He seemed to take his students into his confidence as if assuming that they were as interested in the eye and knew as much about it as he did.

His interest in art was a real and vital thing and was due to the possession of considerable artistic skill particularly in water colors, and visiting his home was like going into a choice art gallery. He was in fact not only well-known in the medical profession, but was prominent in the artistic and literary circles of Boston when the Hub was in its prime as an artistic and literary center. His chief contribution to medical literature was a text book on "Diseases of the Eye," for students and general practitioners, which went through at least seven editions and was noteworthy as being the first text book on the homœopathic treatment of these diseases.

With all his culture and his general and special ability, he was modest, quietly positive and attractive and his influence was that of the scholar and connoisseur rather than that of the modern man of affairs.

The following appreciation indicates the regard in which he was held by those who were fortunate enough to know him well. It was written by his close and long time friend, Professor Arlo Bates of the Massachusetts Institute of Technology, in response to an inquiry as to the details of his life.

"I knew Dr. Angell for many years, and I was very fond of him. He was a man of marked character, of the greatest refinement, of strong artistic bent, of most charming humor, and of an uprightness which bound all these together.

"Of the details of his early life I know nothing. I knew him at first as the friend of William Hunt and that set of painters, as the generous friend of musicians, and the appreciative critic of literature. Howells was

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among his warm personal friends. He was a collector of paintings, and one of the richest collections outside of France of the work of the Barbazon School is in that queer little brown house on Beacon Hill. Indeed, few in Paris approach it. The French government tried, half a dozen years ago, to buy a number of his pictures, but he said he bought them for his pleasure and not to speculate in, and refused their handsome offers.

"He went abroad frequently when I first met him, but of late years he has passed his life between Boston and Medfield, where he had a cottage. Many years ago he suffered severely from meningitis, and he never fully recovered from its effects. For the last ten years he has been so delicate that only his wife's devotion and constant watching have kept him alive, yet he has always been cheery, always interested and interesting.

"We who knew and loved him can only feel the memory of such a friend is more vital and lasting than companionship with the many."

Dr. Angell leaves a widow, Mrs. Martha B. Angell, daughter of the late Levi Bartlett.

Edward Arthur Dakin, M.D., Hahnemann Medical College, Philadelphia, 1881, of Boston and Magnolia, Mass., a member of the Boston Gynecological and Surgical Society, died in the Addison Gilbert Hospital, Gloucester, Mass., May 22, from septicemia, due to an abrasion of the instep, aged 58.

SOCIETIES

American Institute of Homœopathy

The Sixty-seventh Annual Sessions of the American Institute of Homœopathy were inaugurated in the assembly hall of the Hotel Mathewson, Narragansett Pier, Rhode Island, on Sunday evening, June 25, with the beautiful custom of holding a memorial service for the members whose earthly ministrations had ceased during the past year, in response to the final call from the Great Physician.

On Monday morning the first business session convened. In the evening of that day a large and distinguished gathering listened most attentively to the speakers selected for the formal opening exercises, held in the ball-room of Hotel Mathewson. The program included Henry A. Whitmarsh, M.D., Providence, R. I., Chairman of the Local Committee of Arrangements, Martin S. Budlong, M.D., Providence, representing the Rhode Island Homœopathic Medical Society, Ex-Governor George H. Utter, address of welcome in behalf of Rhode Island, President William E. Huntington of Boston University, address of welcome in behalf of New England, Frederick Roy Martin, A.M., Editor of the Providence Journal, a response by Vice-President Nichols, and the address of the President, Gauis J. Jones, M.D., Cleveland, Ohio.

The formal exercises were followed by a reception and dancing.

On Tuesday afternoon scientific proceedings were suspended to enable all to attend the excursion to Newport, across Narragansett Bay, and again on Thursday afternoon to afford opportunity for members and friends to take the sail to Rocky Point for a "genuine Rhode Island clambake."

On Friday evening, June 30, the week's sessions culminated in a banquet, in the success of which Mr. Mathewson's liberality as a host was an important factor. Dr. DeWitt G. Wilcox of Brookline, Mass., was toastmaster, and he launched his "conversational craft" as only Dr. Wilcox can. The responses were keen, witty and timely, and were made by retiring President Jones, Dr. John L. Coffin and Rev. James A. Francis of Boston, Dr. Royal S. Copeland of New York, Dr. Lottie A. Cort of Brooklyn, N. Y., and President-elect James H. Carmichael, of Philadelphia.

The work of the week may be summed up as a studious, painstak-

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ing, carefully impartial, and scientific consideration of the healing art, which is epitomized by Dr. James Krauss of Boston in the following definition: "Medicine is the science and the art of adjustive and curative treatment of disease."

The 1911 meeting of the Institute will go into the records as one of the most successful sessions in the Institute's history. There were in attendance three hundred and forty-two members, three hundred and ninety-nine visitors.

Too much praise cannot be given Dr. Henry A. Whitmarsh of Providence, Chairman of the Local Committee of Arrangements, and Dr. John H. Bennett, Pawtucket, Chairman of the Committee on Exhibits, both of whom served the Institute with an unusual degree of acceptability. Much of the success of the meeting was due to their generous giving of themselves and of their time. Dr. Whitmarsh was indefatigable, watchful, and able, a kindly and smilingly courteous host. Dr. Bennett's good management made the exhibits a prominent and successful feature of the meeting. It is worthy of note that against forty-one exhibits at the Los Angeles meeting of the American Medical Association held in June, the Institute session just closed had a representation of forty-two prominent exhibitors. So acceptable to these exhibitors was Dr. Bennett's management that he was presented by them with a handsome instrument cabinet for his office.

The newly elected officers for the coming year are as follows:

President, Thomas H. Carmichael, M.D., Philadelphia.
First Vice-President, William H. Dieffenbach, M.D., New York.
Second Vice-President, Clara E. Gary, M.D., Boston.
Censors, Willard A. Paul, M.D., Boston; A. C. Cowperthwaite, M.D., Chicago.
Trustees, Joseph P. Cobb, M.D., Chicago; George Royal, M.D., Des Moines; Gauis J. Jones, M.D., Cleveland.

The offices of Treasurer, Secretary and Registrar hold over for one more year.

The next meeting is to be held in Pittsburg, Pa., in the third week of June, 1912.

The present membership of the Institute is 2800, there having been added two hundred and forty new members.

A New Use For Quinine.—According to the newspapers, a new use has been discovered for quinine. It occurred to a certain housewife in East Orange, N. J., that because quinine had benefited her husband, a sufferer from malaria, it might perhaps be good for a favorite hen which was ailing. Accordingly, she administered a two-grain pill, and before long was gratified to find her patient the liveliest Leghorn in the yard. The next day the hen not only laid her accustomed morning egg, but a second one in the afternoon; and since then, we are assured, she gets a quinine pill every morning and regularly lays two eggs a day.

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THE TREATMENT OF HYDROPHOBIA BY RABIES VACCINE.

Until recently, it has been necessary to send patients exposed to hydrophobia to a Pasteur Institute (in many instances located in a far distant city) for prophylactic treatment. The Hygienic Laboratory of the United States Marine Hospital Service devised a method of administering Rabies Vaccine, whereby it could be prepared at a central laboratory, according to Pasteur's method, and distributed to any part of the United States, allowing the patient to be treated by his attending physician.

Briefly, the following is Pasteur's method for preparing Rabies Vaccine: The spinal cord of a rabbit—dead of Rabies as result of an injection of a "fixed virus"—(Rabies Vaccine known to kill within a fixed time) is removed under aseptic conditions. A cord containing the Rabies Virus is suspended over a layer of potassium hydroxide and kept at a temperature of 22 degrees C. from one to eight days. The virus is gradually weakened or attenuated as the cord is dried, the strength being decreased in direct proportion to the extent of the drying.

In the preparation of each injection, a portion of a cord in which the virus has been properly attenuated by drying the requisite number of days, is taken and emulsified by grinding under aseptic conditions with a weak solution of glycerin. The emulsion of Rabies Virus thus prepared constitutes the first dose.

The second dose is prepared in the same manner from a portion of the cord which has not been attenuated to the same degree, and each subsequent dose is prepared in like manner from cords containing virus of increasing potency.

The technic of the administration is quite as simple and safe as the ordinary hypodermatic injection.

H. K. Mulford Company have built and equipped special laboratories at Glenolden, Pa., and, under the personal direction of expert bacteriologists are preparing Rabies Vaccine after the method of Pasteur.

The Rabies Preventive Treatment.

The preventive treatment of rabies, as furnished by the H. K. Mulford Company, consists of 25 injections of Rabies Vaccine, the strength of each injection varying in accordance with the plan of treatment adopted by the Hygienic Laboratory of the United States Marine Hospital Service.

Cords with virus of various strengths are kept in constant readiness for preparation of Rabies Vaccine to meet all emergencies.

The vaccine is furnished in ampuls and all the physician is required to do in making the injection is to mix the vaccine in the ampul through a special needle, furnished with each syringe, with the physiologic salt solution contained in each syringe, then inject the patient. The technic is as simple as an ordinary hypodermatic injection.

Special Caloris Vacuum Bottles are used in the shipment of each day's supply of vaccine, insuring its receipt in a satisfactory condition.

Preventive treatment by Rabies Vaccine should be started as soon after exposure as possible. After symptoms have fully developed there is no hope for relief, as a cure for hydrophobia has not been discovered. The period from the exposure to the development of the symptoms of hydrophobia is known as the period of incubation. This varies from eight days to six months under natural conditions, although occasionally cases are reported where the incubation period is much longer.

Immediately following exposure, every precaution should be employed until it is proven that the suspected animal did or did not have rabies. Aside from cauterizing and otherwise treating the wounds, arrangements should be made at once for the use of Rabies Vaccine in the form of preventive treatment prepared after the method of Pasteur.

If the animal responsible for the wound or infection, is alive, it should be kept securely under observation for at least two weeks. Infection may follow from the bite of an animal apparently normal at the time of

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biting. Not until it is definitely known that the animal has rabies should it be killed. After the animal is dead, its head should be removed and sent to a State or municipal laboratory equipped to properly examine the brain for evidences of rabies.

If proper precautions are taken and the patient immediately given the Pasteur treatment, the fatality from this terrible disease may be virtually reduced to a minimum.

According to statistics, rabies is more common in the summer months, therefore at this season of the year, with danger of mad dogs running amuck, the method of supplying Rabies Vaccine so that the physician may administer it to his own patients, is of particular interest to our readers.

Full and complete literature on Rabies Vaccine will be mailed by H. K. Mulford Company of Philadelphia, upon request.



BOOK REVIEWS

The Place of Operation in the Treatment of Uterine Fibroids. Edwin A. Neatby, M.D. London, 1911.

The author of this book is one of the most prominent of the English homœopathic surgeons, and has had a wide experience in the subject of which he writes. His book of about eighty-five pages, is written in a clear manner, and well describes the various forms of treatment of fibroids. A number of illustrations, several of which are in colors, are commendable. While not intended to be a complete treatise upon the subject, it is a work that may well be read by all.

Litora Aliena. By Medicus Peregrinus. "Peregrinum ut viseret orbem." W. M. Leonard, Boston, 1911.

This small paper covered book consists of a series of letters written by one of the editors of the Boston Medical and Surgical

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Journal to that publication. The letters are well written, and are descriptive of many phases of medical interest that are seldom brought forward in ordinary books.

The reviewer has read the entire number with much interest throughout.

Golden Rules of Pediatrics. Aphorisms, Observations, and Precepts on the Science and Art of Pediatrics. Giving Practical Rules for Diagnosis and Prognosis, the Essential of Infant Feeding, and the Principles of Scientific Treatment, by John Zahorsky, A.B., M.D., Clinical Professor of Pediatrics, Medical Department Washington University, St. Louis; Ex-President of the St. Louis Pediatric Society; Attending Physician to the Bethesda Foundlings' Home and the St. Louis Children's Hospital. With an Introduction by E. W. Saunders, M.D., Emeritus Professor of Diseases of Children and Clinical Midwifery, Medical Department Washington University, St. Louis, etc. C. V. Mosby Company, St Louis, 1911.

This book is one of the so-called Golden Rule series. The method of treating the subject is different from that of the ordinary books, in that it consists of a series of aphorisms and short paragraphs that are supposed to be more liable to remain in the physician's mind than a continued description. Whether this is true or not must be decided by the individual. While many of the topics are well expressed the book as a whole does not appeal to the medical reader as attractive, as it is one in which the sequence is more evident. It contains within its covers a large amount of matter that will undoubtedly be valuable to all who study it. A complete diagnostic and a therapeutic index adds much to the worth of the book.

THE MONTH'S BEST BOOKS.

Pediatrics. Zahorsky. $2.50. C. V. Mosby Co.
Spirochætes. Bosanquet. $2.50. W. B. Saunders Co.
What to Eat and Why. Smith. $2.50. W. B. Saunders Co.
Diseases of the Ear, Nose and Throat. Reik. $4.00. D. Appleton & Co.
The Physiology of Reproduction. Marshall. $6.00. Longmans, Green & Co.
Volumetric Analysis. Sutton. $5.50. P. Blakiston's Son & Co.

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PERSONAL AND GENERAL ITEMS

Dr. A. B. Norton, of 30 East 55th Street, New York, is to sail on July 5 for South America, returning to New York on September 14.

FOR SALE. — A long established homœopathic practice in a country town. Full equipment of drugs, books, etc. An excellent opportunity for a good man. Can save $1,000 the first year. Inquire of Mrs. C. A. Paul, Solon. Maine.

FOR SALE. — The Medical Library of the late Dr. David Foss. Publications date from 1810 to 1903. Send to Ernest Foss, Newburyport, Mass.. for list.

The *Gazette* desires to extend its most sincere congratulations and best wishes to Dr. Charles T. Howard, a former Associate Editor, who upon June 15 was married to Miss Amy Carrol Rand in Watertown, Mass. Dr. Howard is one of the most popular members of the surgical staff of the Massachuetts Homœopathic Hospital and has made for himself an enviable reputation in surgery. The best wishes of the *Gazette* go to the Doctor and his wife as they are starting a new home.

The late Dr. H. B. Bowditch by his will bequeathed to Harvard Medical School $4,000, in addition to all his books and scientific apparatus.

The Children's Hospital of Boston expects to receive $25,000 from the will of the late Mrs. Amelia Worthington, widow of Bishop Worthington.

Dr. Horace Packard will attend the International Congress of Homœopathy this month, following which he will spend the summer abroad. Dr. Packard has been made the Honorary President of the section of surgery, and Honorary Vice-President of the Congress.

The Somerville Medical Society was entertained on June 8 at the Arlington Health Resort, where the Society was the guest of Dr. Arthur H. Ring. A number of clinical cases were shown accompanied by demonstrations of methods of treatment.

Dr. C. A. Eaton, recently of Boston, Massachusetts, where he was Assistant Pathologist to the Massachusetts Homœopathic Hospital, and Lecturer in Bacteriology at Boston University School of Medicine, wishes to announce that he is now located at the offices of the late Dr. E. F. Vose, 612 Congress Street, Portland, Maine, where he is prepared to perform the various laboratory examinations, such as blood, tissues, urine, sputum, feces, stomach contents, water, milk, etc. Bacteriological examinations including the Wasserman-Noguchi test for syphilis. Autogenous vaccines prepared. Consultations in laboratory diagnoses and vaccine therapy.

Dr. and Mrs. Gardner H. Osgood have recently moved into their new home in West Roxbury.

The new medical building of McGill University, Montreal, has just been formally opened with proper ceremonies. In its entirety it represents what is probably the highest point in medical school architecture yet reached, and will be one of the sights of Montreal. Its laboratory has recently received a valuable collection of books on diseases of the eye from Dr. Casey A. Wood of Chicago, also a series of valuable engravings from Dr. William Osler and Sir Lauder Brunton.

Dr. and Mrs. Winfield Smith are in Europe for the summer.

There is soon to be a vacancy in the position of second house physician at Lakeville State Sanatorium, Middleboro, Mass. Male applicants should address Sumner Coolidge, M.D., Supt.

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Dr. Cora Smith Eaton, B. U. S. M. 1892, of Seattle, Washington, is enjoying her practice on the Pacific Coast, especially now that the women of Washington are enfranchised. She was treasurer of the Washington Equal Suffrage Association, handling about $10,000 during the successful campaign. She now holds the same office in the National Council of Women Voters, an organization representing the interests of the 405,000 women voters in the five States where women vote, — Wyoming, Idaho, Colorado, Utah and Washington.

Dr. Martha G. Ripley, B. U. S. M. 1887, is the busiest woman physician in Minneapolis, Minnesota, and is credited with having the largest obstetric practice in that city, among men or women. She is the founder and chief of staff of Maternity Hospital now for more than twenty years with open doors, which she has built up by almost incredible effort and sacrifice. That the citizens of Minneapolis appreciate her heroic and philanthropic work is shown by the fact that by gift or bequest this institution at last owns, free from debt, a very valuable property containing several buildings, including a nurses' cottage, a private hospital for married women during confinement, besides the main building for the charitable care of unfortunate girls and their babies

For Sale. — $3500 homœopathic practice in Massachusetts manufacturing town.
Nearest homœopathic, ten miles.
Thorough introduction.
Going to city to specialize.
This is a grand chance to get a good live practice.
Address "B. D. Q.,"
care of New England Medical Gazette.

Drs. J. P. Sutherland and Clara E. Gary of Boston, Dr. Lucy Barney Hall of Hyde Park, and Dr. Bertha E. Ebbs of Dedham, have sailed for Europe and will attend the International Homœopathic Congress held this month in London.

Dr. George D. Bliss of Dorchester and his brother, Frederick D. Bliss, are taking a trip across the country, which includes the Canadian Rockies and the Pacific Coast to California.

Dr. Mary A. Leavitt of Boston sailed July 1 for a two-months' trip to Europe.

Dr. Frank W. Patch, Framingham, Mass., has been elected to the professorship in Materia Medica, Boston University, as successor to Dr. J. Herbert Moore, resigned to resume his lectures in Pedology. Drs. David L. Martin and Harold O. Hunt, class of 1909, have been added to the staff as assistants in Materia Medica.

The engagement of Dr. Lydia Reinhold Baker (class of 1906 B. U. S. M.) of Williamsport, Pa., to Dr. Ward Irving Pierce (1904 B. U. S. M.) of Pittsburg, Pa., has been announced. The wedding will take place in the late autumn.

The engagement is announced of Dr. Bertha L. Cameron, class of 1911 B. U. S. M., to Mr. Chester Guild, Jr.

Dr. Laurence F. Keith, class of 1907 B. U. S. M., has removed from Melrose, Mass., to Wareham, Mass.

We note with pleasure in the June 7th copy of "Puck" another cartoon expressing the sane side of the vivisection problem. The banner of the anti-vivisectionists appropriately displays the candle of progress being ob-

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scured, and its light destroyed by the action of their own members. Such pictures as these may tend somewhat to neutralize the prejudice of the unthinking person induced by some of the cartoons recently appearing in another comic magazine.

Work has already begun upon the new building of the Talitha Cumi Home which the New England Moral Reform Society is erecting in Jamaica Plain. The first spadeful of earth was turned by Dr. Caroline Hastings on April 26 last.

The New York Legislature has recently passed a bill prohibiting the sale at retail or donation of hypodermic syringes and needles to any person whatsoever except upon the written order from a duly licensed physician or veterinary. The object of this bill is to reduce the rapidly growing drug habit.

The trustees of the Melrose Hospital have recently voted to erect a new hospital in that city, the same to cost approximately $60,000. Representatives of both schools of medicine are on the staff, among whom we note Dr. W. M. Townsend, and Dr. Walter Flanders.

The Massachusetts Homœopathic Hospital Out Patient Department has started an evening clinic for diseases of women. This will be held on each Monday evening.

The City of Troy, N. Y., has been offered by George B. Cluett and Robert Cluett a complete new fire-proof hospital involving an expenditure of more than $300,000.

The Boston Medical and Surgical Journal quotes a report from Chicago to the effect that a resident of Missouri, Ella K. Ewing, has reached the height of 9 feet 1 1-2 inches, and weighs 285 pounds.

Dr. Richard M. Pierce, formerly well-known in Boston, and more recently Professor of Pathology at the University of Pennsylvania, has been transferred to the chair of Experimental Pathology in that institution.

The late Miss Elizabeth J. Mead, of Stamford, Conn., has bequeathed to the Stamford Hospital the sum of twenty thousand dollars for general purposes.

The Medical Department of Bowdoin College is making a strenuous effort to raise the sum of $140,000, for the purpose of providing improvements, such as new laboratories, and increased hospital facilities.

According to newspaper reports, Boston is soon to have a large private hospital equipped with all forms of apparatus for the most modern treatment of diseases. It is claimed that at the present time the poor of the city are better able to obtain the advantages of such facilities than are the well-to-do. The projected institution is planned to overcome this difficulty. The Board of Directors will include many well-known physicians, among whom are Drs. R. C. Cabot, W. T. Councilman, R. H. Fitz, J. L. Goodale, F. B. Harrington, Henry Jackson, J. L. Morse, R. L. Lovett, M. H. Richardson, F. C. Shattuck, E. W. Taylor, Paul Thorndike and J. C. Warren.

New York Research Laboratory: The special research paper of the New York Board of Health has recently organized a new section having the title "Laboratory for Special Theraphy and Preventive Medicine." Among other things, this will include the preparation and distribution of any meningitis serum, the study of trachoma, investigation of the Wasserman reaction, and the preparation of streptococcus and pneumococcus sera.

The Massachusetts Homœopathic Hospital has recently added to its ambulance service a new electric ambulance of most recent pattern.

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We learn that the Maryland Homœopathic Hospital is about to establish a modern addition to their building for the purpose of investigating the cause and possible treatment of cancer. The building formerly occupied by the Atlantic Medical College will be utilized for this work.

Harvard Medical School receives $22,000 by the will of the late Professor Samuel Hubbard Scudder.

The New York State Board of Medical Examiners, recently organized, has the following officers: President, G. R. Butler; Vice-President, H. B. Minton.

An institute has been organized in Chicago as a memorial to the late Otho S. A. Sprague. This has been made possible by a generous donation of money, and will include upon its board of directors Dr. Frank Billings. The directors have decided to make it a research institute, and have appointed Dr. H. G. Wells of the University of Chicago to the position of director. Work will be performed in cooperation with the University of Chicago, Rush Medical College, the Presbyterian Hospital, and the Children's Hospital. The institution will have control of a number of beds in the Presbyterian Hospital.

The Hungarians of East Side New York are endeavoring to raise $300,000, for the purpose of erecting a large hospital for their fellow countrymen in that city.

Dr. Patrick H. Mullowney has recently been appointed a member of the Boston Board of Health, and Dr. John M. Martin has been appointed school physician, replacing Dr. John L. Ames.

— Boston Medical and Surgical Journal.

The Massachusetts Homœopathic Hospital is the recipient of a bequest of $5,000 under the will of the late Harriet E. Goodnow of Sterling, Mass. The purpose is for the endowment of a free bed to be known as the White Memorial. The Massachusetts General Hospital, The New England Hospital for Women and Children, and St. Margaret's Hospital are also recipients of a similar amount.

"It should be a rule in obstetric practice never to consider constipation as a cause of fever during the lying-in. It is true that a rise of temperature will more often disappear than not after an enema or a free catharsis, but the reason for the fall is undoubtedly that better vaginal drainage has been secured through the effort at straining. The same negative position should be taken toward distended breasts; if fever accompanies distention of the breasts, and there is no cause for the fever in the pelvis, it means that the distention has caused sufficient disturbance in the circulation of the parts to enable the disease-producing germs normally within the milk-ducts to produce an infection; and if the most energetic treatment to relieve the distention is not instituted without delay a mastitis with abcess formation will follow."—*Bishop*, The Journal of Surgery, Gynecology and Obstetrics.

"Throughout the lying-in, the obstetrician should look upon the symptom of fever in the same way as does the surgeon in his post-operative work, *i.e.*, whenever fever is present in a case that was not septic at the time of operation, it means an infection and that he must not and cannot rest easy until its focus is located."—*Bishop*, The Journal of Surgery, Gynecology and Obstetrics.

"In deciding upon operation of medium and low forceps it is a mistake to let the decision rest wholly upon either the degree of progress or the duration of the second stage. The rule of applying forceps after a duration of the second stage of four hours in primipara and two hours in multi-

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para is usually a safe one to follow, but with it, alone, there will be some cases of fatal asphyxia, due to pressure. It should be an invariable rule, no matter what the duration of the second stage may be, to make frequent examination of the condition of the fetal heart, oftentimes after every hard pain, and, as soon as there is a sign that the child is in danger, to make a rapid delivery with forceps. I am sure that if this practice is consistently followed in what are apparently normal cases, many stillborn births will be prevented." *Bishop*, The Journal of Surgery, Gynecology and Obstetrics.

"Don't fail to impress upon your syphilitic patient at the commencement of treatment that all symptoms may rapidly disappear within a few weeks, but that it is absolutely necessary to continue treatment for several years even if no symptom presents itself." — *Huhner*, The Medical Times.

"Chronic Gastric Ulcer to-day is recognized as essentially a surgical condition. This is so for more reasons than one. Under medical treatment it tends to persist. It is deeply seated, and even if a cure is apparently effected, breaks down easily. Perforation is by no means a rare complication. If situated near the pylorus, stenosis of that orifice is prone to occur as a result of cicatricial contraction of the resultant scar tissue; but the one condition above all others which renders it a surgical affection is the frequency with which malignancy becomes engrafted on the base of an old gastric ulcer." — Editorial, Maryland Medical Journal.

"The fact remains, though, that notwithstanding the rapid progress of medical science for the last twenty or thirty years, real reliable observations and theories made for this period are comparatively few. And it would not be far from the truth to say that the greater portion of the original work done after Pasteur's classical discoveries is centered around the research on acquired immunity, connected with such names as Metchnikoff, Bordet, Ehrlich, Douglas, Flexner, Wright, and a few others. If we add to that the X-ray, radium and serum therapy, together with a number of improvements in surgical technique, e.g., Murphy's treatment of peritonitis, Crile's treatment of surgical shock, and a few others, we will pretty well exhaust the list of the principal achievements made in medicine for the last thirty or forty years." — Medical Sentinel, February, 1911.

We are pleased to note that the Mexican government has collected the works of the late Dr. Howard T. Rickets on Mexican typhus, and has published them in Spanish in a very neat volume. In addition to these articles will be found certain official documents concerning his death, and addresses delivered at the time of the unveiling of the memorial tablet in his laboratory in Mexico.

"The main characteristic of causticum are briefly the tearing, drawing pains in the muscular and fibrous tissues, with deformities about the joints, the aggravation from dry cold winds and cold weather, causing neuralgia, and often attended by paralysis, the sensation of rawness, soreness, and burning in the mucous membranes; the fissures about the corners of the mouth, the wing of the nose, corners of the eyes, and the anus, with intense itching and burning.

The cough with involuntary urination, with cough relieved by a swallow of ice cold water; and the tendency to great weakness and muscular paralysis.

The typical causticum patient seems to be of a sallow complexion, dark hair, depressed and weak, and disposed to look upon the dark side of things, in fact, is a decidely pessimistic individual. Melancholy mood, a feeling as if something were going to happen to herself or family; fear of death; anxiety keeps him awake at night; complains after prolonged anxiety or grief; tired out from business worries." — *Chase*, North American Journal of Homœopathy.

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THE DOCTOR OF THE FUTURE

The Medical Brief for December thus quotes Dr. Woods Hutchinson concerning the above subject:

"There are persons in this hall who will live to see tuberculosis as nearly extinct as leprosy or small-pox. The death rate from tuberculosis in this city has decreased twenty per cent in the last twenty years. The disease is being rapidly stamped out. The fact is, we doctors are working ourselves out of a living by checking diseases."

"We doctors used to live by typhoid fever in the fall, pneumonia in the winter, and influenza in the spring. A doctor with a fair practice could always count on from $300 to $3,000 every fall from typhoid fever. Now that is practically gone.

"Every doctor could also count on a good deal from the visits of the stork, but even that has almost passed away these days.

"From this point of view the future for the doctor is a bit discouraging. But I also see signs of encouragement, for this is the dawn of the new doctor. The time is rapidly coming when two-thirds of the doctors will be in the employ of the community, either as inspectors in the schools or on boards of various kinds. The day is near at hand also when the doctor will no longer be engaged to patch up the sick man, but to prevent him from getting sick. He will visit families, examine the premises, inspect factories and shops, and give instructions to his patients how to keep from getting sick. Each family will select its doctor and pay him so much a year per capita. The doctors will not lose by the agreement, either."

URETERO-TUBAL ANASTOMOSIS

Many ingenious attempts have been made to perform anastomosis between the ureters and various possible points of exit, in order to permit of the removal of the bladder in malignant disease of that organ. Implanting into the intestine has been successfully attempted, but on account of the ever possible danger of ascending infection it has not seemed to be the most desirable, but an ingenious attempt to solve the question has been made by Werelius of Chicago, who in a recent number of the Journal of the A. M. A., reports his experiments with anastomosis between the ureter and the Fallopian tube. This has been successfully performed on two dogs and is suggested as a possibility for application to human beings. It certainly would seem to do away with the danger of infection, and if practical, should satisfactorily settle the somewhat vexed problem.

DIET IN DIABETES

"The diet for diabetic patients needs as much study as does the remedy. Individualization is just as necessary in selecting the diet as in selecting the remedy. To say, cut out carbo-hydrates, eat neither starch nor sugar, will not suffice. In fact, a patient of mine did eat large quantities of candy, which she craved, and felt better after it. Examination of the urine after taking the candy showed that neither the quantity of urine nor the amount of glucose were increased. One patient partook of large quantities of grapes without any bad effect, while another found that eating a small bunch of Concord grapes aggravated all the symptoms, increased the quantity of urine, the amount of sugar, etc., and in addition produced a most violent urticaria.

The diabetic patient requiring Arsenicum requires a different diet than the one for whom Phosphorus is indicated. Chiononthus, Argentum nitricum patients require different diets." — Medical Century.

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COLLEGE OF AUTO DOCTORS.

(Formerly the Chicago Veterinary College,) Spring Announcement 1960.

The spring quarter, 1960, of the College of Auto Doctors of Chicago, will open March 3d. Students desiring to enter at this time must register during the two days preceding. Special attention is directed to the following features.

Credit will be allowed for work done in manual training schools, machine shops and electric plants.

The fee for entrance does not cover medical attendance incidental to the gasoline department.

Students in the gasoline department must make a deposit, to protect the college against loss should they leave without notice.

The course in monkey-wrenches has been extended to take in a full year.

A series of lectures on "The Use and Abuse of Profanity as Applied to Autos" commences with this quarter.

The chair of balkiness: Electro, aero and gaso, has been enlarged to meet the increased interest.

Among the topics for discussion during the year are:Care of the Tire; Consumption in Gas Autos; Braking a Fractious Auto; Insanity in the Auto, Its Symptoms and Remedy; Hot Boxes and Other Fevers; Cracking of the Dashboard, etc.

Ten hours a week of practical anatomy and seven of dissection are required of every student. Students are expected to be able to name readily and accurately place each of the 1,609 parts of an ordinary auto.

The junk shops of the city are open for inspection by our students. Much valuable information is to be gained by frequently visiting them.

The college has made arrangements with the park police, whereby a plentiful supply of material for clinics is constantly turned over to it.

—Oklahoma Medical-News Journal..

TRAUMATISM AS A POSSIBLE CAUSE OF CANCER.

Dr. W. B. Coley, well known on account of his work with sarcoma has prepared a very exhaustive article upon injury as a causative factor in cancer. This article appeared in the April and in the May numbers of the Annals of Surgery. His conclusions are accordingly valuable. They are as follows:

A careful study of the evidence here presented, based upon over 1200 personal observations, justifies, I believe, the following conclusions:

1. Local trauma of any kind, from chronic irritation to a single local contusion, is not infrequently the direct exciting cause of malignant tumors of all types.

2. That a single local injury may cause a carcinoma as well as a sarcoma, is no longer open to speculation. The cases that I have submitted fulfil all the conditions necessary to establish a definite causal relationship between a single trauma and the development of a cancer.

3. This relationship in no way depends upon our ability to offer a scientific explanation of it; nor does it depend upon the acceptance of any one of the various hypotheses as to the etiology of cancer. It can be equally well explained whether we accept the extrinsic or intrinsic origin of malignant tumors.

DEACONESS HOSPITAL FOR CONCORD, MASS.

A generous donation of land and money has been made for erection of a Deaconess Hospital at Concord, Mass. This hospital is now in process of erection and promises to be one that will serve a very useful purpose to a number of towns in its immediate vicinity. It is to be of semi-fireproof construction and will contain an operating room, administration offices, dining-room and nurses' home, in addition to the usual wards.

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A FINE RECORD.—A certain medical student obtained an entrance scholarship at University College and completed his medical training there, taking his M.B., B.S. of London in November, 1910. In January, 1911, he entered for the competitive entrance examination for the Indian Medical Service, and was placed second on the list. After taking the special course of instruction at the Royal Army Medical College, he was placed first in the final pass-out examination with the following distinctions:—

1. Herbert Memorial prize of £20 for highest aggregate of marks in all subjects.
2. First prize in Hygiene, Parkes Memorial, bronze medal.
3. First prize in Tropical Medicine, bronze medal.
4. First Montefiore prize for Military Surgery, gold medal and £21.
5. First prize for Military Medical Administration, bronze medal and £6..

This is indeed a fine record, and it will give pleasure to the heart of every homœopathist to know that the record is that of the son of Dr.Speirs Alexander. It will cause no surprise to any who know our distinguished colleague that he should have a brilliant son, but the record is so exceptional that we must call attention to it. We understand that Dr. Alexander, Jr., is convinced of the validity of the homœopathic doctrine, and we can only regret that he has chosen a sphere of activity so far away as India. —The Homœopathic World.

SEX HYGIENE.—So much is written at the present time both in medical and in lay periodicals concerning the problem of sex education that one scarcely knows what the desirable course is to follow. Some are strongly in favor of it, others are strongly opposed. At a recent conference of Women's Clubs, held in the City of Boston, Dr. Richard Cabot is reported to have expressed his opinions as follows:

"In connection with the tremendous problem of sex hygiene, we are in danger of seizing upon a panacea that will do us more harm than good —the teaching of sex hygiene in the schools. Although doctors and parents should know about these matters, they shouldn't spin that knowledge out to children. The temptation to do this as a preventive measure is great, but the process is not wise. I don't believe in teaching maternity through natural history, and sex hygiene through biology. It is the influence of pure personalities whom we meet that keeps us straight, not fear nor knowledge. Hygiene has no word to say why people should behave themselves. It is obviously the field of the educator and moralist. We often believe that disease is the result of sin. There's nothing in it.

"Whether people who misbehave shall contract disease depends on the money, cleverness or luck of the individual. The sin isn't different, whether you suffer for it or not. There is no good science behind the idea that hygiene can guide us in this matter. It is bad morals to reason so.

"If you lie, you may get insomnia thinking about it, and insomnia hurts the health. Don't steal or you may get into jail, and jails are unsanitary and so injurious to the constitution. These things are no sillier than to say 'behave yourself or you may suffer for your misdemeanors.'

"We must not go too hastily about this business. It requires careful deliberation. The problem is as old as humanity. There's no reason to think we are worse off than humanity has ever been before. Indeed, there is some reason for thinking we are better off."

Dr. Cabot is well-known for frankly stating what seems to him to be right and justice, irrespective of whether it agrees or disagrees with the prevalent opinion. He holds such a position as to justify his opinions along these lines to be held worthy of much consideration.

PRIMITIVE OBSTETRICS.—L. Weinstock reports a very unusual case of obstetrics in the journal of the American Medical Association of March. It is as follows: On Jan. 1, 1911, at 1.30 P.M. I was called to a negress, iii-para, age 22, unmarried, a domestic in a boarding house who had given birth to a boy at 3.30 A.M. of the same day under the following

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circumstances: Thinking herself pregnant for but seven months, she had made no arrangements for the birth of this child, as she had had twins about a year and a half ago, both children dying soon after birth. On Dec. 31, 1910 at 11 P.M. while alone in the house, she experienced a sudden pain in the abdomen which made her "double up." It soon passed off, and she thought it was simply cramp. In a short time pains began again. and she suspected that they were labor pains. After four and a half hours a boy was born. She waited until the placenta was born, and with scissors cut the cord about six inches from the umbilicus, and did *not* tie the cord which was still attached to the child. Washing herself as well as she could, and wrapping the child up in a blanket, she went to sleep. Next morning at 6.30 A.M. she rose, dressed, prepared breakfast for the family, did her other work, and then told her mistress what had happened early in the morning. She then wrapped all her bloody linen around the placenta, placed the bundle in a suit case, wrapped the child in some blankets, and went home on foot, a distance of six squares. Reaching home, which by the way was the home of the father, she went to bed and called me.

Examination. — I found the patient to be fairly well-developed young woman, of apparent good health. Temperature was 98.6 F., pulse 65, respiration 18. Vaginal examination showed a slight median tear of the perineum but the uterus was in normal condition following delivery. She was given a uterine douche. The child was fully developed, about eight pounds in weight, and showed no marks or deformities. After giving the child a bath, I tied the cord about one and a half inches from the umbilicus, and cut off the rest. This procedure was, I think, not absolutely necessary, as the cord was absolutely bloodless, but was done for sake of precaution.

Subsequent History. — The mother never had a temperature above 98.8 F., or a pulse rate above 70 during her six days in bed. She got out of the bed on Jan. 6, 1911, and went back to her position. The child is doing well, and seems in no way concerned as to the attention he received when he entered this world.

TRACING A FISTULA.—Dr. Jerome Lynch of New York has contributed a paper to the Medical Record describing his method of following the course of fistulæ. His method seems to be promising and his routine is accordingly described: The tracer I have used for the past eight years (but have not before published) is a mixture of peroxide of hydrogen and a saturated solution of methylene blue. We have demonstrated time and time again the value of this method as a means of diagnosis, and of its almost unvarying reliability in those very complicated fistulous tracts where the communication between two fistulæ was so narrow as to make it impossible for any probe to pass, no matter how fine, especially when the angle between the transverse and longitudinal fistulous tracts was very acute. This, to my mind, is the simplest and the most reliable method of following the ramifications of the tract so far devised. The peroxide of hydrogen will carry the methylene blue into the finest ramifications of the tract. the methylene blue stains the tract, and when the surgeon comes to operate it is a very simple thing to follow it. This method given a trial will be found especially valuable to the man who operates in such a case only occasionally, and would obviate many failures that undoubtedly result from overlooking some ramification of the fistulous tract or neglecting to find the internal opening.

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THE NEW ENGLAND
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ORIGINAL COMMUNICATIONS.

LABORATORY CONTRIBUTIONS TO HOMOEOPATHY.

By R. R. Mellon, M.D.,
Instructor in Physical Diagnosis, and Director of Clinical Laboratory of Homœopathic Hospital, University of Michigan

The sub-physiological dose and the qualitative non-specificity of remedies are two propositions biological science has just recently begun to corroborate.

By a sub-physiological dose I mean that amount of any variety of poison which will fall short of producing symptoms. The dynamic action, if you please, or the homœopathic action, provided the subject in which it is introduced already has some disease to combat.

By the qualitative non-specificity of remedies I refer to the theory that pathological states will respond in a measure to remedies which are not their perfect similimum. In other words, if your differentiation of a remedy falls even into a certain similimum group, it is possible for it to have some action, although its efficiency may fall short of that resulting, when one selects the particular member of that group which has individual and not generic characteristics.

Of the many biological reactions, both of practical import and purely scientific, one feature has been pre-eminent, viz:—their absolute specificity. To illustrate:—cholera vibrios injected into a susceptible animal produces substances in the serum of that animal which subsequently protect against doses many times the size of the initial one. These substances have been styled amboceptors, immune bodies, or more familiarly anti-bodies. In this particular instance, these anti-bodies protect the animal by dissolving the cholera vibrios. This reaction occurs either in the body of the animal or in a test-tube

Similarly susceptible animals injected with ricin, the active principle of the castor-bean, produced substances which protected against five thousand times the initial dose. In this instance the anti-ricin does not dissolve the ricin but simply neutralizes it.

And so, human red blood cells, when injected into a rabbit produce anti-bodies which dissolve out the hemoglobin and pro-

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duce lysis in the agent which gave rise to their production, that is, the human red cells. This particular form of anti-body is called, hemolysin.

Until recently it has been held that the anti-body of cholera would protect against cholera and against no other bacterium; that anti-ricin would protect against ricin and no other poison; that hemolysin would protect against red blood cells and against no other cell, etc. That is, They Are Specific. It is obvious if such is absolutely the case, it would be rather difficult to parallel the action of homœopathic remedies to their different antigens.

I must ask you to pardon my slight diversion when I state emphatically that the object of my paper is not to conform every biological experiment and every good therapeutic thing to the Law of Similars. because there are other laws of cure, in the same sense in which Similia is a law, and only the obsessed individual can cling *exclusively* to Similia.

An abridgment of some recent work by Dr. Vaughan, of the University of Michigan, will illustrate the qualitative non-specificity of poisons. Guinea pigs were injected sub-cutaneously with suspensions of the living bacilli-prodigiosis and subtilis. The initial dose was O. 1 cc which was increased by O. 1 cc at each injection and repeated every half hour during a period of from 10 to 15 hours. These animals developed a serum which protected against three or four fatal doses of either cholera or typhoid.

Of course the animals developed a much higher immunity to cholera or typhoid when these organisms served as antigen, just as a remedy which is practically a perfect similimum will be more efficient than one obtained from a group whose individuals have much in common.

The work of Moxter in Lysin's serves to accentuate this point. By injections of tracheal epithelium of the ox into a rabbit, he produced that form of anti-body known as epitheliolysin. The anti-bodies in this serum dissolved readily the epithelial cells which gave rise to them,—but in addition it showed distinctly hemolytic tendencies, in that, when added to red blood cells of the rabbit, hemolysis occurred.. However it showed a selective affinity for its specific antigen, for when a mixture of red cells and epithelial cells were subjected to this epitheliolytic serum, lysis occurred, first in the epithelial cells; then if any immune bodies remained in the serum, hemolysis was noted, otherwise not.

To proceed to my second proposition, the sub-physiological dose.

Exclusive of diagnostic purposes, tuberculin should not be used in doses which will produce any known reaction, except the positive phase of the tuberculo-opsonic index. Diminution of dosage has been rapidly progressive since the advent of opsonic therapy. First the obliteration of the negative phase, both clini-

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cally and hemato-logically, and finally Sir Almroth Wright states in the "Practitioner," the following: "If, however, inquiry were made for a dose of the same vaccine which would apply to all tubercular patients without distinction, that demand being coupled with the condition that a serious negative phase should in no case be produced, the dose would probably have to be fixed at not larger than 1-50,000. of a milligram." And again, "In the absence of any method for readjusting the doses it would, I say, be necessary to employ almost minimal doses of vaccine."

Experience has abundantly shown that in the development of human hemolytic anti-body in rabbits, that doses of 1-100 cc. of red cells at two hour intervals, give rise to no recognizable symptoms and produce a relatively strong hemolytic serum without injury to the rabbit. On the other hand, doses of 5 cc. of red cells every week produce from one to two degrees C rise in temperature with some loss of weight. Many of these animals die, and in those that live small proportion give a serum of strong hemolytic powers.

Experiments in our own laboratory bear testimony in the same direction. By giving physiological doses of Veratrum viride, a serum was produced which was negative as far as its opsonic effect on the diplococcus pneumoniæ was concerned. But sub-physiological doses markedly raised the index to this organism.

In sensitizing of animals to foreign proteids, considerable amounts of egg-white or other proteid injected into animals caused no symptoms, but if a second small injection of the same proteid is given after a lapse of ten days, death follows.

The most logical explanation of this phenomenon is as follows: the somatic cells split up the proteid into a poisonous and a non-poisonous part, but this process is relatively so slow that no injury to the animal results. But the cells acquire the lytic habit, and the second injection even though small, is split up with such fulminating rapidity, that the poison suddenly liberated, causes the death of the animal.

The significance of this experiment is wonderful. It shows that in the interval between the first and second injections, the most profound changes are occurring, yet in such an inoffensive way, that the individual shows no external sign of the intense lytic power which is being developed by his organism.

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MORAL PROPHYLAXIS FROM AN EDUCATIONAL STANDPOINT.

By George Warren Spencer, M.D., Cleveland, O.

In a paper read before this Society at its last meeting, a generalization of the educational phases of this subject was considered. In this paper a more specific study will be made of some of the methods of education best suited to overcome the evils arising from ignorance and improper instruction in regard to the reproductive system.

The first and a very important question to consider is at what time in the life of the individual should attention be given to this system, or instruction be given regarding these especial organs and their functions.

In the first three or four years of adolescence the male and female are practically the same so far as their mentality is concerned. They are not conscious of the points of differentiation of the sexes.

During this period of child life, aside from sanitary measures, no attention should be given to the sexual apparatus; but the utmost freedom of intercourse, in the presence of the parents, should be allowed. At this time the male and female child play together on equal footing. There is no recognition of superior strength of one over the other. There is no idea of the ethical relations existing between the sexes which are later, naturally, made known. To plant into the child's mind the idea that he or she has physical differences that should be concealed, or of which they should be ashamed, is to arouse the dormant imagination, and unnecessarily call the attention of the child to that which he cannot understand—even if an explanation could be given. At once the growth of false modesty is begun. Why not leave it to Nature, who will, when the proper time comes, place upon the child her most delicate and purest mantle, true modesty? It is desirable that this Adamitic period of the life of the child be continued as long as possible.

The next period in the life of the child is when the school age is reached. There the difficulties in keeping the mind free from error are increased many fold. In the indiscriminate collecting of children from every imaginable home and neighborhood, the influence and environment is undesirable, but cannot be avoided, under our school system, and therefore is a condition that must be met.

Then it is that, if the parents would save their children, they must be watchful and alert, anticipating the probable impressions they will receive from their companions, composed of those who have had bad home training, and the naturally vicious and degenerate.

How to fortify against this source of vicious education, is a problem that must be solved within the family circle, for where

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else could children, under school age, be instructed? How well prepared the majority of the parents of our country are to become a part of our educational institutions is also a question of grave importance. It takes only a very superficial examination of the subject to discover that there is no real, definite, experimentally proven knowledge of how to prepare the child to understand and protect himself against false teachings and conceptions.

The stock of stories of the stork, the doctor's bag, and "God made you and sent you to us to care for and to become our own," are in common use to satisfy the natural curiosity of the children. The practice is prevalent of constantly saying to the children: "Hush! that is naughty; that is not pretty; you should not say such things before your sisters and brothers. Little boys and girls should not ask such questions," and numerous other subterfuges to escape the responsibility of telling the children the truth.

In consequence of this sort of training the children become secretive and afraid to ask questions, and go elsewhere for information. They have not far to go, for older children who have gained their knowledge from the street school are anxious to assume the dignity of teachers and parade their superiority.

As at this period of life the psychical begins to enter prominently into the processes of physical development, therefore the course to pursue is to follow Nature's methods, which are so admirably adapted to the work. If perchance there might be, in our judgment, some cause for interference with Nature's school, act in accordance with the school mistress' methods, which are subtle and silent, guiding without reproach, leading without seeming to lead, and truthful. During this period, there can also be laid one of the foundation stones of a moral life, namely, respect for the authority of parents, which carries with it love and obedience.

If there are boys and girls in the family, thus early can be taught the ethical relations of the sexes, for example, the difference in their strength, therefore the care and tender treatment the stronger should accord the weaker. Thoughtfulness for the comfort and happiness of the girls; imbue the sturdy boy with the idea that he should be the protector of his sister, and demand the most respectful and delicate conduct towards her, thereby placing the female, in the boy's mind, on a high moral plane, which is one of the fundamentals of a moral sexual life.

An intelligent study of child life will reveal many means by which the ethical nature can be developed. It is said that the period of life from birth to puberty is one in which the child is a savage; therefore, temperamentally unstable; taking for granted that which is done for him; without appreciation, to any very great extent, of the sacrifices made for him, and respecting authority, namely, through fear of physical punishment. For all this, the cortical sub-stratum is ready to receive the elementary impressions of the highest moral conceptions. If the child can be guided through this period without too much error being introduced,

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and approach the first great epoch in human life, puberty, in as natural a physical and psychical condition as is designed, the task of educating him is clearer, and can be assumed with more confidence of success.

When the child steps across the threshold leading to the higher development of youth, he becomes more conscious of his relations to the universe, therefore it is highly important that Nature should not be interfered with in her course of instruction. At this period, the results of the work done by his testes and other organs having internal secretion, are made manifest in the physical and psychical changes.

The most important, perhaps, of all the changes, is the awakening of the reproductive sense, and with it a change in his relations with the opposite sex and with society. If error has not crept into his mind at this time, the difficulties of keeping him from acquiring loose morals are much reduced, and he is therefore comparatively safe from habits and diseases that are weakening or destructive to the psychical as well as the physical.

If proper instruction has been given, there will be no mysteries left unsolved. He will know his origin and the civil laws best adapted to govern his relations to society. He will be ready to learn the importance of a sound body and mind in the struggle of life, and how such a mind and body can be obtained.

To whom should the moral training be left? Our school system almost wholly neglects this part of the children's education. The churches have not risen to the demands of scientific instruction, because held down by the teaching that the sexual appetites and demands are carnal and should be put aside, as only fit for the devil to use. One exception, however, can be noted. The Catholic church has, within the last few years, taken up an advanced position in the teaching of her boys and girls in regard to their divinely appointed formation of reproduction.

Under existing conditions, then, the best agents for the purpose of carrying on this especial kind of education, are the fathers and mothers. If the fathers, for instance, have found time, apart from their pursuit of dollars, knowledge or fame, to devote to their boys, they will in all probability stand in the estimation of the children as the greatest men that ever lived, and in whom they have absolute confidence as to wisdom and truthfulness.

The most important thing for the fathers to do is to become interested in the boys' schools, ambitions, expectations and sports. In order to establish this relation, in truth, some time must be devoted exclusively to the boys. Dr. W. S. Hall, Professor of Physiology at the Northwestern University, Chicago, suggests a plan within the reach of every man, which is as follows: "Instead of spending afternoons at the shooting club, golf links, reading the Sunday paper or taking the Sunday afternoon nap, spend that time in company with the boys, going afield with them; introducing them to Nature and delving into her secrets; teaching

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them her plan of reproduction; of conservation of her energies and her economic use of them. Renew the spirit of sport, thereby becoming a boy again, which opens the way to the boy's inner life where the future character lies, silently and unresistingly building. The material for this more or less permanent structure is gathered from every possible source, consequently good and bad alike are received."

Like the clay in the hands of the sculptor is prepared for the fashioning of figures representing the highest or lowest ideals of human life, so the child is prepared in Nature's laboratory for development into the best or worst of character. As the builder's material is the product of ages of evolution, so the child's mind is the product of ages of development, possessing qualities, both good and bad, of past generations, either inherited or acquired.

As a physical organism, the human is the masterpiece of the great Creator and is endowed with a force which enables him to understand the intricacies of his own constitution. This mind force, operating through the brain, the leading member of the physiological union, is the most important element through which we shall hope to make the perfect man.

There are a few characteristics of organic nature, and of the mind, which, if understood, will assist us in moral and physical education of the youth at puberty.

First, it is the fundamental nature or organic element, whether of high or low degree, to feel agreeable, and therefore to pursue all which favors its preservation and increase, and to eschew all which hinders or prevents its activity and development.

The youth, then, has within him the natural desire to follow that which favors his development and extends his activities. If this natural inclination could be kept from being modified by outside influences, the individual might, unerringly, on his own account, follow that which best serves his purpose; but the composite character of the mind makes it necessary to subject it to education. The appetites and desires are not always ultimately analyzed. That which a youth may have a desire to possess and to practice, and which gives him pleasure, at last may be the very thing he should have shunned because of its injurious effects.

In order, then, to guide the young ego, he must be early taught the significance of his physical and mental demands, and not blindly accept erroneous teachings and yield to desires and impulses, only because their appeal is pleasurable.

Second, another characteristic of organic nature is that the appetite for food and drink and the sexual appetite are the strongest motives of action, because they are the fundamental and urgent appetites of the organic being. The latter appetite is the one which must be understood, in order that it may not lead to where love is naked lust.

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If the brain is well constituted and naturally developed, the sexual desire undergoes a complex development in consciousness. It becomes refined through the interlacing plexuses of the ideational organization and from this basis are evolved all the delicate, exalted and beautiful feelings of love that constitute the store of the poet and play so great a part in human happiness and human sorrow. What is true of this particular desire is true of all our desires. Only by unremitting efforts at education can we hope to make moral prophylaxis efficient, and correct the errors so disastrous to society, as well as to individuals.

THE TONSIL QUESTION.

By William H. Phillips, M.D., Cleveland, Ohio.

The tonsil question divides itself naturally into two parts: First, the advance in knowledge of the pathological significance of the tonsils; and second, the treatment of these conditions. Logically, it would seem that the sequence of the divisions in the tonsil question should be as above given, viz.: first the study of its pathology and next the treatment, but as a matter of fact the thing has been reversed and the reasoning has been of the *a posteriori* type. Thus first a method of treatment was promulgated and then by endeavoring to prove or disprove the rights of such treatment to recognition, much was learned regarding tonsillar pathology. In order to be orthodox and not disturb the existing order of things,—for of all crimes that is the greatest,—we shall adhere to this cart before the horse condition of affairs in this little resumé of the tonsil question, and consider the method of treatment first, and then the pathological significance.

Tydings, of Chicago, is credited with having performed, ten years ago, the first tonsil enucleation done in this country, and, as we are still practically the only country on earth doing such enucleation, he is probably to be credited with the first scientific tonsillectomy ever done. It appears that but few men followed Tydings' lead, for between 1900 and 1904 there is little in tonsil literature to indicate that much general interest was taken in the subject. In 1904 and '05, however, there began to appear in laryngological journals a series of excellent papers on the minute anatomy of the tonsil, and studies of the tonsillar capsule, so called, and also some few reports on the "radical tonsil operation." In 1907 the journals were filled, and have been ever since, with various technics for "tonsillectomy," and disputes, pro and con, as to the advisability of sacrificing *all* the tonsillar tissues, and the ultimate effect of such work upon the body economy. The literature of 1909 shows practically an unanimity upon the part of recognized laryngologists as to the treatment of diseased tonsils, viz., surgical, and with but one standard of surgery, viz., complete tonsillectomy. In 1911 the tonsil question is already on the wane.

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A standard has been established beyond cavil and now it is merely a question of the individual keeping up to the standard.

Why has tonsillectomy taken the place of the older tonsillotomy? First, because it is the only method by which that form of tonsil most frequently associated with the severer types of infection, the submerged tonsil (of which more later) can be adequately removed; second, because recent careful study of tonsils and tonsillar diseases shows that the foci of infection in diseased tonsils, lie, not in the *mouths* of the crypts, but at their *bases* next to the capsule. It is from this point that toxins or germs find their way through the lymphatics to the deep cervical glands and into the circulation and thence to various parts of the system. Tonsillotomy, however radical, because it does not reach the capsule, accomplishes nothing in a diseased tonsil except possibly to seal the cut openings of the crypts by inflammatory debris and leave an infected stump. This stump is capable of producing more serious trouble than the undisturbed organ created originally when the mouths of the crypts were wide open.

To those of you who feel that you have seen much good following tonsillotomy and that it is a proper operation in the light of present knowledge, the following may elucidate matters. Two types of operative tonsils are recognized by laryngologists today, first, the protruding tonsil, be it hard or soft, and second, the submerged tonsil. The protruding tonsil is the one so frequently guillotined. In the majority of cases the only disturbance it produces is the obstruction it offers to respiration and this is far more frequently due to the associated adenoid than to the tonsil. It is rarely the seat of serious infection, except the acute diseases, scarlet fever, diphtheria, etc., and as a rule is but a part of a general hypertrophy of the pharyngeal lymphoid ring. Many of these cases seem to improve after tonsillotomy *if* a thorough adenectomy was done at the same time, for as said before, the tonsil condition is more a functional hypertrophy, the result of the mouth breathing forced by the adenoid growth, than a diseased condition and the improvement is largely due to the adenectomy. If the adenoid was not removed, or was imperfectly removed, these tonsils will often fill out again very rapidly, so much so that in the course of a few months it will look as though nothing had been done. Notwithstanding the fact that improvement, at least in appearance, often follows the guillotine in these cases, these protruding tonsils if operated at all are better treated by tonsillectomy, first, because recurrence of the hypertrophy is thereby avoided and, second, because no stump is left, either already infected or to be infected later.

The second form of operative tonsil is the submerged type and this unfortunately, or perhaps fortunately, cannot be successfully guillotined. It is the so-called small tonsil, innocent looking enough to the unpracticed eye, often producing a distinct enlargement to the finger when applied externally at the angle of the jaw,

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and not infrequently associated with enlargement of the so-called tonsillar gland of Wood, or the whole deep jugular chain. It is not often accompanied by much adenoid enlargement. It is the so-called small tonsil and yet, when enucleated its size is often surprising. To understand fully the why and wherefore of the submerged tonsil, one must be familiar with the anatomy of the tonsil and its surrounding structure; a thing we need not go into deeply at this time. Suffice it to say, that its faucial surface is covered in by two tightly applied folds of mucous membrane, the supra tonsillar fold above and the plica triangularis anterior and below. These folds close the mouths of the crypts of a large portion of this tonsil, preventing their drainage and ventilation and closing in such products of infection as may find entrance. Enlargement of the tonsil is upward into the soft palate, forward and backward, dissecting its way beneath the pillars, downward beneath the plica and outward into the constrictor of the pharynx. Recent study has demonstrated that it is this tonsil above all others which is the diseased tonsil and most often demands removal. As the infection usually lies deep at the base of the crypts in contact with the capsule, the tonsil must be removed either down to the capsule or with the capsule. A tonsillotomy here is practically certain to leave an infected stump bound to defeat the object of the operation and be the source of much future trouble. Complete removal down to the capsule is a difficult and unsatisfactory thing, because of the intimate relation between tonsil and capsule. It is much easier to shell it out capsule and all.

Pathologically considered, recent study of the tonsils has demonstrated especially one thing, that, as stated before, it is the submerged tonsil, to which little attention has been paid in the past, to which we are indebted for much. By pressure and interference with free muscular actions, it is responsible for some cases of tubal deafness and tinnitus. Practically all cases of primary tonsillar or glandular tuberculosis and recurrent quinsies are associated with this form of tonsil. It is the hotbed of the follicular or toxic tonsillitis which is such a frequent accompaniment of our grip epidemics, and many a case of acute articular rheumatism, toxic or septic endocarditis and nephritis is directly traceable to toxic or bacterial absorption from this point during an epidemic of strepto- or pneumo-coccic grip infection. Davis, during the epidemic strepto-coccic infection of 1909-10 made bacteriological examinations of forty-five submerged tonsils removed in the capsule from grip patients, and every one showed strepto infection at the *base* of the crypts. Wood and Grober have shown a direct connection between the tonsil and the apex of the lung, the choice site of pulmonary infection, demonstrating anatomically the possibility of direct infection of the lung from the tonsil, and the probability that many cases of pulmonary tuberculosis owe their origin to this tonsil. Many obstinate eye infections, recurrring iridocyclitis, episcleritis, phlyctenular keratitis, etc,. which respond

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to the tuberculin test are cured permanently only after enucleation of these tonsils. Kramer reports follicular tonsilitis as often attendant upon tuberculin treatment and explains it as the flaring up of a hidden tuberculous deposit in the tonsils. Wright and Hurd report a series of twenty-five submerged diseased tonsils enucleated in the capsule, more than half of which showed tubercular deposits around the capsule.

In the past two or three years, as a result of a better understanding, our attitude toward tubercular or infective lymph-adenitis of the neck has undergone much change, so that today the progressive surgeon is less and less inclined to advise radical removal of simply the passive carriers of infection, thereby inviting recurrence after recurrence, but goes to the source of infection and urges complete eradication of the submerged tonsil first; thereby he often has the pleasure of seeing his patient recover completely and without a neck full of scars, for it is a well known fact that the lymph glands can take care of an enormous amount of infection, if only the supply be shut off.

A review of tonsil literature is interesting and instructive, interesting in that it shows that until tonsillectomy was established, most laryngologists detested tonsil surgery, first, because it was crude and unscientific; second, because results were unsatisfactory and reflection was thereby cast upon their work. Personally until three years ago I had practically given up tonsil surgery and the little that I did still remains to haunt me and I am redoing it as fast as possible. Such a study is instructive in that the pathway of many obscure infections is being brought to light. The problem of tuberculosis begins to assume a different aspect as it becomes more and more a possibility that the tonsil is the real pathway of infection in perhaps a large percentage of the cases and the origin of many obscure infectious processes is being brought to light. We do not yet know the why and the wherefore of the tonsil and, of course, until we do we can never fully appreciate its pathological significance, nor can we say that its surgery is upon an absolutely scientific basis, but certain it is, if results count, we took a long step in the right direction when we accepted complete tonsillectomy as a recognized procedure.

TREATMENT OF PNEUMONIA.

We hear much from our friends of the dominant school concerning the scientific methods of treating this disease and the wonderful results that follow the same. At times, however, when the actual results thus obtained are compared with those of former years, enthusiasm is less prominent, and much food for thought results. An article that recently appeared in the Interstate Medical Journal upon the present status of pneumonia written by Beck of Baltimore rather well illustrates this. Among other things he says:

"The great instruments to be employed in the treatment of inflammation of the lungs are blood-letting, tartarized antimony and mercury; of these blood-letting is the chief." This statement is quoted from Watson's "Practice," 1845. In the light of modern therapy this seems quite obsolete, yet it is doubtful whether the results to-day are better than they were in the days when every patient suffering from pneumonia had to be bled.

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NERVOUSNESS AS A HABIT.*

By Frank C. Richardson, M.D., Boston, Mass.
Professor of Nervous Diseases, Boston University.

The present day enthusiasm in the conservation of health and the prevention of disease is shared by every branch of medical science.

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 microörganisms 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 abounds are well recognized and considerable has been accomplished in the way of correction.

In recent years there has been an unmistakable tendency toward shorter hours of work, more out of door life, more rational recreation, and less indulgence in alcoholic and other excesses.

Fewer business houses expect, or permit, their salesmen to include in expense accounts large sums for alcoholic persuasion.

We hear of prolonged drinking bouts and forty-eight hour poker seances rarely except as reminiscences of by-gone days.

Notwithstanding these and other 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 bonds 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.

While it may be true that the world's best work is done by neurotics, that "ordinary men are the only ones who enjoy normal health" (Tchekhof), that "the Philistine is a wholly successful fool" (Nordau)—it cannot be denied that even in these better days hosts of human beings are being driven by the harassing tire of a hard and wearing life, or the pressure of a too complicated civilization, to nervous disaster and mental incompetency.

It is, therefore, necessary that the educational campaign against influences pernicious to nervous and mental integrity be

* President's address delivered at the meeting of the Society of Neurology and Psychiatry held at Narragansett Pier, June, 1911.

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steadily carried on by you who because of your special study are best fitted for the work.

In indicating this role to the neurologist and alienist, he is looked upon, not as an ordinary practitioner charged with relieving or curing disease, but as a savant, endowed with a knowledge of men, who analyzes psychic functions as he would motor or digestive functions.

It is not an exaggeration to say that the majority of nervous 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 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 department 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 overzealous exponents of the various cults of pseudo-religious psychotherapy.

As in all prophylaxis, protection against nervous diseases must be based upon exact knowledge of causes. In our search for these causes we should not be led by the fascinations of bacteriological lore, or the absurdities of the Freudian theory, to ignore the more commonplace but no less potent influences to be found in everyday life, and it is this thought which makes it seem legitimate to call your attention to nervousness as a habit.

Notwithstanding the fact that popular expression sometimes confounds where experts distinguish, we must admit that such expression is frequently so apt that it forces itself into the vocabulary of even the scientist.

So it is with the term "nervousness"; while so vague and so loosely used as to be almost undefinable, it surely has a general significance to the layman and to the physician.

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For the purpose of this paper nervousness is intended to indicate those conditions in which the higher psychism has become subordinated to one or more psychic, motor or sensory subconscious impulses, and it is desired to offer the suggestion that, exclusive of true psychoses and organic neuroses, a considerable proportion of so-called "nervousness" 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 any one who observes, were, without doubt, originally purposive and therefore constitute so-called moter 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 her ingenuity in vindicating her weaknesses, it has become part of her 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.

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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.

Countless other examples of nervousness as a habit will recall themselves to you, but what has been said will be sufficient upon which to base a few words as to its prevention and cure.

As all habits are, to a greater or less extent, the products of education, it might perhaps be contended 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 which 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.

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 Utopian 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 nervousness.

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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 thraldom.

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 habit of nervousness 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 nervous 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 "hypnoidal 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 in-

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terrogation 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 symptom 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.

They continue to "dash about like a ship without a rudder, well if the winds be fair and the sea be calm, but dependent on the elements for the character and the time of the final wreck."

Fortunately, however, the majority of cases are amenable to treatment, and if the physician will but recognize the character of the affection and discover its etiology, he will often succeed in bringing about its relief, or, better still, accomplish much toward its prevention.

And now in closing it may be said that the presentation of the foregoing trite facts would seem to be justified by the physician's unmindfulness of them and by the hope that through the members of this Society a more wide-spread interest in this increasingly large class of cases, may be aroused as well as a keener appreciation of the obligation of the physician to be an educator of the people in mental as well as in physical hygiene.

REPORT OF CASES.*

By Nelson M. Wood, M.D., Charlestown, Mass.

When asked by your chairman to present a paper for the section in Children's Diseases, I could not think of any subjects or facts that were not common knowledge, and felt that any

* Read before the Massachusetts Homoeopathic Medical Society, April 13, 1911.

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attempt under such conditions would be a failure. However, not wishing to shirk any duty, I consented to report a few cases that have been under my observation and have been of considerable interest to me, and I hope they may also interest you in some degree. In their presentation, I shall not attempt to enter into minute details, but present rather the simple clinical facts with especial reference to symptoms, diagnoses and terminations,

Three distinct types of disease will be considered from the *after observation* standpoint:

The first is that of erythema multiforme, associated with acute rheumatic arthritis. The etiology of this condition is obscure, but in these cases seems to be from the same indefinite causes of the associated disease. The pathological processes concerned in the production of the lesions, which with rheumatism are usually macular, are dilation of the blood-vessels of the corium and the exudation of serum into the surrounding tissues. The lesions are fairly symmetrical, usually appear upon the hands and feet, forearms and legs first; then in pronounced cases, upon the trunk and back. They last from one to three weeks, and need not be confounded with the lesions of any other disease except the possibility of eczema, syphilis and urticaria.

CASE I. Marion Floyd, age 9 years. Seen in consultation with Dr. Walter Flanders, September 30, 1910.

Patient was taken ill September 27. Complained of headache, tired all over. Arms and legs ached; slight fever. Two days later knee joints became swollen and tender, and temperature was 104, pulse 130. At this time a macular eruption appeared all over the body. During the next few days all the joints of the body which are the usual seat of rheumatic arthritis became involved. The eruption gradually formed larger, well-marked areas by confluence of macules.

The usual symptoms of arthritis persisted for a month. October 10th, thirteen days after the appearance of the erythema, desquation began, and by the 14th the patient had peeled all over the body with the exception of the hands and feet, and this also occurred after the 24th. Casts of skin were shed from some of the fingers and toes. Some areas desquated three times, but ceased entirely during November.

The patient was treated symptomatically for the main disease and made good recovery.

Some of the neighbors, as is often the case when they know but a part of the story, insisted that the child had had scarlet fever.

CASE II. William M——. Aged 8 years. Admitted to the hospital April, 1910, suffering with acute rheumatism. He had never been a robust child. Parents were of doubtful health, and his fight for life had been up-hill. He presented the usual joint conditions with some fever and rapid pulse, and a well defined endocardial murmur.

During the second week a very extensive macular eruption

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appeared all over the abdomen and back, but very little upon any other part of the body. The lesions varied from the size of a pea to that of a half dollar, and gradually faded, with slightly yellow pigmentation. They lasted about two weeks and were not followed by desquamation.

Another condition of unusual interest was present in this case —a condition which to many may not be known, or if known its significance is not appreciated. That is, the presence of rheumatic nodules, a lesion rare in adults but fairly common in children, consisting of small yellowish deposits without capsules and containing tiny blood vessels. Histologically they are exactly analagous to the fibrinous deposits found on the inflamed endocardium and pericardium, and their frequent association with severe rheumatic heart lesions seems to prove that they are caused by the same irritant bodies. The nodules are usually small. and situated in the meshes of the loose connective tissue about the joints, particularly over the olecranon process, the condyles of the humerus and femur, less often around the other joints, and over the spinous processes and the occipital bone. Their presence in any case is of great practical importance, as in cases of pain of doubtful nature they help determine that it is rheumatic and not "growing pains" (the old explanation of ignorance).

On account of their frequency in some cases of endocarditis they have an important bearing on prognosis. Such cases are apparently more apt to terminate fatally even though no other factors foretell it. When these nodules are found before heart murmurs appear, one needs to be on the watch for them, as they usually come in a few days.

In this case very large nodules were found over the occipital bone, and some smaller ones were present near the joints. The endocarditis increased in severity, severe cardiac pains, dilatation, vomiting and death ensued in a few months.

SECOND CLASS. Baby B—. Seen first December 19, 1910, when she was four months old. Family history good, child was normal at birth, was fed on modified milk, and seemed well up to the end of the third month, when she was seized with what was termed a cold. She had a temperature varying from 101 to 103, accompanied by a cough with wheezing rales. She continued to take nourishment well, but did not get better. At this time, three weeks after the beginning of illness, the attending physician was dismissed, and I was called in.

Physical examination showed, in addition to the signs mentioned, consolidated areas in the right lung, and suggestions of them in the left. She appeared better at times, without change in chest symptoms, except a gradual increase in embarrassment in respiration. This condition persisted until the middle of February, without loss of weight,—temperature and pulse still the same.

At this time she began to be markedly cyanotic, the amount out of all proportion to what seemed warranted by the physical

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signs. All kinds of medicines, cold air, hot air, steam and poultices were used without any relief whatever. A radiographic plate of the chest showed plainly some diseased areas in both lungs, the greater amount in the right, beginning about the third intercostal space and increasing in width toward the base. Some apparently healthy tissue for about a half inch on the surface in the axillary line was shown.

Five other good physicians saw this case in consultation, two especially able men, and we had varying diagnosis,—enlarged thymus gland, complicating broncho-pneumonia, ataltatasis, swallowed nipples and asthmatic bronchitis, and possible abscess of the lung. All agreed that because of retained weight and excellent appetite and care of her food that tuberculosis was not probable.

Cultures from the throat showed the streptococcus to be the prevailing organism. Autogenous vaccines were used without the slightest effect.

March 12, after two or three days of more than usual embarrassment of respiration and cyanosis, the baby ceased her four months' struggle for life. Consent was obtained to have an autopsy, Dr. Watters kindly coming on Sunday afternoon to do it. The right lung was found to be a nearly solid mass of cheesy fibrous tissue, from which thin pus would ooze when an incision was made through it. Similar areas were found in the left lung posteriorly. Small tubercles were found on the surfaces of the liver, and spleen, and many mesenteric glands were swollen nearly to the breaking down stage.

The case proved to be an acute tuberculous broncho-pneumonia. The value of the autopsy was very great from a clinical standpoint, and if we could get them more often we could learn many things that would otherwise not be known.

I would like to emphasize the value of the X-ray also in these cases. In every one where I have employed it, the needed help has been given. In one case, in my last service at the hospital, with the assistance of Dr. Osgood and Dr. Crane, we located an abscess of the lung which contained just one ounce of pus, and drained it with the first introduction of the needle.

Class III. Everett Harper, age 14, a former patient of mine, was seen March 22, 1911, with the Drs. Faxon of Stoughton.

His family history was good, and he had always been well with the exception of some attacks of indigestion, from the fifth to the eleventh year. He would have two or three each year; they would last two or three days at a time; he would vomit at first, and have a high temperature for one day, then the condition would clear up until the next time. From the eleventh to the fourteenth year, he had not had any attacks of this kind.

Was injured by a kick in the abdomen on the football field in the fall of 1910. Did not have fever or vomiting at that time. Soreness lasted a few days. He has not seemed just as well as usual since,—bowels constipated.

Present attack of illness began March 21. Was as well as

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usual during the day; ate a hearty supper and retired. Awoke with pain and vomiting at 10.30 P. M. This was severe and continued until 4 A. M. After the stomach was emptied of food, water and froth only were ejected, pain continued, but less severe, abdomen was distended by gas and there was marked splinting of the abdominal muscles.

When seen at 2 P. M., temperature was 101, pulse 90. A leucocyte count by Dr. Faxon showed 25,000. The diagnosis of appendicitis of fulminating type was made. The only possible question of disagreement was as to whether rupture of the appendix had occurred.

Dr. William M. Conant of Boston, assisted by Dr. N. H. Faxon, operated at 3.30 P. M. When the patient was anæsthetized and placed upon the table, the abdomen presented a contour like one containing a large ovarian cyst. The usual incision was made for appendectomy, and when the peritoneal cavity was entered, free blood appeared. A lengthening of the incision, nearing the median line, was made and a large coil of intestine, black and distended, was exposed. No description of the way this portion of the bowel was twisted on its mesentery is possible, as it was with greatest difficulty that it could be unwound, and in doing it, much of the mesentery was destroyed. The patient's condition continued good, and complete resection of the strangulated bowel was made, with an end-to-end anastomosis, the lower end of which was nearly down to the cæcum. The wound was drained with gauze over the site of the anastomosis. The patient's pulse was 145 at the close of the operation,—temperature 99.5.

No accidents occurred during convalescence, the bowels moved the third, fourth, sixth and eighth days after operation; and April 1, ten days after the operation, the wound was closed and the patient sat up for a short time.

The portion of bowel removed measured exactly one yard. It seemed to me that the snarl of intestine must have been a congenital arrangement which had escaped the most serious attack until this time.

The points which were impressed upon me personally were:

1st. That four careful observers were absolutely wrong in diagnosis. (Don't always be too sure.)

2nd. In such severe cases, operation is absolutely necessary at the earliest possible moment.

3rd. When à resection upon a child's intestine is necessary, an anastomosis should be made at once if the patient lives long enough for it, as there is but little hope from any temporizing operations on young patients, while the chances for recovery after completed operations are excellent.

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SYMPTOMATIC VERTIGO.*

By E. P. Colby, M.D., Boston, Mass.

The title of symptomatic vertigo is wholly unnecessary, as all vertigo is symptomatic. It is only an isolated indication of some error, oftentimes remote from the organs of special sense, and still more often remote from the brain. Therefore, neither for diagnosis nor treatment can we consult this symptom alone, but when it is present it should never be ignored. The kind of vertigo is of no differentiating value, as it may vary in different individuals with the same originating cause. For convenience of expression I have adopted the terms, objective, where things seem to be actually whirling around, and subjective, where there is a sense of dizziness somewhere in the head, without any visionary manifestation. The first type is sometimes seen in cases of alcoholic or tobacco intoxication, and the latter in the vertigo of neurasthenia. (But I repeat that the type is not sufficiently constant to be diagnostic.) Too much stress cannot be laid on the fact that it is only a symptom, for when a patient applies with a severe case he is so distressed that he demands almost instant relief, having but little idea of the cause and its possible remoteness.

To go minutely into the various concomitant conditions attending vertigo would be worse than carrying coals to Newcastle, but I may be allowed a coarse division into direct, or idiopathic, reflex, auto-intoxication and induced intoxication. To this as a subdivision may be added vascular, or mal-nutritive, which in itself comes near to being auto-infective, as it prevents proper renewal of cell protoplasm and removal of effete material. It is the first move toward the death of the part.

In the first division we are unable to find any actual lesion or remote organic error. It would seem to be functional, or, what is most likely, some error in the sympathetic control, the nature of which is thus far unrecognized. Here would be included the hysterical, the neurasthenic, and the epileptic cases. The second division would include those of a reflex, from some remote organ which sends sensory impulses to the cerebral or cerebellar centres. This may be through the sympathetic system, or possibly by the more direct cerebro-spinal tracts. In our present state of ignorance we do not know which, or if both. In these cases a careful examination will discover the probable exciting lesion. The exciting cause is often found in the eyes, the nasal membrane, the pelvic organs, the alimentary canal or almost any other locality. In the auto-infection class the cause would be some irritating substance circulating in the blood, although it may be said we cannot be sure that this influence is a direct irritant to the vertiginous regions, as the irritation or influence may wholly act through the vasomotor control; many experiments must yet be tried before we

* Read before the Hughes Medical Club, May 19, 1911.

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learn the exact way in which these poisons act. There are a few drugs which cause the same result, but they have never been studied with this point in view. Here might be included the vertigo from alcohol and tobacco. In the vascular cases it is not easy to differentiate between local auto-intoxication and the beginning tendency to lethal decay. It would always seem to be secondary to some lesion cutting off proper blood supply. This may be an embolus, or the swelling of a thrombosis when neither of them go on to actual softening. A different cause, still vascular, is hemorrhage when there is the pressure of a foreign body intruded into the brain, and the same may be said of a tumor, one being sudden in its onset and the other gradual. We cannot be so sure of the immediate cause of vertigo in meningitis, as it often occurs before pressure symptoms are manifest. In auditory vertigo there may be a reflex condition as where the disease is in the middle ear (this is not certain, however). In Meniere's disease the trouble is immediately in the vertiginous apparatus, but not at its cerebral centre; it can hardly be termed reflex, as by that term we expect a secondary set of neurones, physiologically related, to be occupied. In Meniere's the labarynthine impulses seem to be sent directly to their own centre or centres in the cortex without the intervention of any secondary or auxiliary neurone.

In passing to the more practical feature of this subject, namely, the treatment, I wish to announce my old-fashioned belief in the efficacy of drug remedies, and that the closer their symptoms correspond to those of the disease the more likely they are to assist in a cure. As experienced homœopathists you hardly need prompting in the matter of drug pathogenesy. All remedies given for conditions causing, or including vertigo, should cover that symptom, and in most instances this can readily be attained. Those cases which are likely to be the most trying, are those which as far as we can see are purely nervous,—functional vertigo. Here we have but few objective symptoms to guide us, or else we find such a host of inconsequential ones that apart from the vertigo we are quite in the dark. Most authors state that neurasthenic vertigo is particularly worse on first rising in the morning. My observation does not correspond to this statement, as the patients have the vertigo, or have it worse, just in proportion as they are fatigued, which is mostly in the latter part of the day. In hysterical vertigo the exacerbation may be at any hour of the day, and is mostly controlled by emotion or excitement.

Just a word here regarding the paroxysms of attack. From many observations it has seemed to me that it is owing to changes in the vaso-motor control in the cerebral circulation. From various causes there may be either a spasm or a paresis in the cerebral vessels, either local or general. Of the exciting causes we yet have much to learn. They may be psychic, reflex or toxic. In hysteria they are probably psychic; in neurasthenia, asthenic (from fatigue), and in migraine, and general epilepsy (non-focal), from toxemia. There are undoubtedly other causes for these irregular

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ebbs and floods in the brain about which we know absolutely nothing, but, what is most important, we know there are remedies corresponding to the phenomena.

It would ill become me to attempt to instruct members of this Club in drug pathogenesy, as you have spent your lives in that study. A few suggestions, however, as to the one symptom may be admissible. Conium has as one of its results, objective vertigo, and there seem to be but few of our remedies in which the vertiginous symptom is objective. Tabacum also has this particular form, as all of you will recall if you remember your first cigar. Granatum has both subjective and objective dizziness. It is strange that so little stress is laid on this symptom in our works on materia medica. My attention was first called to the symptom several years ago, when I noticed that in giving the active principle in cases of tapeworm my patients were all obliged to take their bed for two or three hours on account of the intense vertigo. This could not have been on account of the primary irritation of the parasite, as the result was the same where I made a mistake in the diagnosis and there was no parasite present. While I had a service in the hospital there seemed to be at one time a regular epidemic of vertigo, without other constitutional symptoms, and all recovered in a satisfactorily short time under the administration of only Granatum. Lachesis has been of great service in those attacks of vertigo which accompany the hot flashes of the climacteric in women. Probably the most resistant forms are those depending upon arterio-sclerosis, or accompanying brain lesions, such as embolism, or a hæmorrhagic clot. In these cases but little aid can be expected from remedies, although in sclerosis a prolonged treatment will usually in the end bring relief, due attention being paid to diet and the use of electricity. Here the barium salts have a beneficial effect on the connective tissue proliferation and on the disordered heart action.

It is not needed to direct your attention to the various toxic vertigos, with which you are familiar. There is one toxemia which does not seem to have the attention which it deserves, the error in metabolism which results in the formation of oxalic acid which with many other symptoms causes vertigo. In this condition I have found no remedy to act as well as Kali nitricum, although I confess my knowledge of this special action is almost wholly from clinical sources. Therefore, vertigo must like other conditions be treated with the concomitants when such can be discovered, as often these concomitants are the disease, and the vertigo of secondary importance, but never negligible.

My present practice brings me more in contact with vertigo connected with gross spinal and cerebral diseases, but a consideration of that subject demands a special discussion of the diseases themselves, and would too far extend this paper.

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A CONTRIBUTION OF THE SPINAL CORD SCLEROSIS DUE TO THE ANAEMIAS

By William F. Baker, M.D., Philadelphia, Pa.

The spinal cord sclerosis due to the anæmias, of which much has been written lately, are special forms of nervous conditions, and in reality they differ very little in symptomatology from the organic lesions. We must remember that these form a very small percentage of cases and occur quite infrequently in comparison with the well known organic lesions.

The philosophy of these conditions is one of nutritional change. It has been established beyond a doubt that there is a mutual relation of the trophic functions and those which have to do with the manifestations of irritability. In the neurone world there can be no such thing as repose. Hodge has demonstrated increases in the cell element and cell shape by excessive exercise of their physiological elements. He showed that prolonged faradic irritation of a peripheral of sensory nerve in a cat leads to distinct alteration in the cells of the corresponding spinal ganglia and later he was enabled to demonstrate similar changes in the nerve cells of other animals after a hard day's exercise.

On comparison of the non-fatigued cells (in the case of faradic stimulation the cells of the spinal ganglia on the other side not stimulated in other instances, the cells of animals captured in the morning) with these artificially or normally fatigued, he found alterations in the latter both in protoplasm and nucleus.

The nuclei of the tired cells were diminished in size; they presented a zigzag border and stained more intensely than did normal nuclei. The protoplasm was often shrunken and stained more feebly than in the cells not fatigued. The alteration disappeared within about twenty-five hours after cessation of electrical stimulation, which lasted five hours; and, in the case of the working animals, after a night's rest.

By an analysis of this neurone philosophy one can readly account for any of the symptoms which are presented and are to be diagnosed. We have the same affection complete of the upper neurone track. We know as yet of no diseases in which the tracks which lead to the cerebellum or originate from it are alone affected. Such pure neurone diseases of the cerebellum cannot arise independently, because the cerebellar tracts are most intimately connected both anatomically and functionally with other spinal and cerebral fibre systems, and in pathologic cases all must be affected.

There is, however, a disease which indicates a definite cerebellar tract: — namely, that situated in the periphery of the lateral column tracts of the spinal cord. This disease is Friedreich's ataxia. It is hereditary, and manifests itself by marked ataxia disturbances, yet, even when the patella reflexes are absent, sensation is not decidedly impaired.

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Anatomically, this disease produces degeneration in three different columnar systems. We find destruction of fibres in the posterior columns (but not in the roots or in their course), in the pyramidal tracts, and in the posterior columns it takes place in the area of the association tracts, the course of which we know to be shorter. As has been stated, the posterior roots and their zone of entrance are normal, probably also their entire course.

The disease in the course of the pyramidal tracts apparently does not affect the motor fibres since muscular spasms and increased reflexes constantly appear here. It is still a mooted question, which must be settled by further researches, which fibre tract is destroyed. Attention must be called to Monakow's tract which unites with the pyramidal tracts and descends into the lateral columns. There is certainly degeneration of the cerebellar lateral column tracts and the cells of Clark's column which form their origin. Since various authors believe in a primary implication (congenital atrophy) of the cerebellum, we may assume diseases of the tract of the cerebellum. We may hope that, in the future, thorough histologic investigations of this rare disease may give us more accurate information as to the origin and relation of the cells connected with the degenerate fibres.

CASE 1. Mr. P., aged 46, was perfectly well until eight years ago. At that time began to complain of pains in the feet and inability to use both lower extremities. These came on gradually and was particularly noticed when walking in the dark. Was totally unable to go upstairs unassisted. The patient grew steadily worse until a complete paralysis of both lower limbs resulted, and the patient was confined to the hospital.

At this time very severe pains developed, sharp and shooting in character. The physical examination showed that the patellar reflexes were exaggerated. Complete reduction in the muscular strength. The limbs were spastic to the ankle; clonus was very marked. The anæmia of this patient was very pronounced. The blood examination showed red cells 2,500,000; white 8,500; hæmoglobin 76 per cent. Red cells were poorly nourished and irregularly shaped.

Examination of Lung. Expiratory murmur prolonged, especially at R apex.

Soft blowing hæmic murmur at base of heart.

During our observation of the anæmias and of the spinal symptoms attending these anæmias there were represented many conditions simulating the cases which have been observed as true spinal cord lesions. The limit of conditions that can be observed in the spinal cord following upon or incident to either primary or secondary anæmia is perhaps never reached. Another notable condition is cited below, showing the following:

CASE 2. Middle-aged man. An examination with the patient in the recumbent posture revealed ataxia. Slow and uniform movements are impossible or they are performed paroxsymally, or interruptedly; even the mere raising of the leg is done in an

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irregular, zigzag way, the raised leg falls at a spot more or less remote from the place intended. A given object can be touched with the great toe only after very irregular, secondary movements; instead of describing a circle with the tip of the foot the figures become angular and often irregular. Touching the knee with the heel of the opposite foot "the knee-heel test" is only possible by means of the awkward contractions which often cause the foot to shoot far beyond the mark; the heel can be slowly moved along the tibia of the other leg only with the utmost difficulty. Here it is evident that the ataxia, especially the irregularity of movement, becomes more distinct when these maneuvers are performed with the eyes closed, but only when noteworthy disturbances of the so-called muscular sense are simultaneously present if these are absent, the closure of the eyes has but little affect upon the ataxia, and it is also evident that, if well marked, the ataxia is not prevented by the careful use of the eyes, but at most is merely decreased.

In the most extreme grades of ataxia, walking and standing finally become impossible, the legs lose their hold, are projected in all directions. If left to himself the patient falls, and even if supported upon both sides or carried, the legs wobble about wildly. Spasmodic and paroxysmal movements invariably appear, and the patient can no longer assume the position necessary for standing or walking. Yet course power may be quite well retained, although the patients may have become entirely helpless, and are confined to their beds or to rolling chairs.

Ataxia usually appears much later in the upper extremities, only the cases of tabes superior being exceptions to this rule. Ataxia, of course, interferes with all of the finer movements for which the hands are constantly used, such as buttoning the coat, tying a cravat, embroidering, cutting, writing, drawing, piano playing, etc. The movements become uncertain, spasmodic, awkward, zigzag-like, etc., particularly if they are performed without the aid of the eyes (buttoning the suspenders at the back). Ataxia becomes distinctly evident when the patient tries to touch with his fingers the tip of his nose or an object held in front of him, or if the fingers of both hands, being some distance apart, are gradually approximated at their tips ("index finger test"). When they attempt to grasp an object held in front of them, the fingers are drawn apart and awkward grabbing is noted, as well as when they try to describe figures in the air with a finger, such as circles, numerals, etc., and in writing and piano playing all movements are irregular, aimless, jerky and angular.

Finally, the hands become useless for the purposes of daily life; the patient can no longer eat nor dress without assistance, can hold nothing in the hands, and, in fact, is quite helpless.

Ataxia may also appear in the muscles of the trunk. The harmonious action of the muscles necessary to maintain the equilibrium in standing, sitting and in many movements, becomes dis-

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turbed, and bodily movements are irregular or wobbly. The same is also true of the muscles of the neck and the nape.

In rare cases even the muscles of the face, of the lips, and of the tongue are not exempt. This is shown by certain grimaces, especially in laughing and speaking, in the impairment of the powers of mimicry, of speech and of mastication. Ataxia nystagmus appears to be a manifestation of Friedreich's ataxia only.

Ataxia movements have frequently been observed in the muscles of the vocal cords.

It is of the utmost importance that these ataxia disturbances of movement be differentiated from all related conditions. This, as a rule, is easy, difficulties arising only in rare cases when similar disturbances of movement appear in other diseases. But the mere differentiation of tabes from the other symptoms—usually no arduous task—will preserve us from error.

Above all, it must be borne in mind that ataxia is a disturbance of voluntary movements, and does not appear during rest. This alone distinguishes it from chorea minor, from paralysis agitans, and other forms of tremor; the only disturbances of movement with which it may occasionally be confounded is the intentional tremor of multiple sclerosis, which also appears on voluntary movement. In this condition, however, they are regular oscillations around the axis of the movement; in ataxia there are irregular movements, zigzag and angles in walking, which it by no means resembles. Moreover, the accompanying symptoms of these affections are absolutely decisive. But it should not be forgotten that true ataxia may occasionally occur in multiple sclerosis, and even be combined with intention tremor.

The ataxia of Friedreich's disease ("hereditary ataxia") is almost identical with that of tabes. Naturally, the experienced observer will detect some differences, but these are not marked (possibly more waddling and certainty in walking, a marked and early implication of the arms, distinct certainty disturbances of speech, ataxia nystagmus, marked "static" ataxia, etc. The disease should be clearly recognized from its other symptoms; its appearance in childhood, in several children of the same family, the absence of sensory of syphilis, etc.

The differentiation of cerebellar ataxia from spinal tabetic ataxia is much more simple. The gait in the former is unlike that in the latter, being of a more waddling character, resembling that of a person under the influence of alcohol, and the individual movements are quite different in character, being coarser, more complete and less zigzag in appearance. The arms rarely show any sign of this, and, instead of the typical symptoms of tabes, we note these of disease of the cerebellum.

This exhausts the description of the second stage of tabes, ataxia being its only differential symptom.

Investigators have busied themselves with the pathogenesis of this symptom, and in trying to explain its occurrence have referred to pathologico-anatomical changes intimately connected

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with the preceding and accompanying sensory disturbances; but, fortunately, from the earliest times to the present with most unsatisfactory results. We shall revert to this when describing the anatomical changes in tabes.

Not much more can be stated in regard to the second stage. The symptoms of the first stage continue, and some of them become more distinct and intensified; as, for example, the sensory and bladder disturbances and the pain. Not infrequently this stage is complemented by the addition of other symptoms.

We now come to the discussion of some rare unusual symptoms of tabes no less interesting and remarkable, which complete the typical picture of the two preceding stages, rendering it extraordinarily rich in types and varieties.

These phenomena are almost innumerable, exact description, and analysis. We shall attempt a brief outline, arranging them according to their frequency and importance. They may appear in any stage of tabes early or late and, for the sake of simplicity, these stages will be discussed together.

Visceral Crises. I must first mention the peculiar phenomena to which the term "visceral crises" has been attached. Those longest known and most familiar are the so-called gastric crises which were mentioned by Gull (1858) and Delamarre (1866), and introduces into pathology of tabes by Charcet's classical description (1868).

These consist of sudden attacks of severe "gastric pain," occurring at various intervals, radiating into the epigastrium, the abdomen, the lateral aspect of the body and the back. The pain is intense, it is girdle-like, boring, screwing, or contracting in character, and is accompanied by moans and cries, and general prostration and a feeling of extreme illness which makes the patient utterly wretched. Uncontrollable vomiting soon follows, first food, then of mucus and gastric juice, rarely of blood. The patient is unable to take the slightest amount of food because it is at once vomited. There is unquenchable thirst. Briefly the picture of intense suffering.

Ordinarily the heat and cold sense is not disturbed, and the pain sense likewise is preserved. These cases are ordinarily very weak and very much run down.

Post-mortem examination in similar cases has shown degeneration in the posterior columns and of the direct cerebellar tracts.

The crossed pyramidal tracts seem to be less severely degenerated. The interior lateral tracts, ascending tracts direct to the other tracts are later affected, but the degeneration in these cases is at times very slight.

Treatment in the case following fevers and the acute infections is tonic in character. The best remedy to use is iodide of arsenic. Many of these cases have been attributed to the uric acid; treatment along these lines will no doubt prove of value.

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LEGISLATIVE NEEDS OF THE BOARD OF REGISTRATION IN MEDICINE.*

By N. R. Perkins, M.D., Boston, Mass.

When I was asked to take part in these after-dinner exercises, in connection with the eminent men whose names I see on the program, men high in the affairs of the Commonwealth, and whom you would rather hear than me, I felt it was a burden that you should not be asked to bear, but my protests were in vain. Dr. Calderwood does not understand the word no, and like the old Quaker, he is deaf on convenient occasions.

Legislative needs of the Board of Registration in Medicine is the topic assigned to me. I would have preferred "The Duty of the Medical Profession to Aid in Matters of Legislation."

We are all aware of the fact that our medical laws should be amended.

Massachusetts was one of the first States to enact laws regulating the practice of medicine, and it was the best that could be obtained at that time. Concessions had to be made to suit the times. Since then progress has been made all along the line, the medical colleges have improved their curricula to meet the requirements of the examining boards, and the examining boards have cautiously felt their way in making a higher standard of excellence for a license, so that today a better class of physicians are practicing medicine than ever before. The medical school that fails to keep the pace set by the better class of schools and the examining boards, sees her graduates falling by the wayside. When this takes place, and a large number of the graduates of such a school are refused a license, the cry goes up that the boards are prejudiced. Do you think this is true in this State? Last year every graduate of Boston University examined by the Board passed, and the average per cent of those examined was the highest of any medical college in New England, and furthermore, every paper is rated incognito. Even the secretary of the Board does not know whose paper he is examining, for the schedule is not made up until all the papers are rated and returned to the office. Any one who says that the Massachusetts Board is prejudiced and uses such prejudice either for or against any college in the rating of papers certainly does an injustice to the several members who are trying to do honest, conscientious work. But I am wandering from my theme.

Educators from all parts of the country, having caught the spirit of the times, are clamoring for a more practical examination. Many of these men are wholly unacquainted with the work of the boards. They have theories, and theories are nice, but a practical knowledge gained by hard work usually brings the best results. Many who are making criticism of the work of the boards were practicing medicine when the law went into effect and were given a license without an examination and never have

* Delivered before the Massachusetts Surgical aad Gynæcological Society, Boston, June 14, 1911

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been in the examination room or looked into the workings of the law and do not know of the obstacles which have been met or the problems that have been worked out. Allow me to say here that the Massachusetts Board was the pioneer in this matter of practical examinations. It has been doing this work for some time in a small way, mainly in urinary examinations, the use of the microscope, the pelvimeter, choice of splints and use of instruments, chest examinations for real and supposed disease. The Board has done but little, but it has blazed the way. Had the Board more money to use, these examinations could be extended, hospitals, dispensaries and laboratories might be opened for our use, where a more extended knowledge of the applicant's ability to diagnosticate disease, to differentiate disease and health, where his knowledge of technic in laboratory work, in pathology and anatomy and where in the physical laboratory he could demonstrate his familiarity with the circulation and the digestion of foods and demonstrate the various functions of the human system.

All this is possible, but it requires quite an outlay of money. The Legislature is the only base of supply, it should be willing to do this, to grant the small amount required, when it gives a million dollars to one of our great educational institutions. Appropriation should be asked for the furtherance of this work, and urged, yes, demanded. Our laws should be amended also so that only graduates of accredited medical colleges would be permitted to take the examination. If we are to keep the standard high and make the standard high for our professional attainments we must see to it that our laws are on the same key as our ideals.

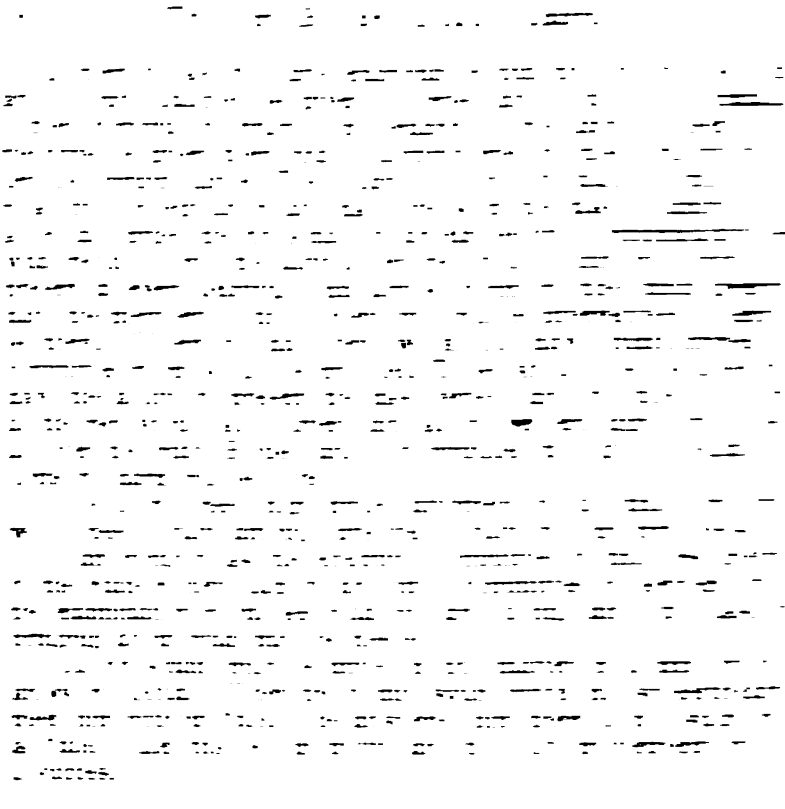
Some preliminary educational qualification as a prerequisite to the study of medicine should be incorporated into our laws whereby the applicant should at least have a grammar school education, so that he will not spell the umbilical cord "CHORD." It sounds too musical and makes the examiner feel the applicant has missed his calling. And when almost every other word is begun with a capital letter and a big one at that the effect is startling, and yet our laws are silent on these matters.

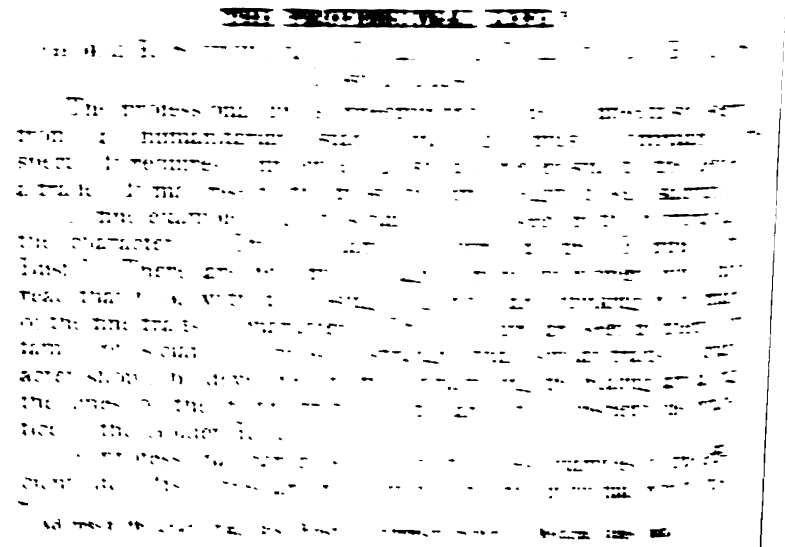
What is the remedy for this state of affairs? Our law makers always keep one ear to the ground to catch the faintest whisperings of the people and many times are good mind readers.

If the physicians of this State would interest themselves and make a demand on the Legislature for laws along these lines we could get enactments that would be of inestimable benefit to the people of this Commonwealth.

Another matter that should receive our attention, is to ask the Legislature to make a definition as to what is the practice of medicine. The courts differ as to a definition, and I dare to assert that if the question was asked of each physician here present there would be a diversity in the answers, but the Legislature can and should settle this matter. If Christian Science, mental healing and all the other cults that are practicing the healing methods on the sick or trying to correct an error, are practicing medicine, then

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immediate circle of friends. It has assumed immense public and national importance. The doctor is not a mere dispenser of pills. He is a teacher of better living, of improved sanitation, of preventive medicine. Life to him is very real, intensely earnest, always serious, and never flippant. His life is one of care, anxiety, disappointment mingled with success, personal sacrifice and belittling jealousies, but these are all forgotten as he draws the counterpane over the mother and her new born babe, when he hears the thanks of the invalid for health restored, and in the quiet of his study, finds the approval of his own conscience for duty well performed.

Medicine and surgery made little progress till within the memory of some now present. But three generations have passed since Hahnemann enunciated the law of cure, Jenner discovered vaccination for the prevention of small-pox, and a little later, a small microscope in the master hand of Virchow laid the foundation of pathology. With these exceptions medicine was chaotic and made little impression on national life.

Hahnemann and Jenner were men of rare scholarship and great professional attainments. Both suffered scorn and public abuse. The former not only modified the drug treatment of the dominant school but founded a new school of therapeutics. It is interesting to note that the greatest discoveries in therapeutics, such as the antitoxin for diphtheria, and the serum treatment of today, are closely allied to the principles he enunciated.

The fruit of Hahnemann's life has not yet ripened. The crying need of the present hour is more scholarships for our students, more endowments for our teaching force, more free beds in our hospital. The public will listen if we do our duty and persist at all times in showing the great return to the public for funds thus given.

The clinical observations of Jenner on vaccination have been tardily recognized, yet vaccination showed the way to control the great scourge of the world. It was the first step in preventive medicine. It marked the broadening of the scope of professional life from the individual to the nation.

Virchow's services to humanity were remarkable for their extent. He was distinguished both as a naturalist and as a pathologist. He also served his country as a brilliant member of parliament. It may be of interest to hear that a grateful nation has built in the suburbs of Berlin a memorial to him in the shape of a large municipal hospital which bears his name.

The chain of circumstances following Jenner's observations is quite remarkable. A young French scientist, not a physician, became interested in them. He based certain biological studies on them and proved that certain micro-organisms caused the disease which was destroying the vineyards of France. Pasteur cured the disease by destroying the micro-organisms and saved the wine industry of his country.

Lord Lister, then a young hospital surgeon in London,

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visited Pasteur, followed his methods of investigation and discovered that certain unknown and invisible germs were the cause of septic infection. He invented means of destroying these germs, or of excluding them from the wound, added the catgut string of the violin to his armamentarium and founded antiseptic surgery. Ether, the first great contribution to this remarkable trio of discoveries, was given to the world by an American dentist and the name, anæsthesia, coined by a distinguished physician and professor of this city, Oliver Wendell Holmes. Truly, the value of the professional lives of these men, who gave freely to the world their discoveries, which revolutionized the art of surgery, can not be estimated. Yet, we look in vain for some token of public appreciation of their labors, such as an endowed hospital, medical school, laboratory, or even a simple monument.

Chemistry now made its great contribution to the service of mankind in the shape of aniline dyes, by which the hitherto invisible micro-organism could be stained, seen and studied. Inventive genius supplied the oil immersion lens and its accessories to the microscope. The laboratory and the study of bacteriology thus became possible and indispensable to the teaching and practice of medicine.

The discovery of antitoxin for the treatment of diphtheria was the first great contribution of the laboratory to the cure of disease, and in the same humanitarian spirit it was given generously to the public. The latest gift of the laboratory, Ehrlich's "606," is still on trial. It is a fine example of research work and seems likely to be the means of treating successfully one of the most widespread and most serious diseases afflicting the human race, as well as being an effective remedy for sleeping sickness which is depopulating the continent of Africa.

The battlefield offers no finer example of self sacrifice than that of Dr. Reed, who deliberately allowed himself to be bitten by mosquitoes, known to have fed on the victims of yellow fever, in order that positive proof might be obtained of the means of transmission of yellow fever. He cheerfully sacrificed his life for the profession he loved so well. The benefit of his sacrifice is incalculable. Yellow fever no longer claims its victims in vast epidemics or threatens the commerce of nations. The pest holes of Havana and of the Isthmus of Panama have been cleaned up, A great national work has become practicable, the construction of a water way between the Atlantic and Pacific Oceans.

Dr. Stiles' discovery of the hook worm disease, which is throttling the progress of our Southern states, is of scarce less national importance.

"The World in Boston" is a recent illustration of the effective work of the medical missionary in advancing the civilization as well as the evangelization of the world. It was freely conceded that the medical missionary was the most effective means of securing the confidence of the people.

Our elaborate Quarantine, our Boards of Health, our segre-

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gation of contagious diseases in special hospitals, our institutions of Preventive Medicine, our Research laboratories, our Pure Food Laws and our hospitals, all testify to the effective work inaugurated and carried on by the medical profession with little or no compensation and bear witness to our fidelity to the cause in which we are engaged.

I cannot pass by the subject of personal service and self sacrifice without alluding to a great man not long since among us. The inscription on the marble slab to Sir Christopher Wren, under St. Paul's cathedral, applies quite as truly to Dr. I. T. Talbot. "Si monumentum circumspice" (If you seek his monument look around you.) Boston University School of Medicine owes its modest beginning, its progressive career, and its enviable position in the councils of medical education more to the sacrifices and service of Dr. Talbot than to any other one man. Personal sacrifice and personal service of the Faculty have been conspicuous throughout its history. Gathered with the professors around the council table and debating some progressive movement, which seemed impossible to carry out, I have heard Dr. Talbot declare, "Courage, courage, gentlemen, we must have courage. We can win if we have the courage."

In every professional life there are hours of deep discouragement but they are the very ones for the greatest courage to strike the hardest blows; to make, it may be, the supreme effort of life; to prepare for the hour of triumph.

Dr. J. Marion Sims threw his sign down a well and for a time abandoned the practice of medicine, but he lived to be the founder of American gynecology and without a peer in the profession.

Lincoln's Gettysburg Address was hastily written on a railroad train; but long before, it was the unwritten sense of deep responsibility and fervent patriotism in hours of despondency that gave birth to one of the classics of American literature.

An English clergyman finding his career was to be cut short by incurable disease, administered the communion to his congregation for the last time, withdrew to his study and wrote, "Abide with Me." His sermons are forgotten, but the very outpouring of his soul in what might be termed the "Swan Song" of his life has comforted thousands.

Cardinal Newman's "Lead, Kindly Light" was hardly inspired by halcyon days.

A young man stood one night on the shores of Chesapeake Bay, disappointed, discouraged, waiting for the dawn which would mean to him that he would be a prisoner of war or a free man. The sun rose, and, as it dispelled the mists of the upper air, it lit up with splendor the Stars and Stripes floating from the peak of his country's flagship. Then and there Francis Scott Key wrote "The Star Spangled Banner" and his name is among those beloved by his country.

A life of grim responsibility would be tedious without some form of relaxation. Vacations are few and far between, but there

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are precious hours of leisure in which the doctor finds diversions according to his taste. Your Faculty is fairly representative. At least two of them have found time to invent valuable apparatus and instruments which have been given to the profession. Music is the most popular diversion. Two, if not three, of our number are regular opera goers and are often seen at the Symphony concerts. Another is a member of a popular quartette. Another sings in the Handel and Haydn Society. Others play the violin, flute, piano, etc. A former member was president of the Philharmonic Society of Boston and was an adept in oil painting. Another former member drew very cleverly with his pencil. Still another of our members finds much pleasure in his library stocked with the best authors. Another is the historian of the famous town in which he lives. On the desk of another you are fairly sure of finding "The Nation," "The Atlantic Monthly" or some rather solid reading in German. Still others find the club, or more especially the fraternal relations of the Masonic orders more to their liking. A few doctors are interested in politics. Every legislature has one or more, and one of our own profession is acting as president pro tem. of the United States Senate at Washington.

Members of the graduating class, by authority duly conferred you are soon to be declared skilled in the Art of Medicine, to be invested with the doctorate degree, with all its rights, honors, and privileges, and to be considered worthy of admission to the society of scholars.

Your success will not be measured by financial reward. It will depend upon your efficiency, on constant preparedness, good judgment and tact, rather than luck, "pull," or the inspiration of the moment. Luck is but another name for ability to recognize and seize opportunity. "Pull" is another name for fitness known to your associates by your interest and activity in medical organizations. Merit alone frequently fails of its reward. The available man is more often chosen than the meritorious. Inspiration of the moment is a delusion. Webster's reply to Hayne was not conceived in twenty-four hours. It was the years of thoughtful observation that prepared him for his opportunity.

The Calumet and Hecla mine suffered from a serious fire some years ago. Prof. Agassiz was criticised severely for not proceeding at once to the fire. He remarked to a friend, "The fire will burn out long before I can get there. I know the fireproof partitions will hold." It is this feeling of positive knowledge of the case in hand which should direct you safely through most of the emergencies which you will encounter.

The hour strikes, and now is, when the last word of the Faculty must be spoken, not in farewell, but to assure you of our continued interest in all that pertains to your professional life. Your scholarship has been conspicuous for its high order of merit. We have given you our priceless heritage of knowledge. We ask you to transmit it to your successors, enriched by your own experience.

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Four of the most eventful years of your lives have been spent within these halls, sacred, to some of us, with the memories of more than thirty years. Like Aeneas of old, "Hereafter we will recount these things."

Your professional education has been acquired here; your mature friendships have ripened; your ideals strengthened; your character moulded, and "Character is destiny."

The influence of your alma mater does not cease here. Her standing and reputation enhances your own. She depends on your unswerving loyalty and earnest interest for her growth and progress. She bids you "God speed," as you are about to cross her threshold and enter upon honorable careers of service to the individual and to the state, to relieve the suffering, to succor the distressed, to meet with disappointment, to find your greatest reward in the thanks of grateful patients and the approval of your colleagues, often tardily expressed.

Your sacred honor will be above price, your loyalty to principle unquestioned. To all these you highly resolve to pledge your lives, your fortunes.

We, as members of a great profession, welcome you into the professional life, membership and activity in our societies. We invite you to share our burdens and to join in our common aims. Shoulder to shoulder we stand with you on a common battlefield with a banner which might well bear a motto not unlike the signal Lord Nelson flew from his flagship at the battle of Trafalgar, "England expects every man to do his duty."

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CLINICAL DEPARTMENT.

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

Case VI. Continued—Operation.

Just after the discussion of this case had gone to press last month there was a rapid development of symptoms which made operation necessary.

On attempting to rise from her chair one morning her left foot failed to support her and she fell to the floor. She was not hurt beyond being somewhat shaken up. During the forenoon, however, the nausea which she had had slightly for some weeks increased, and in the afternoon she began to vomit and to have headache. A restless night with much gas on the stomach followed, and the next morning slight stupor with thick, slow speech and a widely dilated right pupil. This condition continued two days, when she regained her usual state of mind, speech, etc. Lesser similar spells occurred every day or two thereafter.

Examination at this time revealed a right optic neuritis. The left hand and arm became almost useless, and the left leg was moved with great difficulty. Spasticity on the left side markedly increased; tactile senses and taste were not altered nor was color, so far as could be determined.

Mentally it is interesting to recall the religious change that swept over her at about the time that the lesion probably began and to know that certain old hymns would recur to her without the slightest apparent reason.

It was now evident that the cortical lesion was increasing and was probably a tumor located in the foot centre of the right hemisphere.

Operation was consented to, and performed July 12. Sutures were introduced under the scalp at two inch intervals and tied tightly just outside the intended flap, to control hemorrhage. The new Hudson drill was used to trephine the skull and worked admirably, checking automatically when it reached the dura, which was not scarred in any of the five drill holes made. An ostioplastic flap was then attempted, but ultimately this was found impracticable and the bone plate was removed.

The removal of the bone consumed twenty-five minutes, the entire operation sixty-five minutes.

A soft vascular glima the size of a small walnut was located. Its lower border was encapsulated and shelled out easily, but the lateral and upper borders had infiltrated and had to be cut away.

It is of course too soon to speak of results, but there is already marked improvement in all the symptoms.

Case VIII.—Diagnosis:

The case is that of a woman aged 61 years. A Scandinavian by birth, she has been in the United States since a girl. Family history: Father died at 80, of old age. Mother died of dropsy,

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probably hepatic, at 55. Patient was one of twins, the twin dying of consumption at 20 years. One sister died of cancer of breast.

The patient was not a vigorous girl, yet not an invalid. She married at eighteen and had one healthy child. Married a second time at 43, happily. Thirteen years ago one night went to bed as well as usual, but when she got up in the morning suddenly felt very dizzy and had a queer tension in her head. After an hour she felt better and dressed. There was no paralysis or other evidence of organic disturbance. However, she was very nervous, had headaches and was treated by Dr. George Jelly for three years.

Since this time the family reports that she has not been the same. Always quick to anger, this tendency has increased of late years, much to the unhappiness of the home. The merest trifle is often an excuse for elaborate harangue. There have been moments during the last year when she did not recognize her daughter, would say that she had seen her somewhere but could not recall her name.

The past few weeks her speech has been thick and at times incoherent; she has failed and lost weight. Lately went to spend a week with a friend, but came away because they did not have nuts for dinner. Was abnormally tired by the trip. Has not slept or eaten well for a long time.

Ten days ago she became more restless and wandered about the house all night. The key had been removed from her bedroom door and she spent most of the night trying to fit the other keys of the house to it. Tried to light the electric lights with a match. Thought her husband was drunk and used abusive language to him; was very incoherent, attention and memory wandering. She was not, however, violent towards herself or others.

Physical examination. A medium sized woman weighing 140 pounds, iron gray hair. Skin slightly jaundiced, especially over abdomen. Conjunctivæ injected.

She is talkative, though speech is scanning and thick, complaining, rambling, incoherent.

Attention poorly fixed, increased emotionalism, expressions and gestures dramatic, yet under pressure can follow a point and talk to the purpose. She is poorly orientated. Her memory is poor, she cannot recall any Mother Goose rhymes, and the Lord's Prayer is remembered with difficulty. Pupils react to light and distance, the eye movements are normal, no nystagmus, visual field normal. Knee jerks and gait normal; no clonus.

Heart is enlarged and gives a heaving, throbbing motion to left chest. There is a systolic murmur at apex; pulse 100, no temperature. Blood pressure 190. Arteries palpable. Urine: Sp.G. 1012, reaction acid, albumen present, urea 9 per cent. Sediment: uric acid, some pus and small candate cells.

Sleep is fitful, about five hours. Appetite good. Abdomen negative, but tongue is heavily coated, dusky red and protrudes to the right.

What is the probable diagnosis and what the treatment?

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WHAT DO WE NEED TO KNOW CLINICALLY ABOUT THE MIND?

(Continued from July Issue)

We have now reached a point when we are ready to interpret some of the pathological mind states which constantly confront and too often exasperate us, because of our own ignorance. Let us bear constantly in mind that by far the greater number of these conditions undoubtedly are but reflections of disturbed bodily states; that while we must acknowledge a few purely psychic disturbances outside of straight insanity, we yet must ever be alert to assure ourselves, through careful physical tests, of the organic and functional health of the bodily organs. How often do we see a case called "nervous" go from one doctor to another, given a tonic here, a sedative there or perhaps "the indicated mind" based on a series of trivial symptoms without the patient ever being asked to loosen her clothes, and at last, in discouragement, turning for comfort to one of the cults who are only too glad to hear that "doctors have failed." It is all too true that when nervous symptoms predominate we have too often failed to realize that a bad heart or ptosic organs lay at the bottom of the disturbance or have not taken the trouble to look. This is an old story, but it cannot be too often repeated.

Another practical point that must be constantly borne in mind is that so called nervous symptoms occurring in the course of organic disease are not to be disregarded merely because they are explained by the presence of such disease. A case in point is that of a man who had pernicious anæmia with oncoming combined sclerosis. The symptom which distressed him most was a numbness and tingling in the hands and arms. Since the anæmia satisfactorily explained these sensations his physician dismissed them with the assurance that they would improve with the improvement in the underlying condition,—which was doubtless true enough, but did not relieve the distress. The patient heard of a healer in another State who "cured by the laying on of hands" and hastened to try the cure, with the result that for several weeks his pains entirely disappeared. Of course they recurred, but what of that? He had had the respite. So even the organic cases may get much comfort from Psychotherapy.

Now what are the nervous and psychic symptoms which may be rightly classed under the caption of Abnormal Psychology? Shall we carry over our normal psychology into this field as Leonardo Bianchi has done and discuss the psycho-pathology of perception, attention, memory, ideation, emotions and sentiments, will and consciousness; or shall we with Coriat and the Boston school which has grown up about the work of Prince, use the analytic method and discuss the subconscious, the emotions, sleep, dreams, hypnosis, hysteria and split off or dual personality, psychasthenia, etc?

The first classification is broader and lays a better foundation

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for a grasp not only of the asthenic and psychic aberrations, but also for an understanding of psychiatry.

The second embraces the more purely clinical point of view, however, and is perhaps the more interesting and practical for our purpose.

There is still a third point of view, that of the psycho-therapy' to which all our discussion is the natural preliminary, and a description of the various methods included under this head will therefore be left until later.

Let us continue with a brief resume of the psycho-pathology of the leading attribute of mind.

Psycho-pathology of Perception. Having satisfied one's self so far as possible of the normality of the primary perceptual organs, one would apply questions to see how far these perceptions were normally interpreted by the patient. If things seen, heard, etc., are misinterpreted; if for example the patient looking out the window sees stones in the field and calls them dogs; or a coat over a chair becomes a bear; these are falsifications of perception and are called illusions. The error is, of course, in the primary perceptual arcs and there is an objective reality as the starting point, that is, an objection or external stimulus. We all have transitory illusions. They are readily produced in the laboratory under test conditions in normal subjects, and so unless they are somewhat marked are not of great importance. They are a common result of various toxic states, especially alcoholism and typhoid poisoning.

Perception must be distinguished from sensation. A sensation by itself has no meaning, a perception is a compound of sensations and means something. The dog whose cortex is removed still has the senses of sight, hearing, taste, etc., but he does not perceive what he senses. Bianchi says: The point at which consciousness begins is the starting point of the sensations, which, by a process of evolution that may be followed philogenetically and ontogenetically, give rise to the perceptions and the sentiments; that is to say, to successive notions and a succession of modifications of the ego, which are the two fundamental factors in psychic life and in all the vast and complicated mechanism of the mind; also, it is probable that the perceptive process refers partly to the present fact and partly to the recognition of a large or small number of features (images) which through former acquisition have become a utilizable capital of the personality, which every day grows richer in new perceptions, that are continually entering into new and complex combinations with waves penetrating from without and stimulating the perceptive process.

Apperception is merely the focal point of greatest perceptual clearness, the goal ideal in any given moment,—consciousness. It includes clearness of meaning, understanding or insight, and physiologically must be executed in a higher set of arcs.

It takes time to perceive and a longer time to apperceive. By putting such test questions to the patient as the following one

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may determine the apperceptive power. To get the attention it should be prefaced by an interrogation—thus—Is this true? The Fourth of July is to celebrate the Declaration of Independence? That seven and five are twelve? etc.

Dr. William H. White prefers to use a test story and then have the patient repeat the gist of it. By using the same story one gets a familiarity with the results of the test.

Cowboy's Story. A cowboy from Arizona went to San Francisco with his dog, which he left at a dealer's while he purchased a suit of clothes. Dressed finely, he went to the dog, whistled to him, called him by name and patted him. The dog would have nothing to do with him in his new hat and suit, but gave a mournful howl. Coaxing was of no effect, so the cowboy went away and donned his old garments, whereupon the dog immediately showed his wild joy on seeing his master as he thought he ought to be.

I have said that perception requires a certain amount of time for its fulfilment, and this time may be divided into that consumed by the simple perception, the discrimination, and the reaction, and varied a fraction of a second with the different senses.

Reaction time experiments form the backbone of laboratory psychology.

For clinical work the most practical and simple of these is the so-called association test, which we will take up in detail later on.

Defects of perception may be due to errors in the peripheral organs, eye, ear, tongue, skin, etc., or to some anomaly or blocking of the association paths in the brain as a result of which the individual receives incomplete images. Imbeciles and idiots show this in high degree.

Fatigue raises the threshold of consciousness so that greater sensory stimulation is required to produce perceptions, though sometimes it seems to do the reverse and make perception hyperesthetic. But in general fatigue, especially if pathological as in neurasthenia, delays reaction time.

Disturbances of attention, either fixation or distraction, both serve to make defective perception. The former is common in psychasthenic obsession and delusions the latter in confusional states and dementia.

Another disturbance of the mechanism of perception is that in which images, tactile, auditory, olfactory, etc., are touched off without any external stimulus.

Subjective perceptions. These are hallucinations and, while not common in supposedly healthy neuropathic persons in dreams and visions, are usually indicative of more profound disturbances of the brain.

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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 MEDICIAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business, should be sent to the Business Manager 22 Columbia Road, Dorchester, Boston, Mass.

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Reports of Societies and Personal Items should be sent in by the 15th of the month previous to the one in which they are to appear. Reprints will be furnished at cost and should be ordered of the Business Manager before the article is published.

RECENT HAPPENINGS.

Thanks to the meeting of the American Institute of Homœopathy held in June at Narragansett Pier, with the increased activities incident thereto, the July *Gazette* failed to make mention of certain events of general interest.

The first of these events was Commencement at Boston University. Commencement exercises were held in Tremont Temple, Boston, as usual, and were notable because with them terminated the presidency of the much loved Dr. William E. Huntington. The term loved is used advisedly, as it truly expresses the sentiment of Faculty and student body of the various departments of the University who have come into any extended personal relations with President Huntington. Seldom, we think, has a retiring president left behind him such a universal feeling of personal admiration for the man in his official capacity, as teacher, as associate, or as a friend. It was most fitting, therefore, that public recognition of this esteem be made before the large gathering of friends of the University. For the suitable expression of this love and esteem probably no one could have been selected better able to do it than ex-Governor John L. Bates, President of the Board of Trustees. Those who were so fortunate as to hear his brief but unusually eloquent speech will long remember it as the culmination of a very impressive morning, and many who are far from being sentimentalists will recall the emotion which his words caused them to feel. Certainly Governor Bates well expressed the sentiment of universal regret at Dr. Huntington's resignation.

In complete accord with the impressiveness of the occasion was the baccalaureate address of Dr. Hamilton Wright Mabie, editor of the "Outlook." It was a scholarly and uplifting address, with "work" as the central theme.

A large graduating class received diplomas, including twenty-one from the School of Medicine—sixteen the M.D., four the Ch.B. and one the M.B.

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At the convocation of the various departments held later in the day, Dr. Huntington reported that since his induction to the office of president the total enrollment of the University had increased from fourteen hundred to eighteen hundred and included all departments of the University except the Law School.

This last showed temporary decrease on account of increased entrance requirements.

In all respects the outlook for the future is hopeful despite the annual deficit. The Endowment Fund has recently been increased by nearly half a million dollars, and with the energy expected from President Murlin, a hopeful forecast seems safe.

Farewell Banquet to President Huntington.

On Saturday evening, June 10, a complimentary banquet was tendered President Huntington by the Faculty of the University at the Hotel Vendome. It was well attended by representatives of all departments and served as an occasion for an informal expression of esteem. About twenty representatives of the Medical School were present. Dean Sutherland, speaking for his colleagues, made the following address:

"The members of the Faculty of the Medical School learned of the resignation of President Huntington with dismay and apprehension, and at first considered the report a mere rumor. Later information convinced them that the "rumor" was a melancholy fact, to which they have not yet become reconciled.

The Faculty of the Medical School consists of a large number of men and women whose rôle in life is of such a nature as to make them self-reliant, independent, and prone to originality in thought and opinion. Naturally, their opinions on a given subject do not always, by any means, coincide; but one is justified in asserting that there is one subject at least upon which they most unanimously agree, and that subject is President Huntington's retirement from the active duties connected with his office. This they deplore and look upon with unfeigned regret. Accepting the condition as beyond their control, they review the past with satisfaction and look to the future with confidence. During President Huntington's connection with the Medical School its Faculty has learned to respect his opinions, to have confidence in his judgment, to believe in his sincerity, to recognize his breadth of mind and his sympathetic attitude towards the educational ideals of the medical profession; and now that he is to sever his connection with the school they are solidly united in their desire to extend to him their heartfelt testimonial of good will and friendly regard. In many official acts and in many unobtrusive ways he has shown himself a true friend of the school.

He has attended business and social meetings faithfully, and has given generously not only of his time but also of the coin of the realm to special objects which have been brought to his attention. As a Faculty we have grown to feel that we can neither open the school session in the autumn nor bring our year's work

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to a close without his presence, assistance and encouragement. We feel that President Huntington is to be congratulated on having so happily completed an administration of which he well may be proud. We have appreciated, and do appreciate, his unending patience; his unfailing kindness to one and all; his willing response to all appeals; and his keen interest in and sympathy for our special department. Wherever he goes, to whatever uses he may put his time and energies in the future, we hope he will believe in his heart that the best wishes and the warmest regards of the Medical Faculty go with him."

The Alumni Banquet.

The annual banquet of the Alumni Association of the Medical School was held at Young's Hotel on the evening of Tuesday, June 6. In spite of a heavy rain storm an attendance of over one hundred was noted. The post-prandial exercises were of unusual interest, in spite of the enforced absence of ex-Governor Bates, who was unavoidably detained. Dr. Edward E. Allen, president of the Association, presented in a very telling and encouraging manner the various advance steps made by Homœopathy during the past twelve months, covering not the usual ideas and opinions, but giving in detail actual occurrences in various parts of the world during this short period. We freely confess that while we had been in quite close touch with these, we did not realize that they were so numerous till they were thus tabulated.

Next came Dean Sutherland with a similar tabulation of the recent accomplishments of Boston University Medical Department during the past few years. This was a list of by no means insignificant proportions.

Dr. Richardson, the Registrar, followed with an encouraging speech. Among other things he announced the gift of $1000 from an anonymous donor as the nucleus upon which to build the second $25,000 endowment fund. He further officially announced that when this second fund was completed, thus making a total of $50,000, the Trustees of the University would add to it another $50,000 for the exclusive use of the Medical School.

The announcement was received with much enthusiasm and in the near future an energetic campaign will be begun for the purpose of completing this amount.

Dr. Wesley T. Lee then responded to a toast to the Faculty. This speech, largely extemporaneous, was probably the most unique and the wittiest that has been made at any of our meetings in recent years. It was an "anatomization" of the individual members of the Faculty, beginning with the brain (the Dean) and the spinal cord (the Registrar). These first two were recipients of very warm and justly deserved tributes of praise such as could be so well delivered in this impersonal manner.

We have vainly tried to persuade Dr. Lee to put this speech into writing, as it would be of much interest to our readers. Possibly later attempts may be more successful.

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Dr. Hosanna Maligian spoke for the graduating class, the members of which were present as guests of the Association. The meeting throughout was very enthusiastic.

Class Day Exercises.

Monday evening, June 5, was the date of the Class Day exercises at the Medical School. Here at 8 P. M. a large company of friends assembled to listen to the speakers from the graduating class and the response from the Faculty. Dr. Antonio Orozco of Mexico was class historian and Dr. Harold E. Diehl of Pennsylvania valedictorian. The Faculty was represented by Dr. George R. Southwick, who gave a very able address and one which the *Gazette* will have the privilege of presenting to its readers.

The Faculty then held a reception for the graduating class and friends. Later dancing and refreshments were in order.

Formal announcement was made of the appointment of Dr. Frank W. Patch to the chair of Materia Medica, left vacant by the determination of Dr. J. H. Moore to devote himself in teaching exclusively to pediatrics. Dr. Patch is a well-known student of Materia Medica and a pleasing speaker. His appointment should therefore give much strength to this important department.

Clinical Week.

On account of the Institute meeting in Rhode Island and the desired co-operation of men from outside New England in the exercises at the school, Clinical Week was postponed two weeks later than usual. This was a disadvantage to not a few prospective attendants, because of interference with vacation periods, but made possible the co-operation of men from other cities. Those who thus took part were Wilson, Laidlaw, Dearborn, Dieffenbach and Schenck of New York; Wood and Phillips of Ohio; Carmichael and Gramm of Pennsylvania; Tenney, Fisher and Hanks of Illinois; Dewey, Stevens and Burritt of Michigan and Martin of Lowell, Mass. The remainder of the time to a total of thirty-six hours was filled by members of the Faculty. As in previous years, a full attendance was noted throughout, the high mark being reached by Dr. Hanks' lecture, during whose hour extra benches and chairs were brought in to accommodate those desiring to be present. On Friday evening the Faculty gave at the Art Club a complimentary dinner to the invited guests. It was entirely informal throughout. Drs. Tenney, Fisher, Carmichael, Hanks and Dewey were among the speakers, the sentiments of Dr. Hanks, a Boston University alumnus, receiving particular tokens of appreciation.

The Institute Meeting.

Following so soon the Los Angeles session of our national body, with its unprecedented record for cordial greetings and enthusiastic entertainment, some uncertainty was naturally felt concerning the comparison that "reserved New England" might

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make. This feeling proved to be without justification. However reserved or frigid may be the reputation and however much this may be deserved, under the warming influence of that most genial chairman of Local Arrangements, Dr. Henry A. Whitmarsh, the coldness was noticeable only by its complete absence.

In unvarying courtesy, in uniform tact and in an unusual degree of executive ability, Dr. Whitmarsh proved to be most truly the right man in the right place. Everything was planned in advance, and when the Institute members arrived the wheels were set in motion without commotion and all parts worked smoothly without friction.

Hotel Mathewson was well able to take care of all who applied, seconded as it was by several adjoining hotels. For summer hotels the accommodations were good, the table excellent and the charges reasonable. The main auditorium was quiet and has good acoustic properties, while the sectional meetings were well taken care of.

Possibly the location of the exhibits in the basement was unfortunate, but this was more than offset in the eyes of the exhibitors by the unusual courtesy and interest of the chairman of the Exhibit Committee, Dr. J. H. Bennett of Pawtucket. These exhibitors manifested their appreciation in a manner that as far as we know is entirely unprecedented in medical conventions; they joined forces and bought a large and expensive instrument case, six feet high, which they presented to Dr. Bennett as a token of their appreciation of his efforts in their behalf. A visit to these exhibits and to the exhibitors was well worth while. Here were found our old friends Otis Clapp & Son, Buffington, Boericke & Tafel and Boericke & Runyon, each with a representative display of goods. Mellin's Food Co. is always welcomed at our conventions, as is also its representative, Mr. Rogers, concerning whose ability and knowledge so many Boston homœopaths can speak from personal experience. No one can carefully study the exhibits of H. K. Mulford Co. without learning much about modern therapeutics, as aided and advanced by a properly equipped modern research laboratory of a pharmaceutical firm which is inspired by the proper spirit in medicine. The feature of the present exhibit was the use of anti-rabic treatment apart from special institutes. F. H. Thomas Co. of Boston, represented by Mr. Lella, showed several new models of Bausch & Lomb microscopes, as well as a general surgical collection. Our friend, Mr. J. Emory Clapp, was present with his electro-therapeutic instruments.

The Glyco-Thymoline and Listerine companies were present with their usual generosity of samples, which are always appreciated. The same may be said of the company handling Phillips Milk of Magnesia.

Among the books we found Mr. Rebman in person, an able man who is giving to the medical world an excellent collection of books. He also exhibited a collection of beautiful lithographs of medical subjects, suitable for doctors' offices.

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Mr. Paul Hoeber was also present in person, representing his company with a large number of standard works. To him we owe, among other things, the popularization in America of Emery's Immunity.

The Institute meeting itself was marked by absence of any acrimonious spirit. Even the warm rivalry for presidential honors was not in any way marred by unfriendly competition.

The session began on Sunday with exercises in memory of the year's dead. These were made very impressive by the beautiful solos of Miss Isabel Stevens of Boston, an interesting and interested visitor during the entire week.

On Monday morning the business sessions were formally opened and nominations for officers for the coming year were made. Tuesday was the day of election. This resulted, as announced in the *Gazette* last month, in the accession to the presidency of Dr. Thomas H. Carmicheal of Philadelphia. The ballot for first vice-president ended in no election, but by a later vote Dr. William H. Dieffenbach of New York as elected. Dr. Clara E. Gary of Boston was second vice-president, Dr. J. Richey Horner of Cleveland re-elected secretary and Dr. T. Franklin Smith of New York treasurer.

On Wednesday Dr. James Ward presented the report of the Committee on Legislation. This evoked much discussion and will be heard from later. At the other business sessions it was decided to continue the position of field-secretary which Dr. Arndt has so ably filled during the past year. A subscription from the floor was started that in a few minutes reached nearly three thousand dollars. At the final session Pittsburg was announced as the place of the next meeting.

The scientific sessions were by no means behind the business ones in point of interest and were well attended throughout. It is scarcely possible to single out any special ones, although from the standpoint of purely original work those of Bailey of Chicago and Dieffenbach of New York, together with the report of typhoid-therapy from Boston, gave perhaps the most evidence of actual research. Drs. Southwick and A. G. Howard of Boston each gave papers which drew large audiences.

Ogden of St. Paul started a warm discussion concerning puerperal sepsis which proved instructive. The paper of Duncan of New York came at an unfortunate time and did not have the audience it deserved in order to bring out the pros and cons of his peculiar methods of treatment. We have heard from time to time the statement that the Institute meetings do not bring forth anything of value to the auditors, but merely a rehash of what has already been heard time after time. The best refutation of such a statement is the record of the scientific session of the meeting just concluded. If any attendant went away from it without receiving some new ideas and new interests, all we can say is that it was his own fault, not that of the Institute.

The social features were well arranged, with a ball on Mon-

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day evening, an enjoyable trip to Newport by steamer, with a carriage drive about the city on Tuesday, a boat ride and clam bake at Rocky Point on Thursday and a banquet on Friday evening. When we say that at the banquet, our own Dr. Wilcox was toastmaster, nothing further need be said about the humor and merriment of the hour. In addition the ladies of the Meissen enjoyed a daily afternoon tea, automobile excursions and an afternoon bridge party. At the musicale on Wednesday evening Dr. and Mrs. George B. Rice easily carried off the honors among an excellent representation of Boston musical talent.

This wandering account would be incomplete without mention of the excellent press work of Dr. G. F. Martin and of the unusual prominence given to the daily sessions by his brother, who is editor of the Providence Journal to whom the thanks of the Institute are certainly due.

And so the Institute meeting at Narragansett Pier has passed into history where it will be recorded as one successful in all respects, reflecting much credit upon both hosts and guests.

Hail Pittsburg and 1912 (also Miller, Portland, Ore., and 1915)!

Antivivisection.—A certain Capt. C. L. Perkins of the British Royal Navy has recently become a sponsor for a peculiar appeal to sentiment that has been widely circulated in England. It consists of the following: "O God of mercy, send kind death to thy dear dumb creatures, left tortured and agonizing in the laboratories, when the vivisectors go home to dine and sleep." An attempt was made to have certain New England clergymen offer this prayer and from one of such the following answer was received as it appeared in the Boston Herald: "What a delicious paradox this is. Here is a man whose only business is, in time of war, to maim and slaughter his fellowmen, praying every night against those whose profession is to save human life. I think I see him at one moment urging his gunners to rake the enemy's decks fore and aft, yelling like an Ashanti, 'Give 'em h—l, boys,' and several hours later, kneeling in pink pajamas before his berth, slobbering a few maudlin tears over the cats and dogs and rabbits which he thinks the vivisectors have left in their misery. You have asked me, Captain Perkins, to adopt your daily petition as my own. I am almost willing to say yes, but on one condition. Will you offer a prayer of mine, not every day, but once in a while, at least? This is the prayer which I wish you, Captain, and all others of your rank might offer: 'O God of nations, send kind death to thy poor soldiers and sailors left mangled and moaning after the battle, while the captains and the kings sit down to celebrate their victory in wine and song. Remember, we beseech Thee, the widows and little children made desolate by brutal conflicts of greed and plunder, brought on too often by an insensate thirst for glory and reward. Save us, our Father, from all who in their blindness foment jealousy between nations and hatred among races, and most of all from those who for the sake of gold would plunge their country into the hellishness of war.' But perhaps I have taken the captain and his prayer too seriously. The card is doubtless a new device in pamphleteering, and a rather clever one, were it not for the stupid blunder of giving the occupation of the writer. I cannot offer such a prayer as this. I know too well the blessings that vivisection has brought to mankind. For my part, I prefer to offer a prayer which will include both sides: for the vivisectors, that they may ever be kept from causing unnecessary pain; for the antivivisectionists, that they may be given that due sense of proportion which will turn them from misdirected sentiment and set their moral enthusiasm free for attacking the really great and sinister evils that beset society."

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THE ADVANTAGES OF SMALLER MEDICAL SCHOOLS.

In the annual presentation of statistics of the State Board results for 1910, the Journal of the American Medical Association makes the following comment upon relative value of the small and the large medical college:

Table E is also based on the three large tables and gives the results of state board examinations as they affect the 42 largest medical colleges. Although these colleges represent less than one-third of the medical colleges in the United States, they furnish nearly two-thirds of all the candidates for license. This table shows that the graduation of large classes by a medical college does not prove excellence of teaching, since several colleges having 100 or more examined have very high failure percentages, and this holds true even for the graduates of 1910. In fact, the larger the college from the standpoint of the number of students and graduates the more serious is inferior teaching ability, indicated by a high failure percentage. In fairness to the medical student, and in the interests of the public, such schools should greatly strengthen their teaching facilities or reduce the size of their classes.

THE AIM OF THE MODERN HOSPITAL.

A number of inquiries have reached the editors concerning the reasons for present day medical research and some of the problems that are to be attempted. In answer to such inquiry an admirable editorial that recently appeared in the Cleveland Medical Journal, entitled, "The Aim of the Modern Hospital," is quoted in its entirety.

"The nineteenth century brought with it an entire revolution in medical thought. The discoveries of Lister and Pasteur, and the investigations which followed, opened up an entirely new field for advance, and led directly to the development of modern surgery. The multifarious observations on methods of combatting bacterial infections had two great and fundamental results, the one centered the thoughts of workers on the perfecting of aseptic surgery, the other pointed out the need for hospitals where such surgery could be practised after the most approved methods. The days of hospital gangrene, of puerperal septicemia, of general putrescence, whenever wounds or openings in the body covering occurred, passed slowly away, and became historic horrors along with the sufferings of those who had to be manipulated for this or that without the saving oblivion of anesthesia.

"The effect of this new knowledge on hospital architecture and hospital management was profound. Light, air and cleanliness came where darkness, stench and filth had been. Operating rooms, sterilizing rooms, places for dealing with "clean" and "dirty" cases followed one after the other. As surgery advanced the hospitals where good surgery was done advanced also, until the surgical wards of most of the large hospitals in this country were models of method, cleanliness and organization. The tremendous interest in surgery, the great increase in the number of surgical patients, made the surgical divisions by far the most alluring and important part of our general hospitals. During this period of surgical advance, the medical wards did not increase in size nor in activity. Occasional new diagnostic methods were practised, more and more the wards were used for the intimate teaching of the students, but on the whole the medical wards in most hospitals have been a necessary, though slow going, adjunct. To be a "great surgical hospital" has been the proudest boast of most of our great institutions.

The pendulum has swung as far as it can, and is swinging back. Recently great advances have been made along the lines of internal medicine, in the more careful analysis of the deeply underlying problems of disease. The last ten years have shown a great increase in the knowledge of abnormal metabolic processes and of the abnormal physiology associated with

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pathological conditions. New methods for the study of disease have arisen. Biochemistry, physical chemisty and physiology are becoming more needed day by day in the elucidation of the broader problems of modern pathology. New methods of treatment have arisen, based on this new knowledge. Up to the present the bulk of this work has been done in laboratories at a distance from the hospital, or patients have been transported to the laboratories for study and returned again to the clinic, a tedious and cumbersome procedure. It is becoming evident that a hospital to be in the advance guard of medical progress, cannot be satisfied with an active surgical service, and a medical division of the "purge-and-puke," "pill-and-powder" vintage. It must have in connection with its medical wards laboratories where the most advanced methods of clinical investigation may be carried out, not tucked away in some out of the way corner of the hospital, but within easy reach of the wards. The medical wards should have a complete laboratory for chemical, bacteriological and physiological observation, just as much as the surgical wards should have their operating suites. In no other way can real clinical observation be carried on to-day. The days of the tabulation of symptoms and signs, as judged only by the eyes, ears and fingers of the observer, have served their day and passed. Clinical observation means all this in conjunction with the more minute study which the great advances in pathological physiology have made possible. To those who believe that all this is as necessary a part of a hospital today, as was a sterilizing plant and an operating room 20 years ago, such an arrangement seems possible, and greatly to be desired; to those who still believe that all the facts necessary for the advancement of our knowledge of disease can be gleaned by the eyes, ears, fingers and the microscope, this cry for more complete equipment and larger scope of work is hailed as the ranting of the unsound. Such men, and their name is legion, hold the same position now that the scoffers at the "germ theory" held 30 or 40 years ago.

In the fall of 1910, the Rockefeller Hospital was opened in New York, for the study of disease. Perfect from the point of view of modern hospital construction; supplied with laboratories and appliances so that the searchlights of modern knowledge may be focused on the obscure problems under consideration; manned by a keen staff of men trained in modern clinical medicine, quite as at home by the bedside as in the laboratory, able to do everything for the patient from the physical examination to the most complex laboratory investigations, it stands as the greatest institution for clinical research in this country. The staff is sufficient, so that no man need be rushed and crowded by a senseless mass of routine. The patient is studied, the condition elucidated and the treatment planned with equal care and attention to detail. The eyes of the thinking medical world of this country are turned toward this new hospital, with hope and with expectation. It is a great move in the right direction, and as such should be greeted as pioneer and guide. The day will come when each hospital will have facilities for such clinical study of cases, will have its staff of well trained and brilliant young minds, working under the leadership of some worker of mature judgment and great experience. The united efforts of such a combination of facilities and individuals will produce work of untold value to the patients, the community and to the profession. To the community which makes the beginnings of such work, will come the award of gratitude of future generations of physicians and of laymen in this great land of ours. R. D.

WHO HAS THE BABY?

The following is copied from the Medical Brief, which in turn, as will be seen, abstracted it from The Mirror. While we by no means agree with all the sentiments herein expressed, it emphasizes a condition in the natural sequence of events that is sometimes overlooked.

A doctor's wife, in a communication to The Mirror, puts in a strong and timely word for the part which "mere man" plays in the birth of the baby. Referring to an editorial in The Mirror in which Dr. Eliot was taken

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to task for his "baby every two years" advice, on the ground that Dr. Eliot is a man, and men don't have to "have babies," this correspondent says:

"That was a great stroke, your comment on President Eliot's idea of a baby every two years for women. Your women readers all settled back most complacently, self-satisfied, I know, on reading it, but — the men *do* have the babies.

"From the very beginning of the order for a baby the husband's martyrdom begins. He must never lose his temper. He must be all gentleness, all patience. Wife must not be worried while she is busy with her baby. It may be her soul is no larger than a pin-head, she may be a naturally born nagger, yet she is not expected to try to overcome it. She is allowed to revel in all her petty tempers and meannesses. The hired girls may leave, the rest of the family retire to solitude, but father must stand by, for isn't he the *cause* of it all?

"Who is it has nervous prostration, all by himself with no coddling, when the baby comes? Father. It isn't all a joke, the little facetious local notice, 'Father is doing well.' In the ladies' magazines, father is out on the lawn smoking like a burnt-out bonfire, or pacing the gallery, only stopping to inquire if all is well, but in real life father is on the spot, helping the doctor, cussing the nurse and encouraging and soothing the wife. In a few days, wife and baby, beruffled, beribboned and sacheted, are blissfully receiving admiring relatives and friends; nothing to do but just be congratulated on the wonder of wonders. Father gets some good-natured chaffing and cuts an extra hole in his galluses, hitches up a little tighter and goes on 'having the baby' until she is grown, educated and married or until son has been saved from the penitentiary a time or two and is finally landed at some business that will pay his board and clothe him. No one ever hears of father reneging on the number of babies. Each new one is the finest yet. Let someone design a maternity medal for dear old dad.

"P. S. Being a doctor's wife, I couldn't write this without the obstetrics, but you will get my meaning. I know."

THE PAINLESSNESS OF DEATH.

The final passage of that which is variously denominated the soul, the personality or the ego from the present realm to a future one is a matter that sooner or later comes to all. Anything that tends to mitigate the fear which some individuals may have of this passage from the strictly physical side may be of interest. In a recent number of the Dietetic and Hygienic Gazette, quotation is made from a paper by Oldfield that appeared in the Herald of the Golden Age:

"Bacon puts it this way: 'It is as natural to die as to be born, and to a little child the one is as painful as the other.' By this I think he means that it is 'no more painful,' and with this view of natural birth and death I wholly agree. So little does the apparently painful process of being born affect us that it does not ever leave the faintest trace upon our memory.

"The apparent painfulness of a natural death is equally illusory, and I believe that we shall awake in equal forgetfulness of the sensation of dying. Again and yet many times again I have seen a great fear of dying in the earlier stages of the last illness, but it was only a transitory phase, and ere long the kindly comforting of Nature brought peace to the mind and unconsciousness of pain long before the final passing had come.

"Nature is wonderfully beneficent, and with no niggard hand does she pour out from her pharmacy stores hypnotics more potent than the drowsy poppy, more rapid than the speedy chloroform, and more lasting than the charms of magic or of drugs. In forest and jungle, in the burning desert and on the lonely moor alike, the soothing voice of Nature is heard in the hour of death singing her lullaby of rest and peace and sleep profound.

"I believe that under all conditions and in all its manifold forms the angel of death is preceded by a handmaid bearing a bowl of the mystic water of Lethe, which she sprinkles with generous freedom as she passes. Death, then, is never seen and never known, and those who fear the pains

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and the grim visage of death do so without cause and without need, and in the day of their own trial will find their forebodings have all been vain."

ALPHA AND OMEGA

Alpha

Night. Silence. A struggle for the light.

And he did not know what light was. An effort to cry: And he did not know that he had a voice.

He opened his eyes "and there was light."

He had never used his eyes before, but he could see with them.

He parted his lips and hailed this world with a cry for help.

A tiny craft in sight of new shores; he wanted his latitude and longitude. He could not tell from what port he had cleared; he did not know where he was. He had no reckoning, no chart, no pilot.

He did not know the language of the planet upon which Providence had cast him. So he saluted them in the one universal speech of God's creatures — a cry. Everybody, every one of God's children, understands that.

Nobody knew whence he came. Some one said: "He came from heaven." They did not even know the name of the little life that came throbbing out of the darkness into the light. They had only said: "If it should be a girl!"

And the baby himself knew as little about it as did the learned people gathered to welcome him. He heard them speak. He had never used his ears until now, but he could hear them. "A good cry," some one said. He did not understand, but he kept on crying.

Possibly he had never entertained any conception of the world into whose citizenship he was now received, but evidently he did not like it. The noises of it were harsh to his sensitive nerves. There was a man's voice — the doctor's, strong and reassuring. And one was a mother's voice. There was none other like it. It was the first music he had heard in this world. And the sweetest.

By and by somebody laughed softly and said, in coaxing tones:

"There — there — there — give him his dinner."

His face was laid close against the fount of life, warm and white and tender. Nobody told him what to do. Nobody taught him. He knew. Placed suddenly on the guest list of this changing old caravansary, he knew his way at once to two places — his bedroom and the dining room.

He looked young, but made himself at home with the easy assurance of an old traveler. Knew the best room in the house, demanded it, and got it. Nestled into his mother's arms as though he had been measured for them.

Found that "gracious hollow that God made" in his mother's shoulder that fit his head as pillows of down never could. Cried when they took him away from it when he was a tiny baby "with no language but a cry."

Cried once again, twenty-five or thirty years afterward, when God took it away from him. All the languages he had learned, and all the elegant phrasing the colleges had taught him, could not then voice the sorrow of his heart so well as the tears he tried to check.

Poor little baby! Had to go to school the first day he got here. He had to begin his lessons at once. God praised when he learned them. God punished when he missed them.

Bit his own toes and cried when he learned there was pain in this world. Studied the subject forty years before he learned how many more ways suffering can be self-inflicted.

Reached for the moon and cried because he couldn't get it. Reached for the candle and cried because he could. First lesson in mensuration. Took him fifty or sixty years of hard reading to learn why God put so many beautiful things out of our longing reach.

By and by he learned to laugh. That came later than some of the other things — much later than crying. It is a higher accomplishment. It

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is much harder to learn and much harder to do. He never cried unless he wished and felt just like it. But he learned to laugh many, many times when he wanted to cry.

Grew so he could laugh with a heart so full of tears they glistened in his eyes. Then people praised his laughter most — "it was in his very eyes," they said.

Laughed, one baby day, to see the motes dance in the sunshine. Laughed at them once again, though not quite so cheerily, many years later, when he discovered they were only motes.

Cried, one baby day, when he was tired of play and wanted to be lifted in the mother arms and sung to sleep. Cried again one day when his hair was white because he was tired of work and wanted to be lifted in the arm of God and hushed to rest.

Wished half his life that he was a man. Then he turned around and wished all the rest of it that he was a boy.

Seeing, hearing, playing, working, resting, believing, suffering and loving, all his life long he kept on learning the same things he began to study when he was a baby.

Omega

Until at last, when he had learned all his lessons and school was out, somebody lifted him, just as they had done at first. Darkened was the room and quiet now, as it had been then. Other people stood about him, very like the people who stood there at that other time.

There was a doctor now, as then; only this doctor wore a grave look and carried a book in his hand. There's was a man's voice — the doctor's, strong and reassuring. There was a woman's voice, low and comforting.

The mother's voice had passed into silence. But that was the one he could most distinctly hear. The others he heard, as he heard voices like them years ago. He could not then understand what they said; he did not understand them now.

He parted his lips again, but all his school-acquired wealth of many-syllabled eloquence, all his clear, lucid phrasing, had gone back to the old inarticulate cry.

Somebody at his bedside wept. Tears now as then. But now they were not from his eyes.

Then some one bending over him said: "He came from heaven." Now some one, stooping above him, said: "He has gone to heaven." This blessed, unfaltering faith that welcomed him, now bade him godspeed, just as loving and trusting as ever, one unchanging thing in this world of change.

So the baby had walked in a little circle after all, as all men, lost in a great wilderness, are said always to do.

As it was written thousands of years ago: "The dove found no rest for the sole of her foot, and she returned unto him in the ark."

He felt weary now, as he was tired then. By and by, having then for the first time opened his eyes, now for the last time he closed them. And so, as one who in the gathering darkness retraces his steps by a half-remembered path, much in the same way as he had come into this world he went out of it.

Silence. Light.

—ROBERT J. BURDETTE, in "Chimes From a Jester's Bells." Copyright 1897. Used by permission of the publishers, The Bobbs-Merrill Company.

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PERSONAL AND GENERAL ITEMS

Dr. Everett Jones announces that during July and August he will see patients at his office, 419 Boylston St., by appointment only. His address during these months will be "The Hesperus," Magnolia, Mass. Telephone Brookline or Magnolia.

Dr. John F. Worcester, class of 1888 B. U. S. M., has removed from Boston, Mass., to 75 Hawthorne Ave., Portland, Oregon.

Dr. Harry W. Osgood, class of 1898 B. U. S. M., has removed from Ellsworth, Maine, to 12 Grove St., Bangor, Maine.

Dr. W. L. Patterson, class of 1909 B. U. S. M., has been on service for some months at Emerson Hospital, Forest Hills, as house physician.

The engagement is announced of Dr. Winifred M. Woolls (B. U. S. M. class of 1908) of Lowell, to Joseph J. Devine, D.D.S., also of Lowell. Dr. Devine is a graduate of Oberlin College and of the University of Cincinnati.

Dr. Edgar F. Haines, now in the Medical Department of the United States Army, Philippine Islands, has been appointed Presidente of the Municipality of Davao, Moro Province.

The Middletown New York State Homœopathic Hospital is in need of four physicians, — two medical internes and two junior physicians. The first named service pays $600 a year, with maintenance; that of junior physician, from $900 to $1200 a year with maintenance. These are excellent opportunities for young single men, and the chances for rapid promotion is good.

For further information address M. C. Ashley, M.D., Supt., Middletown, New York.

BUSINESS FOR SALE. —

By replying to this notice, the right man can be put into communication with a business already established, which will pay him from $5000 to $10,000 a year. The present incumbent wishes to change for business reasons and will sell a fully equipped place and introduce purchaser to clientele. For further information address "X. Y. Z.," care New England Medical Gazette, 422 Columbia Road, Boston, Mass.

Dr. Edgar S. Hawkes, class of 1897 B U. S. M., has removed from Swan's Island to Kennebunk, Maine.

Dr. Edward B. Richardson, B. U. S. M., class of '91, has removed from Rochester, Vermont, to 33 Bank St., Attleboro, Mass., having purchased the practice of Dr. George B. Maxwell.

Dr. and Mrs. Harold L. Babcock returned from their European trip late in June. Dr. Babcock has been studying in Berlin and is to be connected with the Aural Department of the Massachusetts Homœopathic Hospital.

Dr. George P. Dunham, class of '91 B. U. S. M., formerly of Lawrence, Mass., has removed to Berlin, Connecticut.

Dr. Charles T. Howard has removed his office from the Charlesgate, 535 Beacon Street, to his new residence, 405 Marlborough Street, Boston.

During the three-weeks' absence of Dr. Edwin R. Lewis, Assistant Superintendent of the Massachusetts Homœopathic Hospital, Dr. John A. Hayward of Bangor, Maine, is taking his place.

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Dr. H. W. McElman, class of 1910 B. U. S. M., having completed a year of service in Metropolitan Hospital, Blackwell's Island, New York, is taking the practice of Dr. Ernest N. Wilcox of Pleasantville, New York, during the latter's absence on a three-months' vacation in Europe. Dr. McElman expects to settle in Massachusetts later.

The discussion over the position of Chinosol in recent numbers of the Journal of the American Medical Association opens an entirely new vista for observation on the part of surgeons. It seems that the Council in Pharmacy and Chemistry first made an adverse report on this substance, which was supposed to be used like bichloride of mercury in wound treatment, and further as an antiseptic for internal administration. It was decided that this substance was feebly germicidal. The report did not seem to be in accordance with the clinical findings on the part of men who had used Chinosol to take the place of bichloride of mercury, and further investigation was made, bringing out the fact that this substance while not distinctly germicidal was powerful as an antiseptic.

"We have evidently gone too far in considering the terms 'antiseptic' and 'germicidal' as being synonymous. Something has been overlooked, and taking up this line of thought we at once think of the wide use of borax and of benzoate of soda for the preservation of meats and of canned foods. Borax and benzoate of soda are barely germicidal even when used in strong solution, and yet in extremely dilute solution they suffice to inhibit the development of bacteria in meats and canned goods. Turning in another direction we note the testimony of many surgeons to the effect that physiological saline solution is better than solutions of germicides for many sorts of wound treatment, notably in skin grafting by the Thiersch method, where large surfaces of tissue which one would readily believe to be susceptible to infection, escape without infection under the influence of nothing more than the saline solution. Further, we note that many germicides in possessing the power of destroying bacteria, destroy with the same power organic cells with which they come in contact, leaving the wound exposed to the danger of infection after the brief period of actual germicidal activity has passed. It is now the time for us to begin to make new observations which distinguish antiseptics and germicides, and which will lead us in many places to use harmless and effective antiseptics where powerful or even injurious germicides have been held to be necessary." — Post Graduate.

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THE NEW ENGLAND
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ORIGINAL COMMUNICATIONS.

STREPTOCOCCIC INFECTIONS TREATED WITH VACCINES.

By Josephine M. Danforth, M.D., Cleveland, Ohio.

It has seemed to be the general opinion, since the use of vaccines sprang into prominence, that the treatment of streptococcic infections by this method was not as satisfactory as it is in infections caused by other organisms. This is due undoubtedly to the usually virulent character of a streptococcic infection. The system is so quickly overwhelmed, that its recuperative power is at once taxed to the limit, and any treatment which is given for the express purpose of whipping up this power proves ineffectual. In the slower and more chronic infections the system has more time in which to manufacture its opsonins, and the giving of vaccines has more of a chance to increase the opsonic content.

Streptococcic infections in which vaccine treatment has been tried are suppurations of scarlet fever, septicæmia, puerperal fever, endocarditis, erysipelas, abscesses, etc. It has also been given with the hope of preventing scarlet fever complications.

In reviewing the literature upon vaccine therapy I have found considerable variation in dosage of the streptococcus vaccine, some using it in the same proportion that staphylococcus vaccine is ordinarily used, i.e., 200,000,000 to 725,000,000, and others using it in extremely small doses, 5,000,000 to 50,000,000. By comparing the results obtained in the two methods I noted that those who use streptococcic vaccine in such large doses do not speak nearly as enthusiastically of the benefit derived as those using the small doses.

The following statement formulated by Ross and Johnson, "The more severe the case and the less satisfactory the clinical response the smaller the dose," has been adopted as a sort of vaccine axiom.

In reporting a series of nineteen cases of erysipelas treated in 1908 with streptococcic vaccine they say, "Even the patients in acutely severe cases almost invariably felt quite different, we might almost say infinitely better, in 24-36 hours after the first inoculation."

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In comparing this series of nineteen cases with a series of the same number treated in 1907 in the usual way the following points were noted:—

	First series. Treated in usual way.	Second series. Treated with vaccine.
Average duration of pyrexia	8.9 days	3.1 days
Complications	6.0	1.0 days
Average duration of illness	25.0 days	12.8 days

Their conclusions are:—"From the standpoint of clinical observation of the course of disease as apparently influenced by inoculation with our vaccine, whatever surface becomes involved, subsequently to inoculation, manifests a less severe form of inflammatory process, mental unrest seems to subside more rapidly and long continued pyrexia has not been encountered. Complications and sequelæ seem to be much less common." The initial dose was 10,000,000 if the case was severe, 20,000,000 if less severe; 10,000,000 on the second day if the patient is improving; if there is no improvement 5,000,000. The injections are then repeated on every second day, 5-10-20,000,000 until a week after the temperature is normal and the erythema has subsided.

Drs. Weaver, Tunnicliff and Boughton of the Memorial Institute of Infectious Diseases, Chicago, advocate the killing of bacteria with some indifferent chemical agent as galactose, as a method preferable to the heat method. Vaccines so prepared are incubated 48-72 hours and then cultured to determine their sterility.

They have determined by experiment that injections of streptococcic killed by heat do not protect rabbits from subsequent injections of homologous living virulent organisms, but may even lower their natural resistance, while injections of streptococcic killed by suspension in 25 per cent galactose solution do give rise to a greater or less degree of protection against subsequent injections of homologous living virulent organisms.

From their report of cases I cannot see that their method is preferable to that employed by Wright and his co-laborers, and one serious drawback is the extremely long time it takes to prepare a vaccine. By the heat method vaccines sterilized for one hour at a temperature of 60 degrees do not have to be cultured, and a vaccine can often be ready for use in less than twenty-four hours.

Dr. Martin J. Synnott in the Medical Record for June, 1911, gives a complete resume of the vaccine question under the title of "The Present Status of Inoculation Therapy. The Application of Opsonins and Vaccines in the Treatment of Bacterial Infections, as Taught by Wright, at St. Mary's Hospital, London."

Dr. Synnott says, "A Vaccine prepared at St. Mary's is a standard suspension of bacteria in physiological salt solution, preserved in 25 per cent lysol or 53 per cent carbolic acid, in which

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the bacteria have been killed by immersion in a water bath at 60 degrees for one hour.

"In infections where the invading bacteria have gained access to the general blood stream, such as septic endocarditis, vaccines if used at all should be administered early and in extremely small doses, though it might be permissible to repeat them with more than usual frequency.

"A profound or prolonged negative phase resulting from an over-dose of vaccine may retard recovery, or do harm by making possible involvement of new focci as a result of lowered resistance in the organism.

"At St. Mary's the stock streptococcus is used initially in acute cases; as soon, however, as the infecting streptococcus is isolated, a special vaccine is almost invariably prepared, this being far more specific.

"In all chronic conditions it is best to begin with minimal doses at five to ten day intervals.

"I employ Wright's method in making vaccines and use streptococcic vaccines in small doses."

I wish to present the following cases of streptococcic infections, two acute and one chronic. The streptococci vaccines used in the acute cases were stock vaccines and in the chronic, autogenous.

Case 1. Mrs. O. Service of Drs P. B. Roper and Frieda E. Weiss. Diagnosis:—Puerperal Infection.

April 21, 1911, the patient was delivered of her third child. The delivery was normal, the child in good condition. The temperature before the delivery was normal and continued so until the third day when at ten P. M. she had a slight chill followed by a rise in temperature to 103 degrees. No cause but cold could be ascribed. No internal douches had been given. For four days the temperature fluctuated between 99.8 degrees and 104.8 degrees, the pulse between 88 and 130. The treatment consisted in douching with bichloride. Aconite, Belladona, Echinacea and Aspirin internally. After the douches the temperature would be temporarily reduced, only to rise higher than before. Later the lochia was considerably suppressed but at no time was it offensive, neither was there any distention of the abdomen.

April 28, at 11 A.M., the temperature rose to 105.4 degrees, pulse 130. At 3 P.M., the patient was taken to the surgery and a curettage was done. The entire surface of the uterus was covered with a membrane. Bleeding was so profuse that a hypodermic of ergot had to be resorted to and a dripping saline was given. The temperature was temporarily reduced to 101 degrees, but rose by noon of the next day to 103.6 degrees, and pain and swelling of the right ankle developed. This was treated with antiphlogistine and chloroform liniment and was bandaged. Permanganate douches were given instead of bichloride. Remedies, Echinacea and spiritus frumenti.

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April 29, yeast injections, two cakes of compressed yeast to a quart of water.

April 30, temperature went up to 105.4 degrees. Direct examination of uterine discharge showed: pus cells; yeast cells; Cocci in pairs and in chains. Some of the diplococci and some of the chains showed a distinct capsule. Short bacilli.

Cultures were made on blood serum, glycerine agar and in bouillon.

May 1, examination of cultures showed: — Blood serum, very light growth. Diplococci, biscuit-shape, positive and negative to Gram's. Small bacilli positive to Gram's.

Glycerine agar, growth light. Bacilli positive and negative to Gram's. Streptococci in long chains.

Bouillon, baccilli positive and negative to Gram's. Streptococci.

All of the cultures showed yeast cells. The bacilli negative to Gram's had the appearance of colon bacilli.

May 2, 10.30 A.M., temperature 104.8 degrees. 11.30 A.M., injection of vaccines; micrococcus catarrhalis 25,000,000; colon bacilli 12,000,000; and streptococci 12,000,000. By 11 P.M., the temperature had dropped to 100 degrees. Alcohol, 75 per cent, was alternated every hour with the yeast douches.

May 3, 1 P.M., temperature 104.4 degrees. Injection of 25,000,000 streptococci. The other organisms were not repeated because the streptococci were considered the infecting agent.

May 4, the temperature dropped to normal in the morning for the first time since the curettement. At 5.30 P.M., it rose to 103 degrees.

May 5, 6.30 A.M., temperature 99.4 degrees; 5.30 P.M., 103 degrees. The alcohol douches were discontinued and the yeast continued.

May 6, 11 A.M., temperature 102.2 degrees; 1 P.M., 103 degrees. 7 P. M., injection 25,000,000 streptococci; 10.30 P. M., temperature 100 degrees. The yeast douches were now discontinued and the bichloride resumed.

May 7, 8, 9, and 10, temperature fluctuated between 98 degrees and 103 degrees.

May 8, bichloride douches were discontinued and permanganate douches used.

May 10, 8.30 P.M., 25,000,000 streptococci. The ankle which had been painful and swollen ever since the day of the curettement now become more inflamed. A reddened surface, very sensitive to touch, appeared three inches above the ankle on the outer surface.

May 11, 6.30 A. M., temperature 100 degrees; 5.30 P. M., 104 degrees. Douches were discontinued.

May 12, 6.30 A.M., temperature 102 degrees. At 8.30 A.M., the patient was taken to the surgery, an incision was made through the swollen area down to the bone and three inches in length. Two ounces of gelatinous looking pus were removed. It

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had burrowed beneath the periosteum but there was no necrosis. Microscopical examination showed a pure streptococcus.

May 13, temperature remained normal all day.

May 14, patient discharged from the hospital.

After the first injection of vaccine no internal medication except a few tablets of arsenicum 3x was given.

Conclusions: — The temperature, although temporarily reduced by douches, showed a constant tendency to increase. The membrane was not affected by the douches. The patient was rapidly losing ground and was in a critical condition.

After each injection of vaccine except the last, the drop in the temperature was more marked and more prolonged and it did not rise to as high a point as before. The membrane began to dissolve within twelve hours after the first injection and the surrounding tissues began to take on a more healthy appearance.

The patient's general condition was also greatly improved. In one week the membrane had entirely disappeared.

The fact that the temperature did not become permanently normal following the vaccine treatment can be explained by the confined pus in the ankle. After this had been evacuated the recovery was rapid and complete.

An autogenous vaccine was not used in this case because the growth of streptococci was very light, and the response to stock vaccine was satisfactory.

Case II, Mr. B. Service of Dr. M. H. Castle. Diagnosis:— Dissecting abscess following removal of purulent appendix.

History:—For about four years the patient had been troubled with chronic recurrent appendicitis, which was gradually getting worse. He suffered from chronic dyspepsia, had no appetite, was constipated and constantly under high nervous tension. There was extreme tenderness in region of appendix upon palpation, with rigid abdominal muscles. Under the advice of his physician he went to the hospital Dec. 16, 1910 to have the appendix removed.

Dec. 17, the abdomen was opened. Pus had formed in the appendix, but it had not ruptured. The wound was closed in the usual way. The temperature before and after the operation was normal.

Dec. 18, 19 and 20, the temperature fluctuated between 99 degrees and 102 degrees.

Dec. 20, patient's condition suddenly became critical. He was decidedly septic, pulse rapid and thready, low, muttering delirium and pain in abdomen. The dressings were removed and the wound examined. Marked cellulitis extending over the right iliac region and back toward the lumbar muscles was found. The stitches were removed and about six ounces of thick pus escaped. The probe showed that a dissecting abscess had formed between the subcutaneous tissues and the muscles and the pus was rapidly burrowing towards the median line in the back. A stab wound was made at the lowest point in the pus cavity which was between the crest

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of the ilium and lower floating rib, and a cigarette drainage drawn through.

An examination of the pus showed pure streptococci, and an injection of 15,000,000 stock streptococci was given the same day. In twenty-four hours there was a decided change for the better. The redness subsided, pain was greatly relieved, pus was thinner in character, pulse stronger and slower.

Dec. 22, an injection of 25,000,000 stock streptococci was given.

Dec. 24, 28 and Jan. 2, the stock vaccine was repeated in 50,000,000 dose.

Dec. 24, the pus from the drainage tube contained streptococci and they were found on the same date in the urine. Urinary analysis made on Dec. 29, also showed a few streptococci, a few pus cells and a few granular casts, with a trace of albumen.

From the date of the operation Dec. 20, to Dec. 26, the temperature ranged from 100 degrees to 102 degrees. It then dropped below 100 degrees, where it remained until Jan. 17.

The first of January the character of the pus entirely changed, becoming thin and greenish in appearance. An examination showed pure culture of colon bacillus. It produced gas in glucose agar, curdled milk within twenty-four hours, was motile and negative to Gram's. An autogenous vaccine was made and injections of 50,000,000 were given on Jan. 6 and 10. On Jan. 12, the pus had entirely disappeared from the wound, and under gas anesthesia the wound was curetted, the edges trimmed and brought together with silk-worm gut sutures.

Five days later, Jan. 17, pain developed in wound and temperature rose to 100 degrees. The stitches were removed, and it was found that an abcess had burrowed along the original track but it was not as extensive, nor were the symptoms as severe. The pus was examined and staphylococcus aureus found. An autogenous vaccine was made and a dose of 300,000,000 was given every five days for three doses. After Jan. 20, the temperature did not again go above 99.

Jan. 30, the wound had practically healed. Very slight moisture could be produced by pressing over the incision.

Feb. 3, the wound was completely healed.

The complications which might be anticipated in such a case would be surgical kidney and formation of abscesses remote from the original abscess.

The prompt and satisfactory recovery in this case without complication was undoubtedly due to the use of vaccines in conjunction with the usual surgical procedure of establishing free drainage. No internal medication but the vaccine was used.

Case III. Mrs. B. Service of Dr. O. T. Manley. Diagnosis: —Chronic abscess of pelvis, following puerperal fever. History:— Illness dated from May 15, 1909, when patient gave birth to a child. The birth was quick and natural. Weight of child nine

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pounds. It had to be resuscitated. This was her fourth child. All deliveries normal and all children are living.

On the tenth day the patient began to go about her duties. She felt all right until the twenty-first day. Symptoms then began with vomiting, fever and pain in ovarian region. No douches. except a cleansing douche, previous to the birth of the child, had been used up to this time. She was now treated with douches. Hot flaxseed poultices and antiphlogistine were used locally, and medical treatment given. In a week the temperature subsided and patient again tried getting up. There was still some flow with small clots. If this ceased there would be pain in first one ovary and then the other, but otherwise she would feel quite good. This continued until the first of September. The discharge then became quite scant and the patient was taken with chills and fever. Local treatments brought on the flow, whereupon the temperature fell. Before the birth of the child Mrs. B. weighed 243 lbs. She now began losing flesh at the rate of ten pounds a week, until she had lost eighty pounds.

The latter part of October, a curettement was done, after which she felt even worse. Bilious vomiting developed and the bowels became so obstructed that only with the greatest difficulty could a movement be secured. This continued until November 29, when Dr. O. T. Manley of Cleveland took the case. A temperature of a septic nature had been running since the curettement.

Dec. 4, Dr. Manley operated upon Mrs. B., first making an exploratory abdominal incision which exposed an exudative mass extending from above the umbilicus down to the anterior superior spines on each side. No outline of abdominal or pelvic organs could be made because of this mass. The incision was closed. He then made an incision into the posterior cul-de-sac. This was enlarged with hysterectomy forceps which were introduced with the curve following the outline of the uterus. When in place the blades were opened. This procedure was repeated to the right and to the left, making three openings into which drainage tubes were introduced. Considerable oozing of an exudative character followed, but this soon subsided without any discharge of pus. At the time of the operation the temperature was 103 degrees, it fluctuated for about three weeks between 102 and 104. During this time injections of ichthyol and glycerine were given through the drainage tubes, then the tubes were removed and catheters having the distal ends wrapped in lamb's wool were introduced. Through these catheters hot douches were given three times a day. After a week of this treatment pus began to drain away and then the temperature gradually subsided. Mrs. B. remained in the hospital ten weeks, when she left she weighed 132 lbs., having lost 111 pounds during her illness. Two weeks in the country caused her to gain 15 pounds. From this time, the latter part of February, until June 21, the discharge continued profuse. There was fluctuation in weight and some temperature at times, due to occlusion of the drainage sinuses. The patient felt very poorly.

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Wishing to see if vaccines would be of any benefit in such a case Dr. Manley referred Mrs. B. to me June 21, for pathological examination of the discharge and vaccine treatment.

Cultures were made upon glycerine agar and in bouillon. The discharge was also examined for tubercle bacilli, but none were found.

The cultures showed diplococci in chains which were lance-shaped, encapsulated and positive to Gram's, i. e., pneumo-streptococci; bacilli negative to Gram's (probably colon); and bacilli positive to Gram's.

A vaccine was made of the streptococci, and an injection of 10,000,000 was given June 23. The discharge the following week was decidedly less, but this proved to be due to retention.

July 7 and 14, injections of 20,000,000 streptococci were given. Marked improvement in the discharge was now evident, not due to retention as shown by normal temperature. The patient began gaining in weight after the first injection and felt better generally.

From July 21, to September 26, injections of 50,000,000 streptococci were given once a week. The discharge gradually became less purulent and less profuse. The treatment was supplemented with two injections of bismuth paste.

Following the last injection of vaccine September 26, the discharge gradually diminished until it was less than a leucorrhea, which the patient had experienced in the past, and at times she was entirely free from any discharge.

The last report was April 8. The patient was doing all housework and washing, and weighed 217 pounds. The fundus of the uterus which was bound down with adhesions and unmovable at the time of the operation, and remained so until as late as last November, was free and in good position, and the exudative mass had practically disappeared from both sides.

BIBLIOGRAPHY.

1. "The Treatment of Erysipelas by Inoculation with a Specific Vaccine," by George W. Ross and W. J. Johnson, J.A.M.A., 1909, LII, 747.

2. "Phagocytic Immunity in Streptococcic Infections," by Dr. J. C. Meakins, Presbyterian Hospital, New York City, Jour. Exper. Med., 1909, XI, 100.

3. "The Principles of Vaccine Therapy," by Sir Almroth E. Wright, The Harvey Lectures, 1906-07, P. I.

4. "Clinical Experience with Homologous Vaccines in the Treatment of Septic Endocarditis and Pyemia," by W. Gilman Thompson, Tr. Assoc. Am. Phys., 1909, XXIV, 21.

5. "The Present Status of Inoculation Therapy," by Dr. Martin J. Synnott, Medical Record, June 1911, LXXIX, 985.

6. "A Study of Streptococcus Immunization," by Geo. H. Weaver and Ruth Tunnicliff, Jour. Infec. Dis., 1908, V, 589.

7. "Effects of Injections of Homologous Streptococci, Killed by Heat, in Streptococcus Complications in Contagious Diseases," by George H. Weaver and Ruth Tunnicliff, Jour. Infec. Dis., 1908, V, 585.

8. "The Injections of Heterologous Streptococci, Killed by Galactose, in Erysipelas and in Scarlet Fever," by Geo. H. Weaver and T. Harris Boughton, Jour. Infec. Dis., 1908, V, 608.

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HOMOEOPATHY: ITS ACTIVITIES AND OPPORTUNITIES. *

By Edward E. Allen, M.D., Charlestown, Mass.

I conceive that an address by the president of this Association should have for its main object, something which shall tend to benefit the School, and put new courage and more enthusiasm into its alumni.

We are hearing and occasionally reading some things about our form of practice, and the conduct of our medical schools, which might cause some to think that everything bearing the label homœopathic was rapidly going to the dogs.

Particularly was this idea brought out in the report of the Carnegie Foundation, where it is stated, "that in 1900 there were twenty-two homœopathic colleges in the United States: today there are fifteen: the total student enrollment has within the same period been cut almost in half, decreasing from 1909 to 1009; the graduating classes have fallen from 413 to 246."

"The ebbing vitality of homœopathic schools" is asserted to be "a striking demonstration of the incompatibility of science and dogma," and the conclusion drawn seems to be that our method of practice is shortly to disappear.

We are charged with being unscientific. Please name for me any other system of medicine which has claimed the attention of the public during the last one hundred years, that is more scientific. Was the painstaking labor of the fathers in scientifically proving their drugs on the healthy human body, before using them to relieve the sick, unscientific? When first undertaken by Hahnemann, this procedure was the first really scientific method ever undertaken in the medical world to positively learn how drugs should be applied in the treatment of disease. The foundation then laid is still firm and solid, and I believe can be made more so by applying the modern methods of investigation. Every now and again some investigator comes across a new grain of truth tending to more and more prove the soundness of similia and its application.

Again can not the strictures applied to our school by the report of the Carnegie Foundation be just as truly applied to all others? I think it could be shown that other colleges besides our own have gone out of business during the last decade, and, too, the student body as a whole is not so large as it formerly was. I, for one, gladly welcome any movement from whatever source which will tend to raise the standard of medical education in this or any other country, and if we of the homœopathic school are remiss in any particular, it behooves us to amend our ways. But to say that the law of similia similibus curanter is destined for an early death, is to assert what is not true, and never will be true.

It is my purpose to show some encouraging events which

* Read at the banquet of the Alumni Association of Boston University School of Medicine, June 6, 1911.

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have taken place during the year just passed, that will serve to prove that an optimistic view of this whole subject is justifiable. Personally I like the positive side of any question. None of the great work in this world is ever done by those who constantly dwell in the shadows, see nothing but the dark side, and are forever raising objections. We can not always see the end of the road, but we can at least keep moving, and trust somewhat to the future for developments.

What we most need, I think, is a real renewal of faith in our cause, a disposition to do or die, so characteristic of the founders of Boston University School of Medicine.

I have caused the whole field of our literature to be carefully searched for any authentic contribution to homœopathy or its institutions during the passed year, and I confess that I am surprised at the many important events which have taken place. My search only goes to show that the people have faith in us, even if some of us seem to have lost faith in ourselves.

At the risk of wearying you I will take up this subject by States.

Massachusetts.

The *New England Medical Gazette* of January, 1910, reported the completion in Worcester of the new Hahnemann Hospital on land adjoining the older building, and with accommodations for thirty patients.

At the 70th Semi-Annual Meeting of the Massachusetts Homœopathic Medical Society, October 12, 1910, Dr. S. H. Calderwood reported that Boston University School of Medicine had received an offer of $50,000 conditional upon the subscription of an equal amount by July 1, 1911. About $25,000 of this amount he said, was already pledged. —*N. E. Med. Gaz. Nov. 1910.*

It was reported in the January, 1911, *N. E. Med. Gaz.* that the rate of recovery at Westborough Hospital for the Insane for 1909 was 18.24 per cent. of the commitments for the year, while at the McLean Hospital, which ranked second, the percentage was 17.72.

The City of New Bedford is to have a homœopathic hospital through a bequest made by Mrs. Lucy P. Goff who died January 27, 1911. — *New Eng. Med. Gaz. April, 1911.*

The statement was made in the *N. E. Med. Gaz.* April, 1911, that the cost of medicines at one time reaching $50,000 at the Massachusetts General Hospital, has now fallen to $13,000 a year, a decrease attributed largely to the influence of Homœopathy.

A comparison of results obtained under allopathic and homœopathic treatment respectively, at the Massachusetts State Sanitorium at Rutland, shows that of all cases treated during the past three and one-half years the average percentage of apparently cured or arrested cases was six-two for the homœopaths and fifty-two for the allopaths.—*New Eng. Med. Gaz., April, 1911.*

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THE JOURNAL OF THE AMERICAN INSTITUTE OF HOMŒOPATHY.

July, 1910

CORRESPONDENCE.

To the Editor:

Mrs. Robert Dawson Evans, of Boston, has recently made a donation of $200,000 for the purpose of erecting an Institute of Clinical Research and Preventive Medicine in memory of her late husband. This Institute will be under the direction of the Massachusetts Homœopathic Hospital, and will be for the mutual benefit of that institution and the Boston University School of Medicine. It will be built upon a lot of land immediately adjoining the medical school, with which it will be connected by a passageway, and will also be connected with the hospital by a subway.

The object of the Institute will be the investigation of all phases of clinical medicine as they are allied to methods of laboratory study, including particularly work upon the question of cancer, its prophylaxis and its curative treatment.

As planned, the building will consist of a large structure four stories high, with a roof sun-parlor. The first floor will be devoted to auditoriums in which public lectures will be given, and to the various administrative offices.

On the next floor will be wards for neurological patients, forming a psychopathic department. The third story will also be devoted to wards for patients who are being studied and treated by the various members of the staff of the Institute, including patients with inoperable cancer, sarcoma and various other form of disease at present considered to be incurable. The uppermost floors will be devoted exclusively to laboratories of pathology, bacteriology, physiology, chemistry and drug pathogenesy.

The idea is to provide a place in which the various diseases may be carefully and scientifically studied, and in which the value of the various forms of treatment may be investigated in the laboratories. Detailed plans are now being made, and it is expected that the active work upon the structure will be shortly begun.

Dr. Angus MacDonald of the class of 1876, one of the oldest alumni of our School, passed away May 31, 1910. He was a good man, a good physician and a good homœopath. He served for many years in the medical clinics of the Out-Patient Department of the Hospital, and he was always deeply interested in the welfare of the School. In his will he did not forget his Alma Mater. He left the tidy sum of $1000, to Boston University School of Medicine and this amount has recently been paid to the treasurer. I shall request that you all rise in your places as a tribute to the memory of Dr. Angus MacDonald.

At the laying of the corner stone of the Robert Dawson Evans Memorial Building, February 4, 1911, Mayor Fitzgerald commented on the fact that since the foundation of the Massachusetts Homœopathic Hospital more than 50,000 persons have been treated there.— *New Eng. Med. Gaz. March, 1911.*

The Clark Ward for Children of the Massachusetts Homœopathic Hospital, has been re-opened, and has a capacity of thirty beds.

The report of the Massachusetts Homœopathic Hospital announces that during 1910 there were 5,405 in-patients treated, a total number of in-patients treated since the opening of the

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Hospital of 54,430. The total expenditure for 1910 was $192,156.99; the number of beds, 325; the weekly per capita cost, $13.37. The total number of patients treated in all departments of the Hospital has been 20,289, an increase of 1,011 over the number treated the preceding year. Of this number 483 were treated at the Haynes Memorial (contagious), 12,036 at the Out-Patient Department.

Boston University School of Medicine, January, 1911.

It is with pleasure that we call your attention to the gratifying and creditable record made by graduates of Boston University School of Medicine before the Massachusetts Board of Registration in Medicine during the year 1910. All of the applicants for registration from this school passed the examinations successfully, thereby making for the school a record of 100 per cent. The average percentage obtained by our graduates was 78.8, a mark not reached by any other of the New England medical schools. Thus was a double record made.

The tabulated results are as follows:

	Average per cent.	Percentage of failures.
Boston University	78.8	...
Harvard	78.7	4.8
Dartmouth	77.8	10.
Tufts	76.2	10.14
College of Physicians and Surgeons, Boston	65.7	78.3
Massachusetts College of Osteopathy	71.2	26.3

Medical Advance, April, 1911

New York.

When the 50th Anniversary of the New York Homœopathic Medical College and Flower Hospital was celebrated in June, 1910, more students were reported in the college than any year since 1880, and in the following November the largest freshman class in the history of the College was the cheering news. During 1909, Flower Hospital ambulances answered 6,604 calls, and there were 3,200 patients treated in the Hospital, 41,176 treated in the dispensary, and 7,244 visits made by doctors and nurses.

In March, 1911, the *Medical Century* stated that the New York Homœopathic Medical College had raised a sum of $10,000 to equip the bacteriological laboratories.

New York Homœopathic Medical College attributes 60 per cent of the increase in its enrollment of students to the influence of its alumni — *The Chironian, July, 1910.*

The *Critique* of Denver, Col., February 1, 1910, reports that Mr. Mitchell Valentine left $2,000,000 to be divided between the Hahnemann Hospital and the Presbyterian Hospital of New York City.

In the April *Pacific Coast Journal of Homœopathy*, Dr. Arndt reports that the stockholders of the new Buffalo Homœopathic Hospital being built there, have insisted that "Homœopathic" form part of the name of the hospital, and that it be for homœopaths only.

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New Jersey.

In September 1910, it was reported (*The Hahnemannian Monthly*) that the profession in Camden, New Jersey, aided by friends, had raised $106,000 for the erection of a new homœopathic hospital in South Camden to supplement the work of the West Jersey Homœopathic Hospital in Camden.

The Jour. of the Amer. Inst. of Hom. for May, 1911, reports that at the regular meeting of the Essex County Homœopathic Medical Society of New Jersey at Newark, in April, Dr. Arndt's address on Homœopathy resulted in the offer of Dr. James Krichbaum of Montclair to be one of a hundred men to donate $1000 to found a non-sectarian laboratory of scientific research to prove or disprove the relation between homœopathic and modern serum therapy.

Delaware.

The annual report of the Wilmington Homœopathic Hospital issued in November, 1910, mentioned gifts to the Hospital of $20,000.

The reopening of the Hospital after improvements costing $25,000 took place October 14, 1910, and the new nurses' home was opened ten days later.

Pennsylvania.

Pennsylvania is claimed by its State Society to be the "Keystone State of Homœopathy" and offers in proof the fact that whereas with almost 10,000 allopathic physicians in the State their State Society turns out at annual conventions only about 400, the homœopaths with only 1,500 in the State get out from 200 to 300 at annual conventions. — *Hahnemannian Monthly, Oct. 1910.*

The old building of the first homœopathic medical college in the world, at Allentown, Pa., was recently torn down to make way for other buildings. On opening the box in the corner stone it was found to contain The Organon only. — *Cleveland Med. and Surg. Reporter, Feb. 1910.*

Eighty thousand patients have been cared for within the walls of the old Homœopathic Hospital in Pittsburgh, founded in 1866. — *N. E. Med. Gaz., April, 1910.*

The new Homœopathic Hospital at Pittsburgh has a present capacity of 150 beds, and a fine three story nurses' home. — *Ibid.*

Hahnemann College Hospital of Philadelphia, during the year of 1909 to 1910 treated 3000 in-patients, 21,000 dispensary, and 9,000 emergency cases. —*North Amer. Jour. of Hom. Oct., 1910.*

Hahnemann Medical College of Philadelphia has a new receiving ward (then building), four stories high, costing $60,000. Reported in *North Amer. Jour. of Hom. Sept. 1910*, and also in the September *Hahnemannian Monthly*, the gift of the $100,000 Hering Professorship of Homœopathic Materia Medica and Therapeutics.

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In the February, 1911, *Hahnemannian Monthly* was reported the gift of $2,000 for a laboratory for clinical research work in medicine to Hahnemann Medical College and Hospital of Philadelphia by Mr. Walter E. Hering.

The Hahnemannian Monthly for August, 1910, reported the gift of $125,000 in the form of a bequest by Mrs. W. Elkins.

Illinois.

Hahnemannian Hospital of Chicago, has received a bequest of $75,000 for a Nurses' Home and $30,000 for general purposes. — *Pacific Coast Jour. of Hom., June, 1910.*

At the "Home Coming Day" for the Alumni, Dec. 5, 1910, the offer of $200,000 to Hahnemann Medical College of Chicago was announced conditional only on the alumni raising $50,000. — *The Critique, Jan., 1911.*

Mrs. Anna W. Phelps has presented Hahnemann Hospital of Chicago with a $65,000 site for a new hospital. A new Hahnemann College building will be near it, and the old building sold for business purposes. The Hahnemann Hospital and College have now at their immediate command $550,000 and more in sight, for the new buildings and endowment. — *Medical Century, May, 1911.*

Ohio.

The Women's and Children's Free Medical and Surgical Dispensary in Cleveland, one of the oldest homœopathic dispensaries in the country (1878), put in new and complete equipment for ear, eye, and throat work in January 1910. About 3,000 a year are treated at this dispensary. — *North Amer. Jour. of Hom., Feb., 1910.*

The Ohio State Homœopathic Medical Society in May, 1910, reported a membership of 400, and a balance in the treasury of $500. — *North Amer. Jour. of Hom., June, 1910.*

"There is nearly 100 per cent. larger enrollment at Cleveland-Pulte Medical College this year than last. This with a freshman class of nearly one hundred at the New York institution, and gains in all other homœopathic schools in the country, is pretty clear and convincing evidence that old Mr. Homœopathy is not entirely eliminated from consideration in the selection of a medical education." — *The Critique*, Editorial, Dec. 1, 1910.

Minnesota.

St. Paul, Minn., has a Women's Homœopathic League organized three years ago, and now with a membership of over eighty, composed largely of the wives of homœopathic physicians of Minneapolis and St. Paul, its object being the advancement of homœopathy and all pertaining to it, the support of its schools, hospitals, and the welding together of homœopathic interests. — *Jour. of the Amer. Inst. of Hom., Feb., 1911.*

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Michigan.

The annual report of the Homœopathic Hospital of the University of Michigan has appeared. The visiting staff is made up of the Faculty of the Homœopathic Department of the University. In ten years the work of the hospital has increased from 315 in-patients and 423 out-patients to a total attendance of 2,587. In 1899 the hospital earned $9,000, and in 1909 the earnings have increased to almost $36,000. When we consider that the normal capacity of the hospital is ninety-six beds this state of affairs is wonderfully satisfactory and encouraging. Patients were received during 1909 from seventy-eight out of the eighty-three counties in the State, and a number of patients from sixteen other States. All occupations were represented and all classes of diseases were treated; 2,178 operations were performed, and the cases totaled up to 3,848. Thirty-eight nurses were in the training school, of whom eleven were graduated in 1909. The report is extremely satisfactory from all standpoints.—*Jour. of the Amer. Inst. of Hom., July, 1910.*

The Homœopathic Hospital of the University of Michigan reports for the year 1910 its capacity taxed to the utmost, even the reception room being used for patients at times. In 1909 and 1910, $36,000 were turned into the University treasury, an increase of four-fold over ten years ago. — *North Amer. Jour. of Hom., March, 1911.*

California.

Dr. Florence N. Ward has opened a new private sanitorium in San Francisco. It is perhaps the most completely equipped private institution west of the Rocky Mountains. — Ibid.

General.

When, at the 66th Annual Session of the American Institute of Homœopathy at Pasadena, 1910, Dr. H. R. Arndt was elected Field Secretary, over $5000 was pledged in one hour for the support of his propagandistic campaign. — *The Critique, Aug. 1, 1910.*

The Iowa Homœopathic Journal says editorially (Sept. 1910): "The homœopathic profession is not overcrowded; in fact every State in the Union has lots of splendid openings, and is loudly calling for homœopathic physicians. Many large towns up to 30,000 population have no homœopathic physicians in them. It is with difficulty we can get internes to man our hospitals because the recent graduates have such splendid locations offered them that they can not resist the temptation to get into practice. It is almost impossible to sell a homœopathic practice to any but an old school man, because there are so many good openings for which nothing has to be paid."

In an address to the Homœopathic Medical Society of the county of New York, Dec. 12, 1910, Dr. H. R. Arndt said; "There are thousands of openings in the middle West, in the South

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— cities of 25,000 or 30,000 — that hardly know what homœopathy is. Texas has hardly enough homœopaths to make a corporal's guard. The big State of Washington is begging for men, and California, with five or six homœopaths scattered all through the country, only needs bright young men to come and wait a little while. — *Chironian, Jan. 1911.* (Mem. The population of the State of Washington has increased 120 per cent. in the last decade, and of California, sixty per cent.)

The Jour. of the Amer. Inst., May, 1911, reports seventeen homœopathic colleges in the United States, twenty-one homœopathic journals, fifty-one homœopathic dispensaries, fifty-six general homœopathic hospitals, forty-two special and private homœopathic hospitals, forty-eight homœopathic sanatoria.

The Critique, Feb. 1911, announces the organization of the American Institute of Pathology, W. H. Wilson, M.D. of Chicago, President, and W. H. Watters, M.D., of Boston, Vice-President. This society will meet at Narragansett Pier in connection with the Institute.

At the trustees meeting of the American Institute of Homœopathy at Cleveland, Dec. 17, 1910, it was reported all debts paid, and $1,500 in the treasury. — *North Amer. Jour. of Hom., Feb. 1911.*

The Southern Homœopathic Medical Association held its 27th session, Dec. 6, 1910, and reported 200 members, representing thirty-six states in the Union. — *The Jour. of the Amer. Inst. of Hom., Jan. 1911.*

The 67th Annual Session of the American Institute of Homœopathy will be held at Narragansett Pier, June 25 to July 1, while the 8th Quinquennial International Homœopathic Congress will be held in London, July 17 to 22 inclusive. This is a double opportunity to advance the cause of Homœopathy, by one's presence and hearty co-operation in the work.

The Dominion of Canada is growing very rapidly. Last year 150,000 Americans went there, and 500,000 from the other side of the Atlantic. Montreal is a city of 600,000 inhabitants, and only ten homœopathic physicians. — *The Chironian, March, 1911.*

"The average medical practice in this country is said to yield less than $700 per year, and the average graduate of the old school stays in the practice of medicine less than five years before he becomes convinced that he was only dreaming when he saw in the practice of medicine a royal road to wealth. Is this true of the homœopathic school? So far as we are able to carry this investigation, the average income of the representatives of our school is more than double that of the old school." — *Medical Century, Feb. 1911.*

In January, 1910, the Journal of the Institute reported a membership in the Institute of, in round numbers, 2,600.

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Great Britain and Foreign.

There are thirteen homœopathic hospitals, great and small, in England. — Dr. Burford in *Homœopathic World*, June 1, 1910.

The 60th Annual Report of the London Homœopathic Hospital, noted in the Homœopathic World, May 2, 1910, gives the number of out-patients for the year as 11,629 and in-patients as 1,063.

The London Homœopathic Hospital has completed a new wing at a cost of $150,000; the capacity of the new and old buildings will be 170 beds, the old having 104. — *Pacific Coast Jour. of Hom. Feb. 1911.* The same journal says the King Edward's Hospital Fund for London Hospitals has made a grant of $2,500 to the above hospital for the new Nurses' Home.

A new homœopathic hospital was opened in Southport, England, Feb. 1910. — *The Hom. World, April 1, 1910.*

The Journal of the British Homœopathic Society, a quarterly, ceased publication with the October 1910 number, but a new journal to contain the papers of that society, and papers from other prominent societies, etc., began publication January 1911, and will be issued monthly.

The Glasgow (Scotland) Dispensary only opened one year, was reported in the *Homœopathic World*, September 1, 1910, to have cared for 2,185 patients.

There are six homœopathic periodicals in active circulation at the present time in India, besides a flourishing institute of drug proving of indigenous remedies. — *Medical Century, Jan., 1910.*

The Mrs. William Butler Memorial Hospital costing $20,000 was reported in the September 1910 Medical Century as recently opened at Baroda Camp, Gujarat, India, Dr. Belle J. Allen, Lit. B, M.B., B.U.S.M. 1904, Superintendent.

The Boston Herald of May 8, 1911, says that $1000 has been contributed to the above mentioned work, by the recently organized Medical Women's Association for Aiding Women in Medical Work in Foreign Countries.

A South African Homœopathic and Biochemic Association was formed at Cape Town, South Africa, November 23, 1910, to support, extend, and devolop Homœopathy by the establishment of fully qualified homœopathic medical practitioners in South Africa, the formation of homœopathic hospitals and dispensaries, and distribution of homœopathic literature. — *The Hom. World, Feb. 1, 1910.*

The first eleven months of the Capetown Dispensary, started by the above Association, showed an attendance of 3,688 patients; all expenses paid, and six public lectures given on homœopathic and biochemic materia medica.—Ibid, January 2, 1911.

Sidney, N.S.W. Homœopathic Hospital in its report for the year 1909, announced that it had treated 4,236 out-patients, 193 in-patients, and had a balance of $4,500 in the treasury. — *The Hom. World, Sept. 1910.*

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The *Medical Century,* for March, 1910, announced the establishment of the first homœopathic medical society in Sweden, in Goteborg.

The homœopaths in the Netherlands are raising a fund to build a homœopathic hospital.—*Hom. World, Dec. 1, 1910.*

A new homœopathic journal, *La Critica,* was issued in Florence, Italy, in January 1910, and is published bi-monthly.

In view of the foregoing, it seems to me that anything but a spirit of enthusiasm for our school and its institutions is entirely out of place.

As for ourselves here in New England, the outlook is more than encouraging. We have a good substantial nucleus for an Endowment Fund for the School, and it is our bounden duty to see that this fund grows in a healthy manner.

Through the munificent liberality of Mrs. Evans, the new clinical research building is now nearing completion, and by the re-opening of the School in the fall, or soon after, will be ready for occupancy. I am afraid that most of us do not fully appreciate what a grand uplift this new institution is surely going to be to the Hospital and to the School. Given to the Hospital, the School is bound to benefit most, for in it the students are to have every advantage for study and research under the direction of competent investigators. Here is afforded an opportunity for the study of the many problems which perplex the medical world to-day, and who shall say what brilliant results may not be reached to redound to the credit of the school and its workers?

Think for a moment of what one man has done for the pathological department of Boston University School of Medicine in the short space of ten years, and it is not a far cry to something in the future which shall make us all proud to remember that this is our School, and this work our work.

It is our plain duty to give this new institution our hearty support, make this great gift a credit to its donor; a benefit to the people of New England, and a means of pushing our school and its institutions into the very forefront of medical life in America. I have only one regret about the whole thing—there seems to be no place in any part of the edifice where the anatomical department is needed.

May I make a prophesy? Through the work which will be done in this new building, I believe the School will develop as it never has before. Here are going to be advantages for study which few medical schools in this country possess, and in search of these advantages are going to come in classes of fifty, seventy-five, and, may I not say, even a hundred.

In closing I want to say just a few plain words about loyalty. In this word are comprehended all the duties an alumnus owes his school. If he is loyal he always has a good word for his alma mater. He likes to talk about her, and he remembers with a feeling of gratitude what she has done for him. He thinks of her as a great living entity, with a vital organism, with

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vast intelligence, capable of manifesting a maternal solicitude for his future welfare wherever he may be.

He has in return the same solicitude for her well-being, and he resents any imputation that his school is not the equal of any other. He is always ready to recommend her services to any prospective student, and he takes just pride in the future success of all her graduates.

Again when the call occasionally comes to help in a financial way the institution which has made him medically all that he is, he responds gladly to the extent of his ability, and with a feeling that it is his plain duty.

If we had a body of alumni which would, as a whole, and every time, stand back of our School in the way I have indicated, we would have no cause for even a suspicion as to what the future had in store for us. Our School would be as strong as the "Everlasting hills," and we could say as they do in New York, that sixty per cent. of each entering class is due to the loyal work of the alumni.

Yes, our alma mater is going on in spite of all obstacles. She has trained many good physicians in the years gone by; she will train many good ones in the years to come.

God bless her!

SYPHILIS: ITS DIAGNOSIS AND TREATMENT. *

By Orren B. Sanders, M.D., Boston, Mass.

Ladies and Gentlemen: Syphilis, called pox or lues, is an ancient disease. It has been with us a long time; it is with us today, and it will remain with us. The etiology of syphilis, which was not discovered until recently, I think I can read a little better than I can state to you. Syphilis is a germ disease, and that germ is the spirochæta pallida, or more exactly the treponema pallidum, which has been diligently searched for ever since 1675, when the existence of bacteria was first microscopically demonstrated. The germ of syphilis was identified by Schaudinn in 1905. Its presence is readily demonstrated by the pathologist in smears made from chancres, mucous patches, condylomata and moist skin lesions. Observe that I say, by the pathologist, for the fact is that the treponema pallidum is very difficult to see unstained in the fresh state, and is also, as Jordan of the University of Chicago says, "exceedingly refractory to stains."

Diagnosis is also simplified by resort to the serum diagnosis of Wassermann or its modifications. This also requires the services of an expert, but such a test is well worth applying. Butler of Chicago, in the Journal of the American Medical Association, April 2, 1910, affirms that in the secondary stage 98 per cent of the subjects give a positive reaction, and in the tertiary 90 to

* "Clinical Week" lecture at Boston University School of Medicine, June 21, 1911.

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95 per cent. In the primary or chancre stage his results have run as high as 100 per cent positive reactions, while other pathologists report success in from 65 per cent to 90 per cent of cases, In hereditary syphilis Noguchi got a positive reaction in 94.5 per cent; Schmitt of San Francisco, 100 per cent.

These two methods of diagnosis — the microscopical identification of the spirochæta and the serum test — have greatly increased the ability of the profession to determine whether or not a perplexing case was of syphilitic origin, thus preventing dangerous procrastination in instituting early treatment.

Now, first, we know that the incubation of syphilis is 21 days; the shortest period is 10 days and the longest 90 days. The chancre is the first appearance of syphilis. Every syphilis is preceded by the chancre; you can not have syphilis except by an antecedent chancre, so if you were called in to diagnose a case that had all the symptoms of syphilis where the man gave you no history of chancre, that history would have absolutely nothing to do with your diagnosis because the chancre is a little thing. It is a little pimple developed at the exact spot where the virus was deposited, and it developes painlessly with no resultant inflammation, and many men would not observe it. Really it is a fact that they do not know it, and 50 per cent of women never observe the chancre, never notice when it appears on the private parts, so you can see how easily it can be overlooked.

Second, the induration or thickening at the base of the sore is especially characteristic, and is always present.

Third, the chancre is always followed by painless enlargement of the neighboring lymphatic glands, which are multiform. I mean if you simply see a single groin enlarged, that is not syphilitic enlargement; it is something else. A syphilitic enlargement means generally from two to three, four or five little nodules, which are painless. They can be rubbed with the finger without pain, soreness, or fluctuation; and another thing, they always appear nearest to the seat of the chancre — if on the penis, enlargement is in the groin; if on the breast, then in the axillary glands — the nearest glands. These, then, are the three points: first the incubation, 21 days; second, the induration; third, enlargement of the nearest lymphatic glands. If you will remember these three things you will seldom make an error. If in addition to these you discover the treponema pallidum, then your diagnosis is sure. You can begin treatment at once.

What is this chancre most likely to be mistaken for? First, herpes; second, chancroid; third, balanitis. Herpes are little pimples which come on the foreskin, multiple in appearance, with burning, tingling, itching pain with history of relapses, and these symptoms distinguish the herpes from the chancre. I have had some patients come to the dispensary and some to my private office with both conditions, where the herpes has been the more prominent, but still a mixed infection.

Chancroid: the incubation is short, from two to seven days.

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It is painful, the discharge is large; in chancre very little. Then the chancroids are spreading; they will spread from one part to another and you may have perhaps a dozen; with chancre, never. From chancroid you get an enlargement of a neighboring gland, one gland; it is painful; it is sore. An enlargement from chancre never suppurates, but in the chancroid 60 per cent of the cases suppurate. Whenever you get a chancre that is painful you have a mixed condition, either a herpes on your chancre or else it has been irritated by dirt or dust or some other cause. Chancre itself is painless. Therefore you should think of mixed conditions, and that is shown by the discharge and by pain. One other place we get a chancre, and that is in the urethra, a hidden chancre. A man may present himself who will disclose from the penis a very small discharge, resembling gonorrhea, but which will prove to be a chancre, usually overlooked by the physician and wrongly treated for gonorrhea.

Dr. Whitney gave a paper on the subject, stating he had seen thirty-six cases of hidden chancre where they have been anywhere from one half to two inches down the urethra.

I have told you that chancre is not often recognized because you have many times the secondary conditions to deal with. I have been called upon twice within a year and have examined two cases in the tertiary stage where the phvsician has stated that the man has said that he had no history of a chancre and would not believe that he had syphilis, until we were called in counsel to verify the case, because he said he had not had a chancre.

I particularly want again to call your attention to these four conditions: first, incubation; second, induration; third, swelling of the nearest lymphatic glands; and fourth, the presence of the treponema.

The first stage usually lasts from six to ten weeks. Perhaps I may forget to speak of what is the treatment for that chancre,—nothing but protection, simply keep it clean with mercurial salve or antiseptic powder; protect it, simply the one word, protection. If simple chancre, that is all it needs.

The secondary stage of syphilis usually begins about two months to four from the beginning of the primary stage, so-called, these stages running from one into the other. The secondary stage begins then and runs from six months to two years. We call the secondary stage that period in which we have skin lesions called syphilides and mucous patches, inflammation of the mucous membranes of a syphilitic nature. What are these lesions? They assume every form of skin disease. Syphilis is an imitator; it has been called the great imitator. It cannot produce any original, but can imitate every known form of skin disease. It is erratic. It is the most erratic disease we can have.

If you have the tertiary stage you may have the secondary mucous patches; it is most erratic. If you are treating a secondary stage and have mucous patches and the man complains of severe

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headache, you will know you have got a tertiary condition thrown in. I have had a typical case of that kind. The man had patches in his mouth and had very severe headaches. I gave iodide of potash and relieved him almost instantly. Of these skin lesions I have tried to study out in simple form the peculiar characteristics and make the diagnosis from them. I have written on the board the seven characteristic forms: 1. Slow in approach. 2. Long in duration. 3. Symmetrical in appearance. 4. Absence of all subjective symptoms. 5. Dark in color. 6. Polymorphism. 7. Location.

Syphilis begins slowly, never in two or three nights, usually it takes three or four weeks. A man does not know it because there is no pain. It is slow in approach. Second, it is chronic in duration, lasts a long time; third, absence of all subjective symptoms, syphilis is painless, a man or woman finds the eruption, absolutely no pain or itching; fourth, symmetrical in appearance. You never saw any that did not appear on both sides of the body. You will be surprised. A patient will say: "Doctor, I have an eruption on my right arm." The Doctor will say: "Yes, let us see the other arm." Then: "Well, it is there too; I didn't know it." If you have an eruption on one ankle, you will have it on the other; you will always get that symmetrical appearance, you never find it to fail. If you see it one side only, it is never syphilis; *that* is symmetrical.

A woman came to me with an eruption on the thigh, running down to the knee. She discovered it in dressing; didn't know there was anything on the other side. I found both legs completely covered, absolutely no pain, no other symptoms; she had had it nine weeks. Three physicians had been treating her for urticaria, liver disease, etc. It was absolutely painless, no itching or irritation; it was perfectly marked both sides, dark in color. That was all I wanted; I gave her mercury. Afterwards there were some other symptoms which verified the diagnosis of syphilis.

Fifth, dark in color, shading from a dark red to almost ham color. Sixth, polymorphism. You may have several forms of skin lesions in one patient, or frequently mixed eruptions. Seventh, location. You get syphilitic eruptions where you get no other eruptions — palms of the hands, soles of the feet, different parts of the body, under the knee and outside the elbow.

You will not get all seven characteristics of course. You will get three or four of them, which will be enough. Absolutely painless, and dark in color, with symmetrical appearance are almost always enough; and if it be slow in approaching you have a typical picture of a syphilitic eruption. That is easy to remember, and a valuable help in diagnosis. I have often had patients at the dispensary — it is surprising how many — who have come with an eruption on one ankle or one arm, and no eruption anywhere else, often sent by a physician and the case wrongly diagnosed as syphilis, when a knowledge of these characteristics would

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have prevented this error. The syphilitic eruption is, in the early stages, always symmetrical.

The tertiary period of syphilis will come at two years after the beginning, or anywhere from two to thirty years. That includes the deeper, more destructive stage, affecting the tissues of the body. The primary and secondary stages are superficial lesions; the tertiary stage includes the deeper lesions, as nerve degeneration, like tabes, also arterial conditions and all forms of gummata. These are the tertiary symptoms.

The prognosis of syphilis. A man often thinks that when he has contracted syphilis he has foresworn life, his life is useless, he can never be married, to be married would be a burden to him; that is not true. Of course his life will be prolonged plus syphilis. In other words, he will be able to fulfill all the duties that an ordinary man can, with the exception that he will have with him a possibility of some syphilitic development at some time during the rest of his life. That is what the prognosis would be. The danger would be to himself first; second to his wife, the danger of contaminating her, and that he must be told, that he cannot be married until all contagious conditions have disappeared; and then to the children, for if he contracts marriage, the children will die at birth or soon after; third, earning capacity, whether he could earn a livelihood for himself or family if any tertiary lesions appear, and then the danger of contaminating other people in life during his contagious stage.

In the prognosis, what can be the effect of treatment? What will treatment do for a syphilitic man? Fournier of Paris claims that 80 per cent of all syphilitics who are properly treated during the space of four years will never suffer from any future trouble, they will be immune if properly treated. I also note that he claims that 80 per cent of those who are not treated will suffer from some form of tertiary lesion.

Now, we come to the treatment of syphilis. The treatment resolves itself into two forms; first, hygienic, and second, remedial. A man who has contracted syphilis of course must have the law laid down to him that certain things must be done; one is, that he must stop using alcohol. You cannot cure him if he uses alcohol, either during treatment or in his future life. A man who is syphilitic really ought to be a total abstainer. A man who comes to you with syphilis has got to cut out alcohol entirely during treatment, and for the rest of his life be at the worst only a moderate user. Tobacco will not hurt a man in syphilis except where there are mucous patches, and they will be aggravated. If you have mucous patches you must cut out tobacco; otherwise the disease will run on for years in spite of all you can do.

Then, too, the hygiene must be the best possible. The patient must have plenty of good air and water, and all possible hygienic conditions. In this connection I would say, a man who has syphilis should be told definitely the circumstances, and that if he will do his part you will do yours,— and you can say that with posi-

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tiveness at this date to him,— to cure him. If he does not do his duty, the consequences will be upon his head. He will have to have continuous treatment for two years, partial treatment for the third year, and be under observation the fourth year. I mean by "under observation," that he must report to you four or five times during that fourth year to let you see whether there is any development, and if at the end of that fourth year there is no relapse or return, you can sanction his marriage or anything else you see fit; but until he does that and fulfills the four year's treatment you cannot give him that sanction. Two years continuous treatment, the third partial treatment, and the fourth year under observation.

Now, what are the remedies? Mercury and iodide of potash. If we give mercury, what form shall we give? If you decide on mercury, the bi-chloride or whatever form, use it in whatever proportion you see fit, provided you get your patient mercuralized. Use any form you see fit, only do one thing or the other. Familiarize yourself with every one of the modifications, decide upon one, the dose and its effect, and stick to that one. If you use bi-chloride, do not use any other form, but learn to use it carefully and keep on with it. I have been using the protoiodide of mercury. Why? Because I know what it can do, and it produces its effect on the bowels first and mouth afterwards, thus giving a warning before salivation. In other words, it will produce intestinal irritation quicker than mouth irritation.

When shall you begin the treatment with mercury? As soon as you know the man is syphilitic. Would you use it for the primary chancre? Yes, if you have found the four characteristics I have named for a diagnosis. If you know he is syphilitic in the secondary stage? Yes, if that is the first time you know it. At any period when you have made a positive diagnosis of syphilis begin your treatment, because then you can stand up and say to the man: "You have syphilis." Never give a man mercury until you can say that, because if after your treatment he may never have any other symptoms both he and you will never be sure that he really had syphilis, but *until* you are positive do not use it. When you are positive, then begin your treatment at once.

What should be the dose of mercury in the beginning? I begin with a sixth or a quarter grain three or four times a day. If you begin with a sixth or quarter, increase it another quarter in two days and keep increasing for one, two, three or four weeks, until you perceive a condition of the bowels, throat, or tongue showing that the man is beginning to be mercurialized. Give as much as necessary. Ordinarily one quarter to two grains are necessary. Some men are very refractory. I have patients to whom I have given four grains of mercury in 24 hours that would not be as much affected as others by a quarter grain.

After you get up so that this mercury produces an effect on the bowels, a diarrhœa, a slight pain in the abdomen and desire for stool, three or four urgings a day, then you know you are be-

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ginning to get your effect. When you get that effect, cut that dose right in two. If you are giving two grains cut it to one. That is his tonic dose. Then keep him on that dose for two years unless other things come up and you have to throw in iron if his system needs it. Interrupt it occasionally. If you have been giving the dose three or four months, stop it, giving anything you see fit for a couple of weeks. Then begin the mercury again. and run the man along for two years on that.

Now, gentlemen, some of you may say, why is it necessary to give a quarter to two grains of mercury? Why isn't it just as well to give one c.m. of mercury? Only for one reason: statistics have proven for one hundred years that mercury given in appreciable doses, and in appreciable doses only, has prevented tertiary syphilis, and when you have given only 1-20th a day and have followed that man forty years — a thousand of syphilitics — and then can come and tell me that mercury in largely diluted doses will cure syphilis, you may say small doses *will* cure, but not before.

The men who have been studying this for years say that it requires mercury enough to produce systemic effect in order to affect syphilis so that the man will be immune. Are you trying to eradicate it for a few years? No, you are treating your patient for the next 50 years, 30 or 20 years. That is why you give him mercury; that is why, not for temporary relief, but for all those years.

Now, I should say simply that the men who have especially studied this have found that it is necessary to mercurialize the man that much so that this 80 per cent, according to Fournier, may become useful citizens.

Does not a man get tired of this treatment? Suppose you were the patient and you came to my office and I gave you the same tablets — you don't know what — right along, month after month; wouldn't you get tired of it? I think so. I should. I think our duty is to treat our patients individually as well as collectively. When a man comes to me I give him a pill; I run him on that for four weeks or two months. He takes it; he gets tired. I don't blame him. I don't tell him I am giving him mercury. Then I believe we ought to change the treatment. How do we do it? I want to give him mercury still. Now, there is a quarter grain that I have given him for two months. He is doing well; then I change to another mercury, that is, the color; I run that for two months; and then he comes in and I give him a chocolate-coated tablet. It makes a change; it relieves his mind, and I believe in keeping these syphilitics and holding them. I think I have eight tablets of mercury colored up to impress the mentality of the patients. It is a little deception. Perhaps you have better success if you can hold them on one color. But I believe that after you have been giving it for six months, perhaps, and your patient has got tired and thinks it is the same thing, and if it is any good it ought to have cured him by this time, I believe it

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is good for the patient that we should practise that deception.

If we treat our patients that length of time with the mercury, when do we begin the iodide of potash? Not in the secondary stage, not in the primary stage;—in the tertiary stage. We give it only when we need it. Syphilis does not need iodide of potash except as indicated by the symptoms. What are the symptoms? Neuralgias, headache, nocturnal headaches, teritary lesions, arterial lesions; iodide of potash then does its work.

Do not give iodide of potash in the secondary stage. It is not curative in the earlier forms; it is only useful later, unless you get the tertiary symptoms in the secondary stage.

If you give iodide of potash, how are you going to give it? Iodide of potash is a very unstable product. The manufacturers make it all the way from 20 cents to $1.50 an ounce. Do not allow yourself to be led into buying the cheaper products and believe you are saving money. Personally, I believe two, Merck's and Parke Davis Co.'s, are the best. Get good materials. Many a man has been taking iodide of potash in 30, 40, or 60 grains without any effect. Then I have said: "Will you please me and try iodide of potash for twenty days more," and I have given him Merck's and have had good results, simply because the iodide that he had been taking was not good.

If you are going to give iodide of potash, what dose? For syphilis you must give large doses, always from 10 to 50 grains at a dose. Saturated solution of iodide of potash (Merck's) one drop represents one grain. Do not give a man five drops every two hours; that will knock his stomach out, make him feel sick. Give it to him twice a day: 25 drops after breakfast, and 25 after dinner at night, in two evenly divided doses. If you want to give 800 grains a day, give 400 after breakfast and 400 after dinner. We know that by having tried it out. How do we give it? In a large glass of water, glass of milk or other harmless beverage. I have always given it in a glass of water; never had a patient object to it. Dr. Keyes advises its administration 2 ½ hours after eating. I took pains to ask Dr. Whitney and Dr. Abner Post, and both corroborated me in giving iodide of potash immediately after eating.

I have one woman who had cerebral gumma. I gave 800 grains for five weeks, 400 after breakfast and 400 after dinner at night. She recovered; I didn't suppose she would. Iodide of potash has rapidity of action. No remedy in the whole materia medica works more quickly. Properly given it will relieve syphilitic headache immediately. Do not hesitate to give a man who is in the tertiary stage 50 grains a day, 25 after breakfast and 25 after dinner. If you give 5 to 10 he will have coryza, etc., but not with large doses. You do not get the effect from large doses that you may do from small doses. Don't hesitate to push it. If you see fit to give mercury with it, do so, but I would not recommend it.

(*Question:* Would you give mercury 20 years after lesions?

Answer: Sometimes. It depends a little whether the man has

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had a full course of mercury. If he has not, no matter how late he comes, put him right on to it. If you are sure he has been thoroughly mercurialized for two or three years, no. Sometimes you do have to give it 20 or 30 years after.)

Salivation is sometimes produced by mercury, but you will have the following four prodromal symptoms: first, coppery taste in the mouth; second, a little more saliva running from the mouth; third, the teeth striking together are sensitive; fourth, a little sponginess of the gums. When you get these four symptoms, stop the mercury. What do you give then? Chlorate of potash, both as a mouth wash and internally. When you get these four symptoms, stop, do not give any further mercury.

Mercury is given by four methods: ingestion, fumigation, inunction, and hypodermically. Fumigation you would almost never use. Inunction is sometimes necessary and often used at the Hot Springs. The man first is given a hot bath and the back rubbed with alcohol; one gram of mercury is then rubbed over the back thoroughly in a circular fashion for twenty minutes, when a thin gauze shirt is put on and left. This is repeated every second day for two weeks, and then interrupted. Hypodermic medication is used much more than formerly. Two forms of mercury are used, soluble and insoluble. The soluble forms are the bi-chloride benzoate and biniodide. These are painful and seldom used. The insoluble salts are salicylate, gray oil, and calomel. The salicylate of mercury is the one most commonly used. A 10 per cent solution with liquid albolene is made and seven to ten drops of this solution used, repeating the dose once a week until the effect is reached. It is usually given in the buttock under aseptic conditions. The only bad effects from the hypodermic medication would be local reactions, like pain and swelling, with some danger of embolism.

The only other remedy I want to speak about is Salvarsan, the new "606" remedy. This remedy, above all others most highly vaunted today, is an arsenical compound, the climax of a long series of discoveries made by Erlich and his co-workers. Atoxyl, which preceded it, was discarded because of its injurious effects on the optic and acoustic centres, and it was only after long and laborious study and experimentation that Salvarsan, the six hundred and sixth compound of the series, was evolved and offered as the deadly foe of the treponema pallidum: the miraculous remedy, one dose of which would kill all spirochætæ in the system at the same time leaving the body absolutely uninjured.

Unfortunately it has not fulfilled these expectations, although it is proving a valuable ally. Its name chemically — dioxydiamidoarsenobenzol-dihydrochloride — indicates its composition. In appearance it is yellow powder, difficultly soluble in water, with which it forms a highly acid solution which, before being injected, is preferably rendered alkaline by the addition of sodium hydrate. As Salvarsan is affected by exposure to air, it is put up in sterile sealed tubes each containing 0.6 gm. As high as 1.2 gm. has been

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injected intravenously in one dose without bad effects. This seems to be the preferred way of administering it, but it may also be introduced subcutaneously and intramuscularly.

Of the last two methods the availability of the intramuscular especially is discounted by the pain occasioned, the danger of injuring a large nerve trunk, of infiltrating a large nerve, of puncturing large blood vessels, of causing embolism, of setting up severe local reactions, such as inflamed tumefactions, painful and extensive infiltrations, ulceration and necrosis. Such local conditions are slow to heal. Acid, alkaline, neutral, or even oil suspensions of the drug may produce these effects in greater or less degree. Systemic reactions are evidenced by fever, headache, dizziness, vomiting, diarhea, nervous irritability, cutaneous eruptions, sometimes transient albuminuria, all of varying intensity in individual cases.

The best region for intramuscular injection is doubtless the buttock, although the back below the scapular has been used, and subcutaneously even the abdomen. But as the technic of the intravenous method becomes better understood, the intramuscular becomes correspondingly less popular. The local symptoms given readily explain this, for when inflammation of the buttock does not proceed to the extreme of ulceration, the swelling may yet persist for days, and the patient frequently require to be kept under observation for practically a fortnight.

Marshalkof is quoted in the New York Medical Journal of last April as warning against both subcutaneous and intramuscular injections as having no lasting curative action. He got recurrences in 50 per cent. He thinks Salvarsan by the intravenous route, supplemented by mercury, the treatment of the future.

It must not be supposed that all individuals having syphilis are fit subjects for the exhibition of Salvarsan. Its use is contra-indicated according to the best authorities, in aortic insufficiency, aortic stenosis, aneurysm, diseases of the heart muscle, myocarditis, angina pectoris, arteriosclerosis, diseases of the central nervous system affecting vital organs, and especially if with degenerative changes. Cases in which cerebral hemorrhage might occur; cases with marked retinal and optic nerve lesions; also in diabetes, gastric ulcer, advanced pulmonary disease except tuberculosis.

These contra-indications are absolute, while well compensated cardiac lesions, the presence of acute infectious diseases, cachexia, chronic debilitating diseases, old age, pregnancy and cases already treated with other arsenical compounds, call for great discretion and judgment.

Blascko's summing up of the indications for Salvarsan mentions malignant cases of syphilis intractable to mercury; all cases intolerant of mercury, or in which recurrence takes place during mercurial treatment, primary lesions before the secondary occur, constitutional syphilis hitherto untreated in the primary or second-

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ary stage. He also advocates the combined use of mercury and the iodides with Salvarsan, in late recurring secondary lesions.

Its most spectacular results have been seen in its rapid healing of persistent and relapsing mucous patches of the tongue and fauces, ulcerating gummata of mucous membranes, chronic interstitial glossitis, scaling infiltrated syphilides on the palms, and severe lesions of malignant and hereditary syphilis.

Relapses, however, are being frequently reported, and too much stress cannot be laid upon continued constitutional mercurial treatment.

From all that has been said of Salvarsan, it is evident that a thorough physical examination and careful blood test should precede its administration. Also the latter must be regarded as a surgical operation, and done under aseptic conditions with appropriate after-treatment. It is really to be deprecated, therefore, that Salvarsan should be exploited as a popular remedy or sure cure for syphilis that any physician can administer on the mere suspicion or even diagnosis of syphilis. It will be especially dangerous to the community, if the laity fall into the clutches of quacks who will promise immunity from further trouble after one dose of "606."

It has recently been reported in the British Medical Journal by Sir J. Hutchinson, in a paper entitled "Salvarsan and Arsenic Cancer," that the use of arsenic creates a proclivity toward malignant forms of growth, especially epitheliomata and sarcomata, and he especially calls attention to Salvarsan as a possible, even probable danger in this respect.

Salvarsan is yet on the trial list. It is a powerful remedy but it will take years to verify or disallow all the claims made for it.

CLINICAL DEPARTMENT.

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

Case VIII.—Diagnosis: Cerebral Arterio-Sclerosis.

At least Arterio-sclerosis is the evident underlying factor and the mental symptoms may readily be accounted for by hardening of the cerebral arteries.

The dizzy spell of thirteen years ago may have been due to temporary occlusion of a small artery by the arthromotous process.

In another case we have seen this vertigo with diplopia go on to apoplectiform attacks with hemiplegic, which lasted several weeks, the patient, a middle aged man, regaining a fair degree of health.

The printed history last month in reporting the urea omitted the period before the urea and should have read 9 per cent. This with the low specific gravity suggests small granular kidney, which would account for the enlarged heart and make one feel that the

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patient's restlessness is, in part at least, due to a mild toxic (uremic) state.

The liver has enlarged and can be felt two inches below the costal margin, which has led a consultant to suggest cancer of the liver. But its surface is smooth and there is no pain. It seems to me that it is more readily explained by a weakened right heart resulting in portal engorgement. This is further borne out by the labored breathing and cyanosis of the lips and tongue.

Apraxia, or the inability to perform purposeful familiar acts not due to. paralysis, anæsthesia, or ataxia is a conspicuous symptom in this patient and, as is common, is accompanied by sensory aphasia, so that a purposeful conversation is almost impossible

The admixture of mild uremia with the cerebral disease makes these cases especially difficult to handle. They seem always to be patients who have dominated and had their own way, probably because those associated found it easier to give in to them than to appeal to their reason and judgment, which was often arbitrary and illogical. They have a faculty, in discussion, of presenting the argument which fits their side of the case regardless of its adherence to fact. This state gradually gets worse, yet through it all the patient retains an ability under stress, i. e., the presence of strangers, especially the physician, of exerting a degree of control which makes them appear normal, and so the complaints of the poor suffering family go unheeded.

In a case as far advanced as this, little can be done beyond good care. Hot baths irritate these patients by raising the blood pressure. The oxygen bath may be tried, but the heart should be carefully watched.

The irritable heart has been slowed and steadied somewhat by digitalis and as much rest as she can be persuaded to take. Champagne and a careful diet have also aided, and for a remedy she is taking plumbic iodide 3x.

Case IX.—For Diagnosis:

Woman. Age 46 years. Comes of a long line of hardy New England stock. Family History: Tendency to cancer on father's side and to renal disease on the mother's. Patient was a healthy girl save for diphtheria at seventeen years and pneumonia at twenty-five. Married at eighteen and had five children. Oldest died of consumption at 22; two others in early life. Two are living and well.

Patient considered herself well up to three years ago, when she began to have sick headaches. These lasted about two days and were limited to one or the other temple and were accompanied by vomiting, and she had to go to bed. Later she began to have numb spells in one or the other arm but, as with the headaches, this never occurred on both sides at the same time. Sometimes in place of the numb spells she would have what she describes as blind staggers in which things looked blurred and she saw

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double. Either of these attacks would last an hour or so and be followed by a severe congestive headache.

Over a year ago these attacks gradually got worse. In November, 1909, she had two numb spells in one day and went to bed early but awoke with a headache about 2 A. M., got out of bed and fell full length on the floor, bruising her face, but did not lose consciousness. She was helped back to bed and found that she could not move her left arm or leg. At this time speech was not affected, but three hours later she felt her throat swelling, breathing became labored and she thought she was going to choke. Then speech became inarticulate and the voice hoarse and was a month in returning, but she choked easily especially from liquids and the voice did not become clear for a year.

The next day she could move her left foot a little and in a month the left fingers, but there was some noticeable motor weakness of left side for nearly two years. A day or so after the shock she noticed that the urine scalded, and on analysis she was told it showed eleven per cent of sugar. Mentally she became hypersensitive, cried at trivial things and was depressed. She stated that when crying she was powerless to stop it sometimes for hours. This excessive unstable emotionalism continued for nearly two years.

When first seen the patient had a marked hectic flush and had dyspnœa on the least exertion. Her mood was serious and devoid of humor, but otherwise she was mentally normal.

Examination: Grips about equal and no marked muscular weakness. Station slightly unsteady but gait normal. Both knee jerks irritable, left markedly so, plantar reflexes down on both feet; very slight clonus on left. Tongue protrudes straight but is cracked, and coated by white blotches and teeth marked. Pupils very flexible, left more irritable and a trifle larger, but both react to light and distance. No nystagmus.

Though patient is in bed most of time the respiration averages 32. The heart sounds are loud but normal, apex in the nipple line and the pulse averages 110 beats per minute. Blood pressure 160. Chest and abdomen otherwise normal.

The skin is clear but tawny.

Urine: 24 hour amount from 1,500 C. C. to 2,775 C. C.; Sp. Gravity 1,018; Acid; Albumen, one tenth per cent; Sugar, three per cent; Urea 2.7 per cent;—From what is this woman suffering?

WHAT DO WE NEED TO KNOW CLINICALLY ABOUT THE MIND?

(Continued from the August issue)

Psycho-Pathology of Attention. Did you ever sit on the deck of a steamer on a dark night and watch the search light play upon the river bank, lighting upon one object after another, making each thing in turn stand out sharply while all the rest remained

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indistinct and shrouded in gloom, yet ready to stand out at the turning of the light?

Attention is to consciousness what the search light is to the shore line. The material of all past experiences is there, but it must be illuminated by nervous energy under the direction of a special mechanism which throws it into the focus of awareness, and this directing mechanism we call *attention.*

On the psycho-physical side attention seems to depend upon a process akin to that which provokes a wind storm. We know, if we have in the atmosphere a place of low barometric pressure, that the surrounding air is sucked in with a rush and the result is a wind storm, or, if the pressure is very low, a whirlwind. Similarly it would appear that through the physiological processes of facilitation and inhibition, when a given group of neurons (though complex) is used, its nervous pressure or tension is reduced in that complex, so that the energy generated from most of the co-incident stimulae, from muscles, viscera or one's environment, are sucked into the nervous channel of least resistance, so to speak, raising the tension of that particular group of cells (through facilitation) to a point which pushes them above the threshold level of all the other complexes and holds them in the foreground of awareness. This at the same time lowers the tension in the nearest associated groups, so that they in their turn become raised and attended to. This process of facilitation results in draining off the nervous current, and the blocking or inhibiting for the moment of other channels. This is practically McDougall's drainage theory, which in turn is based on Sherrington's work. It accounts for the continuity or stream of consciousness and also explains why we can only remember by means of association—this latter point we shall have occasion to refer to in our next paper.

Psychologists distinguish three degrees of attention: primary, or active, secondary, or passive, and derived primary attention.

These are but three steps in the same process. The first, primary attention, is that form which is forced upon consciousness by the intensity of the stimulus, i. e., the passing of a fire engine; a vivid flash of lightning; a shrill whistle; intense taste or severe pressure; something which demands attention whether we will or no. The secondary is that kind of attention which one consciously applies to one's work even when one would prefer to be doing other things, an attention under difficulties which is held to its purpose only by effort. If, now, one's effort changes to engrossing interest in one's task then comes the third stage, or derived primary attention, in which there is no longer any difficulty, effort or vacillation but a concentration of thought which tends to block or raise the threshold of aware consciousness to all other stimuli using them to facilitate its special work, so that one becomes oblivious to all distractions. It is in this derived primary attention that one works better if some rhythmic stimuli such as piano playing is going on. Here interest is the moving

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force and riveted attention but a result, and all stimuli are drained into the one channel.

The ability to focus one's attention so completely as to draw upon all associated links of a given thought complex quickly and normally, indicates a high type of brain. In cases of fixed delusions and auditory hallucinations it is a common symptom.

The characteristic thing about attention is, as was said at the outset, that it clarifies or intensifies a given content of consciousness. It will be remembered that these two qualities are also attributes of sensation—hence attention is but a sensation raised in clearness and intensity over its fellows.

It is a mooted question still in experimental psychology whether secondary attention oscillates, comes in short waves, or may be held for a long period, perhaps, as Titchner thinks, for two or three minutes. It has been taught in the past that a single span of attention as measured by the rhythm of a metronome is rarely over a few seconds. But later experiments seem to point to the correctness of the former view, for, as Titchner points out, what we have been measuring in the past is not attention but the effort of attention, and this is found only in secondary attention. When secondary passes over into derived primary attention, when, as we say, one is absent minded, is in a brown study, effort has disappeared, is indeed inert, and attention so fixed may remain constant for some minutes. Certainly in hypnosis it may be held upon one idea for a very long time, though this may be said to be in a sense pathological.

In disease attention the patient appears to suffer mainly in two ways. There may be an inability to fix attention in any one direction purposefully. This is seen in its extreme in acute mania, in which thought jumps rapidly from one thing to another as the result of inadequate perceptions or a disturbance of the mechanism of facilitation and inhibition. In its lesser degrees we all experience it from fatigue and it is characteristic of the automatic thinking of the psychasthenic. It is termed *aprosexia.*

In cases of dementia and exhausting illness there is a simple enfeeblement or weakness of attention through an inability of the perceptual mechanism to reach to ordinary stimuli though it can be forced to, if necessary, by strong stimuli.

Finally we have *hyperprosexia* which is merely a pathologically persistent derived primary attention in which the obsession, delusion of hallucination absorbs the entire thought to the distraction of all others.

In the next paper we shall discuss the psycho-pathology of memory.

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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 MEDICIAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business, should be sent to the Business Manager 22 Columbia Road, Dorchester, Boston, Mass.

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Reports of Societies and Personal Items should be sent in by the 15th of the month previous to the one in which they are to appear. Reprints will be furnished at cost and should be ordered of the Business Manager before the article is published.

THE INTERNATIONAL HOMOEOPATHIC CONGRESS.

The long anticipated International Congress of Homœopathy has been recently closed in London after a most successful session. From the standpoint of attendance it was the largest that has ever been held in Great Britain, and from the standpoint of scientific value was probably the most progressive. Those who remember Dr. George on his visit to America about five years ago will understand why all arrangements were so successful under his presidency. The permanent secretary, who might be said to represent the nucleus of International Homœopathy, Dr. John H. Clarke, announced his resignation. This resignation was accepted with deep regret, as the position that Dr. Clarke holds in the minds of all is a most enviable one. As his successor, Dr. J. P. Sutherland of Boston was elected.

It would be impossible to detail the various features of the scientific session as they were so numerous. We are, however, fortunate in being able to present to our readers some of the social aspects of the meeting as kindly prepared by our loyal friend Dr. Horace Packard. In a letter recently received from him we find the following:

"The eighth Quinquennial Homœopathic Congress is history. It convened under the most auspicious conditions of weather and environment, Monday, July 17th, in the Connaught Rooms, Great Queen St., and ended with a noble and inspiring banquet the following Friday evening. For us, the "over sea visitors," this time has been crowded to repletion. When we have not been, in accordance with our first object and duty, in attendance upon sessions of the Congress, we have been dined, lunched, picnicked, or motored, quite in accord with the traditions of our British hosts.

The organization of the Congress, both in its scientific relations and its social bearings, has been almost military in its comprehensive prearrangement of details and prompt and efficient ad-

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ministration. In fact the chief impression which has implanted itself upon our minds is that our British confreres have been in a grand friendly competition to see who could do the most to make the Congress an unalloyed success and who could carry off the honors in dispensing lavish and unstinted social functions.

Since a report of the scientific work of the Congress will reach the readers of the Gazette through another source, the writer will mainly limit his communication to its social side.

The head and forefront of things social as well as scientific has been Dr. George Burford, President of the International Congress and Napoleon of British homœopathic interests. He has been untiring in his zeal to make this occasion a memorable one. He inaugurated the campaign by an elaborate dinner to the "over sea guests" on Monday evening, at the Prince's Galleries, followed by a reception graced by the presence of the Lord Mayor of London.

In addition to the brilliancy and attractiveness of the reception, a most apropriate and interesting feature was added in the form of an exhibition of personal relics belonging to Hahnemann and his family.

Any report of the Congress whether scientific or social would be incomplete without a reference to the Presidential Address. Words fail to portray the dignity and earnestness of President Burford as—supported by his equally earnest and efficient coworkers, Knox Shaw, Charles Wheeler, Le Hunt Cooper, E. A. Neatby, James Johnstone, David Macnish, Petrie Hoyle, and John Weir, all in academic robes—he opened the scientific session with an address to be a classic in the annals of homœopathic literature. It must be read as a whole to be appreciated. Here are a few selected clauses:

"This representative assembly animated by one mind is the visible sign of the solidarity of Homœopathy throughout the world."

"The profession of medicine is a liberal profession: our raison d'etre is the service of the Commonwealth."

"Our science and our art, our institutions and our traditions are vassals to this over-lord, the physical well-being of the State and the individual. For this we live and move and have our professional well-being."

"Out of the enduring rock of natural fact and natural law Homœopathy was hewn."

"It was the quest of natural knowledge in Medicine that impelled the founder of Homœopathy to his first experiment."

"How stable and enduring are the scientific foundations he then established are patent to all competent observers who will take the trouble to investigate."

"Where is the academic manual for wholesale and repeated bleedings in inflammation and the regular seasonal bleedings in the healthy for a possible inflammation? Gone forever. Who swept them away? Homœopathy."

"During one century to have entirely transformed the type and changed the basis of general practice, and to have effected this as an outside and un-

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noticed influence, is ample justification for the work of Homœopathy, even were it only relative to time."

"Let none fall into the obvious error that Homœopathy is a closed circle, or is at the end of its embryologic history. All the intellectual portents indicate a development and amplification which we can only conceive in outline. We look forward to its expansion, voluminous and harmonized compact of facts and laws which embrace the whole field of curative and preventive medicine. We are at present in the position of the science of dynamics after the discovery of the first law of motion by Newton. It did not cover all the facts; other laws of motion followed after further investigation but they all linked up with the first."

"Homœopathy has ousted therapeutics by cataclysm from the practise of medicine, and is now engaged in infusing the law of progress into the more hopeful work of recent years."

In the annals of the social features of the Congress the untiring efforts of Sir George and Lady Truscott must be chronicled. Sir George Truscott, ex-Lord Mayor of London, is a staunch friend of Homœopathy and its institutions. It will be remembered that while Lord Mayor of London, he gave a brilliant reception to all friends of Homœopathy at the Mansion House. As lay host to the Congress he opened his palatial town home, 87 Lancaster Gate, and gave a brilliant reception especially planned as a hearty British welcome to the foreign visitors. His persuasive and ever ready interest in all things homœopathic were attested by his presence at the inauguration exercises of the Congress on Tuesday morning, and the lunch given to the foreign visitors on Wednesday at Chalmers House, by the British Homœopathic Association, of which he is President.

A most keenly appreciated social courtesy also extended to the foreign visitors was the invitation to the Parliament Buildings by Mr. Mansfield of the House of Commons, who personally conducted an appreciative party, pointing out to them objects of historical interest, finishing with a lunch on the terrace overlooking the Thames. This rare treat was arranged through the forethought and personal influence of Dr. Alfred Ross.

On Wednesday afternoon the whole Congress was invited to a reception at the London Homœopathic Hospital, tendered by the Board of Managers, to view the new wing, recently finished, and to inspect the new laboratories and a special pathological exhibit assembled for the occasion.

Of home receptions, lunches, dinners and picnics, it is safe to say that no foreign visitor has any question in his mind of the sincere, warm-hearted, hospitable cordiality of the British people. What with Knox Shaw's dinner at the Trocadero; Dr. Hoyle's at his charming town residence, Holland Park; Dr. Blackley's at the Grand Restaurant in the midst of the radiance, brilliancy and blaze of electrical illuminations and pyrotechnic display of the "White City;" Dr. Neatby's cordial home dinners; Dr. Wheeler's hospitable entertainment; Dr. Burford's parties at the Botanical Gardens;—but little time was left for sleep.

To all this add excursions to Bromley to view the Phillips

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Memorial Hospital; to Tunbridge Wells Homœopathic Hospital; a river excursion planned and conducted by Dr. and Mrs. Robinson Day; a visit to Buchanan Hospital; St. Leonards-on-Sea as guests of Drs. Pritchard and Shaw who lunched the party and then motored to Battle Abbey; a motor excursion planned and conducted by Dr. and Mrs. Johnston to Runnymede, Windsor Castle, Eton, Stoke Pogis (and the scene of Gray's Elegy), Burnham Beaches, Jordans (the land of William Penn), the Milton cottage (where Paradise Lost was written), and return to London in the delightful cool of the long English twilight.

The Eighth Quinquennial International Congress has passed into history but the human friendship, the hand clasp, the bond of sympathy, the friendship will be perpetual.

NOTES ON THE EIGHTH QUINQUENNIAL INTERNATIONAL HOMOEOPATHIC CONGRESS.

The epitaph on the little child's tombstone which reads:

"If so soon I'm to be done for
What on earth was I begun for?"

is possibly somewhat applicable to the Congress which has just come to an end in London. The week was a giddy whirl, a constant succession of scientific sessions, committee meetings, lunches, dinners, receptions, etc.; an incessant stream of duties and pleasures until all of a sudden there was a hush, a sort of silence and things had come to an end. One then felt how altogether too short the week had been, and wondered where it had gone to. For at least one full year experienced and earnest men had been working at the plans for the Congress, many hundreds of official letters had been written, views had been freely interchanged, committee meetings had been held frequently, and at last all arrangements were thoughtfully and most admirably completed and the programme was printed. With plans so carefully laid the Congress was like the launching of a ship;—at the right moment a block is knocked from under and the creation of man's ingenuity smoothly and gracefully glides into the stream and the thing so long anticipated becomes a realization. Great credit and unstinted praise have been fully earned by those who had charge of the planning for the Congress, for not only did they consider the general and the obvious, they planned for the least of the minutiæ, and by so doing made secure in advance the success of the meeting.

"Short lived, perhaps, but happy and successful," will be the lasting verdict of those who were fortunate enough to attend the Eighth Quinquennial International Homœopathic Congress, held in London, in the year of our Lord 1911.

The Place of Meeting

For all homœopathists the center of London should be not the Houses of Parliament, nor Westminster Abbey, nor Trafalgar

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Square, nor the British Museum, nor the Bank nor Picadilly Circus, nor any of the world famous localities or institutions of this great pulsating heart of civilization with its more than 7,600,000 inhabitants; it should be none other than the London Homœopathic Hospital, on Great Ormond Street, where one may be assured not only of a courteous welcome, but of the greeting possible to a friend and brother by any of the staff who may be in attendance. It was so planned that the meetings of the Congress should be held only five or six minutes' walk from the Hospital in the Connaught Rooms on Great Queen Street, near Kingsway. Here were found a big vestibule and foyer, where registration desk, information bureau and post-office were located; while up stairs, in addition to the great banquet hall, were to be found a hall for general sessions, and three other rooms of ample dimensions for bureau meetings, two large rooms for commercial exhibits and the display of scientific apparatus, and the President's private office. In short, all the facilities needed for public meetings, scientific sessions, commerical exhibits, lunches, routine business, offices and other accessories were to be found in the Connaught Rooms. And, as to accessibility, the very numerous avenues of travel, both surface and subterranean, the omnipresent and reasonable taxi-cab and the multiplicity of auto-omnibus services make all parts of the vast city accessible.

No wonder, then, that under such favorable and auspicious circumstances the exercises of the week moved along with the ease, smoothness and certainty of exquisitely constructed machinery.

The International Character of the Congress

Has never before been equalled. It was, in fact, by far the most international and truly representative meeting ever held by homœopathists. Delegates were present from India, Italy, Spain, France, Switzerland, Austria, Germany, Belgium, Sweden, Canada, United States and Great Britain.

The Attendance

Was also unprecedented, the total registration reaching 173 active members (two of whom registered only at the last moment).

These two undeniable facts, the international character of the Congress and the large attendance, not only testify to the universal and widespread interest in homœopathy, but furnish a foundation for solid encouragement to all those who believe in the reliability and usefulness of homœopathic principles and practice.

The attendance from America was satisfactory and representative, there being 37 physicians present and registered from the States and two from Canada, Drs. Griffith and Müller, of Montreal. These, with members of their families, made a total of about 50.

A partial list includes Drs. J. H. McClelland, J. B. Gregg Custis, H. F. Biggar, Horace Packard, C. E. Fisher, J. P. Cobb, G. W. Roberts, Hills Cole, H. P. Cole, E. Stillman Bailey, F.

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Honan, W. H. Van den Burg, W. E. Reily, B. H. Ogden, E. Guernsey Rankin, Frank Wieland, A. O. Gordon, and N. Pennoyer.

The Pacific coast was represented by Dr. Byron E. Miller, of Portland, Oregon, and Dr. E. N. Chaney, of Pasadena, Cal.

The states represented were Massachussetts, New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Minnesota, Wisconsin, Missouri, W. Virginia, Iowa, Oregon, California and Florida, besides the District of Columbia. New York, Boston and Chicago led as far as cities are concerned.

Of the Institute Committee on the Congress four of the five were present; Drs. A. E. Austin, Hills Cole, G. W. Roberts and J. P. Sutherland, which, perhaps, speaks well for the fidelity of its members to their responsibilities. The fifth member of the committee met his British colleagues at a special preliminary meeting last year in London in addition to doing his full share of work during the year; and for good and sufficient reasons was prevented from attending the Congress.

New England had a smaller delegation present than should have been the case, but that small band tried to uphold the dignity and reputation of their colleagues. The representatives were: Drs. H. Packard, S. H. Blodgett, Clara E. Garey, Lucy B. Hall, Bertha Ebbs and J. P. Sutherland. It would seem that the majority of these are getting to be "globe trotters," for they were at the California meeting of the Institute last year, and this year, after the Congress, intend to take tours on the Continent.

Optimism, Confidence and Aggressiveness

Formed the keynotes of the Congress, although they were kept well within reasonable bounds, and at no time assumed a prominence that jarred one's sense of the just and appropriate. Pessimists and apologists were, if not entirely absent, at least quiescent. The general opinion seemed to prevail that those anti-homœopathists who had preached the funeral sermon of homœopathy were unreasonably premature. And there was, at least, one great lesson drawn from the meeting, viz., that we have greater cause for gratitude and certainty in that some measure of *truth* is possessed by homœopathy than we have need to apologize for its imperfections and limitations. The propagandistic spirit was nourished and given an impetus which if kept alive and militant, promises well for the future of our Cause.

The Opening Sessions

Began promptly at 10 o'clock A. M., Monday, July 17th, and consisted simply of registration. Even before that hour there had come together a gathering that was noteworthy from the international and professional standpoint. Physicians who had never met, but whose reputations were known to one another, came together face to face, and with or without formal introductions exchanged cordial and fraternal greetings Membership

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of the Congress was denoted by a substantial circular medal displaying on its face a bust of Hahnemann in clear cut relief, with the familiar formula, "Similia similibus curentur," and a border of the words "1911 International Homœopathic Congress." On the reverse side, inside an ornamental wreath, as a border, was the inscription "8th Quinquennial Meeting, London, England, July 17-21, 1911."

Promptly again at 2.30 P. M. (for promptness in opening and dissolving the sessions was a refreshing feature of the Congress) there was a "General Assembly" of all members for purposes of Organization.

The session was called to order by the Secretary of the Council, Dr. Charles E. Wheeler, of London, who nominated Dr. J. H. McClelland, of Pittsburgh, Pa., as the temporary chairman, the motion being duly seconded and carried without opposition. Chairman McClelland called for the nomination of candidates for the office of President of the Congress, and Mr. C. Knox Shaw, M. R. C. S., gracefully and enthusiastically presented, as the choice of the Council, the name of George Burford, M. B., C. M., the well known, energetic executive Senior Surgeon of the London Homœopathic Hospital, and one of the Honorary Vice-Presidents of the Congress held in Atlantic City five years ago. With vociferous unanimity Dr. Burford was elected President of the Eighth Quinquennial International Homœopathic Congress, and with suitable ceremony was conducted to the chair. On accepting the historic gavel and assuming the chair Dr. Burford proceeded with the programme, and conducted the election of the officers of the Congress.

Dr. J. H. Clarke's resignation as Permanent Secretary was presented and regretfully assented to by the meeting. Dr. Sutherland was heartily invited to accept the post thus made vacant, but asked for time in which to consider the question.

Other officers of the Congress were elected, as follows:

HON. TREASURER.

C. Knox Shaw, M.R.C.S.

HON. PRESIDENTS.

Dr. E. Boyer, France (President Société Française d'Homépathique).
Dr. Biggar, U. S. A.
Dr. L. Brasol, Russia.
Dr. J. W. Haywood, Sen., England.
Dr. J. P. Sutherland, U. S. A.
Dr. J. W. Ward, U S. A.

HON. VICE-PRESIDENTS.

Dr. E. S. Bailey, U. S. A.
Dr. C. Bartlett, U. S. A.
Dr. S. van den Berghe, Belgium.
Dr. W. Boericke, U. S. A.
Dr. Cahis, Spain.
Dr. Cartier, France.
Dr. G. Clifton, England.
Dr. Hills Cole, U. S. A.
Dr. Gregg Custis, U. S. A.
Dr. Geo. Royal, U. S. A.
Dr. Nankivell, England.
Dr. A. B. Norton, U. S. A.
Dr. W. T. Ord, England.
Dr. H. Packard, U. S. A.
Dr. N. W. Emerson, U. S. A.
Dr. A. E. Hawkes, Liverpool.
Dr. J. Richey Horner, U. S. A.
Dr. Jordan, Spain.
Dr. M. Jousset, France.
Dr. Klauber, Austria.
Dr. Van Lennep, U. S. A.
Dr. Majumdar, India.
Dr. Schlegel, Germany.
Dr. Stonham, England (President British Homœopathic Society).
Dr. Tessier, France.

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ACTING VICE-PRESIDENTS.

Dr. J. H. McClelland, U. S. A.
Dr. T. W. Burwood, England.
Dr. Edith Neild, England.

HONORARY FELLOWS OF CONGRESS.

The Right Hon. the Earl of Donoughmore.
The Right Hon. the Earl of Dysart.
Sir George Wyatt Truscott, Bart.
Sir Robert Perks, Bart, M. P.
Sir Ryland Adkins, M. P.
Henry Manfield, Esq., M. P., J. P.
Dr. Willmar Schwabe.

The list of officers being duly disposed of the next subject to be considered was the "meeting place for the next International Congress." The United States was suggested as an appropriate place in which to hold the next Congress, but since so doing would interrupt the routine order of procedure, it was finally decided to accept the urgent invitation presented by Dr. Kranz Busch, of Wiesbaden, from the physicians of Berlin, and it was voted to hold the 9th Quinquennial Congress in Berlin in 1916.

Then followed an interesting and stimulating number of the programme, which consisted in the formal recognition of accredited delegates from various homœopathic societies. On being called to the platform to each delegate was extended a cordial greeting and the "right hand of fellowship" by the president, and in response the delegates presented to the Congress the greetings of their respective societies. Among the countries thus represented were Canada, Spain, Austria, France, Russia, Germany, Belgium, Italy, Switerland, and Sweden.

The President's Reception

Concluded the functions assigned to the first day of the Congress. This was held at the "Prince's Galleries," Piccadilly, and proved to be a particularly brilliant and enjoyable social occasion. The gracious and whole-souled hospitality of the hosts, Dr. and Mrs. Burford; the benignant and dignified courtesy of the Right Honorable the Lord Mayor of London; the music by the Band of the Royal Army Medical Corps (by special permission); the valuable exhibition of Hahnemannian relics, including personal letters written by the Reformer and Sage of Cöthen, and various of his possessions; the unique collection of precious stones artificially produced by radio-activity, and certain rare, natural history specimens; the sumptuous collation; with the spacious and beautiful halls decorated by a wealth of oil paintings made an evening more easily appreciated than described, and certainly not easily to be forgotten.

Second Day.

The President's Inaugural Address was delivered before a large and receptive professional and lay audience convened at or shortly after the appointed hour, 10 o'clock A. M. To say that the address was scholarly, forceful, comprehensive, profound, original, logical, convincing and stimulating, is to do it scant justice and pay it faint praise. It would be inexcusable to mar its symmetry and coherence by quoting from it, but it is permissible to say that

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it contains a logical analysis of medicine, past and present, an exposition of the status, duties and possibilites of homœopathy, and that its tone is essentially hopeful and constructive; moreover, that it furnishes an excellent and effective addition to the armamentarium of the homœopathic propagandist. The commendations of the audience were genuine and unmistakable and it was unanimously voted not only to extend congratulations and thanks to the President, but to order the immediate printing and distribution of the address.

After a short recess the Congress reassembled to listen to very brief reports on the condition of Homœopathy in various parts of the world from Dr. Griffith, of Montreal; Dr. Cahis, of Barcelona; Dr. Boyer, of Paris; Dr. Brasol, of St. Petersburg; Dr. Kranz Busch, of Wiesbaden; Dr. S. Van den Berghe, of Ghent; Dr. Mattoli, Jr., of Florence; Dr. Mendé, of Zurich; Dr. Grouleff, of Götenburg, Sweden; Dr. Tuninzing, of Rotterdam; Dr. Majumdar, of Calcutta; Dr. Leverson, of Brooklyn; Dr. E. G. Rankin, of New York; Dr. J. P. Cobb, and Dr. A. H. Gordon, of Chicago; Dr. Lucy M. Harbach, of Des Moines; Dr. Custis, of Washington; Dr. J. H. McClelland, for the A. I. H., and Dr. Arnulphy, of Paris. While the interest of the laity in homœopathy and the conditions of dispensaries, hospitals and journals were reported as being, on the whole, satisfactory, there was a general lament from the Old World over the difficulty of securing recruits to fill the ranks thinned by death, and the impossibility of obtaining facilities for teaching homœopathic principles and practice. Continental speakers referred with envy to the institutions, more particularly the medical schools, made possible by the freedom from governmental interference in the United States, and expressed the conviction that the real strength and the future development of homœopathy have become, in a peculiar sense, the privilege and the grand opportunity of the American homœopathic profession. These reports, though necessarily much curtailed, were enough to stir one's pride that he hailed from a country where such educational and other opportunities were available, and to crystallize one's determination to shirk no share of his professional obligation to extend to the widest possible limits knowledge of the beneficent truths and efficacy of homœopathy.

The Scientific Sessions

On Tuesday afternoon at 2.30 o'clock the essentially scientific part of the programme was given right of way and occupied the time and attention of the Congress throughout Wednesday, Thursday and Friday, when at 5 o'clock P. M. the sections adjourned. It would be impossible in any space less than that to be occupied by the "Transactions" to give an adequate idea of the character and value of these sessions. The papers were numerous, many of them presenting valuable experience and original thought, the majority of them concise and to the point, a few of undue length, but all of them interesting. In the mass they will

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make a volume that will reveal the stability, the strength, the progressiveness and the limitations of modern homœopathy. The papers showed loyalty and adherence to the essential principles enunciated by Hahnemann, and at the same time a liberal mindedness in the discussion of points on which in such an assembly there was destined to be more or less wide divergence of opinion. Naturally there were present all shades of opinion, from the surgeon and mechano-therapist, pure and simple, and the "specialist" who rarely makes use of pharmaco-therapy, to the habitually "low potency" prescriber and the "extremist," who declares that "we must let the disease alone and go for the patient," and that "the *most dangerous thing* you can do is to give the indicated remedy high." Yet there prevailed a true spirit of amity and good fellowship and a determination to co-operate harmoniously and strenuously in the effort to "get at the truth." It is this sort of thing that constitutes the real value of national and international congresses, as well as makes for the welfare of mankind.

Unfortunately perhaps the discussions as a whole will not be included in the "Transactions" because to do so would be to expand undesirably the size and prohibitively increase the expense of the volume, there being no guaranteed fund upon which to draw for its publication.

The scientific work of the Congress was divided into thirteen (13) "sections," which necessitated three and sometimes four sections meeting at the same hour. This proved a veritable "embarrassment of riches," and at least one bureau, four of whose five essayists were present and prepared to read their papers, voted to accept the contributions "as read" and adjourned to participate in the work of more attractive sections. Evidently one person could not be cognizant of all that was going on, but to refer to a few things that were notably attractive mention might be made of the consideration of certain heart remedies, Iberis, Cratægus, Convallaria and Cactus. These remedies were definitely differentiated, and the indications for their use clearly given with substantial experience to corroborate them by their exponents. The opposition declared that the "indications" were mainly "clinical," and insisted that the remedies had never been adequately proven; and the ultimate opinion was that no more useful work could at present be undertaken than the thorough proving and reproving of these four drugs according to the accepted methods of the present day.

Another "remedy" enthusiastically endorsed by its advocates is "Isotonic plasma," or, since the phrase may be new to the majority of Americans, specially obtained "sea water" reduced to the specific gravity of the blood and sterilized. This is favorably used only by the hypodermatic method. The technique of its preparation and use has been perfected by M. Quinton, of Paris, under whose supervision a generously equipped dispensary has been opened in London for the treatment of out-patients. M. Quinton has used "Isotonic plasma" for some time, apparently

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with remarkable results in Paris, and our English confreres are evidently quite converted to the idea of its use. But here again in spite of astonishing clinical endorsements its *modus operandi* is purely theoretical, and its use is empirical, and whether it acts as a "special food" or as a "stimulant to the reactive powers" has to be determined. Unfortunately no pathogenetic results have as yet been obtained, and until this is done, as Hahnemann surely pointed out, its therapeutic relationship will remain an enigma.

The subject of "Vaccine Therapy" occupied a full forenoon. "The Protective Substances of the Blood," vaccines, sera, nosodes were discussed in detail and their relationship to the homœopathic principle was very satisfactorily set forth. The difference between prophylactic and curative applications was not overlooked and the session was unquestionably of high scientific value.

No medical meeting of any moment would be even approximately thorough without a discussion of Arterio-Sclerosis and its remedial possibilites. The subject was, therefore, discussed from an all-around standpoint, but the item of chief concern connected with it was the exhibition and demonstration of the various apparatus most in favor for the estimation of "blood pressure." A new thing in this field is Dr. Oliver's "Auscultatory Tambour" as an aid in the early detection of the return of the pulse wave and as a means of differentiating the systolic and diastolic pressure. It consists essentially of a delicate "phonendoscope," which is applied to the flexor surface of the arm just below the elbow in conjunction with the use of the sphygmomanometer. By it the systolic wave can be heard a few beats before the pulse can be palpated at the wrist. It is certainly an adjunct to our "methods of precision."

A very spectacular thing was the exhibition of Pathé Frères' "Ultra-Microscopic Cinematograph Pictures" on Thursday afternoon, Dr. G. Hare, Pathologist of the London Homœopathic Hospital, acting as demonstrator. There were graphically exhibited the peristaltic action of the stomach (under X-ray observation), the formation of "Platelets or Blood-Dust," the "action of Water on Blood-Discs," the "Amœboid Movements of a Leucocyte" (a difficult thing to get and demonstrate on account of the sluggish action), the "Spirocheta Pallida," the "Phenomenon of Agglutination" and the wriggling activities of the micro-organisms of "Sleeping Sickness" and "Relapsing Fever." The "show" was highly successful as a diversion and as an instructive entertainment.

Special mention should be made of Dr. Charles E. Wheeler's public lecture, Thursday evening, on "Homœopathy in Its Relation to Modern Science and the State." Here, again, quotation would be out of place, but our readers are urged to benefit themselves by carefully reading the Address as soon as its printed form is accessible. Dr. Wheeler's capacity and indefatigable industry, his enthusiasm, keen perception and quick grasp of a situation bid fair to raise him to high prominence in the esteem of his colleagues,

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and to give him a world-wide reputaton as an upholder and defender of homœopathic principles and practice.

The most sensational contribution to the Congress as well as one of the best instances of original "Research Work" presented was Dr. E. Stillman Bailey's demonstration of the presence of radio-active material and energy in the 12, 13 and 14 decimal triturations of American "Pitchblend" containing "Uranium Products" and at all events positively increasing in radio-activity with the higher triturations. Of this the photographs exhibited by Dr. Bailey are convincing. The lower triturations only have had therapeutic tests, but in these they seem to possess great remedial properties. Dr. Bailey and his colleague, Dr. Blackmarr, should be encouraged to continue their work, to put their experiences, their experiments, and their full technique upon record, and at the earliest possible moment to give the profession and humanity the benefits of what promises to be a wonderful discovery.

And so the week sped on to the

Final Session

On Saturday morning. Undaunted and apparently untired the members assembled in a large and still representative gathering for the transaction of appropriate business.

After certain preliminaries Dr. J. P. Sutherland was elected Permanent Secretary with Dr. Charles E. Wheeler as Associate Permanent Secretary of the International Homœopathic Congress.

It was voted to adopt President Burford's recommendation to organize an International Homœopathic Council to represent the various national homœopathic bodies and to co-ordinate homœopathic interests throughout the world. The duties of this Council were outlined, and the president authorized to appoint its members for the ensuing five years.

A vote of congratulations and thanks was extended to Mr. C. Knox Shaw, treasurer of the Council and honorary treasurer of the Congress, for performing with such complete success the onerous duties of his position; and to Dr. C. E. Wheeler, secretary of the Council and acting secretary of the Congress, for his unstinted devotion to and unceasing activities in behalf of the interests of the Congress, as the two individuals who, without invidious distinction, might be selected for such an expression of thanks.

An especial vote of thanks, appreciation and confidence, was extended to our worthy president. In justice and without exaggeration, it may be said of President Burford that he was a decisive, executive, inspiring and controlling force; that he was pervasive, persuasive and encouraging; that he was keen-sighted, intuitive and patient, and that he kept a masterful hand on the helm throughout the week.

A vote of thanks, not perfunctory but sincere, was extended to Sir George and Lady Truscott for their most generous and

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hospitable entertainment of the Congress members and friends at their home on Tuesday evening. It should be said that Sir George Wyatt Truscott, who has twice been Lord Mayor of London, is the president of the British Homœopathic Association, and a most earnest and influential lay champion of the cause of homœopathy. After the transaction of other routine business the Congress formally and finally adjourned.

But the story has not been told. Scarcely has it been begun, because other and memorable things went to the making of this the most brilliant and successful of our international congresses, more things than will ever be recorded. Mention at least ought to be made of the LONDON HOMOEOPATHIC HOSPITAL'S recent enlargement, by means of which its capacity has been increased to 170; of its Nurses' Home which is being completed on the opposite side of Great Ormond street; of the reception tendered the Congress on Wednesday afternoon by the hospital authorities; of the very praiseworthy pathological, scientific and educational exhibit in one of the large wards of the hospital gotten up through the energy of Dr. Neatby, and Dr. Hare, the pathologist. But these things alone would mean an additional chapter to an already long story.

Special mention ought to be made of the sectional meeting at Chalmers House, Russell Square, when many interesting papers on the status of homœopathy in the United States, and several valuable reports were presented by eminent members of the American profession. Also of the lunch given at Chalmers House, the headquarters of the British Homœopathic Association, to the American Honorary Vice-Presidents of the Association.

Inadequate mention has been made of the Reception tendered the Congress by Sir George and Lady Truscott, but no reference has been made to the courtesy of Mr. Henry Manfield, M. P., in entertaining at lunch in the Houses of Parliament such members of the Congress and their friends as could accept his generous invitation.

The lavish official Banquet on Friday evening at the Connaught Rooms, as the big, all-inclusive, formal social function of the Congress, needs a clever pen to fitly describe. To say there were more than twenty-five numbers on the post-prandial programme shows the desire of the Committee of Arrangements to make the occasion "international."

And there was the hurriedly-gotten-up Anglo-American lunch at which twenty-two Americans (one being absent) entertained twenty-three British colleagues and one Parisian. It was at this time that the sentiment "Hands Across the Sea," proposed by Dr. Burford, at Atlantic City, was modified by an inspiration of Dr. Biggar's to "Hands and Hearts Across the Sea."

Too much could not be said in appreciation of the many acts of kindness, the special courtesies and hospitalities extended to visiting members by their British hosts. To mention Mr. C. Knox Shaw and Drs. Burford, J. H. Clarke, E. A. Neatby, J. Galley

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Blackley, E. Petrie Hoyle, James Johnstone and Roberson Day is not to mention all who have laid their guests under deep obligations to them; but it is hoped that these matters have been properly treated by an abler pen.

A final word may be permitted in recognition of the many excursions which were planned for Saturday afternoon following adjournment: To Tunbridge Wells; to St. Leonards-on-Sea, Battle Abbey and Buchanan Hospital; up the Thames by private boats; and a motor-car excursion of between 50 and 60 miles through historic scenes not to be duplicated, given through the courtesy of several physicians who loaned their cars for the purpose.

A good time? Well! Well! !

The sun sets in a golden glow over the Eighth Quinquennial International Homœopathic Congress.

J. P. S.

BOOK REVIEWS

Materia Medica. With Comparisons. By Willard Ide Pierce, M.D. Philadelphia, Boericke & Tafel. 1911.

The arrangement of this book is somewhat unique. It is divided into two sections; the first consisting of Comparisons of various drugs somewhat in the nature of a repertoire. The bulk of the work, however, consists of chapters upon Materia Medica arranged in a manner suggestive of that of Hughes' "Pharmaco Dynamics." Drugs are considered alphabetically and without suggestion of their natural relations. Without doubt, the articles upon the various drugs are good. If, however, they are more important over those that we already possess in other books must depend upon the individual student, as that which will appeal to one sometimes will not be appreciated by another.

Suggestive Therapeutics; Applied Hypnotism; Psychic Science. A Manual of Practical Psychotherapy, designed especially for the General Practioner of Medicine and Surgery by Henry S. Munroe, M.D., Omaha, Nebraska. Third Edition, Revised and Enlarged. St. Louis. C. V. Mosby Company. 1911.

An early edition of this book has already received somewhat favorable attention from the Gazette. The present edition is probably more complete than were the two preceding, including as it does many of the new phases of the question and much of the results of more recent investigation. Possibly the same criticism might be made here as would perhaps apply to many other specialties, that is that the form of "Suggestive Therapeutics" is made to cover a very wide field in some parts of which its efficiency has not yet been absolutely demonstrated. The field of Mental Diseases and their treatment is at present so uncertain that any dogmatic statements concerning material allied to this subject is unwise. Judging from personal experience the reader of this book will find it pleasant to peruse and one from which he can cull many important points without, perhaps, being compelled to accept everything therein stated.

A Manual of Clinical Diagnosis by Means of Laboratory Methods. For Students, Hospital Physicians, and Practitioners, by Charles E. Simon, B.A., M.D., Professor of Clinical Pathology and Experimental Medicine at the College of Physicians and Surgeons; Pathologist to the Union Protestant Infirmary and the Hospital for the Women of Maryland; Clinical Pathologist to the Mercy Hospital of Baltimore, Maryland.

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Seventh Edition, Enlarged and thoroughly Revised. Illustrated with 168 Engravings and 25 Plates. Lea & Febiger; Philadelphia & New York. 1911.

The reviewer has recently expressed both in the Gazette and elsewhere his belief, that for an all-round general guide to Clinical Diagnosis by laboratory methods we do not possess in this country at least a book that will surpass that of Simon's, and it is a question whether anyone will equal it. It has been our friend and very close companion for more than ten years, and has, more frequently than we can state, proven a guide to whom we could look in time of perplexity. A new volume, the seventh, has just appeared. It we believe fully justifies as favorable an opinion as we have held of its predecessors.

The new edition is larger than the preceding ones, and differs from them quite materially in arrangement. It is divided into two general divisions, the major being devoted to the technical portion of the work; the minor to the interpretation of the results, the so-called clinical portion.

A very excellent description of the present status, technic, and value of the Wasserman reaction appears for the first time.

On the whole the book is one that we can thoroughly and warmly recommend.

Progressive Medicine. Lea & Febiger, Philadelphia and New York. A quarterly digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia, assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia; Ophthalmologist to The Frederick Douglass Memorial Hospital. Volume II, June, 1911. Hernia — Surgery of the Abdomen, Exclusive of Hernia — Gynecology — Diseases of the Blood. Diathetic and Metabolic Diseases. Diseases of the Spleen, Thyroid Gland, Nutrition, and The Lymphatic System — Ophthalmology.

In the June number of this quarterly, the first topic which we have learned to look for is that of Cancer of the Uterus, by Clark. For the past several years this has been a topic unusually well covered, in that it has considered the present status of cancer research as a whole, and not necessarily to the uterine cavity. Another subject of particular interest at the present time is that of Myxedema and Cretinism. Others are Banti's Disease, Diabetes Mellitus, and Exophthalmic Goitre.

These are all well treated, and will all well bear studying.

The Blood, and Its Third Anatomical Element. Application of the Microzymian theory of the living organization to the study of the anatomical and chemical constitution of the blood and to that of the anatomical and physiological causes of the phenomena of its coagulation and of its other spontaneous changes, by A. De Champ, formerly professor in the Medical Faculty of Montpellier (France), corresponding member of the Academy of Medicine, etc. Translated from the French by Montague R. Leverson, M.D., of the Baltimore Medical School and M. A. and Ph.D. of the University of Gottingen. Philadelphia, Boericke & Tafel, 1911.

A satisfactory review of this work is somewhat difficult even to one rather familiar with the various features of modern bacteriology and hematology. If we consider as proven the statements of the author our view of this subject must be revolutionized. Several serious accusations are made against Pasteur for appropriating to himself the discoveries that should have been credited to De Champ. The present is no place for a consideration of the character or otherwise of such a particular. We scarcely think, however, that the book will add materially to the value of our present scientific studies.

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The Transactions of the Homœopathic Society of Ohio. Proceedings of the 47th annual session of the Homœopathic Medical Society of the State of Ohio. Held at Hotel Hartman, Columbus, May 9 and 10, 1911. Edited by R. O. Keiser, Secretary.

The excellent photograph of the genial president of this society, Dr. F. H. Staples first attracts our attention as we open this book. We find that it consists of about 300 pages of papers and discussions that have been presented to the society during the past year. Many of the papers will be found to be of unusual interest.

The International Homœopathic Directory, 1911-1912. Edited by J. Roberson Day, M.D., and E. Petrie Hoyle, M.D., (U. S. A.) New Enlarged Series. Sixteenth and Seventeenth Years of Publication. "Yesterday" is lost; "To-morrow" never comes; therefore, when asked to send particulars to the next directory, please remember that "To-day" is your last chance. London Homœopathic Publishing Co., 12, Warwick Lane, E.C. Price 4s. net.

Differing very materially from the preceding somewhat insignificant editions of this international work the present one is a distinct pretentious effort. It consists of a work of 300 pages in which in addition to a full English directory and somewhat less completed one of the Continent will be found a complete list of the members of the American Institute of Homœopathy with their addresses. For the first time the United States is adequately represented. There is included as well a list of the Hospitals and Pharmacies.

Yellow Fever. A compilation of various publications. Results of the work of Major Walter Reed, Medical Corps, United States Army, and the Yellow Fever Commission. Presented by Mr. Owen. Washington, Government Printing Office, 1911.

This consists of a compilation of the various publications that have appeared as the result of the medical work of the Yellow Fever Commission in Cuba. It contains a number of articles by Dr. Reed and Dr. Carroll, and is a good history of the progress of this research.

The Treatment of Children. William Boericke, M.D., Professor of Materia Medica and Therapeutics at the Hahnemann Hospital College of San Francisco. Author of "A Compend of the Principles of Homœopathy," "Manual of Materia Medica," etc. Second Edition. San Francisco, Boericke and Runyon Company, 1911.

This little book of about 250 pages will be found to contain much that is of primary importance to the mother in her treatment of her children. It describes the various phenomena incident to the first month of the infant's life, the methods of feeding the infant, and the various diseases incident to the development of the child. It also describes in a very satisfactory manner special indications for homœopathic remedies, and that which is more important still the various common diseases, and the simple methods of treatment, including various remedies used by Homœopaths.

The book seems to be one well suited to the use of the young mother.

The Golden Rules of Diagnosis and Treatment of Diseases. Aphorisms, observations and precepts on the method of examination and diagnosis of diseases, with practical rules for proper remedial procedure, by Henry A. Cables, B.S., M.D., professor of Medicine and Clinical Medicine of the College of Physicians and Surgeons, St. Louis; Consultant at Jefferson Hospital, St. Louis; formerly House Physician at Alexian Brothers' Hospital, St. Louis; member of the American Medical Association, Illinois State Medical Society, etc. C. V. Mosby, St. Louis, 1911.

This is another of the Golden Rule Series that is being brought out by this publishing house, and it is one that deals with one of the essentials of medicine.

In rather carefully studying it, our first attitude of inattention was changed to one of distinct interest. While somewhat difficult to read continuously it

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certainly contains a large amount of very practical information. It contains also the following statement that should be of interest to Homœopaths: "It can be said that quinin is an exceedingly useful friend in small doses in certain affections, because of its power of increasing or calling out the body defenses, but in large oft-repeated doses it will have a disastrous effect, causing paralysis of the body defense by destroying the ameboid functions of the cells."

In such a work can always be found statements to criticise. In view, however, of our present knowledge of the injurious action of pure peroxide upon the teeth, we are somewhat surprised to note that this solution is recommended as a throat spray in certain conditions. Also, while we are strongly of the belief in the great value of diphtheria antitoxin we are somewhat surprised at the statement that it is absolutely harmless. This satement being made without any qualification.

Upon the whole, however, the book seems to be a distinctly valuable one.

THE MONTH'S BEST BOOKS.

Diseases of the Lungs and Pleuræ. Powell & Hartley. $6.000. P. Blakiston's Son & Co.
Surgery. Stewart. $4.00. P. Blakiston's Son & Co.
Spirochetes. Bosanquet. $2.50. W. B. Saunders Company.
Tropical Medicine. Daniels. $4.00. P. Blakiston's Son & Co.
Mosquitoes. Ross. $1.75. P. Blakiston's Son & Co.
Modern Surgical Technique. Pearse. $4.00. Wm. Wood & Co.
Food and Feeding in Health and Disease. Watson. $4.00. Wm. Wood & Co.
Practical Cystoscopy. Pilchur. $5.50. W. B. Saunders Company.
Clinical Symptomatology. Hick Hecht. D. Appleton & Co.
Diseases of Infants and Children. Rechrah. $2.50. W. B. Saunders Company.
Diseases of the Stomach and Intestines. Reed. $5.00. E. B. Treat & Co.
Surgery. Stewart. $4.00. P. Blakiston's Sons & Co.

PERSONAL AND GENERAL ITEMS.

The London Homœopathic Hospital has suffered a severe loss in the death of Earl Cawdor, who has for many years been identified with the welfare of that institution, in the position of treasurer. Through his energy a total amount of over $200,000 has been collected for the various departments during the past seventeen years. As a result of this the Hospital is at present one of which homœopaths throughout the world may be proud.

The Secretary of War has recently set an example to the men under him in submitting voluntarily to anti-typhoid vaccination.

Columbia University has received from an anonymous donor a gift of $33,000 to be applied to the Bull Memorial Surgical Research Fund.

Dr. R. N. Alcock of St. Mary's Hospital, London, England, has recently been appointed to the vacant chair of Physiology in the Medical School of McGill University.

It is announced that the trustees of the University of Galveston, Texas, have established ten scholarships to the value of $36 a month for eight months. These scholarships are open to young women who desire to study in the Medical Department.

The corner stone of the new library of the State Medical Society of Rhode Island was laid on June 1 in the City of Providence. Appropriate

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addresses were delivered by Dr. Frank L. Day of Providence, and Dr. G. A. Blumer of New Haven, Conn.

Yale University has received the sum of $20,000 from Professor F. E. Loomis of London for the purpose of original research in the study of various diseases.

NEW MEDICAL BILL FOR PENNSYLVANIA. — The Gerberich bill (homœopathic) abolishes the State medical council and creates the bureau of medical education and licensure in the department of public instruction, to consist of five appointed physicians at $1,500 per year each, and the superintendent of public instruction and commissioner of health, who are each to get $500 per year.

The bureau will have full power in examining applicants for licenses as physicians of any medical school, and can revoke licenses for causes. Pharmacy, dentistry and osteopathy are specially exempted from its provisions, while other schools of healing also do not come within the purview of the act. The act becomes effective January 1, next, but the members of the bureau are to be appointed by the governor before September 1.

Dr. Harry Weaver, of the Hahnemann Medical College of Philadelphia, has been elected president of the Homœopathic County Medical Society of Philadelphia.

Dr. Theodore L. Adams, Professional Building, Philadelphia, announces that since July 1 he has had associated with him Dr. H. Burdsall Adams, formerly Chief of Staff of the Metropolitan Hospital, New York City, a graduate of Hahnemann Medical College of Philadelphia.

Dr. T. B. Bradley, of Philadelphia, has been appointed, with Dr. M. M. Everhard, of Philadelphia, consultant in diseases of the stomach, Hahnemann Hospital, Philadelphia. Dr. T. L. Adams, of Philadelphia, has been appointed consultant in rectal diseases in the same hospital.

Dr. E. W. Horn, of Bryn Mawr, Pa., has been appointed lecturer on hygiene at the Hahnemann Medical College, Philadelphia.

Dr. D. W. Straub, of Bethlehem, Pa., has been elected president of the Lehigh Valley Homœopathic Medical Society.

Dr. W. M. Sylvis, of Philadelphia, has been elected secretary of the Homœopathic Medical Society of the County of Philadelphia.

BUSINESS FOR SALE. —

By replying to this notice, the right man can be put into communication with a business already established, which will pay him from $5000 to $10,000 a year. The present incumbent wishes to change for business reasons and will sell a fully equipped place and introduce purchaser to clientele. For further information address "X. Y. Z.," care New England Medical Gazette, 422 Columbia Road, Boston, Mass.

FOR SALE. — The Medical Library of the late Dr. David Foss. Publications date from 1810 to 1903. Send to Ernest Foss, Newburyport, Mass., for list.

Dr. C. E. Fisher on his way to London to attend the International Homœopathic Congress was called upon to operate upon a boy for acute appendicitis in mid-Atlantic on board the steamship "Megantic." According to the last reports the patient was doing well.

According to the will of the late Charles F. Webber, of Brookline, the Perkins Institution for the Blind will receive three-fourths of his estate after the death of a life beneficiary.

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The best wishes of the Gazette and at the same time its feelings of envy accompanied Dr. A. B. Norton on his long tour through South America. On the trip he will visit all of the important countries and cities, returning by way of Panama.

Mr. T. A. Earl, son of Dr. George H. Earl, of Boston, was recently married at Winter Harbor, Maine, to Miss Myra Eliza Smith.

We are glad to report the successful result of the operation performed upon Dr. H. V. Halbert, the well-known Chicago consultant.

Dr. A. M. Duffield who has for a number of years been engaged in the practise of medicine in Citronelle, Alabama, has removed to Huntsville, his former location, where he enjoyed a very extensive practise.

Announcement has recently been made of the further donation to McGill University by Lord Strathcona of $100,000 for the purpose of completing the new medical buildings.

It is stated that the International Animal Protection and Anti-Vivisecting Congress which has recently been in session in Copenhagen was refused the patronage of King Frederick on account of his belief that it was opposed to scientific methods of research. For similar reasons all the members of the Cabinet also refused to become patrons.

Dr. Horace Packard is spending the summer at Bad Reichenhall, and expects to return home on or about October 10.

By the will of the late William Taggart Piper, of Cambridge, the Massachusetts Homœopathic Hospital receives $5,000, the Avon House of Cambridge an equal amount, and the Cambridge Visiting Nurse Association $1,000.

The Boston Medical and Surgical Journal reports the death of William Filtz, who died in Baltimore recently at the age of nineteen years, weighing 650 pounds.

Dr. C. S. Gleason has been spending the months of July and August in Europe and expects to resume his practice in Wareham, Mass., early in September. He writes of a delightful trip and perfect health.

Dr. Bertha L. Cameron, class of 1911, B. U. S. M., has opened offices at 346 Granite St., Manchester, N. H.

Boston saw a short time ago its first true case of cholera for many years past. This case was found in the North End, and thanks to a very energetic enforcement of the rules by the Board of Health no further infection occurred. The Marine Hospital service sent two representatives from Washington to Boston for the purpose of observing the case, and also certain other suspicious ones.

Dr. W. H. Watters was the guest of the Mercer County Homœopathic Medical Association at its recent meeting at Trenton, N. J., at which time the subject of "The Use of Vaccine in Typhoid Fever" was freely discussed. The discussion of the paper was opened by Dr. George F. Laidlaw, of New York.

Dr. Ehrlich, now so well-known by his introduction of Salvarsan, has recently been appointed active privy councilor by the Kaiser with the title of Excellency. He is one of the few members of the medical profession thus honored, and is particularly significant as the present recipient is of the Jewish persuasion, a race against which much discrimination has been made in this same nation.

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Two changes in the faculty of the Medical School of Maine have been recently made that are worthy of note. These are the resignations of Drs. F. H. Gerrish, and Alfred Mitchell. Dr. Gerrish is probably the best known of any of the faculty of the Bowdoin school, and his loss will probably be most widely felt.

We learn that the sum of $31,700 was recently raised in Biddeford and Saco within nine days for the purpose of building and furnishing the Webber Hospital of the former city.

Mrs. Samuel W. Bowne of Poughkeepsie, N. Y., has made a gift to that city of $50,000 for the purpose of erecting a hospital for Tuberculosis.

Dr. Victor A. Elsworth, of Boston, has been appointed delegate to the International Congress on Alcoholism to be held at the Hague in September.

Mr. Abraham Abrahams has left a bequest of $50,000 to the Jewish Hospital of Brooklyn, N. Y.

Dr. Burt G. Wilder, the well-known emeritus professor of neurology of Cornell University, has recently moved to Brookline, Mass.

Dr. Victor G. Heisert, of the Philippines, is the recipient of the degree of B. Sc., from the Jefferson Medical College, in recognition of his excellent work in the colonial possessions.

The Massachusetts General Hospital is a beneficiary to the extent of $50,000 by the will of the late Nathaniel Thayer of Boston. The Boston Lying-In Hospital also receives a bequest of $10 000.

Females in Great Britain: The latest census shows that in Great Britain the number of females exceeds the number of males by 1,178,317. The soldiers and sailors abroad are not counted in this list.

Thanks to the recent crusade for a sane fourth of July the last celebraton of that date in Boston was notable for the small number of injuries received from explosives. Only two minor injuries were reported this year compared with thirty-three in 1910, and 117 in 1909.

As far as is reported the number of deaths this year were 38, against 44 in 1910, and 62 in 1909 in the entire country.

On account of the local prejudice in Malta against the term "Malta Fever" the name has finally officially been changed by the Paris Academy of Medicine to Mediterranean Fever.

The old Boston Emergency Hospital, later known as the Grace Hospital, situated on Kingston St., has lately been taken over by Tufts Medical School for the period of one year. The authorities are now making an appeal for funds for its support. If the school continues its association with the hospital it should mean a greatly needed advance in the clinical facilities of that institution.

On account of the unprecedented hot wave that visited Boston during the early part of July the total death rate for the city was the highest on record. For the week ending July 8 there were 375 deaths, and for the next week 394. These may be compared with corresponding weeks of the preceding year when the number was 220, and 221.

Lafayette College has recently conferred the honorary degree LL..D., upon Dr. W. G. Davis, Professor of Orthopedic Surgery in the University of Penn. Dr. P. H. Musser also of the University of Pennsylvania has received the same degree from Brookyln and Marshall College.

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An anonymous gift of a large sum of money has been made by a Boston philanthropist for the purpose of erecting, equipping, and endowing a memorial hospital at Tuskegee Institute. This hospital will be named after John A. Andrew.

The Presbyterian Hospital of New York will build and maintain a convalescent home with the bequest of $100,000 recently received from the late Adele A. Dortic.

The number of cases of typhoid fever occurring in Little Rock, Ark., has become so great than an appeal has been made to the Public Health and Marine Hospital Service at Washington.

According to the Boston Transcript of August 29, Hahnemann Hospital and the Presbyterian Hospital of New York City are each to receive $1,146,826 by the terms of the will of Mitchell Valentine, a Westchester County millionaire who died two years ago.

WANTED, by a woman physician with fine hospital experience, an institutional position. Would serve as assistant physician or locum tenens. Address "Y. E.," care New England Medical Gazette.

THE BRIGHAM HOSPITAL.

Work has finally been started upon the new Brigham Hospital that was provided for by the will of the late Peter Bent Brigham. For this purpose a sum of $5,000,000 was left, and it is now planned to erect an institution consising of fourteen buildings that will be closely associated with the Harvard Medical School, both from the standpoint of location and from that of administration.

NEWS FROM UTICA.

The Utica Homœopathic Hospital has for some time been oppressed by the burden of a debt amounting to $11,000. Recent energetic efforts have been instituted to remove this, and as a result $10,000 of the desired amount has already been subscribed.

ROTCH INFANTS' HOSPITAL.

The new Rotch Memorial Infants' Hospital that is being erected upon the grounds of the Harvard Medical School has now nearly reached completion. This building has a frontage of 120 feet, and is three stories in height. It is planned to accommodate about twenty-five patients, and is provided with a surgical ward, lecture room, an operating room, and several private rooms.

WANTED: BACTERIOLOGIST AND PATHOLOGIST (MALE) FOR PHILIPPINE SERVICE.

The United States Civil Service Commission announces an examination to secure eligibles from which to make certification to fill vacancies as they may occur in the position of bacteriologist and pathologist in the Bureau of Science, Manila, P. I., at a salary of $2 000 per annum, and vacancies requiring similar qualifications as they may occur in the Philippine Service.

It will not be necessary for applicants to appear at any place for examination. Their eligibility will be determined upon the evidence furnished in connection with application and examination Form 2 concerning their education, training, experience, and fitness. Applicants may, if they desire, submit with their applications copies of theses or publications which have been prepared by them.

QUALIFICATIONS.—The qualifications desired of applicants for these positions are as follows:

(*a*) That they be graduates in medicine. It is preferred that they

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shall have received a doctor of philosophy degree (or have had an equivalent training) from a first-class institution.

(*b*) They must be trained in bacteriological laboratory work and must have good technique.

(*c*) They must have a good thorough fundamental knowledge of pathological anatomy.

(*d*) They must have a knowledge of and training in immunity and serum therapy.

(*e*) They must be young, healthy, and energetic, and capable of doing research work; in fact, they should have all the qualifications needed by a first-class laboratory research worker.

Each applicant for these positions will be required to submit with his application a photograph of himself, taken within the past three years, as a means of identification in case he receives appointment. An unmounted photograph is preferred. The name and date of examination, the competitor's name, and the year in which the photograph was taken should be indicated on the photograph.

Applicants must have reached their eighteenth but not their fortieth birthday on the date of the examination.

This examination is open to all citizens of the United States who comply with the requirements.

This announcement contains all information which is communicated to applicants regarding the scope of the examination, the vacancy or vacancies to be filled, and the qualifications required.

Applicants should apply at once for application and examination Form 2, either to the United States Civil Service Commission, Washington, D. C., to the secretary of the board of examiners, post office, Boston, Mass., Philadelphia, Pa., Atlanta, Ga., Cincinnati, Ohio, Chicago, Ill., St. Paul, Minn., Seattle, Wash., San Francisco, Cal.; customhouse, New York, N. Y., New Orleans, La., Honolulu, Hawaii; old customhouse, St. Louis, Mo.; or to the chairman of the Porto Rican Civil Service Commission, San Juan, P. R. No application will be accepted unless properly executed and filed with the Commission in complete form, with the material required, prior to the hour of closing business on September 23, 1911. In applying for this examination the exact title as given at the head of this announcement should be used in the application.

Issued August 23, 1911

FURTHER IMPROVEMENTS AT HAHNEMANN.

Contractors and hosts of workmen have been busy during the summer in converting old Hahnemann into a new and modern Hahnemann. The Constantine Hering Laboratory of Pharmacology and Therapeutics has been finished, and active work has been going on under the able leadership of Dr. Oliver S. Haines and Dr. E. L. Nesbit, guaranteeing teaching of the materia medica pura and perpetuating it for all time.

The Hering Clinical Laboratory, situated in the hospital and in close contact with the hospital wards, has been finished, and will be open to the returning students in September. The laboratory is perfect in every respect. Here each student has his desk and locker, which is practically his pathological home, for in the same laboratory are complete outfits for the examination of blood, urine, sputum, bacteria, etc.

This same plan has been followed out in the dispensary, which has been thrown open to the juniors as well as the seniors. Here each individual will examine and treat patients under the supervision of the teacher, while similar groups work along lines corresponding to ward classes in the hospital.

Work is as well upder way to transform the library into a modern reading or study room and working library for student and physician. One-third of the room will be occupied by two tiers of steel book racks with glass door between librarian's desk, and complete card index. The remaining two-thirds

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of the room will be furnished with tables, comfortable chairs, good light and a file of periodicals, which has been made possible through the subscriptions received from friends and teachers of the college.

The laboratory of pharmacy, under the present library, is to be used for filing of those reference publications only occasionally wanted, being all properly indexed and easy of access; the College possessing a complete file of every homœopathic journal, and probably the work of every homœopathic author.

Work is almost completed on the transforming of lecture room No. 2 into two floors, the lower one of which will serve as a laboratory of physiology, which will, as well, contain a private laboratory of physiology, which in the past has been obliged to double up with histology.

The upper floor will give half again as much floor space for the museum, the monument of over forty years' of hard labor by Dr. Rufus B. Weaver.

The old museum has been cut into two floors, the former useless gallery being added to the pathological department, having a skylight covering the entire floor space. This department, under charge of Prof. Sappington, will now have a finely equipped pathological laboratory, without the necessary use of artificial light anywhere.

The lower floor of the museum will serve as a laboratory of pharmacy, which has been in the basement; so that the entire College has undergone a decided change, and will be quite a revelation to the students on their return, all due to the indefatigable efforts and ceaseless energy of the dean, Dr. W. B. Van Lennep.

A NEW CANCER RESEARCH INSTITUTE.

The Cancer Hospital of London, England, has just opened a new research institute in connection with the other buildings. This new structure is three stories in height, and contains ten separate laboratories, each thoroughly equipped for their special work. On the ground floor will be found the administrative offices, the directors' laboratory, and a large library. On the floor above are the main research laboratories, while on the top floor the experimental work of the institution will be conducted.

HOW TO KILL A FLEA.

It would seem, on the whole, that the surest way to kill a flea (and be able to testify under oath that he is really defunct) would be to place him upon one of those impenetrable plates used in naval warfare and confine him there by means of cables fastened to each of his several legs; then to train upon him (from as near a distance as would be feas'ble) an irresistible projectile from one of those thirteen-inch guns. If the flea should not (by reason of the phenomenal spring we have mentioned) break away and get itself out of range, we might fairly assume that its destruction had thus been consummated. That is, considering the unerring aim for which the American navy is so justly famous; if the experiment were tried in the Cuban or the Patagonian navy we should hardly care to guarantee the result. — Dietetic and Hygienic Gazette.

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THE NEW ENGLAND
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ORIGINAL COMMUNICATIONS.

THE ELECTRICAL TREATMENT OF INFANTILE PARALYSIS. *

By Frank C. Richardson, M.D.,
Professor of Nervous Diseases, Boston University.

The confirmation of the infectious theory as to the origin of Infantile Paralysis and the establishment of the fact that the propagation of virus is ultimately by way of the blood through the anterior spinal arteries and their terminal branches, has done much to modify the therapeutics of this affection.

It is easy to understand with how much more confidence we can attack a disease, the characteristic lesion of which is simply the ending of an infectious process primarily vascular, than we could when believing, as Charcot taught, that the disease was from the outset systematized and defined in the anterior horns.

Demonstration of these etiological facts encourages us to expect much from the future progress of curative and preventive sero-therapy, but in the meantime we must make an effort to limit the disorders engendered by the anatomic lesion and combat akinesia and atrophy. For this purpose the neurologist must rely largely upon the potent influences to be derived from the practice of modern electrology.

Notwithstanding the recent discussions on the value of nerve and tendon transplantations it does not seem that surgical orthopædics has yet solved the problem of functional reparation in infantile paralysis; indeed, the conviction is deepened that muscular exercise electrically provoked remains the only means of accomplishing this end.

The object of this paper is to insist on the value of electrical treatment in poliomyelitis and to call attention to some modifications of the methods which were but yesterday regarded as classics.

The electrical treatment of infantile paralysis is based upon precise physio-pathological indications and is a rational therapy. Its principal object is to reduce to a minimum the infirmities resulting from central lesions, by restoring function to muscles de-

* Read before the Society of Electrotherapeutics at its Annual Meeting held at Narragansett Pier, June, 1911.

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prived of voluntary contractility and by combating the atrophic process so far as anatomic disorders permit.

Of all physical agents electricity is the only one capable of provoking a muscular contraction analogous to voluntary contraction.

It is by electro-diagnosis only that we shall be able to accurately bound the territory of the muscles spared by the original lesion but predisposed to atrophy because of the forced immobilization of the limb or part of the limb affected.

To be sure, we have no elaborate physiological data which permits us to determine in an exact manner the ascending action of peripheric electrization; that is to say, the influences of muscular exercise electrically provoked upon the medullary cells which still live, or upon the possibility of restitution. Nevertheless, although based upon considerations still hypothetical, it seems legitimate to assume that by our peripheric electrical treatment we do promote an increase of central circulation; a stimulus to the activity of the elements of the nerve cells (chromatophilic substance); a compensatory hypertrophy of cells having a co-operating function and a retardation in the proliferation of the neurogia. It is not illogical to suppose that what takes place in the muscles corresponds correlatively with the action in the cord. We know that in the muscles which are not completely degenerated there exist a certain number of healthy fibres. These, as Duchene has pointed out, "may become the nucleus of new muscular bundles and even of new muscles" under the effect of electric excitation. Furthermore, Déjerine has shown in these muscles hypertrophied fibres which he terms hypertrophy of compensation. That such hypertrophy of compensation may be brought about by electrization and that it may retard the progress of atrophy has been distinctly demonstrated through physiological experiments. For example, Bergonié by rhythmic faradization, and Bordier by rhythmic galvano-faradization, have increased the functional activity and have produced hypertrophy of the muscle of a healthy man; Bordet has produced with undulatory galvanization very rapid increase of the biceps; and experiments of Salvioli on muscles separated from their nerve centres have given indisputable analogous results.

The choice of the electric modality will depend upon the results of the electro-diagnostic investigation, our effort being to obtain from the affected muscles a response the nearest possible to the physiological contraction.

If the muscle has preserved faradic excitability we should have recourse to the induced current. If the faradic current excites feebly, the interrupted galvanic currents may be tried and utilized if they give the wished for contraction. Indeed, the galvanic interruptions should be used whenever the muscles fail to respond to other forms of current, exciting alternately with the two poles if there is polar equality, or, if not, with that pole at which there is predomination of action with the weakest intensity

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of current. So far as possible we should endeavor to reproduce conditions of physiological muscular exercise by furnishing to the muscle excitation of progressively increasing and decreasing character. We know since the work of Bergonié and his pupils, that under the effect of undulating currents the curve of artificially produced swellings in the muscles is similar to that of voluntary contraction. Therefore, whenever these modalities furnish an efficacious response the undulating faradic and the undulating galvanic should be our preference.

The use of undulators has increased in recent years, and manufacturers have produced some very satisfactory apparatus.

Not only is the form of the excitant important, but its rhythm is still more so. The curve of the progressively increasing and decreasing currents varies according to the adjustment of the apparatus, and we should select that rapidity of wave which is followed by the best response in the muscle.

The greatest care must be taken to avoid tiring the muscle, and to do this we have only to follow the period of activity with an equal time of rest. We should also guard against too strong shocks, being satisfied with a moderate contraction accompanied by a tolerable sensation.

The electrodes suggested for general employment are, a large pad (about eight inches square) soaked with warm water and attached to the back of the patient by an elastic band, and a small pad (about an inch and a half in diameter) well moistened, placed on the ordinary motor points or well towards the extremity of the muscle if excitation directly gives a better result.

It is not good practice to excite the antagonists, and possible atrophy of these muscles from disuse is obviated by the circulatory over-activity induced in the limb by the treatment. Their hypertrophy is happily combated during the contraction provoked by the opposites.

While it is true that in the acute stage the use of electricity is to be avoided because, like physical therapeutics, it disturbs the rest which is so strongly indicated at this time, it is certainly a mistake to postpone its use so long as has been the usual practice. The acceptance of the infectious theory of the affection makes untenable the principle of "noli me tangere" at the outset, which has so long held sway. The fear of a reaction on the cord from a peripheric irritation, acceptable in the theory of primitive myelitis, becomes chimerical in the modern conception and can no longer excuse an expectant treatment.

Most authors are today in accord in advising early electrical treatment, placing its beginning at about the fifteenth day of the disease.

In children the electro-therapeutist meets difficulties of a practical kind, varying according to the age and timidity of the patient. It is the exception that we cannot succeed in surmounting these difficulties by patience and kindness. Great care should be taken not to do violence by attempting to make a com-

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plete electro diagnosis at the first seance. It is best to accustom the patient to the sensation of electricity by employing at first only a few very weak currents. When the treatment can be undertaken in an efficacious manner, the seance may be continued through periods of from twenty minutes to an hour's duration, ever bearing in mind that a weakened muscle tires more easily than a healthy one, and always stopping short of possible fatigue. The treatment may be given daily at first and the intervals lengthened as the muscles improve in tone.

It seems questionable whether direct application of continuous galvanization over the spinal cord can be efficacious in exciting the vitality of central nerve tissue, as is claimed by some authors. The lines of flux being through muscular masses it would be necessary in order to reach the cord in an efficacious manner to use intensities which would render the application intolerable.

The somewhat prevalent idea that all recoverable power is gained within the first few months of convalescence, and that the patient should not be burdened with any special efforts directed toward developing individual muscles and nerves, is particularly unfortunate because the clinical facts prove the contrary. If necessary the duration of the treatment should extend over years. Repeatedly it has been found possible to gain a return of muscle power after a long period following the onset of the disease, even when during the interval there has been no evidence of actual improvement. The writer has known of several cases in which reaction of degeneration of more than a year's duration has disappeared under electrical treatment, and many authors, notably Zimmern and Bordet, have found it to the patient's advantage to continue the treatment for several years.

Most neurologists are agreed that electrical treatment should be carried out not only in a most thorough manner, but also over an extended period.

To secure continued loyalty to a treatment extending over months and years is a most difficult task; not only on account of the tedium and inconvenience attendant upon such a course, but also because there are few families that can afford to pay a competent physician for the attention necessary; furthermore, there are few physicians who can afford, or who have the disposition, to devote the requisite time. From these considerations and in view of the increasing prevalence of infantile paralysis, it would seem desirable that our training schools for nurses should give post-graduate instruction in the use of electrical apparatus and in the proper mode of its administration, to those wishing to fit themselves for this special service.

Furthermore, there should be instituted in every large city special hospitals, adequately equipped with electrical appliances and manned by competent electro-therapeutists, for the treatment of those cases of paralysis where poverty imposes an insurmountable obstacle to the proper home care and attention.

In conclusion, it is confidently affirmed that a more widely

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disseminated knowledge of the resources of electrical methods in the deplorable conditions under consideration, would greatly diminish the number of incurable cripples and thus add much to the economic value of future generations.

Bibliography

A. Zimmern, Eléments, d'electrothérapie Clinique.
E. Bordet, Archiv. d'Electro. Med., 1907.
Debedat, Archiv. d'Electro. Med., 1893.
Salvioli, Archiv. per le ec. med., 1906.
Gaudier, Rapport au XX Congrés de l'Association française de chirurgie, 1907.

IS HOMOEOPATHY WORTH WHILE? *

By C. E. Fisher, M. D., Sterling, Colo.

The interrogatory carries the inference of a preconceived answer. Yet the very character of the assemblage before whom the subject is discussed forbids the thought of a previously rendered verdict. Certain statements, facts, reviews and deductions will be arrayed and it will be for each auditor, whether of the homœopathic faith or some other, to render a decision for and unto himself.

In order that the query shall be set before whomsoever may hear or read without uncertain premise it would seem to be desirable that a satisfactory definition of what constitutes homœopathy shall be attempted. And just here arises the initial difficulty in the effort of each for himself to evolve a correct answer.

If the dictionaries and assumed authorities be drawn upon perhaps there may be light.

Webster's unabridged reports as follows:

"The art of curing founded on resemblances; the theory and its practice that disease is cured by remedies which produce on a healthy person effects similar to the symptoms of the complaint under which the patient suffers, the remedies being usually administered in minute doses."

The Century Dictionary defines thus:

"The medical treatment of diseased conditions of the body by the administration of drugs which are capable of exciting on healthy persons symptoms closely similar to those of the morbid conditions treated."

The New York County Medical Society some years ago sounded a keynote of a rather more comprehensive ring, as follows:

"A belief in the law of similars does not debar us from recognizing and making use of the results of any experience, and we shall exercise and defend the inviolable right of every educated physician to make practical use of any established principle of medical science, or of any therapeutic facts founded on experi-

* Read before the American Institute of Homœopathy, Narragansett Pier, June, 1911.

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ment and verified by experience, so far as in his individual judgment they shall tend to promote the welfare of those under his professional care."

This definition of the rights of the homœopathic physician would seem to broaden the scope of the homœopathic idea, if not, indeed, of its law. And yet it is exceeded by the definition of the American Institute of Homœopathy. If the New York County Medical Society has swallowed the traditional camel the American Institute may be said to have gulped the entire collection assembled by Noah. It defines the homœopathic physician in the following understandable and almost lurid language:

"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."

Paraphrasing somewhat this official declaration it may be said that the characterization of the homœopathic physician by the Institute might readily be more briefly formulated thus:

"Homœopathy is Homœopathy plus everything else."

Should this very delicious agglomeration be taken and accepted as a proper defining of Homœopathy,—for the homœopathic physician is presumed to be a representative of that which constitutes it,—there seems to be small need for consideration now or at any other time, here or elsewhere, of the topic forming the text for this discussion. The question is settled for us, and so comprehensively that the jury may as well be discharged and be allowed to go back to the farm.

The definitions of the New York County Society and the American Institute suggest the story of three darkies who met down in a Texas bar-room. Two were already engaged in throwing dice when a third entered, tossed down a two-bit piece and blurted out, "Say, yo' niggahs, hyar's a quartah dat I knows the best thing in de world for a darkey to eat!" One of the others promptly took up the wager, the third coming in as a matter of habit. The money up, the challenger smacked his lips as only a darkey can and rolled off that a "great big ice-cold watermillion on a hot day" was the ne plus ultra of a darkey's gastronomical ambition. "Sounds moughty good," said the second, "but, after all dar is to say about a watermillion in August, what's dat compared to a fine mess o' 'possum an' sweet-taters about frost time!" The third darkey instead of coming up smiling with something he preferred pushed the seventy-five cents over toward the other two with the ejaculation, "Go 'way wid dat money, yo' fool niggahs, you done left me nothin' to guess."

The American Institute's official pronouncement blankets the subject, extending its enfolding arms completely about the body medical and dressing it up with a homœopathic necktie. It is for the profession, of the homœopathic faith and all others, each to decide for himself if Homœopathy thus defined is likely much longer to be worth while.

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May it not be permissible to call the founder of the homœopathic doctrine to the stand and learn what he may have had to say upon the question? In the fifth edition of the Organon of Medicine, Dudgeon's translation, paragraph 54, there are to be found these words:

"The pure homœopathic mode of cure is the only proper way, the only direct way, the only way possible to human skill, as certainly as one straight line can be drawn betwixt two given points."

This seems very emphatic, an unequivocal outlining by Father Hahnemann of how he viewed the homœopathic method. And as the method as much as the law makes Homœopathy for all practical purposes, it would seem as if there is a very radical difference between that which Hahnemann proclaimed, believed and practiced, and that which some official representatives of his followers believe and think justifiable in practice. That Hahnemann's convictions upon the subject were strong, the language just quoted proves. A careful reading of his letters to his family and early coadjutors reveals him a man of extreme conscientiousness —never a charlatan nor pretender, always God-fearing, sincere and intellectual. No matter what may be thought of some of his alleged vagaries, perhaps doubtful corollaries or extreme ideas on the subjects of vital force and dynamization, there can be no just attack upon his honesty and sincerity. He believed that which he proclaimed and practiced that which he taught. The fifth edition of the Organon, the centennial of which volume is being celebrated this year, was published at Dresden in 1835. Its author had been evolving the homœopathic precept for above forty years. That which he allowed to stand at that time was the result of mature thought, ripe judgment and plentiful experience. Therefore when he defined homœopathic practice he defined it as he conceived it should be, and in defining it he unquestionably defined the homœopathic physician and Homœopathy itself.

With Hahnemann "the homœopathic mode of cure is the only proper way." With him it is "the only direct way." With him it was "the only way possible." And this, too, "as certainly as one straight line can be drawn betwixt two given points."

Tradition and inheritance seem not to have entered into the account, except by negative inference.

It was the fallacy of tradition and inheritance in medicine that in his judgment had enslaved the medical profession.

It was to free this profession from the thraldom of tradition and inheritance that the law of Similia Similibus Curantur had been evolved.

And in his journey of investigation he had passed the fortieth milestone and was on his homeward voyage when he found himself prepared for the fifth time to herald with no uncertain clarion that the homœopathic way is the only proper, direct and possible way of curing the sick. In the light of this testimony from the founder of the homœopathic school, as contravening in strong

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measure the more modern definitions of what constitutes the homœopathic physician, there may indeed be serious question as to whether twentieth century Homœopathy is, after all, worth while. The jury has no trifling proposition before it.

Chemical and Mechanical Measures.

It should be understood that when Hahnemann referred so positively to the homœopathic mode of cure he referred to its use in the treatment of disease, not to accidents and poisonings. In various places in his writings he makes it clear that chemistry has its antidotal sphere, and that mechanics have their field. The homœopathic physician is sometimes asked if Homœopathy essays to antidote poisons with the homœopathically dynamized medicine. The question carries either a lack of sincerity or woful lack of understanding of what in reality Homœopathy consists. Likewise in regard to mechanical contrivances and appliances. Homœopathy does not "essay to amputate a leg nor set a broken bone." Nor is the use of mechanical appliances in any sense a violation of the homœopathic conscience. Nevertheless, it frequently follows, both in poisonings and surgery, that there are not infrequently witnessed very delightful results from the administration of homœopathic remedies, in dynamized form, for the late effects of poisonings and for the all-time effects of injuries. Homœopathy is a most valuable handmaid to surgery, but does not pretend either in the abstract or concrete to supplant it.

Hahnemann's homœopathic mode of cure, so emphatically enunciated by the master, is naught else nor more than the application of remedial agents of accurately proven range of action according to a strict interpretation of the homœopathic maxim, "Similia Similibus Curantur," or, as the American Institute's official translation has it, "Similia Similibus Curentur." Freely the one means "Likes Cure Likes," the other "Let Likes be Cured by Likes"—a sort of tweedle-dee tweedle-dum juggling of phrases, a late-come attempt to assert that Hahnemann did not exactly mean what he said. If the homœopathic mode of cure is what he heralded in paragraph No. 54, it would seem to be a matter of minor consideration what technical interpretation lexicographers put upon the maxim Hahnemann uttered so long as in practice the mode of cure for which it stands is as clearly and emphatically outlined as in the paragraph quoted.

Perhaps this much of the presentation of the subject may seem to partake of an argument toward an answer for the initial interrogatory, "Is Homœopathy Worth While?" It is not so intended. An effort is being made to ascertain what is meant by Homœopathy, that further facts and deductions may be offered. Speaking in a purely personal sense it is believed that Hahnemann intended to carry a forceful conviction.

Not necessarily by door-plate nor professional card, but by association and environment does the practitioner of the homœopathic faith herald his supposed beliefs. It seems quite natural to

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think that if a man or woman be associated with homœopathic colleges and hospitals, or with homœopathic clubs and societies, it shall be expected that his colleagues of other branches of the profession and the general public shall consider him a homœopathic physician, in deed and in truth. And, equally naturally, it would seem, the estimate of his doctrine would be placed according to the pronouncements of its founder. This proposition seems axiomatic, not requiring elaboration. Therefore, an internal review, each for himself, may in the homœopathic ranks assist in the decision as to whether Homœopathy is still worth while.

Without in the least presuming to ignore the intellectual abilities and force of those who have come after Hahnemann, it is safe to assert that in the years that have passed since his Organon made its appearance there has not been produced his equal in the homœopathic circle. He seems to have been possessed of genius of a high order. There were no better chemists than he, no more indefatigable translators than he, no more painstaking analysts nor critical observers. Neither could any investigator have been more sincere and conscientious, nor any discoverer more enthusiastic. His apparent dogmatism was the sequential outcome of his habits of thought and work. He proved, then dogmatized.

Not all the definitions nor qualifications of modern disciples of the homœopathic faith should be allowed to add to nor take away one jot or tittle from the basic principle of Hahnemann's formula, uncovered by accident, elaborated by patient investigation and proved by painstaking analysis. What he wrote he wrote thoughtfully. It is true or false. By pursuing Hahnemann's methods, in the manner directed by him, any jury, no matter if antagonistic or prejudiced, if it set about it sincerely, can readily demonstrate whether his Homœopathy is or is not worth while. Beatific platitudes, catchy phrases, seriously worded resolutions, lurid proclamations—none of these will solve the problem connected with the truth of the doctrine of Similia. In fact, it is verily believed that at times most serious error and incalculable mischief may result from even the best meant attempt to clothe a doctrine in a garb of radio-activity that does not fit it. The eye-of-the-needle simile is as applicable to the homœopathic doctrine as to the doctrine of genuine Christianity.

A Broken Reed.

To be of intrinsic merit any medical principle must possess the element of stability. Hahnemann's law will have to appeal to the great body of scientific men who today constitute the medical profession as something more than simply one of many excellent rules of practice if it is to be accounted worth while for perpetuity. Not for long will that profession be content to lean upon the broken reeds of inheritance and tradition. For centuries it tried this and has not been satisfied. The entire trend of the hour is for permanency. Unless his followers can add to the value of his

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therapeutic law an element of more decided character and more lasting permanency than Similia itself it would seem that they must come back to the doctrines of faith or be content to drift as did the profession before Hahnemann's day in a veritable Saragossa of traditional uncertainty and of inheritances possessed of doubtful value in the accurate combat with disease.

What need have we, what justification, for holding ourselves aside from the great body politic of medicine unless we in deed and in truth have something of greater value than anything they possess, and of which they for one reason or another decline to avail themselves? It would almost seem as if not Homœopathy alone is on trial in these twentieth century times, but the inherent integrity of its votaries as well. It was not so with our forefathers. They accepted Hahnemann's doctrines and experiences as possessing full face value. For them the law needed neither apology, equivocal analysis nor a coat of sugar. It did what was claimed for it, out of the denial to investigate, and the refusal to adapt it in any substantial measure to the general armament of the profession grew the separate system of which we are an integral part, and they succeeded with the new method so admirably that conscientiously or unconscientiously the doctrine has permeated the entire fabric of medicine. Is it not, therefore, somewhat odd and unaccountable that while just on the eve of general recognition the homœopathic practitioner of today may be said in general to be found wanting in fidelity to the very precept upon which his work is presumed by other branches of the profession and the public to rest — and rightfully so presumed at that — when that very precept is acknowledgedly rapidly coming into its own? It is so anomalous a situation that well may the interrogatory be propounded "Is Homœopathy for and in itself really worth the while?"

Was Homœopathy Justifiable?

After more than a hundred years of the Organon of Medicine — its first edition appeared in 1810 — the question is permissible. Not to homœopathic writers alone is it necessary to turn for evidence that something different from generally accepted doctrines was demanded if the medical profession was to remain an acknowledgedly deserving and scientific body. Up to the time of Haller, who died when Hahnemann was yet a young man, a student of Chemistry at the University, the doctrines of Hippocrates and then Galen had been followed sedulously. Haller proposed a rejection of all theories on medical topics and all attempts to find laws for the governing of treatments. Sectarianism is no new thing in medicine. There had been divisions, schools, classes and creeds during all the preceding centuries, there have been since, and it would seem as if in the regular order of things there will be always. Haller argued that a rational and scientific profession could be built up only by reaching out for an exact and critical study of anatomy, physiology, pathology and the effects of drugs on the human functions. And he reasoned well. If there be any who would find

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some comfort for other than the homœopathic sect in the value that drug experimentation upon healthy persons possesses for the human family, Haller's encouragement of the thought will afford that comfort.

The difference between Haller and Hahnemann lay in the fact that Haller theorized correctly, but failed to put his ideas into practice. Whereas the founder of Homœopathy conceiving the same thought, or following Haller in it, put it into practice and developed a system of provings which in many particulars is remarkable and in many scientific. From the results of Hahnemann's work it is quite safe to assume that had Haller pursued his proposal he and not Hahnemann would have evolved the homœopathic doctrine. And with Haller's deserved fame as a logician in all things medical is it not quite probable that had he instead of the less well-known Hahnemann, then a young chemist only, proclaimed that drug experimentation justified the doctrine of drug affinities, natural selection, or like-action, the idea would have been accepted and have become the rule for prescribing?

The homœopaths and Hallerites are not far apart. Both believe that a critical study of anatomy, physiology and pathology is necessary for the best qualifications of the physician. And Haller had added thereto the effects of remedies or drug agents upon the human body. His death occurred in 1777, whereas Hahnemann's formula was pronounced in 1790. The followers of Hahnemann have from that day to this pursued Haller's critical study of anatomy, physiology and pathology, along with all scientific physicians, whereas they and they alone have also pursued the Hallerian-Hahnemannian idea of drug proving upon the well in order to properly understand the applicability of drug agents upon the sick. Any jury in determining whether real Homœopathy is still worth while should take most seriously into consideration this very important fact.

The Law of Cure.

A word upon this subject. Long before Hahnemann's time the idea of likes curing likes had been touched upon. Hippocrates had himself said that some diseases are cured by remedies possessing the ability of like action, just as others are cured by remedies possessing the power of opposite action. Hahnemann went further than Hippocrates in that he formulated the doctrine into a Law of Cure.

Nor did he do this haphazardly. Out of Haller's suggestion came the practical work of drug proving. And out of this work came the Law as a natural sequence. Hahnemann had no alternative but to proclaim the thought. He did not "make" it, he did not attempt the overthrow of previously accepted doctrines for the simple purpose of doing so. Nor did he necessarily have a desire to become a medical hero and accomplish some great revolution. He certainly would not have been a wise man to have made his proclamation for the purpose of bringing upon his offending

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head the opprobrium which followed. As a chemist, analyst, student and experimenter the proof came upon him with overwhelming force that all remedial or curative action by drug agents lies along the line of like action or similarity. He was as much surprised as anyone else when by proving drug after drug it developed as a fixed proposition that all of them were found to be capable of producing upon healthy subjects symptoms, conditions and disturbances like unto those these same drug agents were most certainly known to be able to remove in the sick.

Hahnemann has been severely criticised for the enunciation of the doctrine. He has been styled a quack, a visionist, a disturber of medical harmony, a fit subject for both the asylum and the prison. And for naught else but that he put down in writing and uttered by voice that which experimentation along the line suggested by Haller, as well as by himself, demonstrated. Is it, after all, such an unforgivable offense that he should record and doctrinate according to plain facts, provable by any medical man from that day unto this? The doctrine of Similia needs no elaboration nor defense. It exists throughout the realm of nature, not in medicine alone. It is the property of everyone. It is not required that any doubting Thomas should accept the testimony of anybody upon the subject. All that is required is to honestly, intelligently and patiently set about a system of drug experimentation upon one's self and one's friends and willing patrons to demonstrate whether Hahnemann uttered a vagary, a notion, a false idea, a visionary scintillation of a highly imaginative mind, or a true philosophy and correct scientific statement.

Infinitesimalism.

Haller failed to touch upon the doctrine of infinitesimalism, Hahnemann did not. This was the issue, after all, upon which the battles of a century were fought against the homœopathic precept and practice. It is very natural that Haller failed to elucidate this practical principle in medical treatment since he failed to pursue his most commendable suggestion of drug proving, probably because of his advanced years and busy life. Infinitesimalism followed as a natural event. Just as certainly as it was shown to Hahnemann, not necessarily by him but unto him, that curative drug action is along the like of like selection, infinitesimalism followed as a necessary and desirable corollary. Since medicinal agents were proven to follow along a straight line in the direction of similarity it was also quickly proven that to give drug agents to sick people in the dosage of that day, along this line, drug aggravations, even to the point of serious harm, were quite certain to occur. In fact, the theory could be put into successful practice only by minimizing the dose. Potentiation followed quickly upon this thought. Neither was generic. Each came as a sequential evolution. Hahnemann has been pronounced an illusionist, an extremist, a dangerous enthusiast. All these epithets were the outcome of the doctrine of infinitesimalism. Again, instead

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of inquiring thoughtfully into his suggestions in this relation, as with regard to Similia, there seems to have been something in the temper of the profession, in the temperament of Hahnemann, or in the medical atmosphere which resulted in antagonisms and scoffings, with the result that to this day the doctrine has never been directly sifted by its opponents. In this particular his sins seem to have been prodigious and unforgivable. A little farther on it is believed it will be shown that this special sequence to the idea of Similia is not so very absurd after all.

Drug Power of Inert Substances.

Out of the idea of infinitesimalism and drug dynamization came the use of substances generally considered inert, and again the shafts of ridicule were hurled. Hahnemann made an excellent remedy of gold. Tin and copper were added to his materia medica. Lead took a prominent place. Platinum, clay, charcoal and even the humble club-moss were developed through dynamization into remedies of great activity and value. It could not be possible! It was incomprehensible! The man was an impostor, a charlatan, a quack and a pretender, a danger to the public, the Fatherland was no place for such heresy, and this learned, gentle, studious and unoffending man was prosecuted and driven from pillar to post and back to pillar again until he finally sought peace and quiet in another country.

Looking back at it all through the windows of twentieth century knowledge it is wondered what will be the verdict of an unbiased and scientific jury. What is said today of infinitesimalism?

Of gold, Hahnemann's Aurum metalicum, Robin of the Academy of Medicine of France has this to offer:

"Almost infinitesimal doses are endowed with very great activity."

This scientist states that solutions of gold, so infinitesimal as to correspond with Hahnemann's fifth decimal, "produced results so positive as to be readily determined and accurately measured." If inert gold in infinitesimal quantities was a drug agent of value in Hahnemann' day, and if it is in infinitesimal quantities a drug agent of value in Robin's day, may not the medical profession at large have been in error in declining Hahnemann's presentation of its power in his Materia Medica Pura during all the years that have passed between the two experimenters?

In the quantities referred to Robin found it "capable of producing an increase of urea as high as thirty per cent." It increased uric acid as much as three times its initial quantity. It caused a temporary raising of arterial tension, and increased the quantity of oxygen the system actually consumed. In other words, in infinitesimal quantities in Robin's hands and laboratory it produced exactly those disturbances in functional physiology that produce depressions, causing melancholias like unto those for which Hahnemann highly extolled and successfully used it, as have his followers to this day. It would seem as if Hahnemann had been

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a century ahead of Robin or Robin a century behind Hahnemann.

But this is not all. To be quoted, Robin talks Hahnemannistically in the following language:

"In the above mentioned solutions the atoms of the metal, separated as widely as possible, are, as it were, liberated, autonomous in their activity, and susceptible of developing greater energy. It is not difficult to conceive that these simple bodies, even in the infinitesimal doses in which they are found, are capable of influencing the chemical reactions of elementary nutrition."

In experiments upon pneumonia in which the same observer brought about crises in six days, in six out of ten cases, he remarks:

"1. That metals in *extreme subdivision* (the italics not his), are capable of remarkable physiological action, out of all proportion to the amount of metal used."

"2. That such metals, acting in doses which therapeutics considered heretofore ineffectual and useless, by making a profound impression on some of the chemical processes of life whose deviations are connected with many morbid conditions, are probably destined to take an important place among the remedies of functional therapeutics."

If Hahnemann himself had said it he could hardly have voiced the truth more forcibly. Substitute his "vital force" for Robin's "chemical processes" and the thought is his exactly. Again, Hahnemann was a hundred years ahead, or Robin a hundred years behind.

Taking up a new witness on infinitesimalism, in his studies on the disassociation of molecules Lord Kelvin has made some discoveries and has drawn some conclusions which may be of aid to the jury just here. His statement as to the size of the molecule is as follows:

"Imagine a rain drop or a globe of glass as large as a pea, to be magnified up to the size of the earth, each constituent molecule being magnified in the same proportion. The magnified structure would not be coarser-grained than a heap of small shot, but probably less coarse-grained than a heap of cricket balls."

If this homely illustration be applied reversely to the dilution of remedial agents, it may readily be seen that not even the most infinitesimal dilution of Samuel Hahnemann or his most extreme follower can be possibly made so small as to altogether eliminate the molecules of the original substance. And if molecules possess activity—and who says they do not—then the most infinitesimal products of the homœopathic and other laboratories are not deprived of the possibility of producing impressions of some degree upon the sensitive organization of such human beings, at least in selected cases. And if this be permissible, then the jury will be brought face to face whether this particular phase of Homœopathy is worth the consideration that Hahnemann gave to it.

Yet additional testimony is forthcoming. Prof. Jones of the department of Physical Chemistry in Johns Hopkins University,

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an institution famed for the quality of talent it employs, enunciates as perhaps the best demonstration of the almost unlimited divisibility of matter the fact that some of the aniline dyes are capable of coloring at least one hundred million parts of water. This goes beyond Robin and his gold tests and in some respects rivals Hahnemann.

The power of radium to impart its activities to other substances, in the most infinitesimal quantities, is well known to the profession and public. Strutt of Trinity College, Cambridge, England, in a recent volume on the Becquerel Rays (Copeland), states that a quantity of gas not larger than a pin head from radium bromide is capable of extending the activities of radium to a million millions of its own volume of atmospheric air.

The universally known power of musk to emit a perfume that will last for years and be taken on by a great many substances, while the original grain of musk retains all it originally possessed in volume, weight and medicinal strength is a matter of common knowledge.

The color in radium bromide has been shown to be discernible in the thirty trillionth and that of picric acid up to the one trillionth.

The flowers of the field, the unpleasant odors of decay, the bright ray of sunlight to a sensitive eye, and many other illustrations in the domain of physics serve also to indicate the power of infinitesimalism and dynamics. Will it suffice to say that these illustrations are unusual and that because Robin, Jones, Kelvin and Strutt admit the power of infinitesimals, it does not follow that infinitesimalism has no relation to drug power? All the recent testimony of Chemistry, a department in which Hahnemann was a master in his day, lead toward strong support of many of Hahnemann's doctrines long rejected by the medical profession at large. Indeed, the chemists of the twentieth century are doing more to sustain the reputation and genius of the founder of Homœopathy than are the followers of Homœopathy itself. Apologetic definitions seem no longer to have proper place in official homœopathic literature in the light of the marvellously similar ideas which are being promulgated in this age by scientists throughout the world.

In Hahnemann's day radium was not known, neither were ions. Nor was the microscope a part of his armament, nor did his laboratory possess a culture tube nor the beneficent medium of an oven. This makes it all the more remarkable that this patient German worker, in spite of opposition which would have crushed the spirit of many a less courageous heart, should have so faithfully persisted in his efforts to demonstrate a great truth in therapeutics and science, once the tiny end of the red thread of similia was presented to his vision in his earliest drug experiments.

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What of the Law?

Leaving the subject of infinitesimals for the moment, what seems to be the testimony of the times in regard to the Hahnemannian precept? Are likes curable by likes?

At the present moment the treatment of disease by vaccines is occupying the medical stage. Wright's opsonic index theory laid the scientific foundation for this doctrine, although in crude way it followed immediately after Jenner. Boston particularly has contributed not a little in recent months to the literature and experimentation of the subject. Wright freely admits that the doctrine is closely allied if not identical with that of Similia, and in recommending doses of one ten-thousandth of a milligram to bring the resisting force of the system up to normal he also admits the power of infinitesimalism and adopts one of Hahnemann's essential corollaries.

Copeland quotes Denys of Belgium as advocating the use of his anti-tubercular substance in doses of one millionth of a milligram, the equivalent at least of the eighth homœopathic dilution. The Denys production from tubercular lymph is strictly along the general line of Hahnemann's Similia, although, to be accurate, there is yet a difference.

Within the last half decade there have been a number of remarkable admissions in regard to Hahnemann, Homœopathy and Similia, admissions which may at least set the jury to thinking very seriously whether Homœopathy is still worth while. Foremost among these admissions is that of Professor Amalia Gimeno, former Minister of Public Instruction for Spain and now Professor of Therapeutics in the Faculty of Madrid. In a recent review of various late discoveries in medical science, and finding in them positive relation to many of the doctrines of the homœopathic faith, Gimeno voiced these words:

"As the author of a treatise on Therapeutics that I published twenty-five years ago at Valencia, which became classic in the Spanish faculties, I deplore sincerely having consecrated several pages to unjust attacks upon Hahnemann and his disciples, and I would like today to be able to tear those pages from my book. Modern discoveries, however, will charge themselves with the care of correcting them. It is most proper that we should venerate the grand figure of Hahnemann, who divined that which subsequent events have sanctioned."

It is indeed refreshing to read so frank an admission in regard to a former error on the part of such an eminent student as Gimeno, particularly since for some unaccountable reason the medical profession is about the last of all to admit a fault.

But Gimeno is not alone. Huchard, of Paris, as frankly announces that the medical profession owes a debt of gratitude to Hahnemann for his views on the dynamization of drugs and the power of infinitesimals, as also for his suggestion of Similia Similibus Curantur, which it will never be able to repay. Specifically he states that nearly every modern discovery in medicine goes to

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demonstrate the correctness of Hahnemann's doctrine. The Academy of Medicine in Paris was Huchard's forum. Nor was he driven from the Academy, nor was his frank confession received with other than serious and respectful attention.

We all know that Pasteur, the French scientist, not a physician and not imbued with the passions that seem to belong to the medical guild, formulated doctrines closely akin to Homœopathy and instituted a dosage in harmony with Hahnemann's doctrine of the power of the infinitesimal.

Wisdom From Von Behring.

But coming nearer home to the medical world and general public, perhaps the testimony of Von Behring, the German savant, who gave the diphtheria anti-toxin to the world and who is acknowledged as the foremost therapeutic investigator and authority of this day, will bear weight with the jury over the testimony of the less well-known Gimeno and the less well-known Huchard. In discussing the new tubercular therapeutic agent upon which he is at work he recently uttered these words:

"The scientific principles of this new agent are yet to be established. In spite of all scientific speculations and experiments this therapeutic usefulness must be traced in origin to a principle which cannot be better characterized than by Hahnemann's word 'homœopathic.' What else causes immunity in sheep vaccinated against anthrax than the influence previously exerted by the virus, similar in character to that of the fatal anthra virus? And by what technical term could we more appropriately speak of this influence, exerted by a similar virus, than by Hahnemann's word 'homœopathy'?"

In concluding his remarks upon this subject, remarks which set to tingling the ears of many of his orthodox hearers, Von Behring closed with these courageous words:

"If I had set myself the task of rendering an incurable disease curable by artificial means, and should find that only the road of Homœopathy led to my goal, I assure you that dogmatic considerations would never deter me from taking that road."

Here are named three acknowledged savants of three different European countries, Spain, France and Germany, all dealing in the same line of thought, namely, that the medical world has misunderstood and underestimated the value of the work of Samuel Hahnemann, now almost universally sustained by the investigations of the laboratory, by institutes for research and by clinical experience. It surely would seem as if the answer might be readily forthcoming, and that any fair-minded and scientific jury could quickly reach a conclusion as to whether Homœopathy is now worth while.

It may have been expected that statistical data would be offered on the affirmative side of the proposition. It seems not necessary. Of this data, and that which is thoroughly reliable, there is an abundance. The homœopathic library has volumes

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upon the subject. But it has not been thought it is required. If out of the mouths of its former opponents and detractors there now comes confession of strength and scientific deduction, figures, which some one has said may be made to tell a story either way, are not required. Nor is a detailed review of the methods of Hahnemann and his early followers attempted for lack of time and because these are also available. Our own present-day inefficiency, as wrongly heralded, it is believed, by our National association in its pronouncement of what constitutes a homœopathic physician, was purposely given first place in this review in order that it might be shown by comparison, through the views of eminent men from "our friends the enemy," that if the decision shall be rendered that Homœopathy is no longer worth while the opprobrium of the verdict rests nowhere but upon ourselves. For just now, when many of us seem half-hearted, in doubt and hardly knowing which way to turn, Hahnemann and his doctrine are being extolled by eminent savants of the general profession who formerly condemned the one and ridiculed the other.

Under these conditions should we be found returning to the insecure foundation of tradition, or be willing to be borne along the medical highway on the rickety railway of inheritance? Are we not, rather, leaning upon broken reeds than upon a scientific basis when we leave Similia, or allow it only doubtful loyalty, to run after the falsities of uncertainty and a lack of scientific precision? Everything recent, accepted today as scientific and possessed of certain values, points toward the precept of like-curing. And everything the laboratory is today revealing seems to point also toward the correctness of Hahnemann's theory of dynamization and the power of infinitesimals.

Taking all these things into consideration, dealing with the question fairly, studying Homœopathy as an art sustained by a principle whose scientific correctness is being demonstrated day by day, and, above all, viewing the subject from the viewpoint of an afflicted humanity many of whose ailments are beyond the reach of other scientific procedures, may not the question be propounded in all seriousness, to a jury of on-coming physicians who are yet students in the colleges, to a jury of physicians who by their pronouncements seem to be but half-hearted homœopaths, and to a jury composed of honest and sincere opponents of the doctrine as they have heretofore understood it, and as they may have seen it exemplified by physicians not more than half homœopathic at heart, is not Hahnemann's Homœopathy after all, yet worth while?

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THE WASSERMAN REACTION.

By C. A. Eaton, M.D., Portland, Maine.

In this present age of new developments, advances and achievements along medical lines, one subject after another looms up in sporadic outbreaks. Each in turn seems to occupy the attention of the medical profession throughout the entire world almost simultaneously for a varying period of time, only to be supplanted by some newer and seemingly more important discovery. True it is that all are important and each one contributes its share toward making this a most wonderful era of medical progress.

During the past five years the two most widely spread international waves have dealt with serum phenomena. The subjects referred to are opsonins with vaccine therapy and the serum diagnosis of syphilis with the already famous "606" or Salvarsan treatment. Today whenever the word syphilis is mentioned, one immediately associates with it the Wasserman reaction for diagnosis and Ehrlich's "606" for treatment.

The serum diagnosis of syphilis is the outcome of previous important discoveries such as: — The phenomenon of bacteriolysis, first demonstrated by Pfeiffer in 1894; Ehrlich's side chain theory of immunity announced three years later. In 1895 Durham discovered that immune serum could agglutinate bacteria. About this same time Widal wrote several papers describing the reaction which now bears his name as applied to the diagnosis of typhoid fever. The phenomenon of hemolysis was first demonstrated by Bordet in 1900. He found that when blood cells of one species are inoculated into the organism of another species a hemolysin is formed which has the power of dissolving the hemoglobin. Hemolysis, therefore, is the power possessed by the serum of one species of animal to dissolve corpuscles of another species. The Wasserman reaction is the result of the combined application of two definite principles, namely: (1) the reaction of fixation, and (2) the principle of hemolysis. Animals, when injected with bacterial emulsions, are rendered immune to the particular bacteria used. These bacterial emulsions have been called antigens. Where this immunity has been established in the animal, there will have developed in its blood certain anti-bodies for the specific antigen employed. This defensive anti-body is termed bacteriolytic amboceptor. There is also present normally in the blood serum of nearly all animals a certain substance which is non-specific, and is termed complement. This complement, however, can be destroyed by subjecting the serum to a heat of 56 degrees centigrade for one half hour, while the other anti-bodies are not injured and are thus thermostable. For example:

Serum from an animal immunized to typhoid bacilli, and therefore containing its specific amboceptor, is mixed with serum from an uninoculated animal containing complement, together with an emulsion of typhoid bacilli. The whole is incubated for one-half hour, but no change will be detected. A reaction has,

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however, taken place which is termed the reaction of fixation, or the complement fixation, as follows:

When all three substances are brought together, namely: the antigen or bacterial emulsions; its specific amboceptor; and the normal complement, the whole incubated for one half hour, the three substances unite, and the complement is absorbed in the presence of the antigen and the amboceptor. When the complement is thus absorbed it is said to have become fixed. This is the phenomenon of the reaction of fixation. It cannot be detected as a gross change when dealing with a bacterial emulsion.

The same principle can be applied to the question of hemolysis. Instead of using a bacterial emulsion for antigen, washed blood corpuscles from one species of animal can be injected into another species. The corpuscle emulsion in this case serves as antigen in place of a bacterial emulsion, and there is developed in the inoculated animal a specific anti-body for the antigen, which is termed hemolysin or hemolytic amboceptor. If, now, we proceed in the same manner as with typhoid emulsion, the following will result: Serum from an animal immunized to blood corpuscles of another, and thus containing its specific hemolytic amboceptor, is mixed with complement, together with an emulsion of washed blood corpuscles, and the whole incubated for one-half hour. A change will be noted; namely, hemolysis. This change will appear in the tubes as a distinct color change.

There is developed within the human organism a specific amboceptor for any infection present, the same as when bacterial emulsions are inoculated into animals. This fact, having been well established, Wasserman thought that if an antigen could be procured, this test might be employed for the diagnosis of syphilis. Since it is impossible, as yet, to grow the spirochaeta pallida in the laboratory, he substituted for his bacterial emulsion an extract of the liver of a syphilitic fetus which is known to contain large numbers of the syphilitic organisms. Without entering into the minute details of the technic, the Wasserman reaction is carried out as follows:—Having obtained (1) blood from the suspected patient, either from the ear or from a vein, this is allowed to coagulate and the serum separated. The serum is then heated to 56 degrees C for one-half hour to destroy its complement. (2) Blood from a known negative and from a known positive; the serum from these being used for a positive and negative control. (3) Antigen consisting of an alcoholic extract of syphilitic liver. (4) Hemolytic amboceptor, consisting of blood serum of a rabbit which has been previously inoculated four or five times with sheep's blood corpuscles washed in an excess of normal saline to destroy its complement. (5) Complement, consisting of a mixture of blood serum from two or more normal guinea pigs.

Three test tubes are placed in a rack and labelled respectively: Suspected patient, Known positive, Known negative. Back of these tubes are placed three more test tubes not labelled. These are for controls of the front row of tubes. Into tube

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No. 1 as well as the tube directly back of it, is placed serum from the suspected patient. Into tube No. 2, as well as the tube directly back of it, is placed serum from the known positive. Into tube No. 3, together with its control, is placed serum from the known negative. Into all six tubes is placed serum from normal guinea pigs containing the complement. Into the front row of tubes is placed the alcoholic extract of luetic liver containing the antigen. This antigen is not placed in the back row of control tubes. All the tubes are now incubated at 37 degrees C in a water bath for one-half hour. At the end of this period no change will be visible. If, however, there is any syphilitic amboceptor present in the suspected serum, the antigen in the liver extract, together with the complement in the guinea pig serum, will have bound themselves to the amboceptor and the complement will have become fixed.

We know this reaction has taken place in the second tube as the positive control is known to contain syphilitic amboceptor. We know that the complement has not become fixed in the third tube as we are dealing with a known negative which is lacking amboceptor. Since, as yet, the back row of tubes contain only two possible substances, no reaction or fixation of complement has occurred. To all six tubes are now added an emulsion of washed sheep's corpuscles. There is also added to all six tubes serum from the rabbit immunized to sheep's corpuscles and thus containing hemolytic amboceptor. The tubes are again placed in the water bath and incubated for one-half hour.

All the tubes are now carefully examined for any visible change or for the presence or absence of hemolysis. Starting with the suspected tube; if there was present any syphilitic amboceptor in the serum, the complement having been absorbed during the first incubation, no hemolysis will have occurred. This is owing to the fact that there is no complement left to unite with the blood corpuscle antigen and its hemolytic amboceptor. The same is true of the second tube or known positive, namely lack of hemolysis. In the third tube, or known negative, hemolysis should occur since there is no syphilitic amboceptor and the complement has not become fixed during the first incubation. We have then for the second incubation, blood corpuscle antigen, hemolytic amboceptor and complement. When the complement in this case becomes fixed the result is hemolysis, which is clearly visible in the tube. Since no syphilitic antigen was placed in the back row of tubes, they only contain the factors for hemolysis and this should take place in these control tubes. Hemolysis, therefore, denotes a negative reaction, while lack of hemolysis denotes a positive.

A modification of this technic has been described by Noguchi, of the Rockefeller Institute, in that he substitutes human blood corpuscles for those of the sheep in immunizing the rabbit. The serum from the rabbit containing the hemolytic amboceptor is then dried on filter paper and can be kept for a considerable

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length of time. He also finds that alcoholic extracts of other organs such as normal guinea pig's heart can be used as antigen. Comparing Noguchi's modification with the original Wasserman, most of the followers of the Noguchi method in this country seem to think that the reaction is fully as reliable as the Wasserman. If anything it is even more delicate.

In reference to the serum diagnosis of syphilis two important questions naturally suggest themselves. — How reliable is the test? Of what clinical value is a positive or negative reaction? In comparing the results of numerous laboratories throughout the world during the past two years, all agree that we have in this test a very valuable diagnostic aid in hitherto obscure, doubtful and unrecognized cases of syphilis. The reliability of the test depends largely upon the skill of the operator. It should not be undertaken by other than carefully trained laboratory workers. Demonstration of the Treponema pallidum is of course definite, but since this is usually most difficult or impossible, we have in the Wasserman reaction the nearest approach to a satisfactory diagnostic measure.

The following percentage of positive reactions is submitted which represents the approximate average as estimated by Wasserman, Noguchi, Swift, Blaschke, Butler and others:

Primary syphilis	80 to 90 percent.
Secondary syphilis	95 to 98 percent.
Tertiary syphilis	85 to 90 percent.
Latent syphilis	75 to 80 percent.
Congenital syphilis	95 to 98 percent.
Tabes and paresis	65 to 75 percent.

Treatment seems to exercise a marked influence on the results of the reaction. Cases having undergone rigorous antisyphilitic treatment are much less likely to show a positive reaction. To the neurologist, particularly, in dealing with latent and obscure cases, the serum test may be of greatest value. The absence or vagueness of symptoms together with the inability to elicit from the patient any previous history renders the etiology of many diseases of the nervous system extremely doubtful. There is also the differential diagnosis of many of these cases from neurasthenia.

When a positive reaction is obtained it is reasonably safe to presume that the patient has had syphilis. Much work has already been done toward confining the belief in the syphilitic origin of tabes and general paresis. In cerebral affections there is always the question of differential diagnosis between syphilitic gumma and other brain tumors. A positive reaction would always be of interest in cases of epilepsy, hemiplegia, multiple sclerosis, etc. In congenital syphilis a large percentage of mothers with a negative history, but giving birth to syphilitic babes, have shown decidedly positive Wasserman reactions.

This bids fair to completely refute Colles law. Another per-

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plexing condition where the test might be employed to great advantage is in cases of visceral syphilis. In latent syphilis a positive or negative reaction might help the physician to decide in his advice as regards the question of marriage. From the therapeutic standpoint the test, when treated as a symptom, promises to be of quite material aid. A negative reaction may save the patient from being subjected unnecessarily to enormous quantities of anti-syphilitic remedies which in themselves frequently prove injurious. This is only a future possibility, since as yet a negative reaction does not necessarily mean that the patient has not syphilis. On the other hand a positive reaction may be of great value in recommending a course of treatment in early cases which may save the patient from permanent damaging after-effects which many times could have been avoided had early treatment been instigated. One must bear in mind the few diseases which have been known to react positively. There is little difficulty, however, in eliminating these from cases suspected to be syphilitic. Cases known to have reacted positively prior to treatment, after having received Salvarsan, still continue to show a positive reaction for two or three weeks, which is followed by a decidedly negative reaction. Rather successful attempts have been made, of late, to quantitate the degree of reaction both before, during and after treatment of a given case.

Absence of symptoms, together with a negative reaction in cases known to have been previously positive, would seem to rather contra-indicate further treatment.

In conclusion it would seem to the writer:

(1) That as yet the exact limitations of the serum reaction for syphilis have not been fully determined.

(2) That we have in this test not only a valuable aid, but the nearest approach to a satisfactory diagnostic measure.

(3) That at present the test is sufficiently reliable so that, in justice to the patient, it should be resorted to at least in all doubtful cases.

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VACCINES IN TYPHOID.*

By W. H. Watters, M.D., Boston, Mass.

About four years ago, at the Massachusetts Homœopathic Hospital, there was undertaken with considerable trepidation a work that, as far as was then known, was unique in the line of therapeutics. It was based upon a principle which was all but universally acknowledged to be indefensible and erroneous, and upon the theoretical grounds of the dominant school could only end in worse than failure. Reference is made to the treatment of typhoid fever by bacterial vaccines.

Bearing in mind, however, the fact that substances capable of aggravating a condition under certain circumstances, not infrequently are able to ameliorate under others, particularly those of dosage, an investigation was begun with much caution and under careful supervision.

The first results of the work were reported to this Institute at the Detroit meeting in 1909, and were, at least to those who reported them, very gratifying.

Since then the work has been followed along somewhat similar lines, the report of which is the purpose of the present paper.

This second report must be considered to be by no means final but only one of progress. We consider the work to be merely well started, hoping in the future to carry it to full termination in the new Department for Clinical Research and Preventive Medicine erected through the generosity of Mrs. Robert Dawson Evans.

The greater number of cases that are now brought to your attention have been reported in detail in the Medical Record for May 6, 1911. In that communication thirty-five cases are described, and since then five more have come in, making a total of forty. To these we may add the thirty-four of our earlier series, making a total of seventy-four. All have been treated by an old, slightly virulent culture made into a vaccine after twenty-four hours incubation on glycerine-glucose agar and by sterilization, by heat and lysol.

Before giving any summary of our own opinion a short glance at the results of the work of others may be well worth while.

Apparently Smallman in India was performing an almost parallel investigation during 1908-09 to that which we were carrying on in Boston in 1907-08, the results of both which were published about the same time. He reported thirty-six cases treated with doses of from 100 M to 350 M. Three deaths occurred. Among other things he says "The 'typhoid facies' was in most cases conspicious by its absence. There has been an unusual absence of prolonged cases of complications, of sequelae and of relapses. Everyone who has been concerned in the care of these patients has been convinced that the injection of vaccines does

* Read at the A. I. H. meeting at Narragansett Pier, June, 1911.

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produce undoubted good effects. Moreover no bad effects have so far been noted."

Wilson, who reported six cases, says "The point that struck me most was the absolute difference in appearance of the cases of enteric fever treated with vaccine to other cases I have seen. They all look so much fresher and more robust and all volunteered the information that they felt decidedly more comfortable after the injection." His dosage was 250 M to 500 M.

Sappington treated twenty-two cases, with three deaths. The duration of fever here was twenty-four days as compared to that of thirty-one days in a control series. About 15 percent of cases showed symptomatic improvement. One case was apparently made worse. Richardson's series of twenty-eight cases enable him to conclude that there is a great reduction in the percentage of relapses induced by the use of vaccines.

Semple treated nine cases, and Hollis eleven, both without mortality. The latter has recently reported forty cases, with two deaths, and is very optimistic. Probably the most pessimistic article is that of Anders in the Journal of the American Medical Association, who treated or suggested treatment in eight cases without mortality. The reasons for his pessimism are not clearly stated.

Nichols says that his cases "show that typhoid vaccine even in quite large doses produces no harmful effect."

In a very well written article appearing four days ago in the Medical Record and from which certain abstracts have been made, Callison reports twenty-four cases, with three deaths. His dosage was large, varying from 25 M to 1000 M, averaging 300 M to 500 M. He says "every case of typhoid fever should receive vaccine treatment as soon as the diagnosis is made, and this should be continued until the temperature becomes normal or it is demonstrated that the case will not respond to this form of therapy." He further states that "when given in therapeutic doses stock vaccines are without injurious effect and do not interfere with other treatment."

In a personal conversation recently, Major Russell of the Army, so well known for his typhoid work, assured the writer of his firm and enthusiastic belief in vaccine therapy in typhoid and of his intention to endeavor to introduce it as a routine treatment in the hospitals of the Department.

Allow me to give you the table from Callison's article corrected by the addition of our five cases.

	Cases	Relapses	Deaths
Watters and Eaton	74	6	2
Hollis	51	8	2
Smallman	36	0	3
Richardson	28	1	0
Callison	24	1	3
Sappington	22	0	3
Fletcher	14	1	2
McLaughlin	13	0	0

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Behrend	12	0	0
Nichols	11	2	0
Semple	9	0	0
Anders	8	1	0
Duncan	6	0	0
Simons	6	0	1
Wilson	6	0	0
Martin	2	0	1
French	1	0	0
Illman	1	0	0
Kennedy	1	0	0
Ramsburg	1	0	0
Ruffin	1	0	0
Wood	1	0	0
	328	20	17

This gives a total of 328 cases with a mortality of 17 and 20 relapses. Of the 17 deaths, two of our own were entirely hopeless and far advanced when treatment was begun. They were among our very early ones, and were thus treated when practically moribund. It seems fair, therefore, to exclude them from the list. This leaves fifteen deaths, or a percentage mortality of less than 4.6 and a percentage of relapses of 6.

These cases are taken from various parts of the world and while, of course, but comparatively small in number are fairly representative. The mortality of 4.6 percent may therefore with justice be compared with that of 10—20 percent without vaccine and the 6.2 percent of relapses with 15—20 percent as usually encountered.

Callison takes issue with us in Boston for using too small dosage, saying "the dosage used by many has been too small to secure the best results." This is a matter of personal opinion reached by experience and observation. We can only say that we still very much prefer the dosage that we have already recommended to the massive ones advocated by others. In fact in what was probably our most critical case, and that one had a very gratifying termination, we used daily doses of 1 M, an amount 1000 times smaller than those that he suggests.

In our work we have received a number of results that are old friends to us homœopathically. Thus an early case with mild symptoms receives a material dose of from 30 M to 50 M. As the symptoms are more severe or the beginning of the treatment more delayed, the dose becomes smaller and smaller. In other words the more severe the case the smaller the dose, differing completely from the use of the various anti-sera where the opposite procedure is the rule.

There is another point where we differ from many of our friends in the dominant school. With them the question seems frequently to be, how large a dose can the patient stand? With

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us the query is, how small a dose can we use to obtain the desired effect? Between these two often lies the gulf between success and failure. I would that opportunity permitted further elaboration of this phase of the question. It may be stated, however, that our usual dosage is about equal to the homœopathic 3x taken hypodermatically. I may further state my personal belief that in the use of typhoid or other vaccines I am acting in accord with homœopathic principles and that the identical goal is being striven for as that of those who may prescribe Baptisia, Veratrum or other indicated remedy. I further believe that better results will be attained by the use of both methods than by that of either alone, thus raising to the maximum that state now known as immunity, which is but another way of indicating the old term now sometimes scoffed at, viz., medicatrix nature.

After such results, therefore, what conclusions may be drawn? It is certainly a gratification that after much discouragement from all sides, the beliefs that have been held by us for several years are now coming into general acceptation. This is particularly so as it is a recognization by members of the dominant school of work done by homœopaths and along homœopathic lines.

In the Massachusetts Homœopathic Hospital, comparing a series of the treated with a series of the non-treated cases, we reported in 1910 to the trustees that the duration of fever was less by nine days, the total residence in the Hospital less by eighteen days and the relapses less by sixty per cent for those who had received the vaccines.

We have in the past refrained from giving any conclusions, preferring to give facts and allowing our readers to draw deductions in an unbiased manner. It seems in view of the number of cases from various sources that the time has come when some things may be stated as at least very probable.

1. That vaccines reduce the duration and severity of the fever.
2. That they decrease the mortality fully one-half.
3. " " " " dangers of relapse.
4. " " are harmless when properly used even if they do not confer benefit in every given case.
5. " the earlier they are used the better is the prospect of success.
6. " " more severe the illness, the smaller should be the dose.
7. " " method should be made a routine one in the treatment of the disease and should be considered to be an adjunct to all other recognized measures, particularly remedies. It should not be considered to replace any method but to act conjointly with others.

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SOME TYPES OF COLDS SEEN RECENTLY.*

By Charles H. Colgate, Jr., M.D., Rockland, Mass.

I do not offer this paper as presenting anything new, but simply to open the subject and get a free discussion of conditions which we are meeting every day, and which from their very trivialness are often slighted, and we sometimes lose good patients and their subsequent business.

As to colds in general, I am a strong believer in their infectiousness. I believe a patient gets the germ from another or from contaminated air, rather than by leaving off clothing, sitting in a draft, getting overheated, or various other ways which people ascribe being the cause of their colds. Severe chilling of the surface of the body or anything else that causes congestions in various places or lowers the resistance of the individual is undoubtedly a contributing factor, but unless there is exposure to the disease those things alone will not cause the trouble. I should much prefer the discomfort of an open car in cold weather to the warm atmosphere of our electrics during the rush hours. I think a warm, poorly ventilated house, office, church or public hall is a more likely place in which to catch cold than the same place with a draft of fresh air blowing around one's head or on the back of one's neck.

There have been a great many colds this winter in my section most of which, I believe, were due to the Influenza bacillus, although no cultures were made and the diagnosis of Influenza was made on clinical symptoms only. Whether or not the different types of infection were due to individual peculiarities or to different strains of the same germ family I do not know; but there were several different manifestations of the disease and one set of people would show one set of similar symptoms, while others would have quite a different set.

The easiest kind to diagnose, and those who might be considered as having the most classical symptoms of the disease, were those with the sudden and violent onset, severe pains in the head and back, chilliness, flushed face, high fever, drowsiness and often soreness of the eyes when moving them or to pressure. These cases often made their own diagnosis and only called the doctor for relief or to hasten recovery. It was not difficult to make a satisfactory prescription for them. Gelsemium, bryonia or belladonna used as the occasion demanded seemed to do the work in a very few days, and if there was not a persistent cough or a relapse, a previously healthly person made a good recovery.

Another type of patients complained of sore throat, sneezing, watery nasal discharge, hoarseness, slight cough, only a little fever and not much general disturbance. This class of patients in my early winter prescribing, seemed bound to continue; they developed more fever, more cough, thicker and more profuse

* Read before the Massachusetts Homœopathic Medical Society, April 12, 1911.

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nasal discharge, pharyngitis, and were generally sufferers for a longer period and more likely to relapse than the previous kind. I was at a loss to find one remedy that covered the whole ground. Phosphorus, arsenicum, nux vomica, sanguinaria, belladonna or mercurius were used as they seemed needed, but all the time I felt that some other remedy than these would be better if given early, and it was not until the latter part of the winter that I discovered lobelia syphilitica or lobelia cerulea, as it is sometimes called. This remedy covers the ground for this class of cases, and thus far has given me good results. Either it is a better remedy for these cases or the disease has worn itself out, for they are cured now much more quickly than with other remedies earlier in the season. I have not used the remedy enough yet to feel sure of it, but it has helped me more than any other so far.

I have seen a very few cases which started with this nasopharyngeal type and then suddenly developed cramps and diarrhœa, the nasal symptoms disappearing at the same time. Most of these cases recovered after the internal symptoms had gone, but some had a recurrence of the nasal symptoms.

The type of cases which have been the slowest to recover, and which kept me guessing the most, were those which started with only a slight one-sided headache, generally the right side, and with little or no fever at the start. These patients did not seem very sick, but they complained out of proportion to the objective symptoms. Later they showed more fever, persistent right-sided infra- or supra-orbital pain and congested nares and pharynx. Some of these cases showed signs of infection in the frontal sinus or the antrum, but in others that could not be found. I cannot yet say what is the best remedy for these cases. I used nasal douching when possible, warm applications and even acetanilid to relieve the pain. These patients did not do well in open air treatment and would relapse or recur when I thought them well. For remedies sanguinaria, arsenicum, china, belladonna or mercurius helped me some. Occasionally I tried gelsemium on general principles, but either I expected the disease to yield too soon or else I did not find the similia. At any rate these patients, while they were not very ill, were the slowest to get well. Perhaps some one will suggest a remedy which might help me in the future.

PAINFUL MENSTRUAL PHENOMENA.*

By Dana Fletcher Downing, A.M., M.D., Boston, Mass.

Pain at the menstrual period has been the lot of woman since the beginning of time. Civilization, bringing, as it has, greater opportunities of life, education and culture to woman has seemed to leave her even worse in this particular. At the present time the

* Read before the A. I. H., Narragansett Pier, R. I., June, 1911.

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woman whose sexual organs perform what should be a perfectly physiological function without undue pain and discomfort is the exception rather than the rule.

The work of the physician for many, many years has been largely an attempt to alleviate painful conditions connected with the sex life of woman. From this large amount of work it has come about that a number of theories of causation of these conditions have been advanced and defended. Treatment of the condition has been conducted according to the theory of causation held by the individual practitioner.

The term "dysmenorrhea" has been used for a long time. Literally rendered it means difficult menstruation and as a definitive term is a bad one. And in connection with the word "dysmenorrhea" and the large literature upon that subject I am reminded of the words of that most melancholy of philosophers, Schopenhauer, when he wrote "Everything has been thought; everything has been said; and everything has been written."

The theory most widely held at the present time and the one that has been most popular for years is the mechanical obstruction theory. This theory undertakes to have us believe that the uterus functionates correctly as far as the renovation of the uterine lining membrane is concerned but that the cervical canal is too small to allow the passage of blood and membrane debris. Consequently the discharge collects within the uterine cavity and causes the pain. This would make the condition of painful menstruation closely analogous with afterpains caused in the case of the lying-in patient by the collection of blood clots within the uterus which stimulates contraction of the uterine muscle in its endeavor to force these clots out of the uterine cavity. To the unthinking mind this is at once the simplest and the most fallacious of all theories of causation of menstrual pain.

In looking over a vast literature on this subject I was indeed surprised to find that with very few exceptions the writers had accepted this theory with at times some slight mention of other possible causes and outlined a treatment in conformity with mechanical-obstruction ideas. Hewitt said, "The large majority of cases are really cases of retention." Sims said, "There can be no dysmenorrhea, properly speaking, if the cervical canal be straight and large enough to permit a free passage of menstrual blood."

James Matthews Duncan, writing in 1884, emphatically places painful menstruation among neurotic disorders as follows; "There is a kind of dysmenorrhea which is called spasmodic, being regarded as a neurosis, characterized by painful uterine spasms, which may be described as having no known object in view. It is often called mechanical or obstructive, terms implying a theory of its cause, and implying also that the spasms are, so to speak, intended for the expulsion of the menstrual fluid accumulating in the uterine cavity and distending it. There is no good evidence of the mechanical obstruction, nor the accumulation of menstrual fluid, nor of the dilatation of the uterine cavity, nor of the use of the

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painful uterine contractions; and, as all admit the presence of these contractions or painful spasms I call this kind of dysmenorrhea, spasmodic. It is . . . the only real, positive recognizable uterine dysmenorrhea. . . . It may occur at any time during the flow of menses sometimes even before it begins . . . In the very great majority of cases it occurs on the first or second day of the flow, and is generally severer when the flow is scanty than when it is copious. The pain is rarely accompanied by bearing down, strangury, and tenesmus. It varies in severity, rising occasionally to the intensest agony, with cold sweats, vomiting, and other symptoms of prostration and collapse. Suffering from it the patient often rolls about and groans, and the restlessness is not that of fever but of griping pain. It may last only a few minutes, but generally it goes on for hours, the number of hours rarely exceeding four or five . . . It is generally aggravated by marriage. In women who suffer from this disease there is a super-sensitive condition of the interior of the body of the uterus and . . . especially of the internal os uteri, this condition being tested by the contact of the uterine probe or sound."

In another monograph Duncan states more fully the difficulties in the way of accepting the mechanical or stricture theory. "The stricture or mechanical obstruction is not demonstrated. The disease is a common one; yet on examining the uterus, its canal is, with rare exceptions, found to be as patent as in healthy women or as in women who have no dysmenorrhea."

"The cutting instruments and tents used in dividing or dilating the supposed obstructing part or stricture are so large as to be available only when there is no stricture."

"When in rare exceptional cases a stricture is found, — generally a congenital stricture of the external os — dysmenorrhea is not always co-existent. Not only that, but when a real stricture is found, accompanied by dysmenorrhea, then cure of the stricture is not found to be reliable as a cure for the dysmenorrhea."

"When there is imperforate hymen or complete atresia of the cervix and consequent dilatation of the uterine cavity by retained menstrual fluid — that is, when there is absolute obstruction to the discharge, not merely a stricture — then the pains complained of are not so severe in kind or degree as in a characteristic case of spasmodic dysmenorrhea."

"Characteristic dysmenorrhea is observed at menstrual periods which are scanty in flow. It is often observed that when the menstrual flow becomes copious the pain ceases, or that when it is copious from the beginning the pain is slight or absent, — circumstances quite inconsistent with the stricture theory."

"Violent dysmenorrhea is often present when there is no flow (if I am permitted to make use of a paradox) and consequently there can be no obstruction, as in the case of infantile uterus."

"The stricture theory fails at every point, and it is to the destruction or removal of the stricture that treatment is directed by

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the believers in the mechanical obstruction theory. The very frequently unsatisfactory results of that treatment do not justify much confidence in the evidence supposed to be afforded by it in favor of the theory."

"I have used all these means of dilatation and have been most extensively witness, directly or indirectly, of their employment by others. The sanguine proposers of these methods have produced no satisfactory data to support their practical recommendations."

The fact that competent observers have passed uterine sounds at the height of menstrual pain and have encountered no discharge of any kind would seem to be evidence of the best against the acceptance of the mechanical obstruction theory. It may be true that if the uterus is badly retroverted there may be actual mechanical obstruction to the proper drainage of the uterine cavity. But the fact that menstrual pain of the most intense character occurs continually in individuals who have no malposition of the uterus would militate against our acceptance of this theory as a basis for treatment in any large number of cases.

The test of a theory in the practice of medicine or surgery is the kind of results obtained by treatment given in accordance with that theory. The mechanical obstruction theory demands that treatment based on it be mechanical. It demands doing away with the obstruction. This was at first done by gradual dilatation. of the cervical canal. This did not accomplish what was expected of it, and at a later date Hanks recommended rapid and forcible dilatation. Various cutting operations were formerly advised but were long ago discarded as being too severe and accomplishing very little except the contraction of the cervical tissues.

Present day methods follow the procedure of Hanks. The dilatation is followed by curettage if thought necessary to overcome a malposition of the uterus or some pathological condition of the uterine mucosa. These methods also include the use of dilators of various kinds placed in the cervical canal for longer or shorter periods after operation, in the endeavor to make more permanent the effect of the dilatation, thus relieving for good and all the pain and discomfort.

It is true that relief from menstrual pain does follow these methods of rapid and forcible dilatation, but it is probable that this effect is due to the temporary violence done the nerve endings in the cervix by the abnormal stretching of its musculature, That this effect is in most cases only a temporary one is demonstrated by the fact that those patients who rely on this form of treatment are obliged to have the operation repeated at more or less frequent intervals. Unless something intervenes, such as parturition, the cases are very rare where dilatation of the cervical canal by mechanical means has permanently relieved the condition of menstrual pain.

Musser writing in 1892 said, "Dilatation of the canal by rapid

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means, as well as the gradual method, has been very disappointing."

For any further confirmation of the inefficiency of the dilatation methods you may consult any surgeon who has operated such cases. The fact is that the manifestations of painful menstrual phenomena are too extensive and too intensive to be adequately explained by the mechanical obstruction theory.

This brings me to a consideration of the second theory which has been called by Massey, the parametritic theory of Schultze. It was Schultze who demonstrated the absence of any fluid in the uterine cavity at the height of the menstrual pain, thus disposing of the theory of mechanical obstruction. This theory maintains that most menstrual pain is dependent on diseases of organs closely related to the uterus, the oviducts and ovaries. The sacrifice of tubes and ovaries on this basis seems terrible to anyone who feels that the sacrifice was in most cases needless. Case after case is on record in which one or both ovaries have been removed without relief of menstrual pain. Some surgeons have advised the removal of what at operation proved to be perfectly normal organs.

The fact that the operators who advocated treatment in accord with the theory of Schultze have been convinced of their error and are to-day using dilatation methods would seem to convince us that this theory does not acccount for painful menstrual phenomena. Musser writes "In the dysmenorrhea of single life removal of ovaries did not cause cessation of pelvic pain in the one instance in which the writer was weak enough to allow it to be employed. Not only did the pain occur periodically, but became more or less persistent, and was attended by the usual and even more aggravated nervous phenomena."

The third theory, the one advocated by Massey, is the one that conceives that menstrual pain is entirely a neuro-muscular difficulty. In the words of Massey it is "the attempt of the performance of an important function while either the nerve-centers in the cord or the uterus itself are in an unprepared condition." He prefers the term "menorrhspasm" or "menorrhalgia" as a better definition of what we mean when we refer to painful menstruation.

"Menorrhspasm," writes Massey, "may be said to be a neuromyotic storm of the uterine neuro-muscular apparatus, which renders the excretion of the menstrual fluid temporarily impossible. Its exciting cause may be either lack of development of the organ or morbid conditions of the endometrium, while its remote causes are traceable to all those influences in modern society which hinder the proper development of physical life in young women."

"Accepting the neuro-muscular view of the cause of these pains, the oneness of the pathologic condition in all cases is apparent, the difference being only a matter of degree. In the one case, the neuro-myotic storm is but a danger signal pointing to a neurotic constitution, vasomotor disturbances, spinal irritation,

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abdominal torpidity, or even merely habitual constipation; consequently the attempt at the performance of a high function in the presence of these disabling conditions results in pains."

It is apparent, then, that this theory regards many cases as the manifestation of a general neuralgic tendency caused by general nerve exhaustion which needs general rather than local treatment. Other cases it regards as due to local pathologic conditions in the uterus itself, such as an undeveloped condition or endometritis.

The fact that the pains and discomforts of menstrual pain are not confined altogether to the genitalia, but induce reflex disturbances, such as vomiting, besides being widely distributed over the sacral, abdominal and crural regions, confirms us in our opinion that painful menstruation is a neuro-muscular storm. The anatomic facts of nerve tissue relationship of the uterus and its appendages as well as the relatively remote organs, confirm us in our opinion that the greatest number of cases of painful menstruation cannot be explained as simply as some would have us believe. The nerve supply to the genitalia of woman consists of fibres from the second, third and fourth sacral nerves, sympathetic fibres from plexuses which are really branches of the aortic plexus which in turn is derived from the semilunar ganglion and renal plexus on either side. From this we see that the genitalia are rather closely related by their nerve connections with the cerebrospinal nervous system and with all the abdominal organs. Thus it comes about that no general disturbance of the nervous system in these related parts can take place without pain occurring in the genitalia. What is more reasonable than to expect that this pain occasioned by pathologic nervous conditions in these related parts should manifest itself at the time of menstruation when there is a direct depletion of the system?

Turning from the further consideration of the theories of painful menstruation we shall consider for a time the various therapeutic measures other than those already taken up. There is no doubt in my mind that the alleviation, through general treatment, of the neurasthenia underlying this condition in many cases will result in the relief of the painful menstrual phenomena. When a case of this kind comes to me I am in the habit of first trying my homœopathic remedies, measures hygienic, hydrotherapeutic and so on before resorting to any local treatment of the genital tract. I believe that in the case of single women we are not justified in attempting local treatment until we have exhausted all other possible methods which are applicable to a given case. The use of anodynes and antispasmodics, while of great value at times as makeshifts and palliatives, is only mentioned to be condemned if used as a regular thing with no idea or expectation of cure of the condition by such means.

That painful menstrual phenomena may result from diseased ovaries or oviducts is well known, but even in event of the existence of such condition it seems unwise to operate with the

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possible removal of organs which are capable of being brought to a state of well-being in some other way. Doubtless there are a limited number of cases which cannot possibly recover unless something drastic is done, but, to my mind, in the great majority of cases surgery of any kind is distinctly contraindicated. A more conserving procedure is demanded.

I have witnessed dilating operations and followed up the histories of the patients later only to find that such operations, while temporarily accomplishing the relief of painful menstruation, did nothing more. In my own practice I have dilated but a comparatively few cases, used dilators of a number of kinds in still others before I reached the conclusion that such measures, as permanently curative, were most unsuccessful. Consequently I was induced to hunt about for other means for the cure of such cases. This I found in the work of Massey. His use of the galvanic and faradic currents in these conditions appealed to me. I learned that some fifteen years ago the use of electricity for painful menstruation had been hailed with enthusiasm by the profession in general and many physicians began the use of batteries. Most of them unwilling or unable to spend the time to master even the simpler parts of electro-physics met, as you would expect, with very little success. The tyro in electro-therapeutics endeavored to obtain results from the local application of the positive pole of the constant current which can only be obtained by the application of the negative pole and the terms anode, kathode, reaction of degeneration, were as so much Aramaic to him. Consequently these electric methods of treatment fell into disrepute, and even to-day you will find many apparently intelligent physicians who will tell you, with the greatest pleasure, that the electric treatment of disease is entirely dependent upon the psycho-therapeutic effects of the electric currents involved.

Properly applied, however, I know of nothing more efficient for the permanent alleviation of menstrual pain than electricity. A single case among many similar ones will at one and the same time demonstrate the futility of dilatation and kindred therapeutic measures, applied on the basis of the mechanical obstruction theory, as well as the most miraculous efficacy of electrical treatment.

Mrs. R. E. P. 121, 1910. This patient, a young married woman, twenty-nine years of age, gave a history of agonizing menstrual pain with nausea since the inception of her menstrual periods. Up to three years before her marriage she had had no treatment other than palliative. At that time, however, the menstrual pain became unbearable. Consequently a leading gynecologist of Boston, not of homœopathic school of practice, was consulted and dilatation was recommended. This was done and a uterine stem pessary was inserted by the operator, who made a diagnosis of infantile uterus. Within a few days, while the patient was still in the hospital, the pessary became dislodged and this time the surgeon sewed the pessary in place. This pessary was worn for

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six months, at the end of which time it was removed. During the two years following the periods became more and more painful. During that time she was married and a year after that came to me with the condition of menstrual pain worse than ever before. The pain just at the beginning of menstruaton, often lasting five or more hours, was intense, accompanied by nausea and frequently by vomiting.

Following the current ideas of mechanical obstruction I had her admitted to a hospital and performed the usual operation of dilatation. This done I inserted an Outerbridge dilator securing it in place with a silver wire suture. The menstrual pain was absent for the next two months, and thinking myself secure I removed the Outerbridge dilator. The next period following this removal the pain returned and I resorted to the use of intra-uterine applications of the constant current, making use of the technic of Massey.

Inasmuch as the patient had no leucorrhea and the condition was one of delayed or repressed menstrual flow due to incapacity of the uterus to perform its function properly, the negative pole was selected for the intra-uterine electrode. If there had been leucorrhea and a tendency to menorrhagic condition the positive pole would have been selected as the intra-uterine electrode. It may be well to state that it may be necessary to use the negative pole within the cervix preliminary to the introduction of the electrode within the uterus if the cervical canal is too narrow for easy admittance of the electrode through the internal os. Beginning with a current strength of 8 ma. of the constant current for five minutes, followed by five minutes treatment with the induced current from a high tension coil, the dosage of the constant current was increased from 15 ma. to 40 ma. in the later treatments. Treatments were given twice and thrice weekly for a period of eight weeks. The two periods occurring within that were practically painless, with no nausea or vomiting. At this time the patient removed to another State and I was not satisfied that the cure was complete. It is now over a year since these treatments were given and a recent report by letter states that menstrual conditions are still much improved although the patient remains sterile, a condition I had hoped to relieve.

I mention this case in preference to some others which have been more thoroughly followed out, because of the fact of the great severity of the menstrual pain as well as its long standing, also because of the fact that this patient had all the benefits of treatment according to accepted mechanical obstruction ideas.

The value of constant current application in menstrual pain caused by diseased ovaries and oviducts has been proved by me in several cases of that kind. Sometime, indeed, dorso-abdominal treatments with faradic currents have corrected the condition.

The use of electricity in these and many other conditions appeals to me because of its ease of applicaton, the mimimum discomfort felt by the patient, the needlessness of ether or other

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anesthesia, and the minimum amount of traumatism and manipulation of the tissues of the patient. I cannot remember a case in which I have had to use vulsellum or bullet forceps, or any case in an unmarried woman where I have had to use a speculum unless the patient had been accustomed to that sort of procedure before coming to me.

We, as practitioners of the healing art, should endeavor to give our patients the benefit of every helpful kind of treatment and if we do not that thing we are recreant to the trust that is placed in us. Knowing what I do of the value of electrical modalities in these distressing conditions of menstrual pain as used by others as well as myself, I consider that I am not justified in advising patients to undergo surgical operations of any kind until electrical treatments of the proper sort have been tried and found wanting.

THE PREVENTION OF TUBERCULOSIS, FROM THE MEDICAL, ECONOMIC, AND SOCIAL STANDPOINTS. *

By John Prentice Rand, M.D., Worcester, Mass.

Just now the subject of tuberculosis is receiving much attention, and physicians and others, all over the world, are trying to educate the people regarding it. Incidentally the bars of medical ethics have been thrown down and the physician who was interested in the subject has been given a chance to advertise himself in a legitimate way. Like scores of others in this great campaign, I have been drafted into the service and must plead guilty to the charge of addressing a mixed audience in a public hall upon the subject of tuberculosis. A little later the substance of my address appeared in an issue of the *Journal of the Outdoor Life*, which now advertises the same, with others of like character, "Six valuable back numbers of carefully compiled advice; all for fifty cents."

But my subject is *The Prevention of Tuberculosis*, which embraces in its development about all that can be said of its etiology and treatment. The key to the whole problem is that great discovery of the tubercle bacillus, by Dr. Robert Koch, in 1882. Previous to that all of the learned treatises in regard to the pathology of the disease were hardly worth the paper they were written on. What does the medical profession care today for the anatomical descriptions of "grey tubercle" or "yellow tubercle"? Of greater interest are the experiments of M. Villemin, communicated to the French Academy of Medicine in 1865, in which he showed that tuberculous disease in man could be communicated to certain inferior animals by inoculation. But Flint in commenting upon these experiments in 1873 said: "The discovery of this interesting and important fact naturally leads to the inquiry whether pulmonary

* Presented at the meeting of the American Institute of Homœopathy, at Narragansett Pier, R. I., June 28, 1911.

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tuberculosis may not sometimes be caused in man by the inhalation of a virus contained in the breath or exhalations from the body of a tuberculous patient. The doctrine of the contagiousness of the disease has now, as hitherto, its advocates, but the general belief of the profession is in its noncommunicability."

Old traditions die hard, and this quotation from Dr. Flint, who was then at the very zenith of his professional career, shows how slow the regular profession has ever been to accept anything new. In contrast to this I wish to call to your attention the open-mindedness of our own Dr. Herbert C. Clapp, who in 1880, two years before the discovery of Koch, wrote a little book to prove the contagiousness of consumption. ("Is Consumption Contagious?")

From a medical standpoint, the whole problem of preventing tuberculosis hangs upon the proper recognition of the tubercle bacillus. Without the bacillus we should have no tuberculosis in the strict interpretation of the word. A person's lungs might become involved and impaired to almost any degree. He might even die as a result, but he would not die of tuberculosis. The old term of phthisis, according to the original derivation of the word, would best describe his condition or disease. Destroy the bacillus and the contagion is gone. The question is how to destroy the bacillus. It is evident with the millions of tuberculous people scattered all over the civilized world that this cannot be done by force. We may legislate against promiscuous spitting until doomsday, but people will still spit. All the policemen in the world could not enforce the anti-spitting law in a single state. It is only as the people become educated up to the dangers of filthy habits that we can make any anti-spitting law effective. And this leads me to remark that the most important movement in this tuberculosis campaign is the education of the people. What we wish to accomplish is the destruction of disease-producing germs, and we would like to do it without coercion if possible. If every tuberculous patient would appoint himself a committee of one to look after his own expectorations no prohibitive legislation would be necessary. But all patients will not do this, and so we have to enact laws against spitting in public places and emphasise the danger of communicating disease by so doing. Already we have created a genuine phthisis-phobia, and whole communities will rise in arms when talk of establishing a tubercular hospital in their midst is made.

The lay mind will never reconcile the incongruities of our professional teaching. We say that consumption is a contagious disease, and that the expectorations of a consumptive patient contain millions of living germs which may infect the whole community. We demand that all cases of consumption be reported to the Board of Health. When a patient dies we boil his clothes and disinfect the room he occupied. We flaunt the dangers of communicating consumption upon glaring posters; but when we wish to build a hospital for consumptives in a given locality and the

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neighbors object, we come around and assure these people in dulcet tones that there is absolutely no danger from an institution of the kind, though hundreds in it were dying from the disease, and we wonder what makes them so foolishly frightened.

The reason is not far to seek. A little knowledge is a dangerous thing, and a wholesome fear of what we cannot fully understand is often desirable. Personally, I sympathize with the layman's position. I should not like to have a consumptive's home for a near neighbor myself.

But pardon the digression. I was speaking of sanitary education as the first and most important factor in the prevention of tuberculosis. Laws are but the natural expression of public sentiment. An intelligent public sentiment creates wise laws and insures their enforcement. It is not difficult to get appropriations for tubercular sanatoria when public sentiment demands them; and so as a physician, I welcome this educational campaign. We are fighting a common enemy and we need the active coöperation of the entire community. The majority of people will help us, if they can be made to understand the necessity for doing so and the reasons why; and so the travelling tuberculosis exhibit which can be widely advertised in the public press becomes a mighty factor in the education of the people. Think what education has already accomplished upon these lines.

The official Directory of the National Association for the Study and Prevention of Tuberculosis, just published, gives the following statistics:—"421 hospitals and sanatoria; 342 dispensaries; 68 open air schools; 511 philanthropic associations; 69 hospitals for the insane with separate wards or pavilions for tuberculous patients; 29 penal institutions making special provision for the same and 250 cities actively interested in the work." To Massachusetts belongs the credit of establishing the first state sanatorium in this country. (It was my privilege to serve as a Trustee for a period of seven years beginning in 1897.) New York followed next, but today we have actually built or provided for 38 sanatoria in 29 different states. Providence opened the first Fresh Air School on Jan. 1, 1907. In four years 67 have been added to it. And so on all along down the line. The increase of our great public facilities for the prevention and relief of tuberculosis is but the legitimate result of sanitary teaching.

There can be no fixed line drawn between the preventive and sanitary treatment of this disease. The scrupulous cleanliness demanded in the care of the sick is not so much for the sake of the patient as for the sake of those around him, and the same might be said of our special care for comdemned criminals and the hopelessly insane. What is the life of an incorrigible criminal or of a demented person worth to the state? Nothing, absolutely nothing. They are "undesirable citizens" from a material standpoint and if they could be eliminated in some merciful way from the body politic the world would be better off. But we cannot Osler-

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ize them as yet, and so we are trying to cure these poor unfortunates, not for the sake of prolonging their miserable existence but as a protection for ourselves.

Abraham Lincoln once said: "This country cannot live half slave and half free," and we might paraphrase his words,— We cannot live half tuberculous and half exempt. At least there is no surety that we can, and the vilest consumptive in the whole community, from a sanitary standpoint becomes an object of interest. Society must protect itself as truly as the individual, and the advanced cases of pulmonary tuberculosis must be looked after to prevent them from infecting the healthy. Personally I believe that such cases should be segregated, so far as possible, in public institutions where they can be under competent supervision. There is no danger from contagion in an incipient case, for the case must have passed the truly incipient stage when bacilli are thrown off in the sputum. It is the advanced cases that must be looked after and taught the lesson of personal cleanliness.

Another form of education to which I wish to call your attention is the special training of medical students to take up this kind of work. There is no branch of medical practice that offers better opportunities for service than this. To be able to diagnose and cure incipient cases will surely help to prevent the infection that comes from the advanced ones. A conflagration which is put out at the start is never heard from.

And the next form of education of which I wish to speak is that intuitive wisdom by which a man is able to know himself and understand the environment in which he must live. If good food and fresh air will enable an infected person to recover, how much more will they prevent a well person from being sick! And this leads me to the great economic question involved in the prevention of tuberculosis. There is no doubt but unhealthful occupations and stifled houses are responsible for most of the tuberculosis that obtains today. You have heard of the notorious "lung block" in New York City in which the death rate from tuberculosis was simply appalling. What was the reason for this? The almost total absence of sunlight and fresh air. Filth and promiscuous expectorations were contributing factors, but the sputa would have been robbed of their terrors could they have been exposed to the bright sunlight even for a few hours. You cannot have proper sanitation in tenement-houses that are crowded together with no suitable provision for sunlight and air, and there is only one way to prevent such crowding, and that is by law.

"Man's inhumanity to man makes countless thousands mourn." The lust for gain is so strong in the heart of the average landlord that he will crowd just as many tenements upon a given area as he can possibly rent. With our boundless acres and ready means of transportation there is no need for crowded tenements. Every house should have a yard around it, the glorious sun should shine in every dwelling, and these things can be made possible

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if the men who make our laws can be educated up to the necessity for them.

But we must make haste slowly. We cannot legislate effectively any faster than public sentiment will approve, but when we know that an occupation is unhealthful we should find out the reason why and then serve notice, upon the ones responsible for it, to remedy the evil or shut up shop.

Think of the thousands of our mill operatives who have gone to their death from lack of proper ventilation! Almost every indoor occupation is unhealthful on this account. It is claimed that alcohol and improper foods are predisposing causes of tuberculosis, and they surely are but, in my opinion, bad air is much more frequently so. Our sixty-eight fresh air schools for tuberculous, children are but a tardy acknowledgement of previous neglect. We ought to keep all of our schools so thoroughly ventilated that we should have no need of them.

Through the courtesy of Dr. Edwin A. Locke of Boston, I have been furnished with some very interesting statistics in regard to the financial cost of tuberculosis. These statistics were compiled by Drs. Locke and Cleveland Floyd, from a study of five hundred male consumptives, a full report of which was presented by Dr. Locke at the Denver Meeting of the National Association for the Study and Prevention of Tuberculosis, June 25, 1911. These figures are startling from a business standpoint and show in a decisive way something of the tremendous financial burden our army of consumptives throws upon the state.

Of the 500 male patients whose histories were studied to May 1, 1911, 244 had died, and 256 were then living. Of the dead, 175 had been treated in public institutions at a total expense of $31,072. Of the living, 151 had been treated in public institutions with a total expense of $42,912, making the total cost for the 326 patients, dead and living, in public institutions $73,984. He also shows by another study of figures that the total loss in wages of these 500 ordinary laborers amounted to the enormous sum of $426,039.

Prof. Irving Fisher says that the total cost of tuberculosis in these United States exceeds $1,100,000,000. per year. How small our little appropriations for combating the disease seem in comparison with that!

But I must hasten on. The prevention of tuberculosis from a social standpoint consists in correlating all of our municipal and semi-charitable organizations for the help of the afflicted. The help which a well-conducted sanatorium renders the public is more general than specific. It is a great thing to take a poor discouraged consumptive into our State Sanatorium and send him home cured; but that is only a small part of the benefit conferred. You have educated a medical missionary who is going home to preach the gospel of new courage and right living to everybody he meets. People will believe in him who will not go near the doctors, and the influence he can exert among his friends and acquaintances is a tre-

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mendous factor in teaching the public how to avoid consumption.

The great social question of elevating the physical standards of the race by prohibiting the marriage of tuberculous people I shall not discuss at all. I, myself, married a consumptive, the only woman in the world to me, who left me with an orphaned child in less than four years. That child is now a college student who has never shown any evidence of tuberculosis, and I trust he may never become a burden to the State.

And this reminds me of the claim of Dr. Joseph Walsh, I think, that the child of a tuberculous mother, instead of being more susceptible to tubercular infection has really inherited a partial immunity on this account. And he argues that if this were not true every such child would surely become infected by physical cantact with his mother and die a victim of this disease.

Whether his theory is correct or not it is surely an encouraging thought to the children of tuberculous mothers who have felt themselves doomed on this account.

To summarize the essentials for the prevention of tuberculosis, all of the measures I have enumerated seem to come back to this one thing and that is the education of the people. The profession already knows enough to stamp out the disease, but the laity does not. If we could only bring every consumptive, and every candidate for consumption, to a realizing sense of his individual responsibilities in stamping out tuberculosis the thing would be done. Laws would be passed and enforced for sanitary dwellings for sanitary factories and mercantile establishments of all kinds. Gymnasia would arise for the healthy; hospitals and sanatoria for the afflicted poor. The saloon would be closed, and the ten thousand little things which go to make up the sum total of our sanitary knowledge would become common and popular.

When I started out to write this paper, I had in mind to go into the details of our great state and municipal organizations for the benefit of our tuberculous people, but the more I thought of it the more I was convinced that all these things were matters of detail which each community must work out for itself.

The need today is not so much for more knowledge upon the subject of tuberculosis as for the dissemination among the people of what knowledge we do possess.

The scientist must go before and blaze the way for the profession to follow in his laboratory, but there is work for every true physician outside. We must educate the people. We must take them into our confidence and invite their co-operation and support. We must tell them the truth about this disease which has held them so long in bondage, and the truth shall make them free.

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CLINICAL DEPARTMENT

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

Case IX. — Diagnosis: Arterio-sclerosis — Apoplexy and Diabetes.

There can be little doubt but that the congestion headaches from which this patient suffered were due to some cerebral vascular trouble. This is especially suggested by numb spells in one arm or the other and the diplopia, both of which frequently preceded the congestion headaches and both of which suggest periodic slight thickenings, perhaps little thrombi on the side of roughened vessels which did not produce complete occlusion. A similar arterial change doubtless led to granular kidneys, though as no urine analysis was made before the shock this is conjectural, but there is now a constant though small amount of albumen.

Then came a day in the fall of 1909 when she had two numb spells which necessitated her going to bed. This was evidently a more serious thrombus which by 2 A.M. had produced such pressure and œdema about the right projection tract as to result in a left haemaplegia. The absence of Babinski's reflex on the left (large toe extension on plantar irritation) and of marked muscle weakness or contracture argues against hemorrhage as does also the gait which is not of the semi-circle type.

Speech was not affected at first, but in a few hours the clot had extended sufficiently far down the vessel to disturb the nucleus of the glossopharyngeal in the neighbourhood of the calamus scriptorius. This latter is probable on the ground that it is known that irritation in this locality by hemorrhage thrombus or embolus may produce a sugar urine. Of course it cannot be definitely said that diabetes was not present before the shock, but the fact that she suddenly began to have urethral irritation and scalding soon after makes it probable that it appeared then for the first time as a result of cerebral disturbance and is not of pancreatic origin. The proximity of the vagus nucleus would also account for the increased respiration and heart action.

The emotionalism of this patient is an interesting feature. She would cry even at a joke and could not control it for hours. I have a dispensary patient who laughs similarly while describing his pains, and he too had a shock a year ago. It would seem that whatever this lesion is it disturbs the inhibitory mechanism of the emotions and so suggests the possibility of localization of this function — an interesting problem for psycho-physiology to work out. It is in just such questions that neuro-pathology may be of service to psychology.

The patient was referred by an old school colleague who requested that she should be given codeine, and so she has received a quarter grain each night. It has had the happy result of giving ten hours sleep each night and days free from the restlessness which has been one of the most disturbing symptoms to both patient and family. It has also, in conjunction with plumbic iodide

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and a careful diet, reduced the sugar to a little over 1 per cent. The patient feels and is much improved.

Case X. — For Diagnosis:

Mrs. C. Age 56. Born in Massachusetts of old New England stock.

F. H. Mother normal, vigorous, died at 94. Father, asthma for fifty years, died of sepsis at 74. Five children living and well except patient.

Patient had scarlet fever at 7 followed by dropsy. When 11 years old jumped from a hay loft, hurting herself but not seriously. After this, however, bending in a certain way to pick things off the floor gave her a catch in her side.

When 17 she was suddenly picked up from behind and thrown over the back, which hurt her much. In neither of these instances, however, was attention paid to these strains.

She was married at 19 and had two healthy children. She early began to have indigestion gas, and periods of colicky discomfort. Constipation was persistent and was explained on the ground of a retro-displaced, firmly tied down uterus, which, however, she was told could not be operated upon "because she would die of shock." She had much local treatment. This was twenty-five years ago.

Twenty years ago she contracted malaria in the South and had chronic diarrhea for three years, until she became acclimated.

Ten years ago an osteopath was the first to tell her that she had spinal curvature.

Three years ago, being much run down, a ventral suspension operation was done, from which she made a good, immediate recovery. But five weeks later she went completely to pieces and for two years was acutely neurasthenic. So called internal tremor with pulsations, loss of appetite, indigestion, and some phobias with much fatigue were the leading symptoms. She then got somewhat better and walked much out of doors. At this time tried Christian Science and neglected proper treatment. As a result while thus overdoing she began last February to have a new kind of throbbing in her abdomen and left chest and sinking spells, when she thought she was going to die. "The world recedes from me and I get very faint," she said. This pulsation in the abdomen and the faint spells are now the most distressing symptoms. Sleep is capricious, as is the appetite, and the bowels are still constipated. She has headaches parietal and occipital, the latter at times being very wearing.

Examinations:

A thin, gray, sallow woman of happy temperament when feeling better, but easily depressed and slightly hyper-emotional. Full of internal feelings. Reflexes are normal. The standing posture is slightly stooped; lower abdomen protruding, and the spine has a marked S-shaped curve, in the dorsal to the right with a slight

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hunch, and in the lumbar region to the left for compensation; the right hip is high as is the left shoulder.

In examining the possible leg movements with the patient first lying on the back and then on the abdomen, a distinct limitation of motion can be demonstrated in the right sacro-iliac joint and there is a constant dull pain here and soreness to pressure in this vicinity.

The heart sounds are clear, and at the apex is a slight blow which one follows to greatest intensity in the region of celiac axis. There is a distinct *bruit* which can be heard in the femoral and popliteal arteries. Palpatation just below the costal margin on the left reveals a pulsating tumor size of a small orange. Otherwise the chest and abdomen reveal nothing, and the urine is negative.

From what is this woman suffering?

We regret that our usual paper on "What Do We Need to Know Clinically about the Mind," had to be omitted this month. It will appear in the November number.

TUBERCULIN IN PRACTICE:

Glandular Tuberculosis. — In uncomplicated cases of scrofula or tubercular lymphadenitis statistics afford favorable results.

Ocular Tuberculosis. — From the reports of Dr. Geo. S. Derby on the use of tuberculin in ocular tuberculosis the tuberculin treatment is indicated in such lesions in preference to any radical measures.

Genito-urinary Tuberculosis. — Dr. F. E. Gardner gathered data from fortv-six authors on the use of tuberculin for tuberculosis of the kidney, bladder, prostate, fallopian tubes, testes, etc., embracing over 200 cases. Of these 27 per cent were cured, 47.5 per cent were improved, and 25.5 per cent unimproved. Mixed infection plays an important role in this class of cases. Distinct surgical indications should always be met before attempting tuberculin injections. Dr. Hugh Young cites six cases in detail with decidedly favorable results.

Tuberculous Peritonitis. — Raw claims that tuberculin is practically specific.

Cutaneous Tuberculosis. — Not only Raw but others advocate the use of tuberculin in all cases of lupus and tuberculids.

Tuberculous Meningitis. — If a correct diagnosis is made early tuberculin treatment may do good. Raw claims to have cured three cases.

THE DELAWARE COUNTY HOMŒOPATHIC MEDICAL SOCIETY held its July meeting on Mr. J. I. Taylor's launch on July 13, 1911, at 3.30 P.M. The Society met at Taylor's boat house, Chester, Pa., and enjoyed a pleasant afternoon's sail on the Delaware. The scientific discussion of the meeting was "Some Thought on Infant Feeding," by Dr. E. L. Clark, whose subject was well presented, and caused much favorable comment and discussion. The President, Dr. J. P. Van Keuren, was in the chair. Collation was served on the launch, all having voted it a most joyous and pleasant scientific as well as an enjoyable afternoon and evening. — G. C. Webster, M.D., Sec.

THE WEST PHILADELPHIA GENERAL HOMŒOPATHIC HOSPITAL held an annual meeting of the combined Hospital and Dispensary staffs in the hospital on Monday afternoon, July 10, at 3 P.M. Much important business was transacted. — H. M. Gay, M.D., Chief of Staff.

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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 MEDICIAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business, should be sent to the Business Manager 22 Columbia Road, Dorchester, Boston, Mass.

EDITORS:
JOHN P. SUTHERLAND, M.D.
W. H. WATTERS, M.D.
ARTHUR H. RING, M.D., Assistant Editor.

Reports of Societies and Personal Items should be sent in by the 15th of the month previous to the one in which they are to appear. Reprints will be furnished at cost and should be ordered of the Business Manager before the article is published.

Human and Bovine Tuberculosis

We remember that the International Congress on Tuberculosis held in London in 1901 was particularly notable for the famous dictum of Koch concerning the difference between human and bovine tuberculosis, and the impossibility of transmitting infection from the lower animals to human beings. At this session a royal commission was appointed consisting of eminent English investigators. These were Sir Michael Foster, Sir Rupert Boyce, Sir John McFadyean, Dr. Sidney Martin, and Dr. Sims Woodhead. This commission has been busy investigating three phases of the question since that time, and has in the interim published several primary reports. The final report has just appeared and is well worthy of study.

The three questions considered were: First, Is tuberculosis in men and in animals the same disease? Second, Can men and animals be reciprocally infected? Third, Under what conditions, if at all, does the transmission of the disease from animals to men take place?

Concerning the identity of the two forms of the disease it has been found that the human and the bovine type of bacilli are indistinguishable morphologically, but that their culture and pathogenic properties differ. It seems to be, however, a difference of degree only. The human type produces a fatal disease in guinea pigs, chimpanzees and monkeys, but is comparatively slight pathogenically to cattle, goats, and pigs. Two types of the organisms are considered by the commission to be merely varieties of the same species showing different characteristics, on account of long continued differing environment.

The second question concerning the possibility of reciprocally infecting men and animals is obviously a difficult one. It is concluded that the bovine type of the bacillis is more virulent than

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the human, but that in a general sense both men and animals can be reciprocally infected.

In consideration of the last question, it is noted that those cases of pulmonary tuberculosis investigated, were usually due to the human type, but of the younger children suffering from the primary abdominal tuberculosis, nearly 50 per cent were caused by the bovine type. It seems to be definitely decided also that primary abdominal tuberculosis as well as tuberculosis of the cervical glands is frequently due to the ingestion of tubercular material of bovine origin. The necessity of properly safeguarding all milk and meat supplies is therefore obvious.

The conclusions thus reached after a most careful research, are ones that should command, not only respect, but should give rise to the instigation of new laws and regulations for the prevention of the condition.

OVER THE BORDER LINE

Apropos of the late decision of a Massachusetts criminal court, giving a verdict of guilty against a physician who had previously held a good record but was recently arrested for performing an abortion, there has recently occurred in a neighboring State a case of more than usual interest. The method of following the doctor, the final discovery of his willingness to thus play the part of criminal, was particularly interesting if newspaper reports are to be trusted. The man in question was originally a homœopath, a brilliant student, and one who took high standing at the university from which he graduated. Very early in his professional life he disdained his homœopathic associates, and left for the allurements of the dominant school. Not satisfied with the normal income of the practitioner, it is stated he made secret bargains with various charlatans for sharing the profits of all cases referred to him. From this to abortion the steps were easy and readily taken, as are all down grades.

His former medical associates becoming suspicious of him, a unique way of watching him was devised. A comparatively young and (we presume) attractive female was employed. With a companion she went to a private hospital noted for its illegal work in the maternity line, and represented herself as pregnant, and planning to herself in some way to induce abortion. The motherly (?) matron finally dissuaded her, explaining all the possible dangers and giving emphasis instead to the safety with which the procedure could be followed by a physician. At the same time the name of this physician was given. Shortly after, arrangements were made and the physician came to the house with his instruments. The detective continued to play the role of patient, paying the fee and allowing all surgical preparations of instruments to be made. Just as the operation was about to begin, two other detectives who had been secreted in a closet stepped out and placed the doctor under arrest.

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As might be expected, the defense is putting up the plea of "trap" and "plot," and at the time of writing the verdict has not been given.

Whichever way it may go it should teach a lesson to other localities concerning a new and possibly a better way of getting after those who do so much to lower the dignity and purposes of the profession.

In these cases may the saying be most true, "The way of the transgressor is hard."

AN EPIDEMIC OF CHANCRE OF THE LIP: In a recent number of the Journal of the American Medical Association Schamberg reports an interesting but unfortunate epidemic of chancre occurring in a company of young men and women averaging from 16 to 22 years of age. The occasion was a minstrel performance and banquet, after which some of the old-fashioned kissing games were introduced. He describes very clearly how six of the young women and possibly a seventh became infected from the promiscuous kissing, the infection apparently having its origin from one young man. In concluding he says: "This most unfortunate epidemic should teach a lesson which cannot too strongly be impressed on the public, i. e., the danger of promiscuous kissing, either between those of the opposite or the same sex. This should be taught as a matter of every-day hygiene. In the second place, physicians must recognize that a tremendous responsibility rests on them in safeguarding the public from luetic patients under their care. Too often the instructions given to patients suffering from syphilis are perfunctory and unimpressive, if not omitted altogether. This epidemic likewise emphasizes the intense infectivity of extragenitally located chancres swarming as they do, with spirochetes."

LETTER FROM CHICAGO

The Chicago Homœopathic Medical Society opens its winter's work in October with a banquet, and, if present plans mature, an address by Dr. Royal S. Copeland of New York.

The Society is trying an entirely new plan of meeting, hoping thereby to awaken a general interest on the part of all who are identified with Homœopathy. The proposition is to hold two meetings with the two active associated societies, in their respective localities on the south and west sides of the city; two clinical meetings with Hahnemann and Hering Medical Colleges; one meeting, devoted to medical research work, in the down-town district; and two banquets, at the beginning and close of the year. The President, Dr. A. H. Gordon, and the Secretary, Dr. P. M. Cliver, are alert, earnest and progressive, and the year promises much. The hope of all who are interested in arranging the program is to harmonize all factions, awaken general interest, and establish good fellowship "all around the circuit." Dr. Gordon has just returned from Europe, where he attended in London the International Congress of Homœopathy, and later visited the Continent and did some work in the clinics of Vienna.

The After-Dinner Club, the women's organization, holds its first meeting this month and will have a full program. Later it will resume the custom of meeting on the same evening as the city society, adjourning early

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enough to attend the sessions of the latter. Dr. Sarah M. Hobson is President and Dr. Agnes Fuller, Secretary of the Club.

While on a vacation this summer in the Northwest I had the pleasure of attending the Washington State Homœopathic Medical Society, which met in Seattle July 21, 22. About fifty members were present. Dr. C. E. Grove of Spokane, President of the Society, was in the chair. The papers of all the bureaus were valuable and well presented, and very few listed on the program failed to appear. The President's address was a concise review of the whole field of medicine and medical research for the year, and his conclusions were broad and positive. He favored the Owens bill to establish a national bureau of health, and recommended a resolution by the Society endorsing the bill. The Society, in general, however, took a more conservative view and voted to take no official action until it was known definitely what the attitude of the American Institute of Homœopathy had been at its recent meeting, desiring to act in harmony with that body.

The meeting was characterized by an earnest, progressive spirit and a good fellowship most attractive to the on-looker. Most of the doctors are young, and all gave the impression of success and thrift.

The meeting closed with a banquet at the New Washington Hotel. Philosophy and good humor, blending with a gracious interchange of compliments in the after-dinner talks, made a fitting ending to the two strenuous days of association work.

Dr. A. E. Goldsmith of Tacoma was elected President for the ensuing year, and Dr. George W. Beeler of Seattle was re-elected Secretary.

Rhoda Pike Barstow.

September 15, 1911.

SOCIETIES

The Homœopathic Medical Society of New York is planning for an unusually interesting meeting on October 10-14. The session will be held in New York City at the Homœopathic Medical College and Flower Hospital. It will include clinics in all branches of Medicine, as well as the usual very promising program of papers. We believe all who attend will be well repaid for their efforts.

THE MONTH'S BEST BOOKS

Medicine. Dieulafoy. 2 vol. $12.00. D. Appleton & Co.
Diseases of the Stomach. Aaron. $4.75. Lea & Febiger.
Thyroid Therapy. Waller. $2.00. Wm. Wood & Co.
Pathology and Morbid Anatomy. Green. $4.00. Lea & Febiger.
Practical Hygiene. Harrington. $4.50. Lee & Febiger.
Cardiac Pathology. Norris. $5.00. W. B. Saunders & Co.
Joint Tuberculosis. Ely. $2.50. Wm. Wood & Co.
Diseases of the Skin. Sequeira. $8.00. P. Blakiston's Sons & Co.
Infection, Immunity, and Serum Therapy. Ricketts. $2.00. American Medical Association.
Pathologic Technic. Mallory & Wright, $3.00. W. B. Saunders & Co.
Pathology and Bacteriology of the Eye. Collins & Mayou. $4.00. P. Blakiston's Sons & Co.
The Treatment of Syphilis with Salvarsan. Wechselmann, Ehrlich & Wolbarst. $5.00. Rebman Co.

BOOK REVIEWS

An International System of Ophthalmic Practice. Edited by Walter L. Pyle, A.M., M.D., Philadelphia, Member of the American Ophthalmological Society.

Pathology and Bacteriology. By E. Treacher Collins, F. R. C. S., Surgeon to the Royal London Ophthalmic Hospital and Ophthalmic Surgeon to the Charing Cross Hospital, etc., and M. Stephen Mayou, F. R. C. S.,

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Surgeon and Pathologist to the Central London Ophthalmic Hospital, etc. With three colored plates and two hundred and thirty-seven figures in the text. Philadelphia. P. Blakiston's Sons & Co. 1911.

Some time ago there was reviewed these columns a book upon Ophthalmic Therapeutics, by Davis. It was one of a series upon ophthalmic practice that is being prepared by this publishing house under the editoral supervision of Dr. Walter L. Pyle. The one now under consideration is another of the same series. The topics of which it treats, pathology and bacteriology, will doubtless be less popular than were those of the other, as treatment is a necessity for all, while a smaller number consider the more theoretical side.

Both authors are Englishmen who have had extensive experience in the subjects, both from the operative and from the laboratory sides. It is from this wide experience that the book has been written rather than from that of the theorist. If any one part might be selected as more valuable than another it is the chapter upon parasitic diseases of the eye (bacteriology), with a final section upon practical methods.

Extended description of the Wasserman reaction explains the technic of that procedure in a manner more satisfactory to the general reader and probably more intelligently than any other description that the reviewer has read.

Our review is therefore favorable in all respects, and we believe the book to be well worth a wide circulation.

Progressive Medicine. A quarterly digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia. Assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia. September 1, 1911. Lea & Febiger. Philadelphia and New York. Six dollars per annum.

The Fall number of Progressive Medicine includes contributions on Diseases of the Thorax and its Viscera, by Ewart, Dermatology by Gottheil, Obstetrics by Davis, and Neurology by Spiller.

In view of the results of recent research the section upon Syphilis is perhaps the one containing information that will be the most appreciated. This has particularly to do with the results of treatment by Salvarsan, and the present status of the Wasserman reaction, As usual the volume contains a large amount that should appeal to every practitioner.

TUBERCULIN TREATMENT IN PULMONARY TUBERCULOSIS.

The author reaches the following conclusions:

"1. The efficiency of tuberculin as a therapeutic agent has been proved to such a degree that it has passed beyond the pale of controversy.

"2. Its administration should always be combined with rest, hygienic and out-door treatment, and in the vast majority of instances should be subservient to this.

"3. I am of the opinion that equal parts of the 'Bazillen Emulsion' and 'Bouillon Filtrate' represent at the present time the ideal therapeutic agent for the treatment of tuberculosis, for the reason that the mixture would combine whatever immunizing properties exist in either the tubercle bacillus or the culture fluid.

"4. Statistics show that more than twenty per cent more permanent cures have resulted when tuberculin has been employed than when it has been omitted. (Trudeau and Pottenger.)

"5. Many patients running a slow but steadily down-hill course, in spite of hygienic, dietetic, and open-air treatment, improve under tuberculin."

— Southern Medical Journal.

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IDENTIFICATION BY FINGER PRINTS.

It would seem that it was Galton who proposed, and first reduced the finger-print method to a system; that when he made it known to M. Bertillon the latter was for a long time very skeptical as to its utility. Galton published his "Finger Prints" in 1892, and soon afterward his "Index of Finger Prints." He claimed that the chance of the finger prints of two individuals being identical is less than one in sixty-four billions — a margin safe enough, for the most careful of judicial procedures. If therefore two such prints are compared and found to be identical, nothing human can be more reasonable than that they are the prints of the same person; if they are not identical they must surely belong to different people. The chance of error is here infinitesimal; and such chance is still further eliminated if prints of three or more fingers are taken. The only requisite seems to be that the prints be taken clearly enough to bring out all the lines. It is considered that these lines and prints are more enduring than any other mark of the body; they do not vary from youth to age; they persist even after death, at least until decomposition has set in. Injuries alone change them; but a cut would be an added identification. — Dietetic and Hygienic Gazette.

THE VALUE OF COLEY'S FLUID.

So much has been heard in the past few years concerning the fluid prepared by Coley, and consisting of the mixed toxins of Streptococcus pyogenes and Bacillus prodigiousus that a quotation from Green's experience as recently reported in the Boston Medical and Surgical Journal may be of value:

"From a study of these cases the following conclusions seem justifiable:

1. That the use of Coley toxins alone in the treatment of sarcoma is warrantable only in obviously inoperable cases and then as a last resort.

2. That the use of Coley toxins as an adjunct to surgery in the treatment of sarcoma, or as a prophylactic against recurrence, is advisable, though by no means of definitely established value.

3. That the preparation of the mixed toxins of *Bacillus prodigiousus* and *Streptococcus pyogenes* as a bacterial vaccine, by the method described in this paper, is quicker, simpler, and more accurate than their preparation by Coley's method, and that the product obtained is equally efficient."

TUBERCULOSIS OF LYMPH NODES.

In the "Northwest Medicine," Griswold of Seattle expresses his belief in the efficiency of tuberculin in the treatment of tuberculosis.

"The advantages of the tuberculin treatment over that of surgery are that patients will more readily submit to this than to surgery, and they are probably less likely to be afflicted later with pulmonary tuberculosis. A patient whose general health improves under tuberculin must be getting rid of all of his tuberculous lesions; consequently one would expect fewer cases of pulmonary tuberculosis following cures by tuberculin than those by surgery."

DIAGNOSIS OF GENITO-URINARY TUBERCULOSIS.

Barney and Young in a recent number of the Boston Medical and Surgical Journal contributed an article upon the Guinea Pig Test in Genito-Urinary Tuberculosis. After a number of cases they speak of

These cases are to be considered as simply further evidence of the extreme reliability of the guinea pig in the final decision.

Let it not be understood from what we have said that absolute immunity from error in the diagnosis of genito-urinary tuberculosis is claimed for either the surgeon, the pathologist or the bacteriologist at the Massachusetts General Hospital. It has been shown that all are at times in the wrong. What we have attempted to prove is that the guinea pig test for tuberculosis, when carefully done, is by far the most delicate and invariably accurate diagnostic weapon at our disposal and that a negative test is of indisputable value.

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TREATMENT OF MISCARRIAGE.

Young and Williams in the Boston Medical and Surgical Journal, after an experience with 2,000 cases of miscarriage at the Boston City Hospital, give the following conclusions:

1. Spontaneous emptying of the uterus takes place in but about 13.2 per cent of all miscarriages.

2. The likelihood of a miscarriage to complete itself increases with the duration of pregnancy.

3. When it becomes necessary to use artificial means to complete the miscarriage, the finger followed by the curette in later miscarriages, and of the curette alone in the earlier months of pregnancy, has given uniformly satisfactory results at the Boston City Hospital.

4. Experience has shown that where the cervix is extremely rigid it is better to introduce the curette and break up the fetus and placenta and remove them piecemeal than to attempt to dilate the cervix sufficiently to introduce the finger.

5. Packing the vagina and lower segment of the uterus is an unsatisfactory and often unsuccessful method of emptying the uterus. No success whatever was obtained in treating incomplete miscarriages in this way.

6. Packing is, however, of great value in two classes of cases.

First, in exsanguinated patients, to stop the hemorrhage and give the woman a chance to recover somewhat from the loss of blood before emptying the uterus.

Second, when the cervix is very rigid, a tight cervical pack for twenty-four hours will soften it so that dilatation may be attempted with safety.

7. The results of artificial methods are as good, but not better than where nature has succeeded in emptying the uterus.

8. Artificial methods are necessary in a majority of cases, however, simply because nature has failed.

FACTS REGARDING VACCINATION.

Dr. W. W. Keen in a recent letter to the Philadelphia Public Ledger speaks as follows concerning Vaccination: "One of my old students at the Jefferson Medical College, Dr. Victor G. Heiser, is in charge of the sanitation of the whole of the Philippine Islands. He has accomplished there a work which can be favorably compared with that of Colonel Gorgas on the Isthmus. When in this city about eighteen months ago he told me that in seven provinces in and around Manila there were annually about 6,000 deaths from small-pox, which would mean 25,000 to 30,000 cases every year. But in the twelve months following the completion of the vaccination of all the population, there was not a single death from small-pox in the same provinces. Could there be a better demonstration of its value as a preventive? Moreover, he stated that in over 5,000,000 vaccinations in the Philippines, in spite of their frequent neglect of the slight sores which are necessarily produced by the operation, and of the uncleanly habits of a large number of the inhabitants, not one single death had occurred, the finest record of any similar wholesale vaccination in the world. In your issue for May 7, also, in the first page of the Magazine Section in Professor Turner's paper on the "Abolition of Slavery in Pennsylvania," are published facsimiles of some advertisements which appeared in Philadelphia before the days of vaccination. Among them is one which to-day would be utterly absurd. It reads "Lately imported from Antigua (as though they were cigars or coffee) and to be sold — a parcel of likely negro women and girls from 13 to 21 years of age, who have all had the small-pox.' Such an advertisement at the present day would be unthinkable. It added to the value of a slave in those days to have had small-pox. To-day nobody thinks of any one ever being liable to small-pox, except those who neglect vaccination. I commend this experience of Dr. Heiser in the Philippines and this advertisement from your paper to the attention of our antivaccination friends."

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RETINAL HEMORRHAGE.

Rogers, in the Journal of the American Medical Association thus speaks concerning Retinal Hemorrhage:

1. "Three-quarters of all cases of hemorrhage retinitis either terminate fatally within a few years or the patients suffer marked impairment of health.

2. The existence of any form of hemorrhagic retinitis is suggestive of present or future disease of either the nervous or circulatory system.

3. The duration of life in albuminuric retinitis increases with the age of the patient and the younger the patient, the worse the prognosis in point of time."

AMBULATORY VERSUS SANATORIUM TREATMENT.

The use of tuberculin in the treatment of pulmonary tuberculosis in suitable cases finds its greatest exponents in a well-equipped tuberculosis sanatorium. There, cases can be closely observed, studied, results accurately tabulated, the effect of a regulated administration of tuberculin carefully noted, and from such histories much valuable information and proper deductions may be gathered. Not so in the treatment of ambulatory tuberculosis patients. The treatment cannot be given with any such degree of regularity as with the strict rules enforced at a sanatorium. Ambulatory patients do not always present themselves at the stipulated hour or day to receive the next regular treatment, as case histories only too well show. In a few isolated cases only is there any semblance of a systematic medication and yet with all these provisos the results here given will show that the use of tuberculin is productive of good results, even if the treatment is somewhat irregular and not properly systematized. Therefore, I recommend, as I have stated before, that in all cases of pulmonary tuberculosis, carefully selected and suitable, the subdermal tuberculin medication should be given in correlation and connection with all the other approved methods of treatment. — The Journal of the American Medical Association.

PHYSICIANS' FEES IN JAPAN.

We would like to say Amen to the following item: "An item in the Oriental Review states that "the strict honesty" of the Japanese people makes it unnecessary for a doctor in Japan to ask payment for his services. "When he has finished his visit, a present is made to him of just as much as the patient can afford." Such a custom, even though it bring small fees, should relieve physicians in that delectable land not only from the trouble of rendering accounts but also from the liability of suits for overcharging. — Boston Medical and Surgical Journal.

SALVARSAN IN SYPHILIS.

1. In all my experience with syphilis I have never found any drug which healed the syphilitic symptoms so rapidly and so satisfactorily as salvarsan. When you realize that the chancre, the mucous patch and condylomata lata are in the majority of cases healed over in forty-eight hours, and as these are the active carriers of contagion, you will readily agree with me that the spread of syphilis will be greatly diminished by the use of this drug.

2. From my experience, I believe that a second injection should be given practically to every case and that this should be given within three weeks after the first, except in those cases where following the first injection there have been some bad after-effects.

3. I prefer the intravenous method of giving the drug because the disappearance of the symptoms seems more rapid, there is no pain or any local irritation at the site of the injection, and the effects of the salvarsan have proved to be more lasting and the recurrences less frequent.

As to the absolute certainty of the cure, sufficient time has not elapsed to justify the conclusions that one or even two or three injections of salvarsan will prevent recurrences of the disease either of the secondary or tertiary lesion. Time alone will tell. — *Edgerton*, Interstate Medical Journal.

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SURGICAL TREATMENT OF PULMONARY TUBERCULOSIS.

Surgeons have in recent years and with such success entered so many fields that have formerly been supposed to have been closed to them that we are not particularly surprised at the recent advocacy of certain measures in the treatment of Pulmonary Tuberculosis. According to the Paris letter of the Interstate Medical Journal, a method that is giving a moderate degree of satisfaction has been introduced by a native of that city. It is described as follows:

The method which is much more interesting is the one which is called artificial pneumothorax, and which in France has led to a number of interesting investigations. The following will explain how the idea arose. A pulmonary wound constitutes a cavity that has no tendency to retract; not only do the movements of the lung prevent the coming together of the margins, but the constant exercise of a centrifugal force by the empty pleura tends on the contrary to enlarge the wound. Pneumothorax would seem, then, a priori to place a pulmonary cavity in the best condition, so that its walls can come together and cicatrize. It suppresses, in fact, all centrifugal traction and it impedes the movements of the lung. Clinical facts have shown that this action is real. The observations made in a number of cases in which there was a pneumothorax show a retardation in the evolution of pulmonary tuberculosis and a total modification of the symptomatic manifestations, provided the disease does not develop too suddenly.

Forlarini, of Pavia, was the first one to evolve the idea of systematically applying pneumothorax, created surgically, in the treatment of certain forms of pulmonary tuberculosis.

In principle, pneumothorax ought to lead to total immobilization of the lung, so that upon auscultation the vesicular murmur would no longer be brusque, but, on the contrary, slow and even. The tension should not be variable, a condition which can be achieved by the injection of a gas, generally azote, and which is introduced by means of a special apparatus (Forlarini's or Jeunet's, of Amiens).

INAUGURATION OF BOSTON UNIVERSITY'S NEW PRESIDENT.

The inaugural exercises for the new president of Boston University, Lemuel H. Murlin, LL.D., will take place on Friday, October 20, and will occupy the day and evening. The inauguration will occur in the morning at Trinity Church, Copley Square, Boston, beginning at 10.30 o'clock, preceded by a procession of alumni and students from the Liberal Arts building of the University to the church.

The afternoon exercises are to be held in Jacob Sleeper Hall, Liberal Arts building, corner of Boylston and Exeter Streets, and will include addresses by President Lowell of Harvard University, the recently elected dean, Brown of Yale Theological Seminary and Eugene H. Porter, M.D., Health Commissioner of the State of New York.

The evening will be devoted to a reception at Jacob Sleeper Hall, with short addresses by representatives of the Faculties, graduates and student bodies of the various departments. For the Medical Department Prof. John L. Coffin, M.D., will represent the Faculty, and Dr. Edward B. Hooker, of Hartford, Connecticut, will speak for the alumni.

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PERSONAL AND GENERAL ITEMS.

Dr. R. C. Cooper, of Bellevue, Pa., class of 1901 B. U. S. M., is in Vienna for the purpose of special study of the ear, nose and throat.

Dr. R. E. Mitchell, until recently second assistant physician at Middletown (N. Y.) State Hospital has opened an office in Parker Building, Eau Claire, Wisconsin, for the practice of general medicine and surgery.

Dr. Richard Hodgson, for many years located in Stoneham, Mass., died on September 14, after a lingering illness.

Dr. Royal E. S. Hayes has removed from Farmington, Connecticut, to Waterbury, in the same State.

Dr. Thomas E. Chandler has removed his office to 374 Marlborough St., Boston, where he will be found between the hours of three and four P.M., and at other times may be consulted by appointment.

By the will of the late William E. Chamberlain of Cambridge, Mass., an amount estimated at nearly $100,000 will be divided between the Cambridge Hospital, the Avon Home, Cambridge, and the Holy Ghost Hospital for Incurables.

The late Elizabeth P. Sturgis of Salem left legacies of $20,000 each to the Kindergarten for the Blind, the Boston Nursery for Blind Babies, the Industrial School for Crippled and Deformed Children, and the House of the Good Samaritan.

Dr. Pearl S. Waters, recently house officer at the Massachusetts Homœopathic Hospital, has been appointed resident physician of the Ohio Hospital for Women and Children, 549 Seventh Ave., Cincinnati.

Dr. Deborah Fawcett, B. U. S. M., 1903, has removed her Boston office from Hotel Kempton to Hotel Puritan, 390 Commonwealth Ave. Hours, 10 to 11 A.M.

Dr. Anna T. Lovering, librarian of Boston University School of Medicine, 80 East Concord Street, has resumed confidential collaboration in literary work, with physicians and others.

The annual Book Sale of duplicate and odd volumes, which has become such a popular feature at B. U. S. M., will be held in the library, October 20 to November 3, 1911. The works of Hahnemann (first edition), Hartmann, Gentry, Allen, Hale, Hempel, Hering, Jahr, Gross, Guernsey, Ludlam, etc., will be obtainable. The profession is cordially invited.

Dr. Claude L. Payzant, B. U. S. M. 1910, has removed from Chatham to North Attleboro, Mass.

BUSINESS FOR SALE. — By replying to this notice, the right man can be put into communication with a business already established, which will pay him from $5000 to $10,000 a year. The present incumbent wishes to change for business reasons and will sell a fully equipped place and introduce purchaser to clientele. For further information address "X. Y. Z.," care New England Medical Gazette, 422 Columbia Road, Boston, Mass.

Professor Dieulafoy died in Paris on August 18. His name has become widely known not only in France but throughout the world as a leading clinician and an able successor of the renowned Trousseau.

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Arrangements have recently been made for the erection of a new building for the Medical School of Bowdoin College. This building, which is to cost $140,000, will contain laboratories of anatomy, physiology, bacteriology, pathology and pharmacology, in addition to a dispensary.

Dr. Richard Blackmore, B. U. S. M., class of 1902, has removed from Bellevue, Pennsylvania, to Farmington, Connecticut.

TYPHOID IN BOSTON: It is gratifying to note that at the time of writing the number of cases of typhoid fever reported in Boston has been smaller than at any time since record has been kept. The total from January 1 to September 1 was 225 cases, as compared with 260 cases for a similar period the year before.

COMPULSORY ANTITYPHOID VACCINATION: The Secretary of War has recently issued an order based upon the recommendation of the surgeon general of the army whereby anti-typhoid vaccination is made compulsory for all officers and men of the army who are under forty-five years of age.

Dr. Howard A. Kelley, the well-known surgeon of Baltimore, was recently operated upon by the Mayos in Rochester, Minn., for adhesion around the gall-bladder.

The Vincent Memorial Hospital of Boston receives $1200 by the will of the late Miss Cornelia F. Forbes of Westwood, Mass.

James A. Patten of Evanston, Ill., has donated $10,000 toward the establishment of a Juvenile Home which is intended to supplement the work of the Cook County Hospital in its care of children suffering from contagious and infectious diseases.

FURTHER BENEFACTIONS TO ROCKEFELLER INSTITUTE: A report as yet unconfirmed is in circulation to the effect that Mr. John D. Rockefeller has recently given to the Rockefeller Institute for Medical Research an additional sum of $1,000,000.

NUMBER OF MEDICAL STUDENTS: The August number of the *Journal of the American Medical Association* contains its annual article upon the standing of the medical colleges in the United States. The tabulation showing the total number of students is of particular interest when compared with the report of last year. This shows a total number of 18,414 enrolled at the so-called regular colleges; at the homœopathic, 890; at the eclectic, 433. This is the smallest total number of students on record since 1900, when the statistics first began to be compiled. It is, however, somewhat encouraging for Homœopathy, in that the homœopathic schools were the only ones showing an increase over the preceding year. This increase, while not great, amounted to 23. The eclectic school shows a decrease of 22, and the regular school a decrease of 1,722. There are at the present time 120 medical colleges in existence, a decrease of 13 over the number reported in 1910. The statistics also show a steady decrease in the number of women studying medicine, the total number being 680 in 1911 against 907 in 1910.

BENEFACTIONS FOR CHARITY: A former mayor of New York, Smith Ely, is reported to have left $1,000,000 to various charitable institutions in and around New York. This includes hospitals, day nurseries, sanitaria, children's aid societies, and similar philanthropic objects.

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ORIGINAL COMMUNICATIONS.

OCULAR MANIFESTATIONS OF ARTERIO-SCLEROSIS. *

By George Alson Suffa, M.D., Boston.

Because in certain well recognized conditions the walls of the arteries are responsible for most of the damage to the human economy in those conditions, the term arterio-sclerosis has been generally used and accepted to indicate a series of changes in both the arteries and veins and the adjacent tissues. The disease is commanding the attention of the profession by its heretofore unsuspected prevalence, for we now know that the predisposing cause of many cases of pneumonia, Bright's disease, apoplexy and heart disease is to be found in the weakened blood vessels characteristic of this disease.

Owing to the structural peculiarities of the eye, we are able, by the use of the ophthalmoscope, to see continuously and in minutest detail the changes taking place in its blood vessels, and by availing ourselves of the opportunity we are able to obtain valuable information at the very beginning of this insidious disease which seems to be the peculiar heritage of the present day and generation.

Wood in his recent "System" ascribes the majority of cases of arterio-sclerosis to senility, either premature or normal, and believes that a small minority are due to metabolic disorders such as gout, diabetes and a variety of chronic intoxications and intestinal derangements, as well as the abuse of alcohol, tobacco and lead; and finally syphilis. When found to exist in the ocular vessels it is then usually merely a local manifestation of a general diathesis, although it may involve any portion of the vascular system, often indicating changes in the blood vessels of the brain or kidney, these being the organs most susceptible to the disorder on account of structural peculiarities, or it may be purely local in the eye.

Perhaps the earliest visible change in the retinal vessels is an increase in diameter and darkening of the veins having the appearance of a slight engorgement. The smaller arteries become

* Read before the Massachusetts Homœopathic Medical Society, October 11, 1911.

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tortuous first, their terminal twigs often assuming a typical corkscrew appearance near the macular, while the larger arteries become paler, showing an exaggerated light reflex in the center, the so-called "silver-wire" arteries.

Usually as the disease advances we find abrupt changes in the diameter of some of the larger vessels, giving a peculiar "beaded" appearance which with the kinking of the veins is considered pathognomonic of the disease. This "kinking" of the veins is produced in the following way. Instead of keeping its course when approaching an artery the vein runs along beside it for a short distance, turns suddenly, crosses at right angles, and then continues on its original course. Often the distal side of the vein is distended for a short distance just before passing the artery, which is not as transparent as under normal conditions.

As degeneration of the vessel walls progresses still farther, stripes of white or gray appear along the arteries, and minute hemorrhages show as specks throughout the fundus. When the disease is well established retinal oedema occurs, the optic disk often becoming a dirty pink color, like that of brick-dust it has been said, and more or less numerous feathery or flame-shaped hemorrhages, due to extravasations in the inner layers of the retina, are to be seen along the course of the arteries. Hemorrhages may also take place in the deeper layers when they assume no characteristic shape but are formless and dense.

When the changes in the ocular vessels are associated with chronic interstitial nephritis the fundus changes are more intense. The disk becomes indistinct or altogether indistinguishable in outline and intensely swollen (the so-called choked disk) and hemorrhages are numerous and large, usually in the inner layers. Later, patches of fatty degeneration appear, assuming a form which is pathognomonic of the kidney lesion. These patches when in the macular region take on a somewhat linear form radiating from the fovea in a glistening star-like pattern but not involving it. Often, too, the disk is surrounded by these areas which become confluent, forming a white zone known as the "snow-bank" of albuminuria retinitis.

With this brief resumé of the ocular changes in the various stages of the disease, let us carefully consider what may be the warning symptoms, that the physician may recognize the danger signals before serious structural changes have taken place and while his services are yet likely to be of real value to the patient, for it is only in its earliest stages that this affection is amenable to treatment. When the walls of the blood vessels have been weakened by degenerative changes, the physician, however skilful, is powerless to avert the imminent peril in the shadow of which his patient must henceforth live.

In a general way an appearance of premature old age suggests that the blood vessels are not properly performing their function and should lead to an immediate investigation of the blood pressure. If found to be high the probabilities are strong

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that we have to do with a case of arterio-sclerosis. Early symptoms are, persistent headache, eye-pains or inability to use the eyes even after the correction of refractive and muscular errors, and general muscular fatigue.

As the capillaries of the retina are the smallest in the body and the delicate function of the retina so dependent upon its blood supply, we should expect the eye symptoms to be among the earliest and should look with suspicion upon such manifestations as specks before the eyes, scintillating scotomata, unexplained dimness of vision and paroxysmal blindness, often produced by spasm of the diseased retinal vessels. The specks of which these patients sometimes complain may actually exist as small vitreous opacities, the result of slow inflammatory changes in the intima of the vessel walls. A sluggish pupillary reflex, early failure of the accommodation, especially if unequal, persistent unexplained vertigo, transitory ptosis and sudden changes in the action of the extra-ocular muscles, manifest as insufficiencies, especially when accompanied by increased blood pressure, demand a careful opthalmoscopic examination in order that the visible retinal blood vessels may be observed for early changes such as have been enumerated.

In the early, purely ocular manifestations as well as in all early degenerative changes in both retina and choroid, I have found the mercurials in the second and third attenuation to be of marked benefit. In the later stages, especially if accompanied by dense hemorrhages, the absorbent and eliminative power of the iodides in appreciable doses is our only hope of checking the progress of the disease.

It is not, however, the purpose of this paper to attempt to instruct you in the treatment of general arterio-sclerosis. Such approved methods as regulating the patient's habits of life, the prohibition of alcoholic beverages, tobacco, tea, coffee, and strong meats, will commend themselves to the wisdom of every physician who has these cases under his care. Of other methods less universally accepted, I am not prepared to speak, but must direct you elsewhere. My experience leads me to the conclusion that most cases of arterio-sclerosis (and I use the superlative advisedly) are unrecognized until a crisis occurs. It then remains for the physician to act the part of jailer both by restricting the activities of the patient and by depriving him of most of the things that made life worth living. Such an unfortunate is little better than a prisoner sitting in the cheerless cell of his enforced privations and awaiting the impending stroke of doom. My reason, then, for writing this paper is the imperative necessity for watchfulness for the earliest symptoms of this subtle disease and the further need that every physician should not only *know* of the inestimable value of the testimony of the ophthalmoscope in making an early diagnosis, but that he should have it so frequently and so forcibly brought to his attention that he will invariably *think* of it when the symptoms present themselves.

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THE RELATIONSHIP BETWEEN ARTERIO-SCLEROSIS AND NERVOUS DISEASES.*

By Frank C. Richardson, M.D.,
Professor of Neurology, Boston University.

Discussion of the relationship between nervous diseases and arterio-sclerosis involves consideration of neuroses both as cause and effect of vascular disease.

Since the study of blood pressure and the use of the sphygmomanometer have become popular, much careless statement has been made as to the significance of various findings, and a considerable amount of confusion seems to exist concerning the whole subject.

Apparently, to the minds of some, high blood pressure means arterio-sclerosis, and vice versa.

As a matter of fact it is now generally conceded that unless the splanchnic arteries have become atheromatous we may not expect any effect upon the general blood pressure, as it is disease of these vessels that is the most potent factor in the production of cardiac hypertrophy. Arterio-sclerosis of other vascular systems does not appear to exert this influence. From an investigation of one hundred individuals "presenting marked and obvious sclerosis of palpable arteries," Walton and Paul conclude that "arterio-sclerosis without cardiac enlargement or renal degeneration is only exceptionally accompanied by a very high blood pressure." Literature abounds with similar reports.

On the other hand, it should be appreciated that any of the manifold influences increasing cardiac energy and vaso-constriction may result in a temporary hypertension.

Realization of the above facts should deter from a hasty diagnosis of arterio-sclerosis, based upon sphygmomanometric findings. The ill-considered announcement of such a baseless conclusion has more than once caused serious mischief when made to neurotic individuals whose hypertension was due solely to their unstable nervous condition.

A recent article by Dr. Marc. Armand Ruffer on the arterial lesions of Egyptian mummies, quoted in abstract in the Boston Medical and Surgical Journal, is of interest as illustrating the baffling character of evidence concerning the etiology of arterio-sclerosis. Dr. Ruffer is president of the Egyptian Sanitary, Maritime and Quarantine Service, and thus has had opportunity to obtain from foreign archeologists specimens for his study. As a result of his investigations he concludes that:—"The old Egyptians suffered as much as we do now from arterial lesions identical with those found at the present time. Moreover, when we consider that few of the arteries examined were quite healthy, it would appear that such lesions were as frequent three thousand years ago as they are today." The etiology of the disease

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is as obscure as it is in modern people. Tobacco as a cause can certainly be eliminated, for the drug was not used in Egypt, and syphilis can, perhaps, be eliminated, for no pathological specimens of this disease in Egyptians have as yet been discovered. The question of the importance of alcohol as an aid to arterial degeneration is raised by this writer, he having made, he says, more than eight hundred post mortem examinations of Mussulmans, subjects who certainly never touched alcohol in their lives, yet in them arterial disease is as common and occurs as early as in people who take alcohol regularly. The diet in meat was not important, the people then as now subsisting mostly on vegetables. From examinations of Egyptians three thousand years apart in time the writer does not think that meat-eating as a cause of arterial disease receives any material support. Such observations as the above simply serve to confirm the belief that while one or another pernicious influence may predominate in the production of arterio-sclerosis, there must in every case be a combination of causes.

That functional hypertension can be the sole cause of arterio-sclerosis seems as unlikely as that any other single factor can harmonize all the observed facts. That it may be a contributing or even preponderating cause acting coincidently with others is an entirely reasonable supposition.

Although continued hypertension is not altogether accepted as an etiological factor in the production of arterio-sclerosis, there seems to be a reasonable basis for the belief that it may exercise an influence in superinducing vascular lesions difficult if not impossible to differentiate from true atheroma.

The two most important factors which determine blood pressure are the force of ventricular systole and the peripheral resistance, and as both of these are directly controlled by the cardio-vascular nervous system it can be readily understood how any neurosis involving disturbance of this mechanism may be indirectly responsible, in part at least, for arterial disease.

In neuropathic individuals innumerable influences may increase the cardiac force and stimulate the vaso-constrictor reflex, thus increasing the blood pressure, and the greater the psychical irritability the higher may be the pressure. On the other hand, it is not uncommon to find markedly neurasthenic persons with a rather low pressure, and, indeed, experience would seem to indicate that hypotension may be a valuable differentiating symptom in cases of suspected simulation.

Severe and long continued pain, from whatever cause, may increase the blood pressure.

In tabes the painful visceral crises are almost always accompanied by a considerable rise in pressure, while the lightning pains are more often associated with a lowered tension. Although perhaps not entirely pertinent to the subject of arterio-sclerosis their great clinical importance prompts to the mention of Pal's observations on the lightning pains and visceral crises of tabetics,

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cited in Janeway's "Clinical Study of Blood Pressure." Pal examined the tension during the attacks and found that the lightning pains were attended by a constant fall in pressure, sometimes of considerable extent. In certain severe gastric and abdominal crises, however, an enormous rise occurred. The climax of hypertension and of pain seemed to coincide, and both passed away together. Morphine caused sleep and a lessening of the pain, but no fall of pressure, and the heart often showed weakness after its use. Chloral, however, exerted a hypotensive, as well as an analgesic effect. The writer's experience tends to corroborate this testimony as to the therapeutic superiority of chloral in these distressing conditions.

Acute intracranial pressure, as in fracture of the base of the skull, and apoplexy, causes extreme arterial pressure. Knowledge of this fact aids in the differentiation between hemorrhage and arterial occlusion. The finding of an approximately normal blood pressure early in a paralytic stroke makes an occlusive lesion highly probable, and thus gives important indications as to treatment.

It has been thought probable that intra-cranial tumors cannot of themselves cause blood pressure symptoms, because room is made for their slow increase, as a rule, by atrophy of brain substance. Clinical observations in this connection, however, are as yet rather meagre. Two cases of brain tumor, at present in the Massachusetts Homœopathic Hospital, show marked hypotension. In one of them the tumor is probably located in the anterior fossa, in the other the posterior fossa is the probable site. In both cases the intracranial pressure is severe enough to produce the classic symptoms, including profound optic nerve atrophy, and neither of them can be said to have yet arrived at the terminal stage when we might expect the medullary centres to be exhausted. It is suggested that the hypotension existing in these cases may be due to a local compression anæmia, inhibiting the function of the bulbar vaso-motor centre.

In the various psychoses increased tension is found commensurate with the intensity of mental anguish, the stimulus which excites the reflex originating in the psychical sphere.

The influence of arterio-sclerosis in the production of nervous diseases has undoubtedly been much over-rated, and the coincidence of sclerotic arteries with nervous symptoms is certainly not legitimate evidence upon which to base a conclusion of cause and effect.

Of the many neuroses ascribed to vascular disease it seems desirable to mention at this time only a few of the most important, and those only in which relationship is well defined.

Vertigo from cerebral anæmia, due to defective circulatory conditions, is one of the commonest manifestations of general arterio-sclerosis. Walton and Paul found it in 65 per cent. of the hundred cases examined at the Massachusetts General Hospital:

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this in striking contrast to the infrequency of headache, which they found in only 22 per cent. of their cases.

Grasset has divided the vertigo which occurs as a result of atheromatous vessels into simple vertigo, vertigo with syncopal attacks, and vertigo with epileptiform crises.

The last mentioned variety would seem to be closely allied to the *apoplectiform attacks* not infrequently met with in arterio-sclerotics. The term claudication has been applied by Marie, Leri, and others, to these attacks which are probably to be explained on the ground of cerebral fatigue and temporary suspension of function with restoration after rest. Many of the transient aphasias and motor lapses occurring in old people belong to this category, and it is important to remember, in view of prognosis, that such an attack in an arterio-sclerotic does not necessarily mean either thrombosis or hemorrhage.

Intermittent Limping, or intermittent claudication, first described by Charcot, consists of pain, numbness, cramp and fatigue in one or both legs on walking, increased by further exertion and disappearing after rest. Upon examination pulsation in the dorsalis pedis and anterior tibial arteries will be found to be feeble or absent, and further investigation will usually reveal a condition of general arterio-sclerosis. This syndrome is not uncommon and has more than once led to errors of diagnosis.

Senile Paraplegia. Occasionally we find a person of advanced yeas afflicted with a slowly progressive weakness of the legs, which may or may not be attended by pain and sensations of numbness, undue fatigue upon exertion, and possibly with a slight degree of difficulty in the retention of urine. These symptoms are usually of very slow progress and produce disturbance of walking which results in a slight dragging of the feet, or rather shuffling gait, difficulty in getting up stairs or stepping up into a carriage, but not attended by any true ataxia of movement.

A large proportion of patients afflicted in this way are the subjects of chronic arterial disease causing disturbance of circulation in the lower part of the spinal cord. This disturbance may consist of an arterial anæmia or of a venous congestion, and be curable by appropriate treatment, or there may be a true ischæmia resulting in necrosis of tissue and permanent disability.

In regard to neurasthenia, progressive loss of memory, emotional changes, and the like, which have been ascribed in some cases to arterial disease, there is little to be said. It is doubtful if uncomplicated arterio-sclerosis is capable of producing the various mental states which have been accredited to it, or explain all the symptoms of senile dementia. Persons with the most extreme general arterio-sclerosis may live to old age without cerebral accident, and others, with little disease elsewhere, may manifest most marked and varied evidences of intra-cranial trouble. It is not difficult to conceive, however, that impoverished nutrition because of defective circulatory apparatus may play an important part in the mental enfeeblement incident to the involutional period of life.

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In conclusion, the salient points of this paper may be epitomized as follows: —

Often occurring, or long continued hypertension may be a contributing cause of arterial disease.

Various neuroses, functional and organic, may, by irritation of peripheral or central neurons, increase blood pressure and thus become "accessories before the fact" in the production of symptoms as is commonly supposed.

Arterio-sclerosis is not so frequently a cause of nervous symptoms as is commonly suppored.

Of the results of arterio-sclerosis likely to come under the observation of a neurologist the most noteworthy are vertigo, apoplectiform attacks, intermittent claudication, senile paraplegia, and the involution psychoses.

WHAT SHALL WE DO FOR ARTERIO-SCLEROSIS?*

By George Frederick Laidlaw, M.D., New York.

In considering arterio-sclerosis we must remember that we have to deal with a disease which is exquisitely local in its manifestation. There may be advanced sclerosis of one small group of arteries while the rest of them are entirely healthy. Arterio-sclerosis, therefore, comes to us in various clinical forms and the question of what we shall do for it depends much upon the location of the disorder.

Consider first the simplest form, senile gangrene. That appears first in the toe, due to sclerosis of the tibial arteries, cutting off the arterial blood supply to the foot. You have here a question of skin and subcutaneous tissues which are dying and decomposing for want of arterial blood. What are you going to do about it? We have all tried to treat these cases medically by stimulating the supply of blood to the foot with mustard foot baths, warm wrappings and by the administration of secale, — which is certainly indicated on pathological grounds, — by arsenic, lachesis and other remedies. I suppose that we have all been convinced from time to time of the usual hopelessness of medical treatment and have resorted to surgical amputation of the leg above the point of obstruction. If we were fortunate enough to amputate above the obstructed point, the patient has recovered. If we could not get above the obstruction, the gangrene reappeared in the stump and the patient died.

When sclerosis appears in the arteries at the other end of the body, in the head, we have an entirely different picture. A patient sixty years or over will complain of frequent attacks of vertigo. There may be attacks resembling apoplexy, with hemiplegia or aphasia, from which the patient usually recovers quickly and without the mental enfeeblement that commonly follows true hemorrhagic hemiplegia. Or there may be gradual mental en-

* Paper read at the Lowell meeting of the Massachusetts Medical Society, October 11, 1911.

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feeblement with headache, vertigo or loss of memory. What are you going to do about this case? First, we regulate the patient's life, attempting to cut down the amount of work he is doing and increase his rest or take him out of business altogether. In the next place we simplify his diet, excluding alcohol, spices and all stimulating food. Next we enforce physical rest, lying down for two hours every day. Next we select the remedy, whether arsenic or aurum or phosphorus or silica or whatever remedy his symptoms may require. One of the remedies which is well suited to this condition symptomatically is gold, which I generally use in the form of the chloride of gold and soda in the 3x trituration, a tablet four times daily. Another remedy is baryta.

Arterio-sclerosis appearing in the vessels of the heart, the coronary arteries, presents a different picture. Here the patient on going out one windy day or on a cold day may be seized with a sudden shortness of breath. This dyspnœa will reappear from time to time with increasing frequency. By the time he comes to you for examination, you will probably find evidence of dilatation of the heart, the apex being displaced to the left or possibly downwards. There will often be no valvular murmur or there may be aortic systolic murmur, indicating a sclerotic process around the base of the aorta or in the aortic valves. What are you going to do for him? In this case, as in sclerosis of the cerebral arteries, you will recognize that the physical machine has been seriously damaged and that the proper treatment is to simplify the patient's life that his damaged organs may continue to functionate as long as his constitution will permit. You take him out of active life, you simplify his diet, you insist on an abundance of physical rest and the avoidance of over-exertion. In the way of remedies, you have your choice between a basic constitutional curative remedy and a remedy applied to the relief of his distress, which is usually a dyspnœa or a cough. As an underlying constitutional remedy, you will select again gold or arsenic or phosphorus or silica. Such a patient will often require special attention to the relief of his symptoms, the dyspnœa and the cough. Here after attempting to get relief from symptomatic prescribing, you will often have to resort to the physiological cardiac stimulants, at the head of which stands digitalis or the vaso-dilators as nitro-glycerin and the nitrites. In cases of sclerosis of the arteries in any point of the body, great care should be used in the selection of the cardiac stimulant, digitalis and strophanthus and the rest being of great value to relieve the dyspnœa but undoubtedly favoring rupture of the injured arteries by increasing the arterial tension. If the dyspnœa and cough can be relieved by the vaso-dilators, it is much the safer practice. However, I think it a mistake where a patient is suffering extremely from cardiac dyspnœa to deny him the relief that comes from digitalis and its associates used in moderate doses for short periods of time. This

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is especially true in cases of cardio-renal sclerosis without cerebral symptoms.

Cardiac or coronary sclerosis may present itself as pain rather than dyspnœa, angina and anginoid attacks, apt to be produced by exertion, exposure and especially by excitement or psychic shock. Here, the peaceful life, avoidance of all excitement and emotion, are important. As remedies, we will select arnica, spigelia, aconite, gelsemium, the vaso-dilators and last, but often most valuable, sodium iodid, five grains three times daily.

Another localization of arterio-sclerosis which is often allied with the cardiac form, is sclerosis of the renal arteries or arterio-sclerotic nephritis. This form of nephritis follows the interstitial type. In fact, in an advanced case, it is impossible to say whether the case began with a primary nephritis with secondary cardiac and arterial complications or as a primary arterio-sclerosis with a secondary nephritis. Only the sequence of events will determine this point, and we are seldom in position to know the early history of the patient. The treatment of arterio-sclerotic nephritis does not differ materially from that of chronic nephritis in general except that in the relief of the dyspnœa, the cardiac stimulants will be much more effectual in relieving dropsy and dyspnœa than in nephritis from other causes.

Another form of arterio-sclerosis with which we have been familiar for many years is aneurism. We recognize aneurism as a purely mechanical result to be treated by mechanical remedies or surgery. I think that there are few of us who would expect to cure an aneurism of the thoracic or abdominal aorta with arnica 30 or silica or hamamelis. Symptomatic relief we can obtain; but cure of a vessel that is dilated, sclerosed and full of blood-clot is only possible by fibrosis of the mass. How far our remedies can stimulate or favor fibrosis is questionable.

By the time we have got this far in our study of arterio-sclerosis, we shall have come to the conclusion that we are treating not a disease but an end product of disease; that in all these forms of arterio-sclerosis, the most that we can do for our patient is to preserve what vitality he has left and lead him as gently as possible to the grave, unless indeed surgical removal of a gangrenous foot or surgical treatment of an aneurism will make a symptomatic cure.

We see that we do not recognize arterio-sclerosis early enough to do the patient much good. In fact, arterio-sclerosis when established is so hopeless that to treat it effectively we should really treat it before it begins, that is, we should prevent it. The way to prevent it is to remove the cause. What then is the cause of arterio-sclerosis? Here we meet the first great obstacle in its treatment. We do not know.

We know that syphilis is a common cause of arterial degeneration. It has been recognized for many years as a cause of aneurism. We know that lead poisoning, gout, diabetes and

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probably alcoholism lead to arterial degeneration, but what is the cause of gout and diabetes? We do not know. The strenuous life, worry, anxiety, sorrow, have all seemed to cause arterial degeneration, but no one has yet pointed out the steps by which these psychic conditions are transformed into arterial degeneration.

If we do not know the cause, how shall we find it? There are three methods by which this cause might be discovered, study of the dead tissue, study of the patient's life, and study of his chemical metabolism.

The first of these methods, that of pathological study in the laboratory, has helped us little. It simply shows us a thickening of the artery which affects one or all coats. The intima presents fibrous thickening; the muscular coat is thickened; the external coat presents fibrous thickening. This is the beginning and end of the microscopic picture of arterio-sclerosis.

The second method, study of the patient's life, is the method of Hippocrates and of Hahnemann. It involves a close study of the symptoms of the patient with a consideration of his history. It is this method that has revealed the frequency of syphilis in the history. In the history, we have found not only syphilis but also diabetes, gout, alcoholism and lead poisoning. In other cases, none of these causes can be detected and in none of these cases are we in a position to state the exact step or series of steps which leads from gout or diabetes to the sclerosed arteries. In fact, gout and diabetes can hardly rank as ultimate causes, for the causes of these conditions themselves are still unknown. Our general conclusion is that some toxic substance is at work, but our understanding of arterio-sclerosis will not be complete until we can state in each case just what is that toxic substance, where it arises, and how it can be controlled.

It is at this point that the third method, physiological chemistry, takes up the problem. And here, probably, lies the solution. The analysis of the blood, the analysis of the urine, the analysis of digestive fluids, will probably reveal the secret of the faulty chemistry which interferes with the nutrition of the arterial wall. As yet, our methods are crude and primitive. As yet, our knowledge is limited to the very uncertain phenomena of indicanuria, glycosuria, acetonuria, etc. We are bringing up a race of physiological chemists, and to their hands we must commit the problem. When the physiological chemist can tell us just what poisons cause arterio-sclerosis, where those poisons originate and how they can be controlled, we shall then be in a position to talk confidently about removing the cause and about rational treatment.

If then, we cannot remove the cause, can we improve our present method of treatment? At present, we recognize the condition too late to be of much service. I think that we can all improve our handling of these cases by recognizing them earlier than we usually do. Some day, physiological chemistry may

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help us to recognize these cases, and recognize them early, but not yet. There is no sign in urine or blood and we must still depend on the subjective symptoms of the patient and what we find on physical examinations.

We should pay more attention to these subjective symptoms. When a patient over fifty years of age complains of vertigo or headache, or loss of memory, or dyspnœa, or cardiac pain, or cramp in the leg, or intermittent limping we should remember the possibility of arterio-sclerosis and examine him carefully.

How shall we examine him? We should remember that the sclerosis affects chiefly the arteries of the brain, the head, the kidneys and the legs, and we should examine each of these structures as well as the peripheral arteries.

Examination of the peripheral arteries may be a great help or a great deception. Remember that arterio-sclerosis is one of the most exquisitely localized conditions with which we have to deal. It is absolutely impossible to tell by feeling the radial arteries how the coronary arteries or the cerebral or renal arteries may be. On the other hand, there may be advanced sclerosis of renal or cerebral or coronary arteries with normal peripheral arteries. I have examined a heart in which the right coronary artery was extremely thickened whereas the left coronary was normal. In your examination, then, bear in mind this extremely localized distribution of arterio-sclerosis and be very careful in pronouncing an opinion that because the radial and temporal arteries are normal there can be no sclerosis of the cerebral, the coronary or the renal arteries. On the other hand, in every home for old people, you can find a dozen cases of radial arteries which are beaded and calcified yet in which there is good physiological function of the internal viscera.

If, then, in the examination and detection of arterio-sclerosis palpation of the peripheral arteries is deceptive, is there any sign by which we can determine the early steps of sclerosis of the internal arteries? Of late the degree of arterial tension has assumed great importance. Since the invention of the sphygmomanometer, by which we can readily determine arterial tension, this symptom has become well known, and hardening of the arteries has become a popular disease. Here, too, it is necessary to express some words of warning. There is plenty of arterio-sclerosis with normal or low tension, and again there is high tension without arterio-sclerosis. The sphygmomanometer, like the stethoscope and other instruments of diagnosis, must be used with intelligence and not followed blindly to a blind conclusion.

Having recognized, or thinking that we recognize, an early stage of arterio-sclerosis in any organ, what can we do for it? Always a simplification of life, a reduction of the amount or intensity of business or social life, an increase in out-door life with very moderate exercise. In diet, a plain general diet is best adapted to most cases. We do not yet know the ultimate

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chemical destination of our food stuffs, and at the present time it is impossible to lay out a scientific diet for a case of arterio-sclerosis. There is no known relation between red meat and sclerosed arteries nor any reason why a case of sclerosis of any type should not have a moderate amount of meat.

The most universally used remedy is some form of iodin either as iodid of potash or one of the newer forms of organic iodin. There is not the slightest doubt of the symptomatic relief in many forms of arterio-sclerosis, cardiac, renal and cerebral and even aneurism by the use of moderate doses of iodin long continued. It was formerly thought that the iodin caused the absorption of the sclerotic patches in the vessel. With more correct pathological ideas, we no longer hold this probable. In our conception of the action of iodin, we have transferred to arterio-sclerosis our knowledge of its action in syphilis. Now there is no doubt of the disappearance of a syphilitic gumma under the influene of iodin. We are wrong, however, to hold that because iodin can cause the absorption of the syphilitic gumma it can also cause the absorption of the degenerated patches in an arterial wall. When the idea of iodin absorbing sclerotic patches was given up, the next theory was that it diminished the specific gravity of the blood, thinned the blood so that it flowed more easily through the narrowed vessels. More exact examination of the blood gave no support for this hypothesis. The specific gravity of the blood is practically unchanged by the use of iodin. The next supposition is probably the true one, that iodin causes a relaxation of the muscular coat of the arteries, thus reducing the general arterial tension. We use iodin, then, for symptomatic relief. It will often relieve the pains of angina pectoris and of aneurism. It will often materially improve the subjective feelings in any type of arterio-sclerosis, but we should recognize that its action stops short of curing the pathological lesions. We look to it for symptomatic relief and not for cure.

In the old school, iodin and the vaso-dilators are practically the beginning and end of therapeutics of arterio-sclerosis. Have we homœopaths any remedies that are more effective? When it comes to really curing arterio-sclerosis, I am afraid that we are as helpless as the allopath and for the same reason, namely, that we do not recognize the cases early enough while they are still in a curable stage. The same is true of Bright's disease, diabetes and often of tuberculosis. But for symptomatic relief, for prolonging life and increasing comfort, we can do much. Any of our antipsorics, especially aurum, phosphorus, silica and arsenic, as already mentioned, may be of service as constitutional remedies. In cases of persistent high arterial tension, you will often be surprised at the resistance shown to the vaso-dilators, nitro-glycerin and the nitrites. These will usually be cases of chronic interstitial nephritis, the tension remaining persistently high and uræmia and apoplexy being early accidents.

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To sum up, then, an essential in the ideal treatment of arterio-sclerosis would be first to remove the cause. We do not know the precise cause. Pathological anatomy and clinical history alike have failed to reveal the cause, and it is probable that physiological chemistry will finally reveal the successive steps that take place in arterio-sclerosis. Pending the discoveries of the physiological chemist, our efforts should be to recognize the disease as early as possible, earlier than we are in the habit of doing. The early recognition, the intermittent limping, the palpation of the peripheral arteries, the high arterial tension, the mental phenomena of sclerosis of the cerebral arteries and the shortness of breath of cardiac sclerosis should receive close attention. Instead of neglecting them as only passing phenomena, they should suggest to us the importance of a thorough study of the arterial system, the heart, kidneys, and the brain, for they may be the early signs of arterio-sclerosis which discovered early may be manageable, but progressed to a later stage will certainly resist not only cure but even palliation.

ARTERIO-SCLEROSIS: WHAT CAN WE DO ABOUT IT?*

By John P. Sutherland, M.D., Boston, Mass.

As my part of the symposium which is offered to you today I should like to refer to three phases of the subject; — the first having to do with the recognition of the condition of arterio-sclerosis; — the second having to do with its etiology; — and the third being suggestive of certain possibly curative measures that may be adopted in its treatment.

As to the recognition or diagnosis of arterio-sclerosis there are only a few conditions to be discovered by ordinary methods of examination and these occur only in well developed cases. These are, first, cardiac hypertrophy; second, accentuation of the aortic second sound; third, possibly palpable arteries; fourth, permanent or continuous increased blood pressure. These are the classical points referred to in text-book discussions of the subject. But to them I would add a fifth: viz., evidences of renal inadequacy or disturbed metabolism.

I should like to call particular attention to our methods for detecting hyper-tension and increased blood pressure. Within recent years many instruments have been devised for the purpose of measuring blood pressure, and they all include palpation of the radial pulse. It does not matter what sort of a manometer is used, recognition of the radial pulse by palpation is given to all. Herein I think lies the chief fault of the methods of sphygmomanometry, for the sense of touch is much more acute in some people than in others, and it varies more or less in any individual under the varying conditions of life. The pulse may be so indistinct that several beats may occur before one is convinced that

* Read before the Massachusetts Homœopathic Medical Society, October 11, 1911.

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he is feeling the pulse itself, and the reading of the manometer may therefore be very incorrect. By the palpatory method it is unlikely that any two people out of a dozen will make exactly the same reading in a given case. Recognition of this possible source of error has led to the invention of other methods, the chief being the auscultatory. It is only within five or six years that this method has been investigated, and I understand that it was Karotskin of St. Petersburg, who in 1905 was the first to make extensive use of auscultatory tonometry. Ettinger, Krylow and Gittings have published the results of their researches along these lines and references to the method may be found in the 1911, just published, edition of Anders' "Medical Diagnosis," and of DaCosta's "Physical Diagnosis." While attending the International Congress in London this summer, I chanced across the latest invention in the way of apparatus to be used in measuring blood pressure by this method. This instrument is called Oliver's Auscultatory Tambour. It is nothing more nor less than a very delicate stethoscope or phonendoscope attached to a band or cuff, and I have pleasure in exhibiting it to you at this time. The instrument consists of a flattened drum on the distal surface of which may be found a circular perforated hard rubber disk which is about an inch and an eighth in diameter, which is cemented to a thin rubber diaphragm, the rubber being the ordinary dentist's dam; the free surface of the phonendoscope being a trifle over an inch and a half in diameter. The phonendoscope is attached to a band about two inches in diameter which is fastened around the forearm just below the bend of the elbow on the flexor surface so that the phonendoscope may be applied over the termination of the brachial artery or about where it bifurcates into the radial and ulnar. Flexible rubber tubes and hard rubber ear pieces complete the instrument. It is to be applied to the arm just firmly enough to hold the instrument steadily in place. The technic of its use is simple: — The sphygmomanometer is applied as usual, and by means of the auscultatory tambour one can recognize a slight but queer tapping sound which occurs just before the blood stream is shut off by the constriction of the sphygmomanometer armlet, and also just after this constriction is relieved by the escape of air from the cuff of the apparatus. It is only when the arteries are partly filled with blood that this tapping sound is heard. Under ordinary circumstances, therefore, the blood vessels being full and the stream flowing as usual, no sound is to be heard. It has been found that readings made by the auscultatory method by different examiners agree more closely than those made by the ordinary palpatory method, and it is also easy to demonstrate that the auscultatory reading is somewhat higher (three to eight or ten millimetres for instance) than those made by the ordinary method.

I believe that the ear is quicker to recognize the first delicate taps made by the returning blood wave than the fingers are to recognize the pulsation at the wrist. In all probability a smaller

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amount of blood is necessary to produce this sound that is required to produce a tactile impression. At all events we can make use now of both methods and thus be doubly sure of our readings. A gradual crescendo and diminuendo effect is noted by the auscultatory method that removes all possibility of doubt from one's mind as to the presence of a pulse wave. My use of the auscultatory tambour has been most gratifying and I confess to having greater confidence in my present readings than in those formerly made.

I may seem to be wandering from my subject in making reference to the etiology of arterio-sclerosis, but I claim that such reference has to be made, and definite knowledge concerning the causes has to be obtained before one can intelligently answer the question "What can we do about it?" By recognition of the causes we shall have at our command the most effective means of preventing what I believe to be a very common condition and one that is at the root of untold discomfort and suffering. Text-book authors quite unanimously claim that alcohol, lead, gout, Bright's disease, syphilis, over-eating and drinking, and bacterial infections are the main causes of the condition under discussion. It seems to me one word expresses the entire etiology, and that word is "toxæmia." For it is a toxic condition of the blood that is the most important etiological factor. Toxins in this connection may be divided into three classes for purposes of discussion: first, chemical toxins, viz., alcohol, coffee, tobacco and drug; second, bacterial toxins, such as scarlatinal, diphtheritic, typhoidal, malarial, syphilitic, to mention some important ones; third, the metabolistic toxins, which have to do with the food ingested and with the nutrition of the body as a whole.

Gout is referred to by nearly all authors as a cause of arterio-sclerosis, but gout is in itself a result, not a primary cause, and therefore the cause of the gouty condition is the one that should be referred to as the cause of arterio-sclerosis, and this cause belongs under the class of metabolistic or physiological errors.

We hear much in these days of auto-intoxication, and it is a term that is very significant if properly used. My observation, however, leads me to conclude that it is used very loosely indeed; that there is too much latitude allowed in its use, and that our conceptions of its meanings should be more precise. We frequently hear the term applied to the hypothetical absorption of injurious matter from the intestinal tract into the system. Intestinal putrefaction and auto-intoxication seem to be synonymous in the minds of many, and I wish to protest against any such use of the term auto-intoxication. In short I would protest against the conception itself that many injurious elements are absorbed from the intestinal tract. Doubtless the possibility exists, but I think such occurrences are very infrequent, and that the rather prevalent opinion on this subject is much exaggerated.

I have elsewhere called attention to the fact that the intestinal cavity is simply an inner surface of the body. Embryology teaches us that the highest mammal was once simply a trilaminar struc-

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ture, and by an incurving process the inner surface becomes converted into a tube. Therefore anything in contact with the gastro-intestinal mucosa is simply in contact with a surface of the body, and is not, strictly speaking, within the body tissues. Therefore if we want to make use of the term auto-intoxication in connection with the absorption of the products of intestinal fermentation we should make use of the term "exogenous auto-intoxication." As I have said, it is my definite conviction that the importance of this matter is very much exaggerated at the expense of a far more significant fact, and that is true auto-intoxication or the poisoning of the body by the products of tissue metabolism. This might be called for purposes of precise nomenclature "endogenous auto-intoxication." It is a familiar phrase that "Man is the generator of his own poisons," for it has been established by Bouchard, Von Noorden and others that the average man under ordinary circumstances will generate every fifty-two hours poisonous material enough to kill him. Fortunately this poisonous material is usually quite fully eliminated, but if even a little be retained within the tissues of the body it is sure to produce trouble of some sort. We are apt to forget the significant fact that the body is composed of multitudes of living protoplasmic cells and that each cell is capable of nutrition; one of the results of which is the elimination of waste matter. It is this waste material that is poisonous not only to the body itself, but to other bodies into which it may pass. We are accustomed to the idea that the nutrition, growth and reproduction of *germs* (in a phrase, "germ metabolism") within the body is accompanied by the elimination of poisonous chemical wastes into the body of the host. This phase of toxæmia we have become familiar with, but the "endogenous auto-intoxication" process has been insufficiently considered. We are accustomed also to the word uremia, but we are apt to associate with the term the idea of headache, œdema, renal insufficiency and convulsions that as a matter of fact have to do only with the more severe manifestations of uremia. I contend that the retention within the tissues of the body of any quantity of material that ought to be excreted as urine, is to just the extent of its quantity and quality injurious to the body. Uremia may exist and give rise to a thousand manifestations and not produce eclampsia. We may have slight or severe headache; slight or severe indisposition; loss of appetite; flatulence; imperfect digestion; aches and pains in various parts of the body; general malaise, etc., as a result of a mild uremia.

I have thus hurriedly and disconnectedly referred to these etiological factors for the express purpose of emphasizing what to my mind is the most important and successful method of preventing and treating conditions of arterio-sclerosis. For it is conceded that the various toxins referred to, by irritating the intima of blood vessels, gradually produce the pathological condition of arterio-sclerosis. Recognition of these etiological factors therefore is of the greatest importance from the therapeutic standpoint. For instance, if alcohol, coffee, tobacco, and drugs, as con-

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sidered in our text-books, are capable of producing arterio-sclerosis, it is a simple matter to avoid their use, one and all, and thereby to prevent the development of the condition itself, or arrest its further progress if through any of these causes the trouble itself has been started.

In regard to the bacterial toxins; scarlet fever, diphtheria, etc., are likely to afflict humanity for generations yet to come; therefore their toxins are bound to continue. While, however, the toxin itself may be produced we need not allow injurious results to follow, because I am confident that by the free ingestion of water these toxins may be so diluted and so surely and quickly excreted that no harm need result from their temporary presence. In my treatment of these infectious diseases it is as much a recognized method to insist upon the free drinking of water as it is to administer a drug or remedy. Even in case a patient is unable or unwilling to swallow water, a good deal of water may be gotten into the system by means of saline enemata or the hypodermic introduction of a saline.

In regard to metabolistic toxæmia, I could easily talk to the point of exhausting the patience of my audience, but to avoid this catastrophe let me refer to two principles only. The first is to avoid the introduction of toxins contained in any food material. It is a very simple matter, for instance, to demonstrate in meat foods the presence of almost all if not all the elements which are found in the urine and which have toxicity. I want to emphasize the point that the kidneys simply eliminate the waste materials which have been formed by cellular metabolism, and that these waste products are circulating in the blood and lymph stream and are simply carried to the kidneys for elimination. My conviction is therefore that meat foods are injurious, and I am inclined to think quite unnecessary, to humanity.

The second principle I want to refer to is the elimination of tissues wastes. These tissues wastes cannot be thrown out of the body except in a state of solution, and in order to make a thorough solution of them it is necessary to make free use of water in flushing the system. I am convinced that many evils that afflict humanity could be permanently removed as well as wholly prevented by the simple practice of drinking water freely.

Further consideration of this phase of the subject of course is inappropriate on account of lack of time.

I have called your attention to a diagnostic method, and also to certain etiological factors connected with arterio-sclerosis. The third point I would like briefly to refer to is the therapeutics of arterio-sclerosis. Can the process be arrested when once initiated? Can it be cured, or can it be modified to any extent? It is a sad comment on our pharmacotherapeutic knowledge that in our general medical literature there is only one drug referred to as a possible curative agent. This drug is potassium iodide. It is unanimously recommended, and I have often wondered why.

Vierordt assumes that "it promotes resolution of sclerotic

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products," evidently in accordance with the established idea that it is the great "Alterative."

Huchard and Balfour think it dilates arterioles and thus lowers blood pressure.

Huchard lauds the remedy and believes it "improves the nutrition of blood vessels."

Boehm, Prevost, Corin, Stockman, James Burnet, and *Rolleston* all claim it "does not reduce blood pressure," yet admit it is useful in arterio-sclerosis.

Burnet claims it "increases elimination."

Tyson, Hare and *Osler* all recommend it.

Tyson considers it the great remedy and advises its continuous use for several years.

Under the circumstances, then, if we use it, we use it empirically, and it is well to recognize the fact.

One other drug is almost unanimously recommended, and that is nitroglycerin or some form of nitrite, but as we well know nitroglycerin is not in the very least curative of arterio-sclerosis and in my estimation it should never be used in what are called physiological doses except in cases of emergency. It may be used of course homœopathically in cases of capillary turgescence, congestion, throbbing, etc., for these conditions are prominent in its symptomatology.

Have we anything that may possibly cure the milder cases or arrest the more advanced ones? The ordinary text book says No, but I believe and am confident in asserting that as homœopathists we are not powerless in this important matter. It is widely acknowledged for instance that *lead is capable of producing* arterio-sclerosis. If we accept this statement then we surely have in lead a remedy that may be therapeutically used. If you will turn to the provings of plumbum you will find that it produces general interstitial inflammation characterized by proliferation of connective tissue, and this is the pathological foundation of arterio-sclerosis. It produces contracted kidneys, renal degeneration, decreased elimination of urea, uric acid and urates, a condition that simulates gouty affections. It is claimed that in persons predisposed to gout lead will give rise to an acute gouty attack. The characteristic renal condition produced by lead poisoning closely resembles what is called gouty kidney, and this gouty kidney we know will produce eventually cardiac hypertrophy, vascular thickening and all the attendant and resultant symptoms. Acetate of lead is a soluble form for administration and quickly produces the characteristic lead symptoms.

Unfortunately the records of drug pathogenesy do not establish for us as a rule definite pathological pictures, but it is the consensus of opinion that the metals are particularly prone to produce inflammation and degeneration of interstitial and connective tissues, and if this is so we ought to look to the metals for our most effective pharmaceutical agents with which to combat the effects of arterio-sclerosis. Among these preparations, following lead, reference must be made to mercury which in small doses and

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continued for months at a time may have an alterative effect upon sclerotic tissue. Among other metals the use of which is indicated by its pathogenetic effects is aurum metallicum (or aurum muriaticum, or the double salt, aurum et natrum muriaticum), which has long been held in high esteem in the treatment of conditions which today are recognized as concomitants of arterio-sclerosis. Baryta, especially in the iodide, and strontium iodide promise to be useful agents, although their use at the present time would seem to be based upon clinical reputation rather than observed pathogenetic effects.

The various expressions or accidents of arterio-sclerosis such as cerebral hemorrhage, with its sequelæ; hypertrophied heart, which is undergoing degenerative changes; or gastro-intestinal manifestations, require as remedies drugs which are applicable in such conditions, and it cannot be definitely anticipated just what drug will be useful. Among the vegetable remedies I think conium is more likely to prove of wide service than any other.

Other therapeutic agents which are not pharmacologic in character include electricity, more particularly in the form of the modern high frequency current. This I have used extensively, and I feel justified in speaking positively in regard to its power to modify metabolism, and restore defective elimination to the normal or relatively normal standard. I have not, however, as yet been able to determine that it permanently reduces a high blood pressure when once this high pressure has become established.

Dietetic measures would need a chapter for full discussion, but I am convinced that a not too high proteid diet is the one to be desired. Remembering that our text-books invariably refer to "over-eating and drinking" as among the causes of arterio-sclerosis should be enough by way of caution. The luxurious methods of modern life include a too abundantly supplied table and numerous preparations that may please the palate, but do not minister to the needs of a healthy body. In all probability, for all except those engaged in hard physical labor, two simple meals a day would do more to ensure prolonged good health with the absence of all that pertains to arterio-sclerosis than is likely to be believed by those whose habits and desires call for a more liberal dietary.

Much might be said in favor of warm baths at night; of the use of Nauheim and similar baths; or in favor of active and passive exercise, massage, vibratory stimulation; the leucodescent lamp and other varieties of photo- and thermo-therapeutics. But time does not permit us to wander in such enticing fields.

When brought face to face with a moderately severe form or even a well developed case of arterio-sclerosis I am not inclined to fold my hands and advise my patient to be resigned to his fate, for I think we have, as I have tried to suggest in this brief and disconnected way, numerous agents capable of alleviating the sufferings and arresting the progress of the trouble and to some extent of even curing the condition.

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DISCUSSION OF PAPERS UPON ARTERIO-SCLEROSIS.

Dr. J. Herbert Moore.

Mr. President, fellow members of the State Society:

Investigation into this very important subject of arterio-sclerosis, whether by consulting the authorities, or going into our own clinical records, certainly places us very much in sympathy with Dr. Laidlaw's sentiments, that we are passing through an undiscovered country. At the same time it is through such symposiums as these that the different grains of truth will come to the surface, and perhaps the most important features of the discussions like today is not what we hear, but the suggestions that these thoughts bring out in our own minds.

First as regards Dr. Suffa's paper. I do not want to profess to being an expert at the ophthalmoscope, but this does not keep me from appreciating the great importance that Dr. Suffa brought out in his paper as to the use of the ophthalmoscope in detecting the very first symptoms of this disease. I believe the general practitioner who is not apt at the ophthalmoscope would certainly find it very much to his benefit to be placed in the right way as soon as possible by sending his patients to an expert ophthalmatist, who can discover on the retina the very first signs of disease, just as we send samples of urine to be examined.

As regards the etiology of this disease. I am very glad to find that Dr. Sutherland and Dr. Laidlaw, without any collusion, put the pathology of this insidious disease on a chemical basis, because it does seem that is the most reasonable basis of finding out the first disturbances in the system.

The old saying is that a man is only as old as his arteries. What is senility if it is not the wear and tear on the delicate structures of the body; the tearing down of the human organs which prevails in every person over fifty years of age?

It seems to me that investigations in the future along these lines will perhaps place the etiology of this disease in a large number of cases on the toxins. It does seem as if the chances of the future would be enhanced by a study of retention of toxins and the results in the very delicate structures of the body.

There was one point which I was very glad to hear Dr. Laidlaw emphasize. That is, that we should not judge the condition of the internal arteries of the system by the effects on the external, such as the radial which we see in the wrist. One can have a very great degree of internal arterio-sclerosis without its manifesting itself on the external surface of the body.

Also another excellent suggestion, that a low blood pressure does not necessarily exclude arterio-sclerosis, that is, arterio-sclerosis can be had with a low arterial pressure as well as with a high.

Dr. Suffa in speaking of blood pressure made use of one adjective, "permanent," high blood pressure. That is what we want. We do not want to decide the condition of a patient who has been through great trial and stress, but what we want is permanent blood pressure.

Just a word in regard to therapeutics. It certainly seems as if our two societies had hit upon the right methods. To my personal knowledge, and in my own experience plumbum from its pathology seems to take the lead.

Just one little point about what the patient should drink. Plenty of soft water. As regards drink at table, no coffee. The ordinary cup of coffee contains three to three and a half grains of caffeine. These patients should omit coffee and tea. If they insist on a hot drink give them cocoa, on account of the theo-bromine in it.

In the matter of fatigue. Perhaps some of you know the excellent work which Dr. Lee, professor of physiology at Columbia University, wrote on the effects of fatigue on the body, and there seems now to be an epidemic of business men walking to and fro from business. Now with arterio-sclerosis patients, we should be careful how we allow them too much physical exercise. Do not allow your patient who is coming down with arterio-sclerosis to take too much exercise. Rest is an important adjuvant in curing this disease.

It seems to me it should be the aim of a high pressure-living professional

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man over fifty years of age to so conduct his business, his profession, his everyday life that not too much strain and stress may be brought to bear upon the delicate arterial system.

Speaking again of prevention: there is no prevention of this disease other than right living. Right living physically, right living morally, right living psychically.

The papers were further discussed by Dr. Solomon Fuller of Westborough, who exhibited a number of photographs and drawings of brain sections, and who very ably described the changes induced therein by arteriosclerosis. A number of others then entered into the general discussion, among whom were Drs. J. P. Rand, G. L. Van Deursen, G. R. Southwick, F. S. Piper, H A. Whitmarsh, and Eliza T. Ransom. In the discussion many cases were cited and numerous interesting points brought forth.

CRANIAL INJURIES AND THEIR SURGICAL TREATMENT.*

By DeWitt G. Wilcox, M.D., Boston, Mass.

The fact is being borne in upon us with a persistency which we can no longer disregard that this delicate and intricate organ which we call the brain is the victim of traumatic misfortunes to a much greater degree than we have yet realized. It is possible that I may be guilty of allowing my fancy to run away with my more sober anatomic and pathologic knowledge, when I say that the time is not far distant when we no longer shall prejudge and condemn a man or woman who is eccentric, a pervert, a kleptomaniac, an occasional criminal or even a homicide without first making a careful physical study of his entire life from the hour of birth to the commitment of the first crime, and thereby determine, if possible, whether or not his brain has been the victim of some traumatism inflicted either at birth or later.

The impetus given the subject in the last few years by such men as Cushing of Baltimore, Ballance of London, Starr of New York, and Kocher of Berne, and the pioneer work done by Sir Victor Horsely of England, and Ferrier of France has been productive of much good, placing the whole matter upon something like a scientific basis.

Cushing in a recent article advocates the cultivation of what he calls the neurologic surgeon. He says, — "In no department of medicine today is there greater promise of immediate scientific reward or greater need of extensive surgical cultivation than exists in Neurology, which so far as the possibilities of operative therapy are concerned is about the position occupied by gynecology twenty-five years ago. There is urgent need and wide opportunity for a group of men, rigorously trained in general surgery, in the neurologic clinic, and the experimental laboratory who can serve as pathfinders in surgery of the central nervous system; men who are not only capable of exposing the brain and cord with full respect to the dire consequences of rough methods, but who stand abreast with the growing maladies to which these structures are heir." So much for the neurologic surgeon.

* Read before the American Institute of Homœopathy, at Narragansett Pier, R. I., June, 1911.

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Let us for a moment view the brain of the new born child at the moment when it is about to assume the majestic responsibility of governing a new-made life. An all wise Creator has so modelled the head of the child still in utero that it can be greatly compressed in all directions in its passage through the bony pelvis without doing serious damage to the brain which as yet has not awakened to its full duties. Indeed the brain of the new born child seems especially tolerant of the roughest kind of treatment without entering a pathologic protest. This is due partly to the fact that the brain is as yet undeveloped and in a state of partial stupor. But tolerant as this sleeping brain may be, there is, nevertheless, a limit of tolerance, and the wonder is, not that there are occasional lesions, but rather that there are so few.

In a protracted forceps delivery where much compression is imperative, there must be much overlapping of the cranial bones ere the delivery can be effected. This overlapping must of necessity cause a loosening of the pericranium along the line of sutures where the bones rub one against the other. If this loosening be extensive there must of necessity be some torn blood vessels and a hemorrhage between the pericranium and the skull. Thus a blood clot may form between the dura and the pericranium and after the bone closes it becomes an epidural clot. As the overlapping of the bone is greatest at the sutures where the parietal bones join we find, as Cushing has pointed out, the greater frequency of blood clots upon the parietal lobes of the brain.

This explains the greater frequency of motor paralysis of the lower extremities rather than the upper in the new born, because the motor leg centre is nearest the suture line. This hemorrhage, or extravasation, may be bi-lateral or uni-lateral.

Little, an English surgeon, was the first to call attention to the fact that a history of difficult birth could be obtained in a large percentage of the children who later in life suffered from bilateral spastic paralysis. Hence the name "Little's Disease" or "Birth Palsy."

It has been pointed out that a violent fit of coughing during a paroxysm of whooping cough may cause a rupture of one of the delicate blood vessels connecting the cortex and dura and thus induce death or local paralysis. This fact has been demonstrated in autopsies.

The extent of brain surface which these hemorrhages may cover, varies from a small point to an entire cerebral hemisphere. It is rare, however, that both hemispheres are involved.

The question may arise, Why do we not have more cases of death or paralysis from these intra-cranial hemorrhages? It is because of the open membranous fontanels which are so elastic as to allow an expansion outward and thereby overcome compressive symptoms. Were the same amount of bleeding to take place in the closed cranium of an adult which probably takes

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place in a great number of new born infants there would be an alarming number of deaths or cerebral defects.

Let us now see what are some of the pathological evidences of these intra-cranial hemorrhages which may be revealed either by operation or post-mortems.

First. There may be only a thickening of the meninges with adhesions over an old superficial scar, or we may find a shallow defect filled with blood.

Second. We may find a large cavity occupying an entire lobe filled with blood.

Rogers, of Chicago, who has recently operated upon a number of children for cranial injuries mentioned finding a calcareous deposit like fish scales on the meninges. This deposit is the remains of blood fibrin wherein the clot has been largely absorbed, leaving only the lime salts behind.

A far more interesting question, however, is what is the ultimate state of these children mentally, morally and physically, who have been the victims of parturient accidents? Fortunately many of them do not live more than a few days after birth. Those which do survive are, in the majority of instances, most pitiable objects. Not infrequently the respiratory centre seems to be the one most embarassed and the child has great difficulty in breathing. It has been demonstrated that many of the cases of still birth are due to hemorrhages into the pons of cerebellum. Again we find these infants showing difficulty in swallowing, hence the child suckles badly and is in consequence poorly nourished. A Cheyne-Stokes respiration is indicative of such local hemorrhage.

There may be pupillary inaction or inequality. The fontanels may be hard and tense, showing great intra-cranial pressure. Twitchings and eventually convulsions may be manifest. All these symptoms are likely to occur early, within the first few days after birth. It should be remembered that rarely is there any evidence of motor paralysis in early life as the motor centres are more or less dormant, the spinal cord and cerebellum being the real actors of the central nervous system.

If now the child survives the early infant life the next group of symptoms will interest us still more. The parents ere this have become aware that the child is not fully normal, and they are watching with anxious solicitude for the first awakening signs of mentality. Not infrequently there is a period of improvement following the first symptoms of compression, a period when false hopes are raised only to be shattered later by failure of normal mentality to assert itself. It is now only a matter of time when this child must be classed with the simple minded, the epileptic, the spastic paralytic, or the hopeless idiot.

With such a picture before us is there not the greatest possible incentive to arouse ourselves to the double responsibility which rests upon us; first, the prevention of these unfortunate, (and I think to a great extent preventable) accidents of parturi-

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tion whereby hemorrhage and compression take place; second, the early recognition of these accidents when manifested by the line of symptoms just outlined, and a scientific, skilful effort to correct them by surgical means in so far as they are surgically accessible?

I seriously question whether the average obstetric physician has before him a full comprehension of the grave dangers of these cranial hemorrhages to which the new born child is subject and the dire consequences of such injuries to the mental and physical welfare of the child in after life.

Allow me to cite an interesting case as an illustration of this kind of intra-cranial hemorrhage. The case came under observation of a Boston surgeon some eighteen months ago. A child of four days old, instrumental delivery, no complications otherwise, a healthy boy of nine pounds. On the third day he became stupid and finally slept continuously. Twitchings appeared in the right hand and leg, also the left eye and left side of the face. The father of the child, being a physician, was easily induced to have a surgeon called. Fortunately the surgeon had been doing some brain surgery, and an exploratory trephine was made over the leg and arm centre on the left side of the head. A small sub-dural clot was found and removed, and the child made a good recovery with the entire disappearance of all symptoms of compression. Eighteen months have now elapsed and the evidences are that no further hemorrhage has occurred.

Cushing reports twelve cases of trephining for hemorrhage following delivery, with six recoveries.

From these reports it will be seen what possibilities for relief lie in surgical measures. The indications for operation are as marked and the demands are as imperative as they are in the same class of cases in adults.

Dr. Rogers of Chicago reports the following case:

"A boy aged four entered Willard Hospital March 15, 1909. Mother says he was a large baby, labor long and difficult. She was finally delivered with instruments. Baby seemed well and the physician noted nothing wrong, but the child cried a good deal and did not move his arms and legs as did her other two babies when they were young. The mother said the child never made any attempt to move his left hand." At six months the mother discovered that the left arm and leg were paralyzed. He cried nearly all the time he was awake. At the age of one year he still made no attempt to sit up. At this time a physician was consulted, and the mother was informed that the baby was paralyzed on the left side and the paralysis would be permanent. He sat up when he was two and a half years old, and would hop about, using his right arm and leg. This was his mode of travel when I saw him at the hospital. He could stand on his right foot if supported, or could get hold of some object, as a chair, table, etc. He had never talked, nor could be taught.

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His temper was violent, and at times he would beat his head against the floor.

Examination. The left arm showed nothing abnormal except atrophy. The left leg was atrophied, and the patient had a marked talipes varus. Many physicians had been consulted and none gave the mother any hope, but the mother consented to the request of Dr. Rominger (to whom I am indebted for the case) to allow us to operate and see if there was a pressure that could be relieved.

Operation and Result. March 16, in my clinic at the Willard Hospital, I turned back a large bone flap on the right side and found extradurally several large deposits of lime salts. They peeled off like fish scales. The dura was then opened, but nothing pathologic found. The bone flap was replaced and in about a week the child began to use the arm a little. A letter recently from his mother says he is talking a little and can walk well without assistance. His great difficulty now is the club foot. His case is undoubtedly one of extradural hemorrhage following injury by the forceps. The clot was partially absorbed, the rest calcified. Had this patient been operated upon when a few weeks old there is no doubt that the result would have been more satisfactory than at so late a date, four years after the injury."

The one great obstacle which has stood in the way of operations upon the infant has been the widespread belief among neurologists and obstetricians that the new born does not stand well any operations upon the brain. As a matter of fact, it has been demonstrated that the child does stand these operations remarkably well, that it stands operations upon the brain better than upon any other portion of the body, because of the inactivity of the brain in the early life.

One of the most intractable and deplorable results of the cranial birth injury is *epilepsy*. According to Gowers, of London, sixty per cent. of all the palsies incident to birth later develop epilepsy. If we accomplish nothing more in our investigations of cranial injuries to the new born than to avert epilepsy in this sixty per cent. of these unfortunates, we shall be doing a magnificent work.

Animal experimentation has demonstrated that we can induce a genuine epileptic seizure in a monkey by faradization of a small area of the motor cortex. If so slight an irritation as a mild faradic current will induce a convulsion, surely an old scar, a few adhesions, calcareous deposits, the results of clot absorptions, or any mechanical pressure of the motor zone might be expected to work similarly. Nevertheless Kocher believes that there is something back of the lesion itself, some circulatory change, some disturbance with the cerebro-spinal fluid circulation, or some auto-toxic agent which is the torch that sets off the discharge. Yet a lesion however slight may be the causative factors which will produce these changes.

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The fact that the longer the epilepsy has lasted, the less are the chances of cure would go to show that even if the lesion has been removed or overcome there are some fundamental brain changes which take place and which cannot be remedied.

As an index to the advance which is being made in the surgical treatment today compared with that of twenty years ago, we have but to note the percentage of cures now and then. At that time Horsely and Ferrier were just beginning their pioneer work. They had succeeded in giving us a motor cortex map of the brain and a few of the indications of motor excitability. But the surgical results were far from gratifying as but a small percentage of the cases which were operated upon remained cured. Recalling my own experience for operating for epilepsy eighteen years ago, I can remember the enthusiasm I experienced over the first half dozen cases wherein the patients had been having seizures every other day or even a number a day; and then to have an immediate cessation of all seizures following the operation for some weeks or months was like a fairy tale, and it was but natural that the operator should feel that he held in his hand a cure for epilepsy. But as the months went by and the seizures gradually returned in almost all the cases, until finally they reached the maximum of the pre-operative period, his confidence and enthusiasm ebbed away. Nevertheless out of some twelve cases on which I operated at that time, eighteen years ago, there were two which made such satisfactory recoveries that it rewarded me for the failures of the others.

In the light of better knowledge of pathology and technic I can see now the probable cause of some of my early failures.

First. The correct site for trephining was not always chosen.

Second. There was not a sufficiently large area exposed to relieve pressure or to discover the lesion.

Third. Failure, through fear of opening the dura, and thereby making careful search for clots, tumors, cysts, fractures, or other lesions.

Fourth. The replacing of the bone or a plate over the seat of the exposed cortex, thereby continuing the same pressure which previously existed.

Now compare those results, which were a fair index of the results obtained by all surgeons who were doing brain operations twenty years ago, with Cushing's results of today. He says, — "There have been 128 cases in all, of which number only fifty-nine have been operated upon, showing that there has been considerable sorting out of unfavorable cases. Of these fifty-nine cases, in forty the attacks have been focal, in nineteen general. There have been seven cases of epilepsy associated with brain tumor; *twenty-four following birth or infantile palsies* of one sort or another with great variety of lesions, from simple adhesions to large encephalic defects. Of these fifty-nine cases,

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twelve have remained free from attacks for periods of one to five years and hopefully regard themselves cured. About twenty per cent have received no bromide therapy since the operation. Of the remainder, thirty express themselves as improved, many of them as 'greatly improved.' The time since the operation varies from five years to six months."

The results of operative work for feeble mindedness and idiocy are as yet unsatisfactory. Here and there a brilliant recovery has been reported, but with our better understanding of the ravages of intra-cranial hemorrhages in the new born we have a hopeful outlook for these little unfortunates even, if they can only be brought to the surgeon early enough before the impress of the brain has left its indelible effects.

The theory once advanced that idiocy was due to a too rapid ossification of the skull is now found to be entirely untenable. Amongst my early brain operations was one of the character where a child eight years old had gradually degenerated into a state of feeble mindedness approaching idiocy. At three different sittings about six weeks apart I encircled the entire cranium on a line midway between the vortex and the ear, thus loosening the entire calverium. Although the child did not show the least ill effects from so radical an operation yet there was no improvement in her mentality. Fortunately she died two years later from scarlet fever.

Just a word regarding surgical relief for apoplexy. Two factors are of prime importance determining whether an operation is justifiable and whether it would be curative, —

First. Has the clot remained so long as to cause destruction of brain tissue?

Second. Is an operative approach possible?

It is generally believed that a hemorrhage such as takes place in apoplexy is of short duration and the clotting takes place quickly. The fact that the patient may sink into deeper coma and show a gradually extending paralysis immediately following the first stroke is due to the ensuing œdema rather than to the increasing hemorrhage. This œdema comes from pressure upon the cortical blood vessels from the blood clot. Small extravasations of blood which has not infringed upon any vital cerebral centre and are quickly absorbed leave no discoverable trace of their presence. Large extravasations are slowly absorbed or never entirely, and in time are likely to be replaced by extensive scar tissue or cysts.

Ordinarily there is comparatively little difficulty in locating a hemorrhage of apoplexy, even though there may be profound coma. Usually some paresis is demonstrable. A relaxed limb, a disparity of reflexes, the position of the eyes, or unequal pupillary reaction will indicate not only the hemisphere affected but the area.

Up to the present we have stood helpless in the presence of apoplexy. The revival of the old time bleeding procedure was

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thought to be a helpful agent, but that has been proven worse than useless.

Upon the subject of cerebral tumors a long and interesting chapter could be written. I feel justly proud of having been something of a pioneer in this line of surgery.

In 1894 but a short time after Horsely had published his experimental work on the topography of the brain, a man was referred to me suffering from a paralyzed right arm. The symptoms had been very gradual in their onset and subsequent development. He was a healthy farmer of fifty years old, with a negative family and personal history. At the time I saw him he complained of a severe headache, and some nausea, unsteadiness of gait, and defective vision. The paralysis of the arm was quite complete. There were marked choked disks of both eyes. I studied the case in conjunction with an able neurologist and we became convinced that the man had a cerebral tumor presumably in the left motor zone. We advised operation, and his family readily consented.

I made a seven-eighth inch trephine opening over the left arm centre and then enlarged the opening about one and one-half inch diameter. The dura showed a marked bulging indicating an intense itra-cranial pressure. Upon incising the dura a dark body presented itself being forced out by the pressure from within. It was about the size and shape of a pecan nut, and was loosely attached to the surrounding meninges save a few roots which ramified deeper into the convolution from which it seemed to emerge. Being encapsulated it was shelled out and a little packing of gauze in the cavity from which it was removed controlled the slight hemorrhage.

The man made a good recovery, regained the use of his arm, nausea and dizziness subsided and there was an improvement of the optic disks. An examination of the growth showed it to be of a sarcomatous variety, although in the light of subsequent knowledge of such brain tumors I am induced to believe it was an endothelioma. He remained well about three months, when he gradually relapsed into his former state and died shortly after. An autopsy revealed seven growths studded throughout the brain, one being situated deep in the cerebellum near the pons which was, no doubt, the immediate cause of death.

These endothelial growths are the most common variety of brain tumors except, perhaps, the syphilitic gumma. They usually arise from the meninges, are easily accessible, and cause trouble by pressure symptoms. Cystic tumors come next in frequency. These are almost universally the results of old injuries to the meninges or cortex when blood has extravasated, become encapsulated and undergone encystic degeneration. Frequently these cysts become the seat of parasitic infection.

What are the symptoms of brain tumors? They are divided into the general and special or local. The general are,—first, headache; second, nausea, and vomiting; third, choked disks; fourth, vertigo; fifth, convulsions.

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The headache usually is of the dull character, appears most often in the morning. The pain is not necessarily over the site of the tumor. This pain becomes more unbearable and drives the patient to suicide. Headache in some form is rarely absent in tumor formation. Its persistency is suggestive of tumor.

Vomiting is not a constant symptom. It may or may not be attended by nausea. It does not depend upon the taking of food. It is more like the vomiting of pregnancy, being reflex. Its chief characteristic is the projectile type of vomiting. It is increased by raising the head from the pillow, or a quick motion of the head. In absence of any other cause for vomiting this should be looked upon with suspicion as indicating brain tumor.

Choked disks would be almost a diagnostic sign of tumor were it not for the cerebral œdema which so frequently occurs in Bright's disease, and causes choked disks. But once eliminate Bright's disease and the presence of a choked disk either single or double is a pretty positive sign of cerebral tumor.

Localizing symptoms may be or may not be present according to the location of the growth. If a motor zone be involved then we get the paralysis of those structures governed by that zone. If the tumor is pressing upon a non-motor zone or close to a motor zone we are likely to get epileptic seizures or convulsions.

Word blindness may come from a tumor in the lower part of the parietal lobe. Loss of memory, irritability, change of habits, and insanity may result from tumors in the frontal lobe. Later I will report a case illustrative of this type.

Blindness is quite apt to follow tumor formation in the occipital lobe, especially if it is near the optic radiation.

I now have under consideration two very interesting cases which I hope soon to operate upon. Two children, brothers, in the Hospital for Blind Babies, age three and four years, totally blind, yet as far as the oculist can discover there is nothing abnormal with the visual apparatus. The mother is an ignorant Swede, an alcoholic, and can give us but an imperfect history of their births. I am quite convinced that we have in these cases some form of pressure upon the optic radiation of the occipital lobe. Whether it is a tumor, intra-cranial hemorrhage, or a fracture I am not able to say, but I hope to report later upon these cases.

Dr. Rogers, whom I have already quoted, reports two cases, brothers aged two and four years, one blind, the other a hydrocephalic. He made a decompressive operation upon the blind child over the occipital lobe, and a few weeks after the child could recognize food across the room.

To me the most interesting phase of the whole subject of cranial injuries is the possible effect which they may have upon the character, or the temperamental effects. While this side of the subject is almost entirely in the speculative stage, yet a case here and there comes to light in such a manner as to impress the thoughtful man most profoundly with the belief that all people

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who go wrong morally may not be entirely and altogether to blame for their actions. There are a certain few, perhaps many more than we dream of, who are victims of cranial injuries either at birth or later in life.

And who can deny that as our knowledge of the effects of parturient head injuries amplifies we shall be able to distinguish beyond peradventure of mistake the difference between the real criminal and the brain pressure criminal?

If it is true that the motor and sensory centres can be so impressed by hemorrhages, clots, tumors, fractures, and abcesses as produce epilepsy, paralysis, blindness, and imbecility, why is it not possible that the same causes operating upon the psychic or moral centres should not cause moral obliquity in all the graduations from lying to murder?

Dr. Alexander B. Johnson of Columbia University Medical College says, — "There are large areas of the cortex whose functions are unknown. These are more extensive on the right side than on the left. Many of these areas are doubtless concerned with the more complex mental processes. The frontal lobes of the brain apparently have to do with the higher mentality, i.e., attention, reasoning, and self control, and lesions of the frontal lobes, notably upon the left side, are commonly attended by dulness, apathy, loss of the power of concentration, and imperfect self control." If such lesions will produce imperfect self control why should they not be productive factors of criminality?

At present we are laboring under the great difficulty of not knowing where these moral centres are located. We need some David Livingston who will penetrate these darkest centres of the higher brain wherein dwell the little genii of good and evil, and coax them to come to the light where we may study their character and abode. Till then we can only speculate as their dwelling place.

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THE NEED OF A CHAIR OF PRACTICAL DIETETICS IN OUR MEDICAL SCHOOL.

By Benj. C. Woodbury, Jr., M.D., Portsmouth, N. H.

The inductive method of homœopathy long ago demonstrated that in order to apply drug substances for the purposes of cure, we must first determine what is curable in disease and the corresponding curative properties resident in medicines. By original experimentation Hahnemann established upon a theoretical basis the *method* of *determining such curative processes, namely, drug provings upon the body in health;* this having been verified in the great school of clinical experience, *the method* was thus placed upon a *purely scientific basis.* It is, therefore, no longer a matter of speculation, given a set of disease symptoms, that a remedy known to produce as nearly as possible similar drug effects in a healthy person, administered in such a condition, will cure, if such a case be curable; it is now a *scientific fact.*

It is, furthermore, interesting to note that, young as the science of homœopathy is, — a century old, — its working theory, by its far-reaching grasp of medicine in general and its scientific prevision, has been able to cope with any and all the problems that have confronted it, and in countless instances predicted and anticipated its most striking epochs; attest, — the recognition by Hahnemann of the immunity conferred by vaccination, in the rediscovery of this principle and the application of vaccines at the present day; the necessity of the minimum dose, not at first employed but later found to be a necessity; the statement that the cause of cholera must be some essential infectious material, the active agent of which he reasoned to be certain living animalculæ; and his prediction as to its prophylactic and curative remedies. The single remedy is now advocated not only by vaccinists, but also by the majority of thinking physicians of all schools; the action of the infinitesimal dose now confirmed by the behavior of the atomic and sub-atomic particles of radioactive substances; not to mention Hahnemann's much derided psora theory, as the basis of most non-syphilitic and non-sycotic diseases, the truth of which must inevitably become a recognized and demonstrable scientific fact. Therefore the time is evidently fast approaching when the natural methods of cure are to be given the place in medicine to which they have long been entitled. Important as all methods of drug prescribing are, no less noteworthy is the subject under consideration, namely, the need of *careful, practical study of food effects upon* the *body in health as the basis of their use or disuse in disease,* — the scientific study of *food provings,* if we may construct the phrase. Homœopathy shed the first gleam of light upon the dark era in medicine, was the first Titan to overthrow the power of Galenism. Since its advent there have arisen other methods of natural healing, variously classified as hydrotherapy, osteopathy, magnetic healing, and the dietetic and metaphysical methods of the present, all of

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which, admirable as they doubtless are in their limited fields, in so far as they have any application in the treatment of disease should be the therapeutic possession of every practitioner of medicine. However useful the various methods of drugless healing may be in selected cases, fully as important is this very matter of diet, which is sorely neglected by most such systems. Fortunate for us again that Hahnemann, with his searching mind, long ago entered this domain and has given us what has been known as "the homœopathic diet." Those who are unfamiliar with this department of homœo-therapeutics, we would refer to notes and explanatory remarks to the Organon [131], Sec. 260.

If, after careful reading and thoughtful reflection, anyone is not convinced of the truth and foresight of these careful directions given by Hahnemann as to the avoidable or removable causes of disease, let him but glance casually at the carefully recorded provings of such condiments as pepper, mustard, nutmeg, ginger, cinnamon, table salt, etc.; such medicinal vegetables as asparagus, tomatoes, mushrooms, onions, etc., and there read in bold-faced type the symptoms of their drug effects. Then, if he will note carefully the symptoms produced in himself after an ordinary course dinner, or overindulgence from the same causes, he cannot fail to recognize the fact that here in our every-day dietaries lie the causes of the greater part of our so-called diseases. If not satisfied with this investigation, he may go still farther and take care to note, aside from the ordinary symptoms of over-eating and improper mastication and insalivation, the effects of (a), excess of proteids, such foods as beef, milk, fish, butter, eggs and the legumens, (b), excess of fats, as butter, oils, fat of meats etc., and (c), excess of carbohydrate intake, such as sweets in general, natural or artificial, starchy foods such as found in cereals and vegetables, and carefully record the results. It will then be very evident that the determination of the effects produced in the body by the different kinds of foods is no subtle, intangible problem, but a simple, profitable study if pursued along scientific lines. Thus we shall learn what foods produce, for example, bad tasting mouth, excessive or scanty saliva, decay of the teeth, fulness after eating, heaviness of the eyes, sleepiness after dinner, constipation and diarrhœa, eczema, and boils, rheumatism and gout, corpulency, bilousness, headache, nerve and brain fag. This being determined by what may be called *scientific food provings*, we have in the elimination of such foods, in the improper amounts or bad combinations, the *means* for *alleviation* of *the majority* of *our human ills*. Just as knowing the effects of mercury, cinchona, and arsenic, as obtained from our drug provings, we may know that the first step toward cure is the proper correction of the same by stopping the food or drug intake, and the second will consist in antidoting, by proper hygiene and our well known remedies, their effects, both acute and chronic. Here we shall be aided by our repertories, which give in a general and particular way, under "aggravations from food and drink," both

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disease symptoms and their corresponding remedies. If, on the other hand, we are called to treat malnutrition, due to improper assimilation of such alkaline salts as are found in our foods, we have again the selection of *proper nutrition*, and the tissue remedies of Biochemistry, which when wisely and carefully applied become wonderfully helpful in treatment.

Why should not the medical profession, and particularly we homœopaths, who were the pioneers in the advocacy of dietetic and hygienic reform, take advantage of such a method, along with our drug provings, and not leave it to academic professors, pure food experts, or the advocates of the various dietetic reforms, who are so sanguine as to their methods that they are willing to dispense with all drug medication, thereby hindering the ultimate spread and acceptance of the truths of our divinely given art? Surely we should be equally zealous to save our own homœopathic system from the inevitable disuse into which medicine in general is fast falling, for it has recently been estimated that in our own country alone no less than twenty millions of people are now depending on methods of healing other than drug medication. Much more can be done for our patients by dietetic and hygienic measures combined with proper homœopathic treatment which is constructive in action and seeks to conserve and direct the vital forces into healthy, normal channels.

The dietetic experiments of Salisbury in 1856 and later, and those of others who have succeeded him, go to prove conclusively that the origin of various states of fermentation and other auto-intoxications is from within the organism and engendered by improper eating and drinking. The effects first and last of uric acid and its by-products most carefully observed by Haig over a period of many years, starting in 1882, and others, have likewise been suggestive that there is a right way and a wrong way of combining foods.

At the thirty-seventh annual meeting of the Alumni of Boston University School of Medicine Dr. Frank C. Richardson outlined the purposes of the (then proposed) Robert Dawson Memorial, in the establishment of an Institute of Clinical Research and Preventive Medicine. The special references to our subject in this preliminary report are as follows: under the department of Chemistry, Article 3 — "The determination of the energy value of various food stuffs and of the end products of metabolism by more accurate methods than those now in use."

1. — The application of the data thus obtained to the study of various problems of the metabolism in *health*. (Italics our own).

For example: — a. The influence of diet on the characteristic end products of metabolism.

b. The study of various pathological conditions of metabolic origin.

c. The origin of certain metabolic end products.

"In order that the institution may be productive of good to the greatest number, it is planned to have upon the ground floor

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an auditorium where may be given popular talks on physiological subjects: the value of fresh air, exercise, bathing, food values, personal hygiene, etc., while psycho-prophylaxis might be taught by ethical discourses upon the philosophy of life, the influence of the passions, and the various habits of thought inimical to health."

On Feb. 4, 1911, occurred the laying of the cornerstone of this building which is fast nearing completion, and these two important events mark the beginning and erection of an institution which has many possibilities. Such an institution will make possible the carrying out of whatever laboratory experiments come within the scope of our subject. These investigations should supplement didactic teaching of a Chair of Practical Dietetics, and thus combined the advantages of such an addition to our curriculum and its opportunities for the elucidation of many perplexing problems will be almost unlimited.

Now that our followers have manifested sufficient faith in us to endow and raise with our help such new and modernly equipped institutions of research, let us not be unfaithful to our trust. But while we thus go zealously forward in search of the apparent, tangible causes of cancer, diabetes, and other chronic diseases, let us bear constantly in mind that there are other more subtle, far-reaching, dynamic or underlying factors, which are operating silently during our sleeping and waking hours, of which we may often be unaware, working from the simple to the complex, and ending in incurable pathologic change. This must be the future of such investigation. Our homœopathy has stood the test of a century; let us re-inforce the original rules of Hahnemann in regard to dietetics by carefully conducted experiments, and enhance the treasure he bequeathed us and thus restore the enthusiasm of our staunch adherents.

Such a department of hygiene may certainly be given a place in our newly erected building, and under careful direction, become a power for good to the coming race. Pure experiment will dispel the clouds of dietetic empiricism, for we shall then know with certainty when a vegetarian diet is indicated, when an animal diet, and when to prescribe a properly combined mixed diet.

Then shall we cease to run blindly after dietetic fads, and new cures for constipation and the like simple troubles; then drug crudities will of necessity be expunged from our pharmacopœias. The time is ripe; let us grasp the opportunity.

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CLINICAL DEPARTMENT.

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

Case X. — Diagnosis: Sacro-iliac Strain and Abdominal Aneurism.

While only a post mortem examination could definitely settle the question, it is strongly probable that the expansive and pulsating tumor felt over the celiac axis in this patient is due to dilation of the aorta by the arterial wave. Apart from the actual tumor, the distinct and far reflected bruit and the periodic vascular disturbance and faintness is further suggestive evidence. The position of the tumor is such as to fit into the cup made by the curving bodies of the vertebræ and leads one to fear a necrosing process, though as yet there is no evidence of it.

It is interesting to conjecture that the early sacro-iliac strain which led her to carry the right hip a trifle high and hence the shoulder thrown over for compensation was the starting point of a long series of digestive, pelvic and nervous symptoms which through her more vigorous years she threw off with but slight discomfort, but which after the climacteric made inroad upon her nutrition and resulted in arthroma of the abdominal aorta and its dilation. This is quite in line with the findings of those who have done the most work on sacro-iliac strain and emphasizes the importance of early recognition and treatment of this condition.

Case XI. — For Diagnosis: —

The case is that of a young Irish servant girl who had been in this country for several years. Her family history is not known but is unimportant. She was working and in good general health at the time of the following accident. About two summers ago she intended to go home to Ireland with her sister for a vacation. On a Sunday afternoon in June, 1909, she went out as usual. About midnight the family for whom she worked received a telephone that she was at the Massachusetts General Hospital, suffering from multiple fractures received from being struck by an electric car and was in a stupefied condition. She gradually came to herself and was conscious the next morning and knew her employer. Her various fractures had been attended to. She could, however, tell nothing whatever about how the accident occurred. When seen six weeks after, she was still unable to recall anything of the incidents for an hour preceding, or twelve hours after the accident. Since her friends were anxious to collect damages from the road for her it was very important that these memories should be restored.

From what was this patient suffering and how would you treat her?

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WHAT DO WE NEED TO KNOW CLINICALLY ABOUT THE MIND?

(Continued from the September number.)

The Psychopathology of Memory

Memory, though an element of our mental equipment, capable of analysis in its higher forms through many experimental channels, is so closely linked with and dependent upon other elements, especially sensation, perception, attention and association, as to make it, in a sense, a composite representative of waking consciousness. It is the essential factor in all reasoning and judgment. It is the one quality that, above all others, makes possible the type of mind which allows the human intellect to stand out in bold contrast to that of all other animals. Richet says, "Of all the psychic functions, memory is the most important. Without memory there is nothing in the intelligence, neither imagination nor judgment, language nor consciousness. It may be said of memory that it is the keystone of the intellectual structure."

As shown in a late popular paper on "Instinct and Memory," it is this quality of the neuron to retain and at a later period to reproduce the sensory stimuli of experience which raises the human species far above all other vertebrates, who depend largely upon instinct (the innate tendency of their nervous mechanism) to respond in a stereotyped way to their environment rather than to profit to any extent by experience. Bianchi defines memory as "that function by which the nervous system receives, conserves, and reproduces impressions."

Physiology of Memory

Put in physiological terms the receptive would become the sensory leg of the reflex arc, conservations the central station, and reproduction would be the motor discharge. It is generally accepted that every sensory stimulus received so modifies or changes the chain of neurons through which it passes as to make it of slightly lowered resistance and renders more easy the passage of succeeding similar stimuli, that is, it leaves a trace of its passage, the "disposition trace."

Sherrington has shown experimentally that this change takes place not in the axis cylinder nor in the nerve cell, but in the cement substance between the dendrites of one cell and the arborizations of the next, that is, in the spark gaps or *synapses.*

It has also been shown that after sufficient repetitions of the same stimulus, at first under voluntary effort, this modification becomes so marked that automatism is set up, the reception, conservation and reproduction become unconscious. The effort of attention is no longer required for its guidance, as in dancing, for example; but, on the other hand, if we desire to know how we dance, secondary attention must again be invoked to recall and observe how we do it. This is also the physiolog-

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ical basis of habit. One other thing Sherrington's work emphasizes in this connection is that the nervous energy will flow through the synapses in one direction only. The current once having passed through a given chain of nervous elements and lowered their resistance in a certain direction, the recall upon suitable stimuli, objective or subjective, tends always to recur in the same chronological sequence. For example, it is easy to say the alphabet as one learned it, forward, but effort must be used to repeat it backward. James says "when two elementary brain-processes have been active together or in immediate succession, one of them on recurring tends to propagate its excitement into the other. This is the *law of forward conduction.* But there is still another important determining factor and that is attention in memory. McDougall says, "effective durable associations are only formed between the objects to which attention is given in successive moments." (The fringe impressions rapidly fade). "The passage of attention from one object to the other seems to be the essential condition for the formation of effective associations."

Psychology

Here the important factors for memory seem to be: (1) the intensity or vividness of the impression; (2) the recency of the impression; (3) the duration of the perception; (4) the degree of attention; (5) familiarity; (6) the number of associations formed.

The important studies in memory began with the introduction of nonsense syllables by Ebenhousen in 1885. These consisted of a series of syllables as — tal, kep, mow, gid, foom, tod, buz, howj, — which left no clew or association for memory to hang on, and so permitted of pure experiment. The result of these experiments showed that unlike the physiological mechanism association may work backward as well as forward. This does not in the least invalidate the law of forward conduction but merely emphasizes the intricacy of the connections in the associative mechanism in the brain mantle (the cortex). Practically it has led, among others, to the following hints for memorizing:

(1) Prose is better learned if the whole is read through twice a day for twelve days than if read twenty-four times in one day. (2) In learning short, disconnected words or numbers it is better to take a few at a time.

Memory and imagination are closely linked in consciousness. Professor Tichnor in his Lowell Institute lectures on Psychology last winter gave the following interesting table:

The Image of Memory	*The Image of Imagination*
1. Is not clear; has blanks.	1. Is clear, vivid, quick. No blanks.
2. Is variable and unstable.	2. Is strong and stable.
3. Has associations.	3. Has no associations.
4. Is a moving picture show ever changing.	4. Is a picture hung where it can be studied at leisure.

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5. Has feeling of familiarity.	5. Has feeling of strangeness.
6. Is accompanied by the appropriate movement of the eye, hearing, movement of the larynx, etc.	6. Has no accompanying movements.
7. Has kinæsthetic factors present.	7. No kinæsthetic factors.
8. Accompanied by organic sensations of imitativeness.	8. Accompanied by organic sensation of feeling.
9. Is fixed and stable.	9. Is unstable and moveable.
10. The body is restless.	10. Body is fixed.
11. Not influenced by surroundings.	11. Is influenced by surroundings.

Another point which Titchner explains in his last text-book is the blanks in consciousness of which we are all aware when we are trying to remember. He says that one of the factors in memory is the kinæsthetic (muscle and joint) sensations which accompany the first impression and they may therefore serve as an associative link in the recall. These so called blanks are therefore the effort to use these kinæsthetic sensations, to get the general feeling which was present at the time of the original perception. These feelings are, of course, unconscious and involuntary and are, therefore, blanks so far as the intellect is concerned.

Modern psychology insists that each of us can only perceive and mentally retain that which previous experience and the inherited type of mind has prepared us to receive.

Many similes have been offered to illustrate the process of memory. The best of these is the one suggested from McDougall who says, "The process of perception and retention of an impression may be likened to the application of a seal to a waxen surface on which a countless number of impressions have previously been made, such new impression finds its way into the marks previously made by similar seals and deepens and alters them a little, and, if no such congruent marks have been previously impressed, the novel form of seal fails to leave any recognizable trace. The new impression is only rendered possible by the co-operation of the accumulated effects of previous impressions."

"Adhering to the simile we may say that when the new seal, the object of present perception, fits accurately into marks already made, we call the process *assimilation;* when it does not perfectly fit to the old marks, but affects some change in them, we call the process *apperception.* The marks, of course, are the dispositions elaborated from the simpler congenital disposition in the course of education, and the modification of any mark by a new impression is the modification of a disposition that is affected in the process of perception and the persistence of this modification constitutes retention or memory."

From the physiological point of view all such similes are objectionable because they lead to a misconception of the actual neural elements and processes involved. But from the psychological side such a description gives us something tangible upon

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which to hang ideas and serves well as an aid to the understanding of this difficult subject.

Owing to the very different circumstances under which the lives of individuals are developed, and especially for reasons of heredity (Ribot) the various parts of the brain are not all developed proportionately, and the inequalities in their evolution cause inequalities in function, which are expressed in the readier formation of images and in the more certain and durable conservation of these, likewise in their readier reproduction, with more coloring in those parts of the cerebral mantle that are most evolved. In this way amnesic types are formed among men, who, for this reason must have diverse inclinations, tendencies, emotions, and aptitudes according as there is predominance of visual, aural, or tactile images in the complex formation of the mind. I am of opinion that in this regard there are no men with absolute equilibrium of development. (Bianchi.)"

Pathology.

In disturbance of memory, one or all of its component parts, — impressibility, retentiveness, evocation and reproduction, — may be affected. Clinically the various states so produced are:

(1) *Fogging:* a disturbance of impressibility in which there is difficulty of apprehension, easy distractibility or indifference which grades all the way from the absent-mindedness of fatigue to states of confusion with amentia (Knapp) such as occur in dementia præcox, paresis and epilepsy. It is characterized by a stupid indifference. The most marked disturbances of this type occur in Karssakow's psychoses and senile dementia.

(2) *Retrograde amnesia*, in which memory is more or less destroyed without clouding the memory gap, including a period of hours, days, months, or longer. There is a more or less complete amnesia for the occurrences of period. It is most common in hysteria, psychic epilepsy and paralytic attacks and in traumatic cases with concussion. Certain states, as dreams, delirious conditions, profound intoxication and hypnotism, prove that psychic life, and therefore consciousness, may exist without memory.

(3) *Accuracy of memory* may be disturbed through impaired retentiveness, and may grade from states of normal fatigue to the development of delusions. Even our normal reproductions of past events are never absolutely accurate.

(4) *Paramnesia* is a mixture of imagination with memory, a sort of hallucination of memory which results in fabrications. This condition in its incipiency is normal to some minds and results in the unstable and unpractical, dreamy type of individual. In its more pronounced state it is found in paresis, paranoid dementia, mania, epilepsy and the hysterical. Fabrications are particularly characteristic of Korssakow's psychosis. There are often fantastic accounts of wonderful adventures, etc.

(5) *Acquired loss of memory* is always an expression of

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changed organic conditions of the brain and may result from acute infective maladies, intoxications, infections, central shock, exaggerated, intense and unduly protracted intellectual labor, — all of which may be summed up in the expression, auto-intoxication.

(6) Finally we have *antigrade amnesia*, found typically in senile dementia, a state in which the mind fails to acquire new impressions.

BETTER OBSTETRICAL TRAINING.

The *Gazette* is in receipt of the following letter which is self-explanatory, and with the aims of which the editor is in hearty accord. For a number of years the Medical School of Boston University has held the same opinions that are here emphasized, and have given opportunities to the students much in advance of those here acquired. In fact, the number of cases seen by each student graduating will probably be three times as many as here suggested.

"Dear Sir: —

Of all branches of medical practice, it is generally admitted, I think, by those who have investigated the subject, that young physicians are least well prepared in Obstetrics and that lack of adequate preparation in this branch is productive of more harm to the community than a deficiency in any other.

The large Maternity hospitals of the country receive every year a number of unfortunate women in child-birth, fatally injured by inadequate or unskillful medical attendance, and the infant is usually destroyed with its mother. These tragedies, therefore, must be comparatively frequent throughout the country.

Our medical schools have recognized of late their defects in material and clinical equipment for teaching this branch and are earnestly endeavoring to remedy them.

The best schools of the country demand of their students personal attendance on a certain number of confinement cases before graduation, although the number is small compared with the requirements of Europe, where forty to fifty cases are required before a candidate is licensed to practice.

A Committee of the American Gynecological Society last year recommended that at least six cases should be attended, under supervision, by each graduate.

In view of these facts, would you kindly submit to your board the inquiry whether the time has not arrived to act in accord with the practice of the older civilized states of the world in demanding of an applicant for a license to practice medicine, evidence of practical training in Obstetrics?"

Very respectfully,

(Signed) Barton Cooke Hirst, M.D.

Professor of Obstetrics in the University of Pennsylvania.

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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, 16 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business, should be sent to the Business Manager 22 Commercial Road, Dorchester, Boston, Mass.

EDITORS:

JOHN P. SUTHERLAND, M.D.

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ARTHUR H. RING, M.D., Assistant Editor.

Reports of Societies and Personal Items should be sent in by the 15th of the month previous to the one in which they are to appear. Reprints will be furnished at cost and should be ordered of the Business Manager before the article is published.

BOSTON UNIVERSITY:—INAUGURATION OF PRESIDENT MURLIN.

On the twentieth of October occurred the inauguration of a new administrative head of Boston University. The functions of the day began with an academic procession from the College of Liberal Arts to Trinity Church. The participants in the procession included delegates from other colleges and universities, guests, trustees, faculties, alumni, and seniors of the four departments of the University. There were upwards of eight hundred in the line. All were garbed in academic cap and gown and many wore hoods indicative of the degree held by the wearer. The representation of School of Medicine in the procession was most gratifying to the officials having the matter in charge, reflecting very adequately our appreciation of the importance of the occasion. Thirty members of the Faculty and an equal number of alumni and seniors marched in the procession.

When the procession arrived at the church and had been seated, the inaugural service began with the singing of a processional hymn. The Rector, Rev. Alexander Mann, D.D., then offered the invocation, following which there was the responsive reading led by Rev. Prof. William F. Warren, a former president of the University and now Dean of the School of Theology.

After the singing of the Gloria, Honorable John L. Bates, President of the Corporation, presented the seal and charter of the University to the new President, with the following words:

"Lemuel Herbert Murlin: It is no easy task to which we have called you. To administer successfully the affairs of any university requires experience, training, patience, devotion, and talent of high order. This is particularly true of our University. It is young in years, but old in achievement. Its progress has been steady. It is unique. It follows no beaten path, but must blaze its own way, and it is for you to mark out and determine its future

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courses. It is apparent that it has not yet half occupied the field of service that opens before it. You will maintain the best and approved policies of the past and to them add new and aggressive ones. Let not this institution mark time under your administration, but may it always be marching onward. Be not satisfied with the victories of yesterdays, but make sure of greater victories on the tomorrows.

"We call you, Sir, not to honor, though there be honor in it, but we call you to struggle and conflict. We call you not to ease but to labor, not to selfish pleasure but to unselfish living. We limit not the field of your activity, but with high confidence in your leadership we place you in a position of power unfettered save by the injunction to make this University not beautiful, not great, not honored, but useful to men, knowing that in usefulness it will find beauty, greatness and honor.

"By virtue of the authority vested in me by the Trustees of Boston University, I now entrust to your keeping its charter, seal and keys, and I induct you, Lemuel Herbert Murlin, into the presidency of this University and confer upon you all the privileges, immunities and honors pertaining to that position."

The President responded briefly, assuming charge of the administration of the affairs of the University with a keen realization of the responsibilities and burdens attached to his office.

After the singing of a choral benediction, President Murlin delivered his inaugural address, taking as his subject "The University and the City." The address was a very earnest and scholarly review of the reciprocal relationship which does or should exist between a great university located in a municipality and the municipality. In closing his address the President said:

"Boston University faces the future under the conviction of a great opportunity. The past is secure in a noble record of worthy and efficient service, The old ideals shall be retained, and brought to the service of a new day.

"While we thus cling to these noble ideals worthily dominant in the past, we shall continue to seek the best modern equipment, to employ the best new methods and to secure for our faculties the highest available scholarship and teaching power.

"When we have passed another forty years let us hope that it can be said of Boston University that we have begun to build wisely upon this well-constructed foundation; that friends have gathered about us counting it a privilege to see that material needs have been generously provided for our high spiritual task; that our educational standards have maintained all that is best in the educational history of the race; that our spiritual vision continues undimmed and grows ever clearer; that our moral earnestness is unabated and becomes stronger with the passing years; above all, that we have proven the reality and worth of our work by the service we are rendering the city and the Commonwealth."

The service was concluded with the benediction pronounced by Rev. John W. Hamilton, resident Bishop of the Methodist

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Episcopal Church and member of the Board of Trustees of the University.

The procession then passed out of the church to the strains of the recessional hymn. Upon the arrival of the procession at the College of Liberal Arts a very successful panoramic photograph of the entire group was taken. This was followed by the serving of a buffet luncheon, during the progress of which there was ample opportunity for delightful social intercourse.

At two o'clock, in the Old South Church, were held the exercises in recognition of delegates, the Hon. Austin B. Fletcher, LL.D., presiding. Among the delegates who responded when the roll was called were Rev. J. W. Black of Edinburgh University, Prof. Paul Hensel of Erlangen University, Dean Chas. R. Brown of Yale Divinity, Pres. Noble of Dickinson, Pres. Garfield of Williams, Pres. Thomas of Middlebury, Pres. McConnell of DePauw University, Pres. MacLauren of Technology, Pres. Lowell of Harvard, Pres. Pendleton of Wellesley, and Pres. Sanford of Clark College.

Addresses were made by Mayor John F. Fitzgerald, Boston, Mr. William Orr, Deputy Commissioner of Education, Superintendent S. D. Brooks of the Boston schools, and President Lowell of Harvard University.

Following these addresses a discussion, — Four Aspects of Education, — was held. The College, — Pres. McConnell of DePauw University; The Medical School, — Hon. Eugene H. Porter, M.D., Health Commisioner of the State of New York; The Law School, — Chief Justice Arthur P. Rugg, of the Massachusetts Supreme Court; The School of Theology, — Rev. Charles R. Brown, Dean of Yale Divinity School.

At six o'clock the Trustees gave a dinner at the Vendome to the delegates from other Colleges and Universities, and other guests. Members of the Medical Faculty were among those who were invited, and a number were present.

In the evening an informal reception to President and Mrs. Murlin was given. Preceding the actual reception there were exercises held in Jacob Sleeper Hall, presided over by Dr. Dillon Bronson, Chairman of the Inauguration Committee of the Trustees. Brief addresses were made by a member of the Faculty, an alumnus, and a senior from each Department. President Murlin closed the speaking with an appeal to all the friends of Boston University, faculties, alumni, and students, to co-operate with him in his endeavors to upbuild the University. He reminded his hearers that it required all the departments of the University to make the University. Furthermore he proposed to have an office hour at each of the Schools one day in every week that he is in the City.

The Glee Club rendered some very acceptable selections during the evening, and the day's festivities closed with a reception to President and Mrs. Murlin in the Faculty Room.

Thus came to an end a most successful inauguration that can-

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not but be fraught with large possibilities for the advancement of the interests of the University as a whole and of the particular interests of each department of the University.

The interest of the Trustees in the School of Medicine has been demonstrated recently by the offer of $50,000 for endowment purposes conditional on the raising of a similar sum by the friends of the School.

The interest of the students of the College of Liberal Arts is evidenced by the appearance as members of the entering class this year of two or more students of the College who are taking the so-called Combination Course (six years). In taking this course a student obtains the degree of Bachelor of Science at the end of his second year in the School of Medicine and the degree as Doctor of Medicine at the end of his fourth year in this School.

It would seem, from the data now at hand, that the inauguration of President Murlin marks a new and progressive era for the University as a unit and a greater recognition of the importance, rights and privileges of the individual departments.

A REMARKABLE WOMAN.

Much has been written, and much can still be written, concerning the unusual attainments of that most eminent Polish woman who is now known as Mme. Curie. Born and brought up in a location in many ways unfavorable for advancement, she early became the assistant of her well-known father, M. Skladowska, in his scientific research. She subsequently became the wife and fellow worker of M. Currie, at that time a remarkable, unknown, earnest chemist. Their later achievements are well known, particularly their discovery of radium and the investigation of that substance.

While the highest honors were being heaped upon them trouble came in the form of the sudden death of her husband by a street accident. Madame Curie instead of retiring from her activity continued the work that she had been pursuing, and as far as possible is at the present time bringing to completion the plans that her husband and herself had conjointly made. Without any question she has won the admiration of the entire world of medicine and the larger world of science. Her knowledge is unquestioned and her ability is beyond doubt. In spite of all these opinions, however, the Paris Academy of Sciences refused to elect her a member merely on account of the fact that she was a woman. This refusal was not based upon any law of the society but was an expression of opinion plainly and openly made, that the highest honors in the scientific world in France were not open to a woman, no matter what her attainments might be. This differs very radically, we are glad to say, from the opinion along similar lines in our own country.

A recent article by Laura Crozier in "Popular Electricity" thus describes with pathos her home life.

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"Here at night she folds her hands that have dared to search out the components of the sun, and bends the mind that has opened new avenues to medicine to telling the hero-tales of far away Poland to her little girls. In the warmth of their arms she finds strength and courage to go for another day."

It must be certainly discouraging to those of the gentler sex in France who are interested in research work, that they are thus debarred from hope of adequate recognition, and it is a condition that we certainly trust will not be largely maintained.

OBITUARY.

Carl Crisand, M.D.

Dr. Carl Crisand was born in New Haven, Conn., February 1, 1858. His academic education was obtained in the public schools of his native city and the University of Rochester, N. Y. In the fall of 1881 he entered the New York Homœopathic Medical College, from which he was graduated in 1884. I knew him well at college. Like Saul of old, he towered above his fellow students, and we all looked up to him as a man of character and ability. He was often called upon to act as interpreter for the German-speaking patients, and he won the Helmuth prize for the best reported case that appeared in the surgical clinics during his junior year.

Upon April 30, 1884 he was married to Miss Clara A. Lall, who now mourns his most untimely end. As a result of this union a little boy was born who died in infancy.

Soon after his graduation in 1884, he opened an office in Rockville, Conn., where he remained until the following September, when he became associated with Dr. G. L. Miller, of Putnam, Conn., with whom he remained for four years. In September, 1888, he came to Worcester and continued in the active practice of his profession until April 1, 1911. He then retired to a beautiful farm which he had purchased at East Brookfield, Mass., to gratify his long cherished desire for a quiet, country life. He hoped to live for many years and had entered upon his new field of labor with his accustomed zest. But it was not so to be. Upon the 29th of September last he came to Worcester to attend the closing concert of our great Music Festival. He had a German's passion for the best music and never tired of listening to it; but that night he was not well, and during the intermission he left the concert hall and retired to his old apartments upon Hawthorne Street for the night. He left directions for no one to disturb him in the morning, as he wanted to rest. Morning found him "sleeping." Without a struggle or apparent suffering he passed from a life of intense activity to his eternal rest.

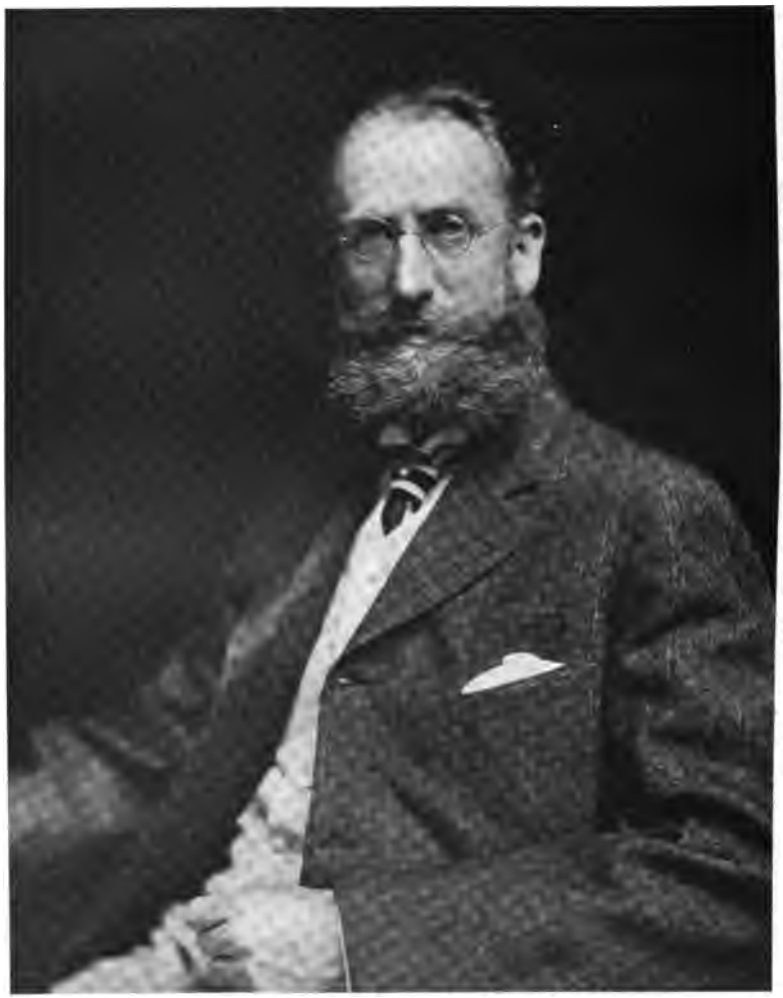
It is interesting to note, in this connection, that the first entertainment he attended upon coming to Worcester in the fall of 1888 was the Music Festival; that he was its constant patron for twenty-three years, and that he went out from its closing concert to join the choir above.

"Let music charm me last on earth
And greet me first in heaven!"

It is difficult in the brief space at my command to give a just and adequate estimate of the life work and character of Dr. Crisand. He was essentially an illustration of that almost extinct type in the medical profession — the "family doctor." He loved his profession and he loved his patients. To him a patient was always something more than an "interesting case," and he never took advantage of his ignorance or credulity to give him unnecessary treatment. He was especially interested in students and young people for their own sakes. He was scholarly and methodical in his habits, which made it possible for him to accomplish a vast amount of work. He kept a card index of all his professional records and accounts to which he

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could refer at a moment's notice. He had a winning manner about him which invited confidence and commanded respect. It was my sad privilege to be present at the church where his funeral services were held, and as I watched the mournful faces of the throng who passed I said to myself, "He did not live in vain."



He was courteous and liberal with his professional associates, always true to his friends and frank and outspoken in his criticisms of those with whom he disagreed. He had a graceful and felicitous command of language which made him very much at home as a public speaker. His one great object in life was to help his patients, and he welcomed any method that would advance that object regardless of the source from which it came. But the great subject of medicine as embodied in our homœopathic institutions was to him especially dear. In 1889 he joined our Worcester County Homœopathic Medical Society and served it faithfully as Secretary, Presi-

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dent, and Censor. In 1891 he became a member of the Massachusetts Surgical and Gynæcological Society and was a constant and active attendant at its meetings. In 1894 he was elected Vice-President of the Alumni Association of the New York Homœopathic Medical College, in which he took a most hearty interest. In 1896 he joined the Massachusetts Homœopathic Medical Society and in 1908 delivered the annual oration. He was also a member of the American Institute of Homœopathy, corresponding member of the Homœopathic Medical Society of Western Massachusetts, and at the time of his death on the visiting committee to Boston University School of Medicine. In all of these organizations he was an enthusiastic worker and ready at all times to do his part.

But it was really in the home circle of his adopted city that he was at his best. He loved his home, he loved his church and was president of the oratorio society connected with it. He was interested in the great crusade against tuberculosis and was president of the Worcester Consumptive's Home Association which claims the honor of drafting the bill that was recently passed by the Legislature compelling towns of 10,000 or more people to provide for their consumptive poor. He was for many years attending physician at the Worcester Homœopathic Dispensary and at the time of his death he was its president. Until his removal from the city he was director and assistant surgeon of the Hahnemann Hospital.

His love for animals was as genuine as his love of music, and he never was quite at home without them. He belonged to the Worcester Riding Club. His horse would whinny at his approach. He always had a pet cat and dog in his office, and his waiting room was filled with humane literature.

Such in brief was Dr. Crisand as I knew him, capable, conscientious and distinctly human. He never sought the publicity of office and he never shrank from doing his full share of public work. Last spring when he retired from practice his homœopathic colleagues in the city presented him with a beautiful silver pitcher, suitably engraved, as a token of their friendship and esteem. That was the last occasion that brought us all together, and now our little circle is incomplete.

God help us so to live that when our summons shall come, we may like our departed brother, approach the grave, "Like one who wraps the drapery of his couch about him and lies down to pleasant dreams!"

J. P. Rand.

Rufus L. Thurston, M.D.

Homœopathy in Boston, and particularly that branch that is more closely allied to the use of higher potencies, has suffered a distinct loss by the death of Dr. Rufus L. Thurston of this city.

Dr. Thurston was a man unusual in many ways. He was a firm believer in the strict application of the higher potencies in the professional sense. He was inclined to be aloof from his associates, not taking part in society work, and never writing anything for publication. He was one of the organizers of the Boenninghausen Club, and was also a member of the society of Homœopathicians. Graduating from Hahnemann Medical School of Chicago, he first practised in Brooklyn in 1885, removing the next year to Boston, where he soon had a large practice. He died in Kendall Green in the sixty-eigth year of his age.

Joseph Hensley, M.D.

The editors of the *Gazette* learn with much sorrow of the death of Dr. Joseph Hensley of Oklahoma. The doctor was born in 1841, and graduated from a medical school of the so-called "regular" type. For a period of ten years he practised the so-called "regular" medicine after which he became a very enthusiastic homœopathist both from the standpoint of practice and from the militant one as well. Many of us remember his fiery eloquence at Atlantic City, which almost so swayed the Institute as to decide it to go to Oklahoma for its next meeting. Dr. Hensley was also made a vice-president at that time. Because of circumstances over which he had no control, later decision overruled the original one and the meeting was held at Kansas City. Without any question, this was a great blow to the doctor who was at that time laboring under physical ailments that would have incapacitated

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many. He showed his magnanimous spirit, however, by turning all his efforts toward making the Kansas City meeting a great success, thus putting aside, as few do, the narrow partisan spirit. Since this time he has been doing for some months a large amount of work in the medical line, in spite of ill health.

On the Wednesday of his death he is reported to have performed his usual work, spending the evening with friends. He retired early, and died suddenly, apparently without pain, from apoplexy. His loss will be widely felt, particularly in his native State.

SOCIETIES.

Massachusetts Homœopathic Medical Society.

The Boston section of this society held its first meeting for the year on October 5 in the Natural History rooms, the program consisting of a paper upon "Empyema" by William F. Wesselhoeft, M.D., and one upon "Toxæmia of Pregnancy" by S. H. Blodgett, M.D. Following the reading of the papers a considerable amount of discussion ensued.

Medical Association of Clinical Research.

The fourth annual meeting of this association was held on September 27 and 28 in the Natural History rooms, Boston. Dr. A. R. Peebles of Boston delivered the opening address, and a number of papers were presented to the association particularly dealing with the cancer problem. The man, who is of all others responsible for the formation of this society, Dr. James Krauss, was re-elected Secretary.

Southern Homœpathic Medical Association.

The 28th session of the Southern Homœopathic Medical Association was held in Marquette Hotel, St. Louis, October 4, 5, and 6.

The meeting was interesting and lively throughout. The address of welcome was delivered by Dr. L. C. McElwee, President of the Homœopathic Medical Society of St. Louis. Response was made by Dr. H. R. Stout of Jacksonville, Florida. The morning was given to business session and the afternoon to papers. The programme was an excellent one both from a scientific and a social standpoint.

Thursday afternoon Dr. H. R. Arndt, Field Secretary of the American Institute, delivered an address eloquent with good feeling and appeal for a more thorough organization and co-operation. In the evening members and guests were tendered a banquet, Dr. C. H. Goodman acting as Chairman. Among the distinguished members of the Homœopathic profession from a distance were the following: Dr. H. R. Arndt, San Francisco, Cal.; Dr. H. R. Stout, Jacksonville, Florida; Dr. Lewis P Crutcher, New York, N. Y.; Dr. W. A. Dewey, Ann Arbor, Mich.; Dr. F. A. Reed, Eustis, Florida; Dr. George Royal, Des Moines, and Dr. Nettle Campbell, Davenport, Iowa; Dr. Joseph P. Cobb and Dr. W. Henry Wilson, Chicago, Ill.; Dr. Benjamin F. Bailey, Lincoln, Nebraska; Dr. F. L. Juet, Lexington, Ky.

On the morning of the 6th a very interesting clinic was conducted by Dr. Willis S. Young at the City Hospital. At 10.30 the meeting was opened and given up to the reading and discussion of papers. A very interesting paper was read by Dr. Cobb, "Some of the errors in the routine preparation of food for the first year of life." Dr. Cobb was requested to have reprints made.

The Association elected the following officers for the coming year: President, Dr. F. A. Reed, Eustis, Florida; 1st Vice President, Dr. A. H. Schott, St. Louis, Mo.; 2ndVice President, Dr. W. H. Schwartz, Houston, Texas; Treasurer, Dr. H. Warren Johnson, Knoxville, Tenn.; Secretary, Dr. Lee Norman, Louisville, Ky.; Necrologist, Dr. A. Leight Monroe, Miami, Florida.

The place of the next meeting will be Richmond, Virginia.

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BOOK REVIEWS.

The Prescriber. A Dictionary of the New Therapeutics with an Essay on "How to Practise Homœopathy" by John H. Clarke, M.D., author of "A Dictionary of Practical Materia Medica," "Clinical Repertory to the Dictionary of Materia Medica," etc. Seventh Edition. Completely revised and enlarged. London. The Homœopathic Publishing Company.

Any book written by Dr. Clarke will arrest the attention of those who are familiar with his writings. The present one now in its seventh edition is intended to serve as an introduction to the study of Materia Medica, particularly in connection with the repertory work. It begins with an essay upon "How to Practise Homœopathy." This coming from a man who was once a member of the dominant school of medicine will in itself be valuable.

The book as a whole needs no commendation here, as it is doubtless familiar to many of the readers of the *Gazette* in previous editions. It is very compact and can be easily carried in the pocket.

A Pocket Medical Dictionary. Giving the Pronunciation and Definition of the principal words used in Medicine and the Collateral Sciences including very complete tables of the Arteries, Muscles, Nerves, Bacteria, Bacilli, Micricocci, Spirilla, and Thermometric Scales, and a new Dose-List of Drugs and their Preparations, in both the English and Metric Systems of Weights and Measures, Based upon the Eighth Revision U. S. Pharmacopœia, also a Veterinary Dose Table by George M. Gould, A.M., M.D., author of "The Illustrated Medical Dictionary," "The Practitioner's Dictionary," and the "Student's Medical Dictionary." Sixth Edition. Revised and Enlarged. 34,000 words. Philadelphia; P. Blakiston's Son & Co. 1911.

At first sight it seems impossible that a book of 1,000 pages can be brought into the dimensions of the one at present under discussion. Gould's Medical Dictionaries are well known throughout the entire Anglo-Saxon medical world in their larger or more abbreviated forms. This one is the pocket edition and should be a companion of every physician who does not have a larger medical dictionary.

Anatomy. A Manual for Students and Practitioners by John Forsyth Little, M.D., Assistant Demonstrator of Anatomy, Jefferson Medical College, Philadelphia. Second edition, revised and enlarged. Illustrated with seventy-five engravings. Lea & Febiger, Philalelphia and New York.

This is one of the pocket quiz books belonging to the series now so well known. These books are very commendable in that their object is to supply to the student, graduate or undergraduate the gist of the subject in the discussion in the shortest possible space compatible with clearness and lucidity. The entire subject of Anatomy is covered in the space of five hundred pages in a manner that is clear, brief and readily understood. The book will not, of course take the place of the larger texts such as Gray, Piersol, or Gerrish, but will make for itself a decidedly useful field as a means of "brushing up" upon a subject which is one of the foundations of medicine.

One Hundred Surgical Problems. The Experiences of Daily Practice Dissected and Explained by James G. Mumford, M.D., Visiting Surgeon to the Massachusetts General Hospital; Instructor in Surgery, Harvard Medical School; Fellow of the American Surgical Association, etc., Boston. W. M. Leonard, Publisher. 1911.

The present book is a companion to those already prepared by Cabot upon Case Histories in Medicine, and by Morse upon Case Histories in Pediatrics. Dr. Mumford, the author of these surgical series, is well-known to all the readers of the *Gazette*. He has prepared a series of cases, one hundred in number, classified under various headings such as for instance, The Stomach and Duodenum, Exploratory Laparotomy, Gynecology, Kidney, The Bones, etc. Each individual case is reported in detail, as the Doctor saw it, giving history, physical examination, operation results, and comments.

A commendable feature consists in the fact that not a few of the cases show partial or complete failure from certain surgical measures attempted.

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This is in sharp and pleasing contrast to so many reports where the favorable cases are described, the others being overlooked or forgotten. One receives a far better impression of the writer or the operator by the frank, open method.

Much can be said in praise of the manner in which these cases are given, as the diction is good, the story is continuous, and the description is sufficiently vivid to make one almost think that he is seeing the case himself.

The book is certainly not only interesting reading but it will bring lessons to every person who peruses it.

A Manual of Pathology. By Guthrie McConnell, M.D., Professor of Pathology and Bacteriology, Medical Department, Temple University. Assistant Pathologist to the Philadelphia City Hospital. Formerly Pathologist to the St. Louis Skin and Cancer Hospital and Bacteriologist to the Missouri State Board of Health. Illustrated. Second edition, thoroughly revised. W. B. Saunders Company. 1911.

The reviewer is sincerely pleased to see a new edition of this book. Without going into a thorough description of it, it may be sufficient to say that he has recommended it to his classes in Pathology for several years past, and has found that the students prefer it to any of the more pretentious volumes, as they find that it contains in an apparently small space the more important parts of the subject of which it treats. It makes no attempt to be at all exhaustive in any subject, but is an excellent hand-book of Pathology. This later edition shows a number of changes, among which may be mentioned some alteration in the classification of tumors, and in the chapter upon Ductless Glands. It is a book that we can cordially recommend.

Refraction and Visual Acuity. By Kenneth Scott, M.D., C.M., F.R.C.S. Edin. Consulting Ophthalmic Surgeon to St. Mary's Hospital for Women and Children, London, E; Late Lecturer on Ophthalmology, West London Post-Graduate College; Professor of Ophthalmology, Egyptian Government Medical School; and Ophthalmic Surgeon, Kase-el-aini Hospital, Cairo, Egypt. With sixteen illustrations and a colored plate. Rebman Company. New York.

Doubtless the majority of the readers of the *Gazette* share the common feeling of ignorance when they attempt to read some of the scientific papers upon diseases of the eye and particularly upon the correction of vision by glasses. This book of Dr. Scott's is intended to elucidate largely the otherwise unintelligible manuscript. How it will succeed must be decided by the individual reader. There is at least a large amount of very valuable information in such a form as to bring to the reviewer much light upon this rather difficult topic. The latter part of the book is devoted to the citation of the various rules and standards of vision held by the English Navy, various Civil Departments both in Great Britain and in the colonies, and to the requirements in railways of various parts of the world.

THE MONTH'S BEST BOOKS.

Clinical Diagnosis. Emerson. J. B. Lippincott Company.
Pathology. McConnell. W. B. Saunders Company.
Electro-Analysis. Smith. $2.50. P. Blakiston's Son & Co.
Medical Jurisprudence and Toxicology. Reese. $3.00 P. Blakiston's Son & Co.
Microbiology. Marshall. $2.50. P. Blakiston's Son & Co.
Pathology. Coplin. $4.50. P. Blakiston's Son & Co.
Dental Materia Medica, Pharmacology and Therapeutics. Buckley. $2.50. P. Blakiston's Son & Co.
Diseases of the Eye. Milligan. $5.00. McMillan Co.

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PERSONAL AND GENERAL ITEMS.

Dr. William L. Patterson, class of 1909, B.U.S.M., has finished his service at the Emerson Hospital and has returned to Amherst, Nova Scotia.

Dr. Winifred M. Woolls, B.U.S.M., 1908, has been married to Dr. F. F. Devine, a dentist of Lowell, and their home is at 320 Varnum Avenue, Lowell.

Dr. William K. S. Thomas, B.U.S.M., 1903, son of Dr. Charles H. Thomas of Cambridge, was married on October 17 to Miss Hortense Johnson, assistant superintendent of nurses, Massachusetts Homœopathic Hospital.

Dr. Willard A. Paul has removed from Dorchester to Hotel Puritan, Commonwealth Ave., Boston.

Dr. S. Perry Wilde, class of 1910, B.U.S.M., has become associated in practice with Dr. Henry E. Spalding of Hingham.

Dr. Leroy M. S. Miner, B.U.S.M., 1907, was married on October 25, to Miss Edna Winifred Darley of Cambridge. Dr. Miner is a well-known dental surgeon of Boston and occupies a position as lecturer on the Faculty of Boston University. The best wishes of the *Gazette* go to Dr. and Mrs. Miner for future happiness.

Dr. F. W. Pavy, the well-known English physician and writer, died in London, September 19. By his death the profession in England loses one of its most prominent members. He was a strong believer in modern methods of laboratory and clinical research. Dr. Pavy is probably best known by his studies and work upon Carbohydrate Metabolism and Diabetes.

After much delay and some political maneuvering in certain localities, Dr. Henry P. Wolcott, who has acted so efficiently in the past as chairman of the Metropolitan Water and Sewerage Board of Massachusetts, has been recommended by Governor Foss for re-appointment.

It is reported that the General Electric Company of Lynn has made provision for any of its employees who become infected with tuberculosis to receive a sanatorium treatment for fifteen weeks without expense, and during this time the company provides for the man's entire family.

It is stated in the lay press that the official head of the Armenian Church in Constantinople has issued a decree to the effect that from the present time every couple applying for permission to be married by the Armenian church must present a certificate from a reputable physician to the effect that both are in perfect health.

Dr. B. J. Manoogian, class of 1911, B.U.S.M., has opened an office at 350 Hanover Street, Boston.

Dr. Ella E. Severance, B.U.S.M. 1901, has removed from Lynn to Brookline, Mass.

The engagement is announced of Dr. Everett Jones, class of 1898, B.U.S.M., of Brookline, to Miss Hartley, daughter of Mr. and Mrs. Henry Hartley, of Brookline. The marriage is to take place on November 7.

Physicians are asked, for the purpose of experimental investigation, to send to the neurological clinic of the Massachusetts Homœopathic Hospital Out-Patient Department, on Mondays and Thursdays, any cases of an obscure functional nature which they may not care to treat. Patients who manifest morbid fears, persistent or compulsive ideas, depressions, and allied psychic disturbances are particularly desired. Dr. Guibord is interested to further try out the efficacy of the psycho-analytic method as applied to the

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mentioned types of cases, and as a means to this end would greatly appreciate a degree of co-operation on the part of neighboring physicians.

Harvard Medical School is to be condoled on the loss of Dr. James Dwight, Parkman Professor of Anatomy. He died on September 8, at Nahant. Dr. Dwight has for years been a very prominent character, and a very active factor in the advance of the Harvard Medical School. His particular activity had been the department of anatomy, and the museum at that institution will stand for all time as a monument to him.

Dr. W. W. Keen, professor of Surgery at the Jefferson Medical College, and Dr. Charles Sedgwick Minot, professor of Comparative Anatomy at the Harvard Medical School, have been recently honored with the degree of LL.D., conferred by the University of St. Andrews of Scotland.

Dr. George Faulkner, who recently died in Jamaica Plain, left all of his estate to the Faulkner Hospital with the exception of a few personal private bequests.

Dr. W. J. Gallivan of South Boston has recently been appointed chief of the division of child hygiene and school medical inspection of the Boston Board of Health.

The town of Torrington, Conn., has been afflicted with a very severe epidemic of typhoid fever, over seventy-five cases having been reported at the time of writing.

Dr. J. Walter Schirmer announces the removal of his office to Great Plain Avenue, corner of Fair Oaks Park, Needham. This also is the site of Dr. Schirmer's new home, and we congratulate him upon his very happy change.

The Medical Journal is reporting a peculiar case of a young woman in Kentucky who mistook an ivory vaccine point for a toothpick, and as a result developed a typical vaccination scar on the inner mouth.

Dr Harry V. Weaver, class of 1893, B. U. S. M., is located at 161 Williams Street, New Bedford, Mass.

Dr. Sarah Adleman, B. U. S. M., 1910, after several months at Minnesota State Hospital, has received appointment at Craig Colony, Sonyea, N. Y., and has begun work there.

Dr. Robert J. GrandLienard, class of 1908, B. U. S. M., has returned to Chickasha, Oklahoma.

During the absence of Dr. F. S. Canedy of Wellfleet, Mass., Dr. H. W. McElman (B. U. S. M., 1910) has taken his practice. Dr. McElman is about to open an office in Waltham, Mass.

Dr. Adah Louise Brown, 1908, B. U. S. M., was married on October 4, to Mr. Herbert A. Eccleston, and her address is now 38 Elm, St,. Southbridge, Mass.

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TESTIMONIAL TO HARRIS H. BAXTER, M.D., OF CLEVELAND.

A testimonial dinner was given in Cleveland on October 18 to Dr. Harris H. Baxter. Dr. Baxter has been Professor of Materia Medica in Cleveland Homœopathic Medical College for nearly all the time since his graduation from there in 1868, and has been for forty-three years a member of the American Institute of Homœopathy. Dr. J. Richey Horner was master of ceremonies, and responses were made by Field Secretary H. R. Arndt, M.D., Charles Hoyt, M.D., President of the Ohio State Society, H. F. Biggar, M.D., of Cleveland, and by the guest of honor, Dr. Baxter. A silver loving cup was presented, bearing the following inscription:

> Presented to Harris H. Baxter, M.D., by his confreres in medicine in token of their love and regard for him and in appreciation of his long and faithful service in the interests of the medical profession and especially of the Homœopathic School.

One hundred and fifty members of the medical profession and their wives were present at the banquet.

OPPORTUNITY FOR OBSTETRIC WORK AT THE MASSACHUSETTS HOMŒOPATHIC HOSPITAL.

Owing to a reorganization of the obstetric section of the Hospital, opportunity will be afforded a certain number of those who desire to do work in obstetrics.

The Section has charge of the obstetric work at the Hospital and also that of the Out-Patient Department. The amount and character of the work done at the Hospital is well known, and the opportunity for engaging in the work there or in the Out Patient Department is a valuable one.

The work at the Out-Patient Department is to be more thoroughly organized and developed. This work consists in the examination of pregnancy, directions for the care of the pregnant, the delivery and after-care in upwards of two hundred cases. The examinations and measurements will be done at the clinics and if necessary at the homes of the patients. The attendance and care of cases at delivery will devolve upon the externes or students assigned under the direction of the assistant in charge.

Experience can be obtained in no better way than by this practical work and by the case and bedside teaching of the normal and abnormal work presented.

There is need of appointing five or six assistants for work in the Out-Patient Department. Any additional information can be obtained from the Secretary of the Section, E. P. Ruggles.

ARRANGEMENT OF SERVICES AT THE MASSACHUSETTS GENERAL HOSPITAL.

Recently there has been introduced in the Massachusetts General Hospital a plan which is a distinct innovation over the former plan followed by that institution. According to the new regime a single surgeon-in-chief is appointed who has direct supervision over the surgical work of the institution. Associated with him are two visiting surgeons who perform the routine surgery. Each is on duty for a term of six months. Under these are three associate surgeons, one of whom performs routine duty, the others taking up the consideration of special subjects. By this plan, each surgeon is assigned from time to time some special problem or line of work in some one particular field. The purpose is to enable the staff to follow up original work along the lines in which they may be interested.

FUNERAL BAKED MEATS.—A gentleman who has been making a collection of curious and humorous marriage and death notices in old New York newspapers reports that the limit was reached in one he found in the Evening Post of January 21, 1804, which reads: "In England, John Tucker, a soldier in Ashford Barracks. He died at four o'clock in the morning; before twelve in the same day his widow was married to another man, and in the evening the happy couple followed the corpse of the first husband to the grave as chief mourners."

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THE SUPRARENAL SITUATION.

The United States Circuit Court Upholds Product Patent on the Natural Active Principle.

When Vulpian, a French chemist, in 1856 reported that the suprarenal glands of mammals contained a peculiar substance giving certain color reactions with ferric chloride, iodine, and alkalies, and quickly changing in contact with the air and on exposure to light, little might anyone have expected that fifty-five years later this peculiar substance would be the subject of a product patent.

In 1904 the H. K. Mulford Company placed upon the market Adrin, its brand of Epinephrine, the active principle of the adrenal gland, believing that the pioneer work done by von Fürth and Abel justified it in doing so, and that a product patent on the active principle existing in nature could not possibly be upheld, particularly in view of the fact that its existence had been recognized for fifty years; that nearly all of its chemical reactions and properties were previously known and described; that its chemical nature had been accurately predicted; that its medicinal virtues had been discovered and put into practical use; and that it had been actually isolated in various degrees of purity in the form of a benzoylated derivative and in the form of a zinc and an iron compound.

The H. K. Mulford Company regarded its product as a substantially different product obtained by a substantially different process, from those specified in the Takamine patent, and did not believe that the latter could — if held valid at all — be construed to cover and include the Mulford product.

Moreover, the H. K. Mulford Company, recognizing that the first object of the patent law is to "promote progress in the Sciences and Arts," believed and still believes that the granting of *Product Patents* on medicinal substances, whether or not they exist pre-formed in nature, are a hindrance to, rather than a means of promoting progress in the practice of medicine, and used their efforts to defeat a product patent which it deemed to be not only contrary to the object and spirit of the patent law but contrary to the best interests of pharmacologic practice in the United States.

On April 29, 1911, Judge Hand, in the United States Circuit Court for the Southern District of New York, handed down a decision sustaining certain of the patent claims of Dr. Takamine and declaring H. K. Mulford Company products to infringe these claims.

The H. K. Mulford Company wishes to call attention to the fact that in defending these suits it has consistently and at great cost endeavored to uphold its antagonistic position toward the product patent for medicinal substances, believing that product patents on all substances used in medicine, work an injustice on the medical and pharmaceutical professions and are inimical to the public good.

The Court having decided that the manufacture of Adrin, the Mulford brand of epinephrine (the active principle of the adrenal glands) conflicts with the product patents granted to Takamine, the H. K. Mulford Company will discontinue its manufacture in the form of solution, tablets and hypodermics, until their appeal is decided in the higher court. Other preparations which have contained the Adrin brand of epinephrine will be prepared with an amount of purified extract of adrenals equivalent to the active principle contained in the glands.

PRIZES FOR FLY KILLING.

During the month of August it is stated that in Minneapolis, a competition was engaged in by various individuals, the object being to kill the largest number of flies; the goal being prizes of from $50.00 down. The first prize was awarded to the person who delivered 266,340 flies; the second prize was awarded for 264,660. In all the total number of flies killed was 3,268,575. When we realize the importance of these small pests in the transmission of diseases, not to speak of the various other unsanitary conditions favored by them, the destruction of such a number of flies must be gratifying, and the saving thus made possible must be many times greater than the prizes. It would seem to be a very practical contest to establish in towns and smaller cities.

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GERMAN HOMŒOPATHIC ENTHUSIASM.

Following the decision of the International Congress of Homœopathy to hold its next meeting in Berlin, comes the report of a very enthusiastic congress of German Homœopathy which is incidentally the seventy-ninth annual one. Dr. Krantz-Busch gave a full report of his visit as delegate to the recent congress in London and showed to his associates how successful his English colleagues had been not only from a standpoint of scientific work but from that of the social phase. An organizing committee was appointed to prepare for the coming meeting, and four societies, the Wurtemberg, Rhenisch, Saxon and Berlin, set a good example by subscribing fixed amounts for the next five years, for the purpose of defraying expenses.

SUCCESS OF HOMŒOPATHS IN CALIFORNIA.

We are glad to note that the graduates of the Hahnemann Medical College of the Pacific present a clean record in the number of candidates graduating, passing the State Board examinations. This makes two successive years in which no candidate from this School has failed before the Board.

NEW STUDENTS IN CLEVELAND.

The Journal of the American Institute of Homœopathy is our authority for the statement that the Cleveland-Pulte Medical College is having a most enthusiastic session for the present year. The freshman class is larger than any reported for a number of years past. May a similar report come from all our medical schools!

CLIMATE IN TUBERCULOSIS.

"The modern consensus of opinion tends to the view that tuberculosis should be treated in the same climate in which the patient must spend his subsequent life, after restoration to health. "The cure at home is likely to take a little longer, but the patient's chances for remaining cured are better." (Knopf, 1909). It has been shown that no amount of rain will cause even the most delicate person to chill, provided he be accustomed to the open air life. Patients who go South to avoid the winter attack of bronchitis gain nothing in the way of protection against subsequent infections, and colds are contracted with equal ease upon their return home. If these patients slept in the open air, were dressed and nourished properly, and accustomed themselves to exposure, they would soon become so acclimated that then and only then would the tendency to bronchitis disappear. The infrequency of bronchitis among our cases can be attributed only to these circumstances.

Let me suggest in conclusion, that the people be educated to know that tuberculosis exists wherever treads the foot of man; that it is curable in any climate; that there exists no specific climate; that the sole climatic requisite is pure air and plenty of it. Those who are unable to go away should be comforted with the assurance that their recovery is not prejudiced by their remaining at home. The professional or the business man afflicted with tuberculosis should realize that at least a portion of his time should be devoted to his health, that by proper regulation of his work, diet, rest and exercise, absence from business and a monotonous existence upon the desert would be avoided." Ray W. Matson, M.D., in Northwest Medicine.

TROUBLE WITH COLD STORAGE.

The State Department of Health of New York City has published a statement in which they claim that millions of pounds of butter, poultry, fish and eggs are being held in the various cold storage plants longer than the law allows. The present law not only limits the time that food may be thus preserved but prevents its restoration to such storage places after it has been once placed on sale. It also provides that all food thus preserved must be so labeled.

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ORIGINAL COMMUNICATIONS.

IODINE IN THE PREPARATION OF PATIENTS FOR SURGICAL OPERATION.*

By Charles T. Howard, M.D., Boston.

In chemistry there is a group of elements known as the halogen. It is made of chlorine, bromine, iodine and fluorine. It is a distinct group and every member of it bears striking similarity to each of the other members in physical characteristics and chemical reactions.

For many years, as reckoned by the progress of surgery, bromine and chlorine have been used as antiseptic agents, chloride of lime and soda having been employed in the preparation of the surgeons' hands for the past twenty years, and lately Stewart's solution of chloride of lime and acetic acid in water for the same purpose. Both of these depend upon the generation of nascent chlorine, which has been found to be an exceedingly active germicide and is one of our best antiseptics today.

Bromide, being more stable than chlorine, had been employed directly as bromine water for the washing out of wounds and for antiseptic dressings. It has, however, never been so widely employed as has the chlorine, notwithstanding the fact that it is equally potent as a germicide, probably because it is more irritating to the skin and mucous membranes.

The third and most stable member of the halogen group has until recently never been widely used as an antiseptic agent, although it has long been employed as a counter-irritant. In many instances its beneficial action was undoubtedly due to its antiseptic properties rather than as a counter-irritant.

No wide or general interest in iodine as an antiseptic agent was taken by the profession until the publication of Grossich's article in the fall of 1908 in the "Zentralblatt fur Chirurgie," Leipsic. In this article he says that he was first led to its use in general surgery from noticing that cases of injuries of the hand if painted with iodine healed with practically no infection, whereas the same

* Read berore the Worcester District of the Massachusetts Homœopathic Medical Society, November 8, 1911.

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class of injuries if attempts were made to cleanse with soap and water suppurated freely.

He then began investigations, microscopic and bacterial, of the effects of soap and water and iodine tincture on the skin. With the use of soap and water he found that the outer layers of the skin became sodden and so swollen that the orifices of the sweat glands and hair follicles were entirely sealed and that any application to the skin thereafter was unable to penetrate into the depths of these follicles. With the application of the tincture of iodine on a dry skin he found microscopic evidence of its penetration throughout the outer layers of the skin and the interstices between the superficial and deep layers. Consequently he began the use of iodine as a routine practice in the preparation of patients for operation. This method has been followed.—The patient receives a full bath the night prior to operation. Just before the administration of the anæsthetic the field of operation is thoroughly painted with tincture of iodine (10-12 per cent.). After narcosis is complete a second application is made, and after the operation is finished and the wound sutured, a third application is made over the line of sutures.

With this method of preparation, Grossich reports a large series of cases with uniformly satisfactory results, no case of suppuration having occurred in the whole series.

Since the publication of Grossich's article innumerable operators have employed the iodine method, either as advocated by him or with modifications. Stretton, Waterhouse and Fenwick have reduced the strength of the iodine used to a 2 or 2.5 per cent. solution in alcohol, and with equally satisfactory results as regards freedom from suppuration. They were led to this change because of pronounced skin irritation following the use of the tincture.

McDonald of New York has employed a solution of two parts iodine crystals in 98 parts carbon tetrachloride, making a 2 per cent. solution. His method of preparation has been to shave and bathe the patient the night before operation and wash the field of operation with a pad of gauze, using an antiseptic soap of formalin or mercury. A dry sterile towel is then applied over the operative area and left on until the patient reaches the table. There it is removed and the iodine and carbon tetrachloride solution rubbed in with gauze for two minutes.

For this method McDonald makes the following claims: carbon tetrachloride is one of the best fat solvents known, and has the extra advantage of being non-inflammable and cheap (about $2.00 a gallon). By its use the fatty substances in the hair follicles and sweat glands are thoroughly dissolved and by the gentle rubbing with gauze the iodine is carried into the deepest parts of the skin. Numerous other modifications of the Grossich method have been employed but do not need elucidation here.

Now a few words as to the bactericidal properties of iodine. In the Journal of the American Medical Association, November 5, 1910, Post and Nicholls published a report of an exhaustive study of the value of different antiseptics. They made cultures of strep-

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tococci, gonococci, pneumococci, and bacillus typhoidus, then with a platinum loop inserted these cultures in different antiseptic solutions for periods of one minute, ten minutes, twenty minutes and twenty hours. The cultures were then withdrawn and incubated on plates of culture media and the colonies of growth counted.

Here are a few of their tabulated results.—

Mercuric bichloride	1 min.	10 min.	30 min.	20 hours
Streptococci	2,000	80	0	0
Gonococci	3,000	20	1	0
Pneumococci	3,000	2,000	0	0
Bacillus typhoidus	0	0	0	0
Formaldehyde 40 per cent.				
Streptococci	0	0	0	0
Gonococci	0	0	0	0
Pneumococci	0	0	0	0
Bacillus typhoidus	0	0	0	0
Formaldehyde 1 per cent.				
Streptococci.	10,000	2,000	500	0
Gonococci	4,000	2,000	1,000	0
Pneumococci	5,000	33,000	200	0
Bacillus typhoidus	..	4,000	50	0
Tincture of Iodine				
Streptococci	0	0	0	0
Gonococci	0	0	0	0
Pneumococci	0	0	0	0
Bacillus typhoidus	0	0	0	0
Solution of Iodine 1 part, Iodide of Potash 1 part, Water 100 parts				
Streptococci	0	0	0	0
Gonococci	0	0	0	0
Pneumococci	0	0	0	0
Bacillus typhoidus	0	0	0	0
Solution of Iodine 1 part, Iodide of Potast 1 part, Water 400 parts				
Streptococci	0	0	0	0
Gonococci	0	0	0	0
Pneumococci	0	0	0	0
Bacillus typhoidus	0	0	0	0

These are but a few of the solutions tested, and I have merely taken two of the commonest ones for comparison with iodine. From these investigations it would seem as if mercuric bichloride and formaldehyde (except in 40 per cent. strength, which renders its use impracticable) are of small value as antiseptics. Iodine in the strength of one per cent. or even one-fourth of one per cent. was destructive to all four varieties of the bacteria tested on a one-minute exposure.

In considering these tests we must remember that the conditions under which they were made were artificial, that is, entirely different than those under which antiseptics are employed in practice. In the tests the bacteria are immersed in the antiseptic and consequently are brought into intimate contact with it. In actual practice the bacteria are hidden within the interstices of the skin

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and within the follicle, and any antiseptic agent to be effective must have sufficient penetrating power to reach them in these locations. The microscopic studies of Grossich seem to show that iodine has this penetrating power.

As to personal experience with the iodine method of preparation. The writer of this paper became interested in the Grossich method and during his service at the Massachusetts Homœopathic Hospital in 1909 tried it on about a dozen cases. As regards antisepisis it was entirely satisfactory, but he was obliged to abandon its use because of the pronounced skin irritation. All of the patients complained more of the intense burning of the skin than they did of post-operative pains, it being in some cases so intolerable that morphine was administered. After a few days, flakes of desquamation the size of a half dollar could be removed.

During the year 1910 the writer used the iodine preparation as modified by Stretton and Waterhouse, that is, one part of the tincture of iodine to two parts of alcohol, making a two and one-third per cent. solution. Throughout this service the writer's courage was not quite equal to his convictions and he used the method only on those cases demanding operation on superficial parts. In his last surgical service, during July, August and September, 1911, the writer has consistently used it in all suitable cases, that is, on those involving skin incisions and not involving work on the mucous membranes. The exact method followed has been to have the patient given a full bath on the night before the operation, and the operative field shaved and scrubbed with soap and water. A dry sterile dressing is then applied to protect the operative field. In the ward on the morning of operation, the field is painted with the solution of tincture of iodine one part, alcohol two parts, and the dressing replaced. On the operating table the field is again painted with the iodine solution and when thoroughly dry, that is, in one or two minutes, the preparation is complete.

During the service eighty-nine cases were operated on with the iodine preparation and seventy-two without. Of these seventy-two, twelve cases were really suitable for the method, but were operated upon by my assistants as emergency cases, and for some reason the iodine was not used. The cases in which the iodine was used are classified as follows:

Appendectomy	20
Double tubo-ovariotomy	8
Double tubo-ovariotomy and Appendectomy	6
Ventral Suspension and Appendectomy	1
Ventral fixation	2
Abdominal hystetectomy for bibroma uteri	5
Salpingectomy for extra-uterine pregnancy	1
Myomectomy and Salpingectomy	1
Cæsarean section	2
Puerperal peritonitis	1
Exploratory incision	2
Post operative sinus	1
Herniotomy	5
Undescended testicle	1

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Hydrocele	2
Supra-pubic cystotomy	1
Posterior urethrotomy	1
Cholecystotomy	7
Gastro-enterotomy	2
Typhoid perforation	1
Colostomy	1
Nephrotomy	1
Nephrorrhaphy and Appendectomy	1
Amputation of breast	2
Amputation of thigh	1
Empyema	1
Cervical adenitis	3
Inguinal adenitis	1
Periostitis	1
Teratoma	1
Excision of lipoma	2
Cyst of breast	1
Ganglion of wrist	1
Alcohol injection for neuralgia	1
Webbed fingers	1
Summary abdominal cases	67

The service as regards clean wounds showed, I feel, as good results as by the more elaborate method of scrubbing with soap and water, and I am confident that no case has gone septic because of the iodine preparation.

Of the eighty-nine cases, seventy might be called clean ones, and of these there have been three which have not healed absolutely by first intention. The first was a hydrocele which had a hematoma form in the scrotum and subsequently suppurated after opening and draining out the blood clot. The second was a case of procidentia with ventral fixation, and the infection was slight, not enough to delay her in the hospital beyond the prescribed time. The third was an acute appendix which was sewn up tight. A mild infection of colon bacillus occurred, probably due to the contamination of the wound at the time of dragging the appendix out.

I am not endeavoring to excuse these infections, but can see in the case of procidentia alone any possibility of the infection being due to the iodine method of preparation.

Now the reasons for my confidence in and preference for this method of preparation are:

First. That wound-healing during the three months that I have tried it has been as satisfactory as with any other method. Second, that snips of skin taken from the operative field just prior to operation consistently showed no bacterial growths when inserted in culture media and incubated. This method of testing the skin was employed during the first part of my service until I became convinced of the efficacy of iodine as a germicide under working conditions.

Third. The time of anæsthesia can be shortened approximately eight minutes. It takes about ten minutes to scrub a patient with soap and water, rinse off and dry, apply alcohol, again rinse off and dry. With the iodine method two minutes is ample. This shorten-

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ing of the period of anæsthesia is worthy of consideration in critical cases.

Fourth. The patient is kept dry and is not lying in a puddle of cold water throughout the operation; shock is thereby lessened, and with elderly people whose vitality is low I consider this of considerable importance.

Fifth. It removes the personal element from the preparation of the patient. You are all aware that it is more or less a fine art to scrub up a patient properly. If improperly done fully as many bacteria are washed into the operative field as are washed off of it. With the iodine method, anyone, even an untrained person, can paint the field and you may be sure of the sterility.

Now in closing.—The writer is convinced of the value of some method of employing iodine in the preparation of surgical cases. Whether or not the iodine and alcohol is better than the iodine and carbon tetrachloride or iodine and acetone, he is uncertain, but does feel that any one of them if properly employed, that is, upon an absolutely dry skin, will prove entirely satisfactory and be one step toward the simplification of surgical procedures.

WHAT IS HOMŒOPATHY TODAY?*

By G. Forrest Martin, M.D., Lowell, Mass.

"The homœopathic doctrine has never taught to cure a disease by the *very same* agent which had produced it; this has been repeated to the foolish opponents of homœopathy over and over again, although to all appearances in vain; homœopathy professes to cure diseases by means of drugs which produce *exactly similar*, but not *identical*, symptoms."

"Miserable sarcasms are not sufficient to overthrow homœopathy; they will rebound against their authors."—Hahnemann.

This same statement of fact, and these prophetic words of the Master, were written a century ago. The chaotic state of what *might* be called "the practice of medicine" in that day admits of no question.

"The art of Medicine is founded on conjecture and improved by murder," wrote Sir Astley Cooper, about this time.

Even as late as 1873, Dr. Quain, whose Dictionary of Medicine was the authority of the day, says,—"Alas, our means of curing disease do not make . . . rapid progress. This is not as some assert, because disease cannot be cured; it is simply because our knowledge of remedies is deficient."

Upon this reign of darkness Hahnemann was the first to shed the permanent rays of "the light of truth."

Hippocrates, Galen, Stoerck and Haller had all groped strangely near to the switch; but it remained for the clear, philosophical

* Annual oration before the Massachusetts Homoeopatic Medical Society, Lowell, Oct., 1911.

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mind, the dogged persistence and the boundless energy of Hahnemann to make its radiance permanent.

No physician of any school, can claim familiarity with medical history until he has read the story of Hahnemann's experiments with Cinchona upon his own person and the far-reaching results of this work, to all mankind. After six years of hard, conscientious work and observation, suggested by the results of this use of the Cinchona bark, he gave to the world the "law of similars."

"*Let Likes be treated by Likes.*"

And, unlike the passing fads and ephemeral philosophies which have in later years filled the pages of medical journalism, here today and gone tomorrow, this law has stood the test of time and trial. Few indeed have been the systems of medical practice which have even survived during the lives of their authors. But Hahnemann and his faithful co-workers builded better than they knew.

Homœopaths, great and small, may come and go; societies and institutions, founded under its name, may rise and fall; the changing conditions of modern life, the stern competitions of practice, the love of ease and matters of policy, may drive hundreds of its nominal adherents into the easier paths of "following the majority";—but nevertheless, today, even as never before, this great truth stands out, defying criticisms and abuse, converting honest investigators, nearer to the basis of all successful practice, than any other systems that the scientific men of the age have been able to formulate.

Homœopathy is not quackery! Quackery aims at secrecy and deceit. Homœopathy is as open as the day and invites the fullest and freest investigation.

Homœopathy is *not* a matter of *little pills*, alone! It was a successful working system of practice long before pills were invented as a pleasant method of conveying its potent solutions into the system.

It is not a "Faith Cure!"—The same critics who often make use of this method of abuse, are found derisively claiming, in the next breath, that "*it is good practice for little children.*" Is the faith element so tremendously developed in the little child? Furthermore it has worked well in animals.

Faith in one's physician and a *hopeful* outlook on the patient's part of the future, certainly aid any physician to bring about recovery. But they are not the exclusive attributes of *any* one school. No! We are none of these, but honest practitioners of the healing art, developed to the broadest limits of safety and scientific truth.

Hahnemann described "Medicine," as "A knowledge of disease, a knowledge of remedies, and a knowledge of their employments" (for the cure of diseases.)

The American Institute of Homœopathy years ago adopted as its definition of a "homœopathic physician," "one who adds to his knowledge of medicine a special knowledge of homœopathic

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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."

What broader outlook upon duty and practice can one ask? This is not a basis for *sectarianism.*

One great difficulty has been, and it is at work today as never before, that so many of us are not quite what we claim to be. And for one reason or another, we do not quite "practice what we preach."

And thus much of the false judgment, which is visited upon *homoeopathy,* should really be a "judgment of *homoeopaths.*"

Our system of medicine has passed through the period of probation. We have withstood the abuse and cavil of the jealous and the bigoted among our opponents; we have earned the right to live.

Whether this living shall be as a separate school of medicine, with separate societies, schools and hospitals, matters not so much as does the *basis* upon which we shall finally decide our differences with the dominant medical school.

I often think that we are ourselves to blame for charges brought against us by our detractors. We have been too easy-going; too contented with success in our individual practices, and giving too little of our time and energy to pushing forward our own art and adapting it to the discoveries and changes which modern scientific investigations have made plain to us.

Can any greater abuse of Hahnemann, our great master, be conceived, than to imagine him bringing out as complete and exact a proving of any drug at the present day until he had applied to it every aid that the microscope, the test tube and the fully equipped laboratory could bring to bear upon the prover?

And how great is the praise that is due him because we are every day able to put into use thousands of his indications for remedial measures, unshaken in their value by the modern discoveries brought about by these instruments of precision which were denied to him!

The deepest thinkers and greatest minds of the past generation have been doing our work for us. In answer to the question, "*What is homoeopathy today?*" shall we be content to leave it thus, and fail to profit by their frank acknowledgments and by their accumulating proofs of the general truth of our law of cure?

Let us step aside a moment and quote a few instances to prove the above assertion.

Rudolph Virchow, a short time before his death, made the announcement that "modern bacteriological therapeutics rested on a homœopathic basis."

Sir A. E. Wright of London, with his work with the opsonic index, comes dangerously near to establishing in the minds of all physicians, the necessity for individualizing every case. Has not this always been one of our chief tenets? And when his experiments led him to cut down his dosage repeatedly, until one-ten-

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thousandth of a milligram was the average recommended dose of a given vaccine, he was using an equivalent of our sixth potency and establishing the truth of another one of the fundamental claims of our system. We are told that the learned experimenter himself is frank to acknowledge this.

Some of these vaccines employed are simply a diluted toxin of the disease producing the germ. In large doses it would produce symptoms *similar* to the identical disease.

The experiments of Von Behring, discoverer of diphtheria antitoxin, and winner of a Nobel prize, have led him recently to make use of the following language:

"The scientific principles of this new agent (vaccine) are yet to be established. In spite of all scientific speculations and experiments this therapeutic usefulness must be traced in origin to a *principle which cannot be better characterized than by* Hahnemann's word 'homœopathic.'

"What else," he says, "causes immunity in sheep vaccinated against anthrax than the influence previously exerted by the virus, *similar in character* to that of the fatal anthrax virus? And by what technical term could we more appropriately speak of this influence, exerted by a similar virus, than by Hahnemann's word, 'Homœopathy?"

Von Behring concludes his statement with these words: "If I had set myself the task of rendering an incurable disease curable by artificial means, and should find that only the road of homœopathy led to my goal, I assure you dogmatic considerations would never deter me from taking that road."

All honor to men of this stamp, to whom "duty" is the only motto!

Dr. Amalio Gimeno, professor of therapeutics in the faculty of medicine in Madrid, has just paid his tribute to Hahnemann:—"As the author of a treatise on therapeutics that I published twenty-five years ago at Valencia,—I deplore sincerely having consecrated several pages to unjust attacks against Hahnemann and his disciples, and I would like to be able to tear these pages from my book. Modern discoveries, however, will charge themselves with the care of correcting them. It is most proper that we should venerate the grand figure of Hahnemann, who divined that which subsequent events sanctioned."

It would be quite possible to fill the entire evening with quotations such as these, from men who are recognized as leaders in medical thought and progress. But these few will answer to show the trend of thought among the leaders in the so-called "regular" school of medicine.

Among our own men, much has been done in recent years to put our system of practice upon the scientific basis that it *must* occupy, to satisfy the prevalent methods of scrutiny and of test. The almost panic which seized upon our homœopathic profession a few years ago, when the campaign of abuse and ridicule gave way to the carefully planned substitute of *"benevolent assimilation,"* has

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reached its zenith and is upon the wane. Propagandist work is in the air. The whole atmosphere of our meetings and the character of the discussions have taken on an optimistic tone. The school is alive from California to Maine.

In strictly scientific work there occur to me so many recent contributions by men of our own school that I scarce know what illustrations to select.

The work of Dr. Bellows and his fellow specialists, in the reproving of Belladonna, adapting it to practical use, makes a fine beginning.

The work of Drs. Mellon and Dewey, at Ann Arbor, with Veratrum Viride in pneumonia, showing its power to raise the opsonic index of the patient against the diplococcus of pneumonia from 70 to 100, and furthermore tending to show that an overdose lowered the resistance, is a valuable piece of work and tremendously suggestive of a field for further study.

The work of Dr. Watters in Vaccine Therapy, and the joint studies of the same physician and Dr. Southwick regarding Phosphorus are worthy of mention.

Dr. Dieffenbach's proving of Radium Bromide, so fully detailed at the Narragansett meeting of the Institute, excited intense interest and hours of discussion. It is a distinct addition to our armamentarium. Perhaps the most significant thing which stamps merit upon these recent experimental efforts, is free use of the microscope, the test tube and the laboratory, at all stages of the work.

Thus, and only thus can our materia medica be made perfect and permanent and stripped of all unreliable and foolish symptoms. I think it was Dr. Bellows who called attention to the symptom "*snapping and crackling*" in the ears in a prover, and the ear speculum revealed the presence of numerous short hairs, which the barber had carelessly brushed into the canal and they were scratching against the drum.

All such symptomatology must be eliminated from our proving by such systematic work as that which I have just referred to before we can put our system of practice where it truly and rightfully belongs.

Referring back now to the American Institute's definition of a homœopathic physician, I am ready to answer the question which I placed at the head of my paper, —

What is Homœopathy today?

Homœopathy is the avowed practice of over 12,000 physicians and surgeons in the United States today besides thousands of others scattered over the globe.

It is, in a crude way, the method adopted for the selection of curative remedies, in a *portion* of the work of probably twice as many members of the so-called "*regular*" school of medicine, who do *not*, however, acknowledge the principle of *Similia* as the basis for that selection, and who, because of lack of training in

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homœopathic methods of thought and study, cannot be expected to obtain the best results.

It is exactly, in some instances, and nearly so in others, the line of action of nearly every one of the really valuable additions to the curative practice of medicine of the past twenty-five years.

Making due and proper allowance for time and progress, the term which Hahnemann gave to the world, — "Homœopathy" — is a fitting explanatory term for all successful curative practice of today.

The discoveries of Watt and Newton and Fulton are freely acknowledged today, and they are given full credit for them. But who expects the Mauretania to be equipped as was Fulton's steamboat?

Why then should we judge Samuel Hahnemann by the standards of this rapid century, or be content to allow others to do so?

And why should we be content until his great discovery is improved and amplified and adapted to the wonderful verifying laboratory conclusions of this age?

Truly our work as a school is not done! Its crowning glory is dawning! Shall we do our parts, as individuals and as a society?

I do not advocate strife and conflict. I do advocate the utmost liberty to every man and woman in the medical profession, to employ the methods which he or she *believes to be right* for the alleviation of the sufferings of mankind, and I would cheerfully accept as a basis for union of all medical schools, the adoption of this platform: —

Perfect freedom to practice what my conscience dictates, even homœopathy.

Perfect freedom to discuss homœopathic therapeutics in any proper medical assembly, along with all other methods.

Frank acknowledgement of the injustice which forced the formation of separate schools and the acceptance of every member on his personal merits only.

If I can have the right to practice what I wish, without cavil or restraint, I am perfectly willing to grant the same privilege to my fellows. No man is a good homœopath or a good physician who fails to live up to the dictum of Hahnemann who wrote: —

"When one has to do with an art whose aim is the saving of human life, any failure to make one's self master of it becomes a crime."

CHOLERA SCARE.

The recent action of a mob in Italy emphasizes the difficulties which sanatoriums are compelled to encounter in those localities where the intelligence of the inhabitants is low.

It is reported that recently in the town of Segni, Italy, a mob of about 300 people assembled and demanded the release of certain patients who were detained as cholera suspects. They first burned the building, and then removed the patients with cholera, carrying them to their homes. The danger of such a procedure is, of course, obvious.

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GASTRIC NEUROSIS.*

By R. L. Perkins, M.D., Harrisburg, Pa.

The diagnosis of functional disturbances of the stomach due to the impairment of the nervous system and those caused by a lesion of that organ have often tried our skill to the utmost.

How often in our zeal while searching for lesions or growths and in examination of stomach contents we overlook the important factor of the make-up of the patient and the condition of the nerous system!

Neurasthenic patients often mislead us, as the least symptom is exaggerated until it assumes mammoth proportions; they insist that there is a growth or an enlargement of the stomach, and according to their statements it can at times be palpated.

If the physician tries to assure such a patient that the disturbance is due to the nervous system and not a lesion of the stomach his statement is doubted, especially if he be a man, as to call him nervous hurts his pride and seems to place him as a weakling among his fellows.

A lesion of the stomach in a neurasthenic is a condition which must not be overlooked, as functional disturbances of the stomach will cause malnutrition, which is bound to disturb the nervous system and cause reflex symptoms which will be most prominent in the weakened organ and thus bring about a complication.

A physical examination is always necessary, as a lesion in an adjacent organ may cause the most distressing gastric symptoms, and treatment properly directed will cure an apparent gastric neurosis.

These cases have inherited a nervous constitution or through worry, mental exertion or dissipation have brought on a case of nervous prostration, and some slight disturbance of the stomach at first may bring on a train of symptoms which have no end, especially if the patient gains access to medical literature.

The consideration of a few conditions commonly found may be brought up for discussion with interest at this time.

Gastralgia may appear before the nervous symptoms are in evidence, but usually follows mental over-exertion or emotional shock; the pain comes without warning, of a burning, boring character over the stomach, being independent of meals, the character of food having no bearing on the case.

However severe the pain, strong pressure generally relieves, while lighter pressure is not well tolerated. It disappears suddenly and may be followed by a desire for food which does not in the least disturb.

If the history is carefully taken it will show a run-down condition of the nervous system, mental over-exertion, and a train

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of symptoms such as headaches, insomnia, an irritable nervous condition and lack of interest in daily duties.

In ulcer of the stomach the pain comes immediately after eating, is relieved when the stomach is empty. If there is no hemmorrhage, blood may usually be found in the stomach contents or stools, and a painful spot is usually to be located over the epigastrium.

In hyperchlorhydria the pain disappears after the ingestion of alkalies or albuminous foods and examination of the stomach contents shows hydrochloric acid in excess.

In chronic gastritis the intense paroxysmal character of the pain is absent, it is more constant, with marked distress after eating, and the stomach washings show more or less mucous.

Nervous vomiting is independent of the character and quantity of food, generally occurring after more or less irritation of nervous system.

No premonitory symptoms may be present, the attack coming on after the ingestion of the simplest food or even on an empty stomach. We have seen patients who could digest the richest food with the mind at ease while the simplest food while under mental tension would cause the most distressing vomiting. The following recent case will illustrate some of these symptoms.

Female, aged forty-five, of a highly nervous temperament, was operated upon for the removal of a large ovarian cyst and had a good start on the road to recovery.

A few days after the operation, over-zealous friends excited the patient, a chill followed by a temperature of 104 and severe vomiting immediately following her excitement and gave us much concern. No cause could be ascertained, the temperature promptly subsided, but no food could be tolerated, even water causing burning and gas.

The second day the same symptoms were repeated; the vomited matter containing nothing that could cause these symptoms, we directed our treatment to the nervous system; passiflora with strontium bromide promptly relieved, with no recurrence. The patient now has a fine appetite, and even the richest food causes no symptoms.

Nervous dyspepsia is a nervous disorder of the stomach characterized by numerous distressing symptoms during digestion. In examination of the stomach contents we find it variable, at times normal and again the acid may be increased or diminished.

This disorder occurs usually among the class who live under great mental tension, have been high livers, have disobeyed the laws of nature, disregarded rest and are now paying the penalty. After eating, a sensation of fulness occurs, with belching and dizziness, a strong characteristic being that the quality and quantity of food makes little difference in the symptoms. The discomfort and pain may be present when the stomach is empty. The nervous system is in an impoverished condition, insomnia, headache, backache and lack of concentration are present; the patient is wor-

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ried about his condition, loses confidence in his friends and cannot be consoled.

This trouble should be differentiated from other conditions by the mental symptoms, the character and quantity of the food having no bearing on the severity of the symptoms. A change of scenery, away from the environment that caused the mental worry, affording much relief as peace of mind is the desired state to properly control this disease.

A case under recent observation will illustrate this point.

A promoter, aged thirty-five, previous health fair, of late having been under great mental pressure had developed a neurasthenic condition, could not sleep well, little tasks seemed too great for him to accomplish, unable to concentrate thought, everything irritated him, even could not bear to have the children about.

At this time his stomach began to cause much trouble, great distress after meals, with eructations and weakness. The appetite was changeable, meals were dropped, but the distress was the same whether the stomach was full or empty, dieting being of no avail. He could not be induced to leave his business a day for fear that it would not be properly attended to, and the fear that his stomach condition was malignant made him unfit to attend to business details.

As he was an enthusiastic fisherman we finally prevailed upon him to go into the mountains with a party on a week's trip, with no restrictions as to diet or living, providing him with a simple nerve tonic. The neurasthenic returned a well man; from his report he began to improve on the second day. He fished each day, came home tired and wet and was glad to eat what was placed before him; at the end of five days as he expressed it, "I was not aware that I had a stomach." His weight was increased by twelve pounds, and today he believes fully that all work and no play is bound to bring disaster.

Atony of the stomach very frequently occurs in nervous diseases of the stomach, associated with neurasthenia.

Atony in a neurasthenic individual may produce nervous dyspepsia. What in such a case is primary and secondary can only be decided on the most careful consideration.

We do not wish to convey the impression that in nervous conditions of the stomach there are no structural changes, as such are bound to occur if the neurotic condition is not corrected. A constant disturbance of the functions of the stomach is bound to cause a lesion, and the longer the condition persists the greater will be the change in the organ itself.

When we consider the situation carefully, how can we expect this important organ to perform its proper duty when the system that governs the secretory, sensory and motor functions is impaired? The patient lacks nourishment, the nervous system sharing in this, causing more worry, and the more the attention is drawn to the stomach the worse it becomes.

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We all know how we have struggled to correct nervous disorders and how hard it is to obtain the co-operation of the patient. The majority of cases are prone to take advice from friends and quacks rather than from the honest physician.

In our treatment of these cases we must not overlook the building up of the patient. Try to find him a hobby and any other means that will take his mind away from his condition. Relaxation is what he needs, and we must in some manner relieve the tension of the nervous system.

Remedies are very important, but our control of the patient is the necessary factor in the case. Without that we can accomplish little, and I am sure that with this and the proper study we can soon relieve the majority of our cases.

EXPERIENCES AT THE MAYO CLINICS.

By George E. May, M.D., Newton Centre, Mass.

While in Rochester and my impressions are fresh, I am tempted to jot down a few points which may prove of interest to my colleagues. This town is located west of the Mississippi River, in the state of Minnesota, and is reached from Chicago after a comfortable twelve-hour ride in the sleeper. The climate is delightful; the population about 9,000. There are several hotels, the Kahler and Cook's being the largest and best. The place has become a Mecca for all lovers of good surgery the world over. A brief history of the men should perhaps here be introduced. Dr. W. J. Mayo is about fifty years old, his brother, Charles H., three or four years younger. One of them graduated from Northwestern University; the other from the University of Michigan. Their father, at the age of 91, still resides here, having been the leading physician and surgeon of this vicinity for many years. The Mayos have surrounded themselves with a corps of more than twenty assistant physicians, representing every specialty in medical and surgical science. If you bring a patient here you are directed to report early in the day, at the large office building in the center of the business district. Here from twenty-five to seventy-five new patients are seen daily, and as many more old patients come in for advice or treatment. A long corridor runs through the building, with offices on either side. You approach the desk near the entrance, give your patient's age, name, residence and a few symptoms sufficient to classify him as to the region of the body most likely to need examination and treatment. You are then furnished with a card and begin the rounds of the various specialists. It may be that you are sent to the stomach man, Dr. Graham, who makes a most thorough and careful examination, and possibly he refers you next to the X-ray room for confirmation of his diagnosis. Finally you meet either "Dr. Charlie," or "Dr. Will," who examines the record which has been made in the process of your

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transit, sums up the case, makes the final diagnosis and advises you as to what in his opinion is required.

If you are advised to undergo an operation, you are sent to the room for hospital arrangements, where you are booked for room, nurse and hour of operation at St. Mary's Hospital. This hospital, founded by the Sisters, is located about one mile from the center of the town, at the extreme border of the city. It has a capacity of 190 beds, but with the Mayos' system of rapid rotation this would fully equal a capacity of 300 beds in the ordinary hospital, their policy being to use the bed for each patient the fewest possible number of days. It is not unusual for abdominal cases to be up on the fifth or sixth day, and out at the end of the seventh to some nearby hotel or boardinghouse, where they are under the direct supervision of the hospital staff. There are four large operating rooms, with extensive microscopical, X-ray and other laboratories adequate for the most careful diagnosis and thorough treatment. As I have said, the management of the hospital is under the direction of the sisterhood, but most of the actual nursing is done by graduate nurses from various hospitals of good standing throughout the country. These nurses come in here for experience and occupation. In connection with the Mayos' offices is a beautiful private library building, in which an extensive medical library is available, not only for the staff but for visiting surgeons as well. Here are found, conveniently arranged, all the medical journals of the world. The building also contains private rooms for secretaries and a small assembly room for the regular staff meetings, which are frequently held here. By courtesy of Dr. Mayo I was privileged to attend one of these staff meetings, at which scientific papers were given, teeming with the experience gleaned from the wonderful clinics, and most animated and instructive discussion followed the papers. Each visiting surgeon is expected on the day of his arrival to join the surgical club. This organization was formed a number of years ago, has its permanent officers, but temporary officers are appointed each week. It meets in a commodious and beautifully furnished club room in the Y. M. C. A. building each day at three o'clock. At the meeting of the previous day reporters have been appointed, one for each operating room at the clinic. Each reporter is expected to note carefully everything said and done in his particular room, and at the next meeting of the club to give a detailed report of the same. At the meeting each case, as soon as reported, is thoroughly discussed. Surgeons from all parts of this country, as well as foreign countries, enter into the discussion, adding points of interest from their own experience, or from other clinics which they have been privileged to attend. This, to me, was one of the most interesting, as well as instructive features of my stay in Rochester. At the clinics, in each operating room are comfortable raised seats for about thirty observers, and I can truly say that there is little spare room. The clinics begin at eight o'clock and there are usually twenty-five to thirty operations each day, the clinic end-

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ing usually at from 12:30 to 1:30. Perhaps here I may say a few words as to the preparation of the patient. He is prepared, either at his hotel or the hospital on the preceding evening, by receiving a full dose of castor oil, often disguised in a glass of beer, popularly known as the Mayo cocktail. No further preparation is given at night. In the morning the field of operation is shaved, if necessary, and in stomach cases lavage is administered. Ether is administered entirely by nurses of long experience, and by the drop method. A mask somewhat larger than the ordinary chloroform mask, being covered by stockinet and eight or ten layers of gauze. Upon this the ether is constantly and rapidly dropped. The method is rapid, and complete narcosis ensues with almost none of the unpleasant features connected with the ordinary administration. As soon as the process of anæsthesia is begun the patient is wheeled into the operating room and final preparations for the operation carried out during the process of anæsthesia. In case the Trendelenberg posture is required the patient is placed in that position immediately and thus the intestines allowed to gravitate toward the diaphragm during the remainder of the preparation, so when the incision is made the pelvic field is clear and unobstructed. The field of operation having been previously shaved is gently scrubbed with Jumbo soap (a pumice stone preparation) gauze being used instead of a scrubbing brush, this followed by rinsing in sterile water, then Harrington's solution is gently applied, all being finished by the application of seventy-five per cent alcohol. In cases where the skin is roughened as on the hands, or about the groin, or scalp, tincture of iodine is applied as a final step. No one seems to be in a hurry, but every motion counts toward the final result, and the Mayos are really rapid operators without apparently being such. Each operator talks in a most interesting and instructive way throughout the entire operation, there being a clinical lecture for each case. Abdominal incisions are large, few retractors are used, and with these in use the edges of the wound are always guarded by gauze. There is no unnecessary handling of the tissues, and comparatively few instruments are used. Needleholders are discarded wherever possible, and big half-curved needles seem to insure rapidity and facility in suturing. Dr. Wm. J. Mayo's first assistant is Sister Josephine, a large, wholesome looking nun who has assisted him in practically all his cases for many years, a woman of wonderful ability in this line. Through every abdominal incision the hand is inserted and a careful exploration of appendix, gall bladder and ducts, stomach, kidneys, spleen and the pelvic contents is made. Drainage seems to be in use in a large number of cases, although my observation would lead me to think a little less employed than three years ago. For the gall bladder a small rubber tube surrounded by gauze, outside of which is a case of gutta-percha tissue. In case there is fear of leakage of the ducts, this is reinforced by a very large split rubber tube with a gauze wick extending down to the bottom surrounding the tube bladder drain, and shutting

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off the peritoneal cavity from the seat of operation. All normal appendixes in patients above forty are left in situ; ovaries are left intact unless they show decided symptoms of disease. In fibroid tumors of the uterus miscroscopical examination is at once made for fear of possible malignancy, and in case the miscroscope revealed suspicious signs a panhysterectomy is at once performed. Dr. Mayo remarked one day that he took little stock in any symptoms occurring as a result of retroversion of the uterus, saying that in fifty per cent of all women whose abdomens he had opened the uterus was in a greater or less degree of retrodisplacement. I might here remark that I saw what was to me a new operation for the cure of retroflexion. The broad ligament was punctured by a hemostat from behind, close to the fundus and immediately underneath the attachment of the tube. The round ligament was grasped by the point of the forceps at a point about one inch and a half from the uterine insertion, drawn back through the opening, and the two loops of round ligament fastened together behind the uterus by chromicised gut, the same stitch taking a bite at the same time in the posterior uterine wall. I understand that Baldy has recently reported a series of 250 cases by this method, with excellent results. I also saw a vaginal hysterectomy done for beginning carcinoma of the uterine body by a method somewhat new to me. The cervix was grasped and the organ drawn down in the usual way, the usual circular incision being made. The peritoneum was opened in front; next by the use of sharp cats-paw retractors the entire organ was drawn down and the fundus delivered through the anterior opening. Clamps were next placed upon the broad ligament from above downward on either side, thus securing the ovarian vessels; the broad ligament was separated from the sides of the uterus, and the forceps left in place, the precaution being taken to tie the handles with thread to insure against unfastening. Next the peritoneal portion of the posterior cul-de-sac was opened from within, the uterine vessels secured also by forceps on either side, which in turn were also tied to guard against unsnapping. The remainder of the separation was made, the uterus entirely removed; the depths of the wound inspected, found dry, a strip of iodoformed gauze carried into the peritoneal cavity, the four clamps and gauze secured in one bundle by a ligature and the operation completed. Forceps and gauze provide ample drainage, the forceps being unlocked at the end of forty-eight hours and removed six hours later.

In all stomach cases rectal feeding is resorted to for five or six days. Dr. Mayo says he cares not what sort of food is used, so long as plenty of water is administered. Morphine seems to be administered in comparatively few cases, and in very moderate doses. For those requiring stimulation, sterilized camphorated oil is administered sub-cutaneously in ten to fifteen drop doses, three or four times a day.

There is much more which I could relate concerning these remarkable men, and their work, but my paper is already too long.

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The doctors themselves live in the most unpretentious dwellings, are simple, honest, cordial, and apparently most happy in their work. It is said that no one ever is told beforehand how much his operation is going to cost, but that hundreds who are unable to pay receive the same care as those with greater ability, and that some even return home with more money in their pockets than they brought with them. The atmosphere of the entire place is one of harmony, cheerfulness, and absolute loyalty. Every visiting surgeon is made to feel at home, and if he doesn't see everything that is done it is his own fault. On Sunday morning the writer was invited by Dr. Wm. J. Mayo to make rounds with him at the hospital. He was accompanied by his little daughter, Phoebe, thirteen years of age, bearing in her arms a bundle of attractive magazines which she distributed as she was introduced here and there by her father. I presume that we spoke to a hundred patients in the course of an hour and a half. Almost everyone, including those operated upon the day before, appeared comfortable and happy. I asked "How do you get your patients to smiling so soon after these major operations?" Dr. Mayo said "Well, you notice we make large incisions, use few retractors, do not pull and haul or bruise our wounds, and carefully replace, so far as possible, in a normal position, the intestines and omentum. Neglect of these precautions contributes largely to post-operative discomfort." I also asked "Dr. Charlie" when he and his brother got their rest and recreation, for they operate from 8 in the morning until 1:30 and then see office patients from 2 until 5 and often attend emergency cases during the evening or night. "Oh," he said, "we ride back and forth to the hospital in our automobiles, I have a little farm up here that I enjoy, and sometimes I play a game of tennis, and of course we go abroad now and then." "But," I asked, "is there not danger of overdoing?" He replied, "Well, Doctor, did you ever know a man who really died from overwork? If you see a man who you think is killing himself by work, ask whether it is really work or worry, work or dissipation. I believe the man who loves his work and does it regularly and systematically and isn't all the time striving to beat some other fellow, is getting the best out of life, and will live longer, other things being equal, than any body else."

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EMPYEMA.

By William F. Wesselhoeft, M.D., Boston, Mass.

The subject of empyema suggested by your chairman is one of great importance. As in other surgical conditions, the earlier it is recognized, and the earlier the operative measures are instituted the more favorable is the outlook. If overlooked, the future of the patient is one of long suffering and death.

While accuracy in diagnosis, due to better training and greater care, is everywhere on the increase generally, we do not infrequently see cases of empyema which have been disregarded, or have been recognized only after long delay. This is sometimes because of the insidious onset of the disease, and sometimes because an empyema has developed from a pneumonia and the continued illness has been thought due to the lung condition not clearing up. A mistake will rarely be made if one is on the lookout for this condition and has its diagnostic points clearly in mind.

Excluding infection of the pleura through a wound, empyema may occur primarily from a pyogenic infection, probably through the blood current. It may occur secondarily from an infection reaching the pleura from a neighboring focus, as a pneumonia or abscess of the lungs; from a suppuration beneath the diaphragm, disease of the mediastinum, or an infection of the chest wall itself. Most cases are believed to begin with an exudate of serum, which later becomes purulent from an increase in leucocytes.

In all cases the pleura is thickened and is usually covered with fibrinous exudate.

While usually the pus is free, it may be limited by adhesions between the lung and wall to a certain locality. Such localized collections are most frequent between the diaphragm and base of the lung, due to infection carried from the abdomen through the lymphatics, and between the lobes of the lung secondary to the pneumonia. The amount in a given case may vary from very little to the full capacity of the cavity, in which latter case the lung is compressed and the other thoracic organs displaced so that the apex beat of the heart may be found several inches from its normal position.

The symptoms are those of pleurisy at first and septic toxæmia and as the fluid increases the respiration becomes mildly or profoundly embarrassed. The fever is usually irregular, with considerable variation between the morning and evening readings, and leucocytosis is present.

If unrelieved, death ensues from exhaustion or sepsis. Rarely does the pus rupture into a bronchus or burrow its way out through the thoracic wall and give relief. As operation is imperative, the diagnosis of this condition becomes of the utmost importance, and this is based on the following points:—

Inspection. At first, when there is little fluid, the two sides show little difference. As the fluid increases, however, the affected

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side shows less respiratory movement, and with a large amount of fluid present there may be a total absence of motion on breathing.

At first the patient may lie on one side or the other, but when the amount of fluid is great the patient lies on the affected side to allow free expansion of the other side. Rarely the interspaces between the ribs may be obliterated or even bulge from intra-thoracic pressure.

Palpation gives one very important sign,—absence of vocal fremitus. The patient is asked to speak loud and the voice vibrations, distinctly felt by the fingers on the normal side, are not transmitted to the fingers through the fluid on the affected side.

Percussion. As the fluid increases the percussion note becomes less resonant and finally flat. In the upper part usually the note is resonant over the retracted lung; below this the note is dull, and over the fluid, flat.

Auscultation. Friction is heard only at first when the wall and lung are in contact. The important sounds are those relating to the respiratory murmur and the voice. With small effusion the murmur is diminished. It may be tubular, but when there is much fluid the sound is not transmitted and nothing is heard.

Above, over the retracted lung, often the breathing is bronchial, and if the lung is compressed and does not work at all no murmur will be heard over the entire side.

Voice sounds are diminished, or absent, transmitted through fluid.

Dislocation of the apex beat of the heart towards the sound side is an important sign in large accumulations only.

Absence of vocal fremitus, flatness on percussion, absence or decided lessening of respiratory murmur, are constant signs. Given such signs, exploratory puncture as a diagnostic measure should be made.

This little operation, without a local anæsthetic, is often very painful and alarming to the patient. Its terror may be entirely avoided by the use of ethyl chloride spray and cocaine injection.

Sometimes it is desirable to make a second puncture if the first is unsuccessful. If the patient has been alarmed and frightened by the pain the second puncture may be a difficult undertaking for both physician and patient. The site selected should be sprayed with ethyl chloride until blanched. Then a sterile two per cent. solution of cocaine injected thoroughly into the skin and along the track the needle is to take to the pleura or through. The needle is withdrawn, and after waiting three minutes the aspirating needle can be deliberately and painlessly pushed in. This should always be connected with an exhausted bottle. If the fluid is found to be pus, an operation for drainage is indicated.

It is now recognized that it is best to resect a rib or even two ribs to give ample drainage, the space between the ribs not being sufficient.

In the operative province are several conditions to consider.

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Robinson divides empyema into three classes,—acute, sub-acute, and chronic.

Acute empyema is where the disease has existed for a short time and the lung displaced by the fluid retains its expansibility unhindered by adhesions.

Sub-acute empyemas are those where either there has been insufficient drainage or where operation has been delayed and the lung has lost some of its expansibility and is somewhat adherent, though in neither case to such a degree that it cannot be induced to expand by suction persistently applied or by breaking up the adhesions. This can be supplemented by a course of suction, if necessary, at the wound, and blowing exercises by the mouth.

The third class, chronic empyemas, are those where the lung has lost its expansibility and has become permanently retracted and adherent.

We thus see that besides the mere opening to let out pus there are other mechanical conditions to be considered. Normally there is no empty space in the pleural cavity, as it is filled out by the lung. The viscual and parietal surfaces being in contact, glide freely on each other during the movements of inspiration and expiration. The elastic tissue of the lungs causes them to contract when fluid or air enters the pleural cavity. The fact that the lungs gradually expand when an opening from the outside for drainage is made is due to the fact that the opening has not the capacity of the bronchus. Each bronchus at the bifurcation has a diameter of about one-half inch.

When an opening is made through the wall, the lung contracts. A good-sized drainage tube is placed in the opening and covered with gauze. The pus soaks this gauze, and with each inspirating movement, as the thorax expands and the pleural capacity is increased, air rushes into the bronchus freely and is obstructed by the dressing at the wound. Gradually the lung, if not hindered by adhesions contracting and holding it firmly, getting more air through the trachea than the cavity through the wound, tends more and more to expand. As it does so it adheres more and more to the wall, and so gradually advances during convalescence until the space is filled.

When, owing to great delay, the lung coverings have become firm and less elastic and adhesions have formed, or the tube has been placed too high so the fluid does not drain, this favorable expansion does not proceed and progress stops. In such a case favorable drainage by a lower opening may be necessary. In any event, expansion may be helped by suction applied at the wound by a proper apparatus, and practiced daily.

Sometimes adhesions that hold the lung can be broken up and expansion then follows aided often by the suction scheme.

In the third case, with a firmly contracted, unexpanded lung, bound firmly by adhesions and the pleura converted to an old suppurated cavity, nothing can be done to induce expansion. Here, the use of the lung is lost permanently and our efforts are to be

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directed to overcoming the suppurating process. This can be done only by some way of contracting the thorax so that it may fall in and obliterate the cavity.

This briefly is the story of empyema and its treatment.

The common operation is for acute empyema. The opening is usually best made in the posterior axillary line at the seventh or eighth rib. A three-inch cut is made directly down upon and along the rib. The periosteum is then quickly detached all around from the rib and the denuded area of one and one-half inch resected. The pleura is then opened by pushing through a pair of closed artery forceps which are then opened wide. The fluid pus gushes out. Not infrequently several large clots of fibrin float into the opening and plug it. These should be caught with forceps and pulled out. It is unnecessary to wash out the cavity, but its evacuation is assisted by turning the patient over so the pus flows down. A good sized drainage tube is inserted so its end is just within the pleural cavity, and fastened with a suture. The wound is then closed to the drain with one or two silkworm gut sutures on each side. A convenient tube is that of Wilson, which is of rubber and has a flange at each end to prevent its going in or coming out.

An abundant gauze dressing is laid over this and retained by a binder. The after-treatment consists in changing the dressings frequently and getting the patient up as soon as possible.

In favorable cases there is no need for drainage after four or five weeks. Cases that have been operated upon and continue to drain pus and continue a temperature usually require an opening made lower, behind or near the original opening.

Suction applied daily to the wound, by a syringe attached to a glass bulb, will aid expansion; as will also getting the patient to blow the water from one bottle into another connected by tubes.

Localized collections of pus are drained at whatever point they occur. The operation is the same with drainage and dressing the wound until drainage ceases.

A WHOLE NATION VACCINATED.

Smallpox has been stamped out in Guatemala after a long epidemic, but only by the rigorous and unprecedented vaccination of every individual in the country. The whites have ever submitted voluntarily to vaccination; but the Indians, by reason of superstition, have heretofore always refused to be inoculated. Dr. J. A. Padilla, surgeon-general of the marine hospital and quarantine service of Guatemala, finding the epidemic beyond his control, made strong representations to President Cabrera of the necessity of immunizing the Indians, who were spreading the disease. The President then issued the order for general vaccination. Every physician in the republic was called on to assist, some thousands of dollars were invested in vaccine, and the soldiery concentrated the Indians. For three months the physicians worked daily. For the first time in its history (it is said) all Guatemalan ports are at present free from contagious diseases and passenger traffic is without restriction.—The Medical Times.

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DEAN SUTHERLAND'S ADDRESS AT THE OPENING OF THE THIRTY-NINTH ANNUAL SESSION OF BOSTON UNIVERSITY SCHOOL OF MEDICINE.

Ladies and Gentlemen: —

Time relentlessly pursues the even tenor of its way undisturbed by the happiness or misery, the prosperity or failure, the diligence or shiftlessness, the interest or indifference of mankind. Morning and evening, summer and winter follow each other in established order and come and go quite irrespective of the desires or condition of humanity. In anticipation four months may seem a long period of time; in retrospect it not infrequently seems as "but a passing breath." For the majority of us a summer has intervened, a period of four months has joined the irrecoverable past since we last met in these halls. What has this period of time meant to us; in what fashion has it been utilized to our advantage; what changes has it introduced into our common environment; what preparation for our work in life has it enabled us to make? These and questions of a similar nature naturally occur to us as, after a vacation period, we gather here to participate in the opening exercises of a new School year; and perhaps it may be profitable for us briefly to consider some of the topics suggested by such questions and the occasion itself.

First of all let me extend to you one and all, individually and collectively as classes, to old friends and to new comers, (prospective friends), the heartiest greetings and most cordial welcome. This it gives me great pleasure to do personally and as one of your instructors; this it is my highly-prized privilege and duty to do as the representative of the Faculty of Boston University School of Medicine. As the doors to these halls have been opened to you today and you are bidden to enter, so the doors to our fraternal regard, assistance, coöperation and friendship are thrown wide open and you are sincerely invited to enter. To reach its highest efficiency our relationship must be more than that traditionally existing between teachers and pupils, — we must work together in a spirit of mutual toleration, confidence and sympathy as we probe into the mysteries of life revealed in our studies of anatomy, physiology, pathology and related sciences, and as we try to fit ourselves for the intricate and arduous labors connected with the age-old Art of Healing. We welcome you at the threshold of a noble profession, and we shall expect to welcome you before long as colleagues in that profession.

It is unnecessary to remind you that this is the first day of a new year with all the possibilities which are offered by a new and fresh beginning. Profiting by past experiences we can by a resolute effort make of the new school year a success that shall far surpass in solid and useful accomplishment any of its predecessors. Its predecessors are becoming steadily more numerous, for this is the opening day of the thirty-ninth session of our School. It is significant in that it is the last year of the

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third decade of our existence, and somehow forty sounds much more venerable than thirty-nine.

To glance at the interval of our separation let us briefly consider some of the noteworthy occurrences that have marked what, to use a physiological phrase, might be called the metabolism of our school, — the modifications in our immediate environment.

Our curriculum need claim but little of our time, although certain changes of more than momentary interest have been made. The program for the work in clinical medicine has been considerably expanded. In bacteriology the therapeutic side of the subject, such as the preparation, scope of action, and applicability of bacterial products, (vaccines, sera, etc.,) is to be more thorough and comprehensive. A course in applied anatomy for third year students has been introduced; and a course in neurologic surgery has been added to the already effective department of surgery. In the reassignment of duties to members of the Faculty several other (minor) changes in the curriculum have of necessity been made, but all these points will be elucidated by the official horarium which will be given to you by our Registrar.

In regard to the *personnel* of the Faculty I regret to chronicle the fact that Professor Windsor and Associate Professor Cahill, who for twenty-three and fifteen years respectively, faithfully, unselfishly, and with marked ability and success have served the best interests of the school, withdrew from the active work of the Faculty at the close of our last annual session. Their assiduous and effective service for so long a period is deeply appreciated by their co-laborers on the Faculty, who profoundly deplore the necessity which calls for this tribute to the excellence of their work, — a tribute that is hopelessly insufficient.

It is a pleasanter task to speak of the additions to the teaching staff, especially as these additions promise to bring a stability, and infuse a new vigor and vitality into a department which recently has caused us some uneasiness. Professor Moore, finding he was undertaking to carry too heavy a burden in the double capacity he assumed last year, relinquished his appointment to the chair of Materia Medica and will hereafter confine his work to the department in which he has labored with such conspicuous satisfaction. To labor in the particularly important part of the medical vineyard thus made vacant, the department of Materia Medica, we have fortunately secured a trio of graduates of the School who in addition to being familiar with its traditions, in sympathy with its ambitions and acquainted with its standards, are capable, earnest, well-trained physicians conversant with the problems which confront the every day practitioner of medicine. For Dr. Patch who will occupy the chair of Materia Medica, and his associates, Drs. Hunt and Martin, I urgently bespeak such sympathetic encouragement as can readily be offered by a serious and receptive student body not too ready with immature criticism.

Other changes and readjustments in the Faculty and the

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curriculum you undoubtedly already have noticed in the School Announcement for 1911 which has been sent to each of you.

It is a great pleasure to call your attention to the rapidly approaching completion of the Robert Dawson Evans Memorial adjoining the School. This laboratory, as you perhaps know, is the latest gift to the Massachusetts Homœopathic Hospital, and before many weeks have elapsed it will be in the active performance of its particular and beneficent functions. Its proposed work is a close connecting link between the healing ministrations which are the duties of a hospital on one hand and comprehensive medical education on the other, and will include not only efforts to alleviate suffering and heal diseases but will offer special facilities for thorough investigation into the causes of diseases and the most effective methods of their prevention. Let it be emphasized and appreciated to the full extent of its meaning that one of the greatest aims of the medical profession today is the *prevention* of disease. There is no need here to enumerate the many diseases the prevention of which has been made relatively certain and easy because of the recognition of their causes. There remain, however, many classifiable and unclassifiable diseases which have still to be investigated as to their etiology, as well as other vital questions in physiology, pathology, metabolism and allied subjects which have to be answered, and the investigations into these problems and the answering of these questions belong to trained *observers*. It is the training of trustworthy observers to do this special sort of work, work that does not belong strictly to a hospital, neither strictly to a medical school, for which the Evans Memorial is designed, and we hail with rejoicing the privilege of affiliation with such an institution.

During the early part of the vacation, from June 18th to 24th inclusive, occurred one of the extra activities of the School participated in by the Faculty and not by the student body, which by that time had separated for the summer and on that account may not be familiar with the character or importance of the activity referred to. The prime object of the School, the very *raison d'être* of its existence, is to educate in things medical the students who come to it for the special purpose of securing a medical education. But the Faculty feels that its obligations to the profession and the community would be very imperfectly fulfilled if its educational labors were restricted to its own band of students. Therefore immediately following the termination of the academic year — as soon after Commencement as possible — the facilities of the School in conjunction with the superb facilities possessed by the Hospital are thrown open to the medical profession for a post-graduate Clinical Week. The exercises consist of didactic and clinical lectures and demonstrations, during which the most recent theories and the latest developments of medical science and art are discussed. The 1911 Clinical Week differed from its predecessors not so much in its essential plan as in its execution, its novel feature being the presence among the

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lecturers of a number of homœopathic physicians and surgeons from various and even distant parts of our country, whose experience and ability have marked them as preeminent in professional circles. Nearly 50 per cent of the thirty-four exercises were conducted by physicians not members of the Faculty. This was made possible by the fact that the American Institute of Homœopathy, the national organization which represents the special interests of our wing of the medical profession and to which we owe allegiance, held its annual convocation for 1911 at Narragansett Pier. The special lecturers here referred to were Drs. Martin of Lowell, Stevens of Detroit, Schenck of Brooklyn, Carmichael of Philadelphia, Wood and Phillips of Cleveland, Dewey and Burrett of Ann Arbor, Hanks and Tenney of Chicago, C. E. Fisher of Colorado, Dearborn, Wilson, Laidlaw and Dieffenbach of New York;—and to them the Faculty is under a deeply appreciated indebtedness.

To glance for a moment at more distant portions of our professional environment, I want to refer to a matter of more than passing interest,—to an event of marked significance, although its influence upon you as individuals may not be immediately apparent. One object I have in mind in referring to it is to impress indelibly if possible upon your consciousness the fact that from the moment you matriculate as medical students you become, with us all, members of a great family whose interests as a whole affect to a greater or lesser extent every individual member. And the converse of this is true; as the efficiency and strength of the family is in direct proportion to the efficiency and strength of the unit, whatever affects the unit, its accomplishments, its successes, its mistakes, its failures, by just so much reflects upon and influences the composite whole. It may be unnecessary to illustrate, but you all know that a felon on the thumb, or a bad toothache even, will interfere in its degree with the happiness, the well-being and the well-doing of the body of which the offending member is a part. Let me therefore urge you to use every effort to become healthy, earnest, progressive, creditable and actively useful members of the professional body of which you have become a part.

The event to which I call your attention is the Eighth Quinquennial International Homœopathic Congress which convened and held its session in London during the third week of July last. Its chief characteristic possibly was its truly international membership. Its participants came from all parts of the world: from far-away India in the East to distant California and Oregon in the West; from Canada, from Florida and many of the intervening States; from Italy, Spain, France, Austria, Germany, Russia, Holland, Sweden, and Egypt. Naturally England itself was well represented. Its membership represented the most advanced thinkers and most earnest spirits in the profession, who made the long pilgrimages, in many cases of more than 6000 miles in one direction only, in order to testify to their confidence in, loyalty to, and knowledge of the methods of practice distinguished

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as homœopathic. Enthusiasm born of success, certainly due to tested experience, aggressiveness the offspring of the propagandistic spirit, the free acknowledgement of our limitations and deficiencies were marked features of the meeting; and its whole tone was elevating and stimulating and broadening. Several bits of exceedingly valuable original research were presented, such as the demonstration of the presence of distinctly radio-active matter in the 14th, and even the 15th, decimal trituration of Colorado pitch-blend; a series of provings of radium-bromide; and several analyses of the pathogenetic action and therapeutic uses of certain drugs familiar to us all. The essays and discussions were almost wholly confined to the practical and useful and to demonstrating particularly the soundness and reliability of homœopathic principles. The two points connected with the Congress which I want to emphasize as of chief importance to us at this time are its international character and the great opportunity it offered of obtaining the world-wide consensus of opinion on practical points connected with the Science and Art of Homœopathy. Later on in your career as physicians you will perhaps more fully appreciate the essential value of such conferences as I have referred to, but I trust the reference may not be inappropriate to this hour and occasion.

To return to our more immediate environs, to within the precincts of our own University, in fact, there is one event which is of such a nature as in great measure to overshadow the subjects which have been presented to you. Since we separated in June last our friend and well wisher, Dr. Huntington, has relinquished the active and onerous duties associated with the high office of President of Boston University, and the reins of government have passed into other hands.

President Huntington for nearly thirty years had been closely associated with the life and interests of the University, the greater part of the time as Dean of the College of Liberal Arts, but for eight years as chief executive officer of the University as a whole. It was during these eight years that we of the Medical School came to know him, and with that knowledge came a deep respect, an unwavering confidence, an abiding affection; for President Huntington was earnest and faithful in his efforts to advance the interests peculiar to our School. His unfailing courtesy, his inexhaustible patience, and his unquestionable good-will made our association with him a pleasant and encouraging experience; and I am sure I voice the sentiments of all those who came into close relations with him in wishing for him a season of well-earned rest, and in hoping that on his return from his sojourn in the distant West he will find himself invigorated and strengthened and quite prepared to resume active work as Dean of the Graduate School in the University he has so long served.

Le roi est mort, vive le roi! We are not here to review the past, we are living in the present. We are not here to mourn; we are here to rejoice. It is the opening of a New Year with us in

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more senses than one. The past year and its predecessors are of value to us only in so far as they have prepared us for the performance of the tasks of the present and the future. The memories and experiences of the past encourage and stimulate us to face the present and to anticipate the future with confidence, and it is with confidence we look to the future of the University of which we are a part. Wise heads and brave hearts have heretofore guided its destinies, and we have reason to believe our new pilot will successfully continue the journey so well begun. Our New Year opens with a new executive to administer the affairs of the University, and our exercises today are made memorable by his presence. It is our privilege and our pleasure at this time to extend to our new President our sincerest greetings and a hearty welcome, and to wish for him unprecedented prosperity and felicity. We appreciate to some extent the difficulties, the anxieties and the responsibilities of his position, and we would lighten and make easy his tasks. The burdens resting on his shoulders are not light, but we have confidence in his ability to carry them, and we rejoice in the opportunity now offered to proffer such support and assistance as we may be permitted to give, and to pledge our allegiance and loyal coöperation in all measures designed to increase the reputation and widen the usefulness of the University or any of its parts.

It would be eminently proper for me to close my remarks at this point, but I cannot let the hour pass without trying to impress upon your minds a few thoughts which possibly may prove of some value to you in your future work.

It may be assumed that you are here as members of this School for a definite if limited purpose. You are here to obtain an academic degree in medicine; to become to an extent familiar with the structure and functions of the human body; to study the causes and courses of diseases and the methods of preventing and curing them; in a word to equip yourselves for the practice of medicine. But this purpose, commendable as it may be, falls far short of what should be your ultimate aim and object. I would urge you not to confine your efforts solely to fitting yourselves to practice the Art of Healing. While not neglecting this important duty let your desires and ambitions and sympathies be as wide and as deep and as varied as are human interests. Do not narrow in any way your mental horizon but let it be all comprehensive in its scope. It is necessary for you of course to *specialize* in things medical, but remember that while you are physicians you are *more!* for you are human beings and therefore identified with everything that concerns humanity. I have pointed out more than once on such occasions as the present some of the lessons to be learned from a study of biology and especially embryology, and have drawn certain conclusions from the latter. It would seem to be, for instance, an established fact that on the purely material or physical plane evolution had completed its work; — but evolution or development of the human race, the

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crowning achievement of creation, has only begun, for not much more than the foundation has been laid. The great task now before humanity is the unfolding or developing of the mental, the psychic, the spiritual Man, and in this great task much is necessarily left to the exercise of the free will of the individual. His physical evolution has been unconscious and his voluntary participation in it has been a negligible factor, — but his continued or further growth certainly is to a great extent if not wholly within his own powers of achievement, — dependent upon his own voluntary exertions. Recognition of his powers in this direction is well within the knowledge of biology — of physiology; — for we can demonstrate that Man is something and even much more than a physical — a merely material being. He is a force, a form of energy, a dynamic, a spirit. Man is not his brain, or his eyes or tongue, his lungs or heart, his liver or kidneys. He is a personality, an *entity* even if his arms or legs or tongue or teeth or appendix have been removed. He *is*, even without certain of the organs of the body. His blood of today is not the blood of yesterday or the blood of tomorrow. His skin, his hair, his cellular structures generally are constantly undergoing disintegration, desquamation, elimination, and other cellular units are constantly replacing those that are destroyed and cast aside; — and yet who would say in spite of all these and other physical changes that the Man himself loses his identity from day to day, or year to year? We are justified in concluding that the physical is but the temporary habitation or investment of the true being. With this thought in mind therefore strive to perform your share of the *great task* here referred to.

In the pursuit of knowledge whether medical or general it will be vastly to your advantage if you acquire the faculty to *think* coherently and consecutively; to *think* economically as to time and energy; to think to some useful purpose; to recognize the true relationship of cause and effect; to accurately observe facts; to methodically classify what has been observed; and to reason logically and without prejudice from sound observation.

Difficult as it may be to differentiate truth or real facts from appearances, it can be done in many instances and will be done with greater ease and certainty as the years pass and mankind acquires wisdom and knowledge. Truths are only apparently contradictory. It is true that a man at the north pole can look horizontally in only one direction, — south. For him there is no north, no east, no west. To a man so placed a day comprised of a period of continuous daylight and continuous night is not of twenty-four hours duration but a period of 365 days. The untutored observer might claim that stars are the sole property of night skies, not realizing that the sky of day is thickly studded with unseen stars.

In making your observations therefore and in claiming things to be facts be sure to maintain a receptive mental attitude that will permit the correction of errors. For it is not safe to assume

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that the whole of anything is yet known. We must not follow the example of the exceedingly learned and wise man, a marvellously erudite scholar, scientist and philospher, who 150 years ago wrote as follows: —

"If we look to Physics we shall find that it abounds in experiments and discoveries! More light has been shed upon it in the way of experiment during the last century, than in any previous age; indeed, so far as facts are concerned, it has reached a meridian degree of brightness. If we consider Chemistry, with what experiments is it not enriched! So greatly has it exercised the industry of the learned that we possess thousands of guides towards penetrating its secrets. If Geometry, to what a height has it not been carried by the men of science of our time! It seems to have scaled the sacred hill, and for all human purposes to have attained the utmost perfection."

In regard to medicine we may confidently assert that appalling as the sum total of chemical, anatomical, physiological, bacteriological and pathological knowledge thus far acquired by the profession may seem to the uninitiated it is but as a drop in the bucket compared with the knowledge yet to become the property of the profession. As with medical so with general knowledge. Man's future state of familiarity with the truths of the Universe is inconceivable at present, but that there are possibilities of growth and development of knowledge and power that will cast into insignificance all that is possessed by our civilization cannot be doubted by one who knows the sad limitations of our present attainments and is convinced of the oppressive necessity for greater and more useful knowledge.

Let us all as students, graduate or undergraduate, assume the mental attitude towards the future so eloquently and beautifully phrased by Edmund Gosse in his verses concerning another subject but eminently appropriate to this occasion: —

"Howe'er it be I will not quail
To tell the lapse of years like sand.
My faith in beauty shall not fail
Because I fail to understand.

New acts, new raptures, new desires
Will stir the new-born souls of men;
New fingers smite new-fashioned lyres,
And O, may I be listening then.

So if I pray for length of days,
It is not in the barren pride
That looks behind itself and says
"The Past alone is deified."

I wait till down the eastern sky
Muses like Mænads in a throng
Sweep my decayed traditions by
In startling lays of unknown song."

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CLINICAL DEPARTMENT

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

Case XI. — Diagnosis: Retrograde Amnesia (traumatic).

From the point of view of the psychologist this type of memory disturbance presents interesting material for speculation. Why should the memory of events before the accident be lost at all, and if at all why not for several hours or days, instead of for a specific lapse of time?

Bianchi cites the case of a major who went for a horseback ride at 6 a. m. intending to return at 12 m. but who was thrown from his horse, striking his head on a rock, at 9 a. m. On regaining consciousness several hours later he had no memory for any incident after going to bed on the preceding night. In discussing this case Bianchi shows first that the series of thoughts in the morning before starting were all purposefully associated in consciousness and so formed a particular disposition (thought complex) of the mind, "a complete organic consciousness of which no part can stand alone." "The consciousness is wholly occupied by that series of images, emotions and acts which, taken together, form a conscious thought of longer or shorter duration," "If the accident ruptures the state of consciousness, then the single components which have no separate existence, but form part of a whole that is definitely and violently broken through, and which therefore ceases to exist, cannot be represented in another state of consciousness."

This is just what appears to have happened in the case cited last month. The method used for restoring her memories was the production of that condition to which Sidis has given the name hypnodical state. The patient was asked to close her eyes, lie very still, and listen to the tick of a watch which was placed near her ear. She was told to let her mind drift where it would and after two or three minutes was asked to tell her thoughts out loud. After a little rambling and confusion she repeated the following story which is given in substance.

Having passed the afternoon making detailed plans with her sister for their much anticipated visit home, a friend came in and together they had lunch, still discussing the trip, deciding what to wear, what to take, what the old folks would say, etc. Here we get to the, "complete organic consciousness," which in itself formed a unitary mind disposition. About 7:30 she left for home, walked down a long gravel walk, and down the side walk, all the time in a state of *secondary active attention*, her thoughts fixed upon the trip and distracted for all else, and walked deliberately in front of the car which struck her. Now she distinctly recalled the clanging of the motorman's bell, and the glaring head light, to all of which she had been oblivious in her "brown study." While scientifically the association of the amnesic complex was most satisfactory, as proving the functional nature of the disturbance, it was destructive to her own interests since it demonstrated that beyond doubt the accident was her own fault.

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Case XII. — For Diagnosis:

Miss. F., forty-eight years of age; born in Boston. Family history. Father born in England, died at fifty-two years of epithelioma of face. Mother born in Ireland, died of cancer of stomach at age of sixty-two years. There were three children, one died of abdominal cancer at twenty-six, one of Bright's disease at forty, and the other is the patient who presents the following history: — She was a healthy child; menstruated at twelve years. From the age of sixteen to eighteen had chronic inflammation of the bowels. Went to work at seventeen as saleswoman and was comparatively well except for inflamed appendix, which was operated upon when she was thirty-six.

Two years ago following prolonged emotional strain she began to feel weak, to lose her color, which was normally florid, and to get out of breath easily. At this time she had her tonsils taken out and also was ill from pain through her left side, diagnosed as neuritis, for eight weeks.

She was somewhat better for a year and a half, though not well. Then last summer she began to lose weight, (normally 140 lbs.) and to feel inadequate and weak. This condition steadily increased till the first of October when she had to give up work. Examination at this time resulted as follows:

The patient is a medium sized woman weighing one hundred and ten pounds. Her skin has a peculiar yellowish waxy appearance and pits at the ankles from œdema. She has occasional nosebleed, and much dyspnœa on slight exertion. The lymphatic glands of the neck are much swollen and soft, hanging down about the lower jaw like a double chin, and giving the face the appearance of blending imperceptibly into the neck. The axillary and groin glands are also enlarged. The spleen is palpable to about the umbilicus. Respiration is rapid and shallow, and the heart-sounds are weak. There is a faint hernic murmur at the apex. She has periods of great faintness, is continuously "so tired," and is much depressed in the mornings. Insomnia is persistent and distressing and there are wandering pains, the worst of which are about the abdomen. Appetite is poor, bowels capricious. The temperature is sub-normal in the morning, and up a degree or less in the afternoon. The urine is not remarkable, except that it is deficient in solids. The blood, however, is interesting. The color tests shows the hæmoglobin down to between twenty-five and thirty. Microscopically the red corpuscles stain faintly, and vary much in size, and many have large central vacuoles but none are nucleated. The leucocytes are about equal in number to the reds and are almost wholly composed of large and small lymphocytes, with large faintly staring round nuclii and a small, granular margin. There are also many small cells staining a homogeneous blue and having the shape of a rose leaf. Polynuclear leucocytes are very scarce, eosinophils about normal. What are the diagnosis, prognosis and treatment?

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WHAT DO WE NEED TO KNOW CLINICALLY ABOUT THE MIND?

(Continued from the November number.)

Memory Tests

Since memory may be split up into (1) impressibility, (2) retentiveness, (3) evocation, and (4) reproduction, these elements must be borne in mind in tests for memory. Most tests will demonstrate two or more of these elements. Further, it is to be borne in mind that each sensory inlet (eyes, ear, taste, smell, pressure and temperature) has its own elemental memory. So conspicuous is this fact in the make-up of many minds that it has led to a division into memory types, of persons who are eye-minded, those who are ear-minded, (because these types predominate) and mixed memory types. And this has been of much use in educational psychology.

Thus, in one group of tests, the acoustic word memory may be examined:

(1) Read to the subject the following fifteen pairs of associated words, requesting him to remember the second of each pair. One may use as many pairs as he thinks suitable to the case, but the normal mind should not make more than one mistake when repeating the second word of the couplet on receiving the stimulus of the first.

Wm. A. White, M.D., ("Outlines of Psychiatry") suggests the following

1. Well — pump
2. Cent — dime
3. Roast — stew
4. Oak — pine
5. Drug — medicine
6. Game — sport
7. Bridge — river
8. Dust — sand
9. Thumb — toe
10. Cow — horse
11. Water — ice
12. Barrel — bottle
13. Porch — chair
14. Glue — wood
15. Street — house

If one desires to be more detailed, he may, as suggested by Dr. L. F. Barker, make his first five words represent customary word compounds, such as the ones given; five may be arranged according to the laws of causality, like, — fish, pond; day, night, etc.; and five according to the similarity of sound, like wound, wonder; die, dynasty.

(2) Visual memory may be tested by a set of twenty-five familiar portraits of which the subject is requested to name five.

The color memory may be tried with any suitably colored objects at hand.

(3) The power of pure recall, unaided by associated, may be tested by showing to the subject for twenty seconds a list of ten nonsense syllables and then asking him to repeat them; i.e., tal, kep, mow, gid, foom, tod, buz, howj, var, smor. This is the best test of impressibility.

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(4) The ability to evoke memories at will is largely a matter of the retentive power of the cells in the areas of general sensation in the cortex where the kinæsthetic and somatic sensations are recorded. We are unable to find a good test but perhaps one will occur to the reader and if so we would be glad to know of it.

(5) Simple reproduction may be tested by having the subject repeat the following: the alphabet, the names of the months, the days of the week, the names of the seasons, the Lord's prayer, Mother Goose rhymes, a familiar bit of poetry.

We have several times observed that a progressive dementia such as occurs in senile and paretic cases can be gauged in its downward course from time to time by the accuracy with which the Lord's prayer can be recalled.

Of course, when perception is deficient, as in imbeciles and dements, there can be only capricious reproduction. It is important to make sure that the test is correctly understood by the subject. If one wants to carry his examination further to test time-retention, the same sets of words may be given and the association asked days or weeks apart, or one may be asked to draw the same figure at similar intervals, as, write from memory a short story, as the one of the cowboy given in the August number.

Clinically, memory tests are of use in deciding the degree of mental deterioration and in cases where it is necessary to re-establish disassociated thought complexes.

MEDICAL SLANG.

"In an article by one of America's most prominent surgeons and medical authors, very recently published in a State journal, we find the passages: "after removal of an acute appendix" and "the unmasking of a chronic appendix in ambush." Of course, the author means by "an acute appendix" "an acutely or chronically inflamed appendix" or "an acute appendicitis." But why carry the inelegant slang of the operating room into the manuscript of a presumably dignified address into the printed page of permanent medical literature?

"An acute appendix" is of a piece with "the patient had no temperature" and with the numerous other instances of slang that are found in the manuscripts of those who ought to know better. They constitute one of the several unnecessary burdens cast upon the careful editor by writers who would feel aggrieved if they were accused of carelessness."—American Journal of Surgery.

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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 MEDICIAL GAZETTE, 80 East Concord Street, Boston. Subscriptions and all communications relating to advertising or other business, should be sent to the Business Manager 22 Columbia Road, Dorchester, Boston, Mass.

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Reports of Societies and Personal Items should be sent in by the 15th of the month previous to the one in which they are to appear. Reprints will be furnished at cost and should be ordered of the Business Manager before the article is published.

THE CRUCIAL TEST.

A fact, as defined by Webster, is anything regarded actually existent whether material or mental, especially something concrete as opposed to truth regarded as abstract. Hence a demonstrable truth must be regarded as a fact. The germ theory of disease was a theory or an abstract truth until the microscope and the laboratory gave it an actual existence by showing the germs and giving their relation to diseased conditions. Then it became a fact. The exact effects of drugs and medicines upon the human system can only be known by a laboratory study of all the tissues of the body, especially the blood and nerve cells. Just so the effects of any disease upon the system can only be known by a like study of the same tissue. The physiological effects of drugs and disease germs upon the human body are merely corroborative of laboratory facts, but standing alone they are not qualified witnesses to prove what are the actual changes in the various cells of the body.

Since the days of Hahnemann we have been studying the physiological effects of drugs upon the human system and we have deduced many interesting truths, but as yet no actual fact showing just how these medicines acted. Behold now the concrete truth begins to loom up as the laboratory testifies to her findings.

So obtrusive and insistent has this testimony become that even the leaders of the dominant school are beginning to give heed to its vibrant note. The latest testimony comes from Dr. W. Warner Watkins (old school), President of the Arizona Medical Association, who in his presidential address before the State society recently took for his subject, "Similia Similibus Curentur." He seeks to show in his address that all the research work of Ehrlich, Wright, Metchnikoff, Sajous, and Adami do but demonstrate the scientific truth of the law of similars.

He said, "Without any knowledge of the action of drugs on cells, without any knowledge of bacteriology, without knowledge of the definite laws of biology, still he could catch glimpses of the

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greatest principle of physiology and suggest its therapeutic application. A high authority has recently written in his "Principles of Medicine" that in the "autoprotective resources of the body and the laws through which drugs influence them" lie our scientific therapeutics, that these resources are developed through adaptation, that active immunity is adaptation, and that, consequently, active immunity is the basis of the therapy of the future. Empiricism will give way to exactness and except for those drugs given for the sole purpose of temporarily combating harmful symptoms, they will be given with the definite intention to augment the tendency of the cells to first adapt themselves to a toxin environment and then to attack the bacteria. This principle of adaptation forms the basis of all the defensive processes of the human organism. Sajous contends that the body has a chain of organs which act as an autoprotective mechanism, and whose functions are to detect the presence of alien substances with the circulating fluid and to initiate processes of defense. This chain of organs exists and operates through the nervous system, as shown by Sajous. It consists of the pituitary gland, the thyroid and the adrenals. Drugs which lend artificial aid to this system of autoprotection, by direct action upon these glands, or indirect action upon the peripheral nerves, are bringing about adaptation, and consequently follow the law of similars. The action of many drugs may be interpreted in this new light. Five grains of quinine oft repeated will kill the malarial parasites in the blood. But a solution of one in 10,000 of quinine is not a very powerful germicidal. It is claimed that quinine acts upon the blood cells and that it causes the white cells to remain within the vessels instead of wandering outside. If this were the only effect, quinine would be equally efficacious against spirochetæ of syphilis as against the plasmodii of malaria. But the administration of quinine causes the phagocytes to attack the plasmodii alone, and with more avidity, and to destroy them, when they did not do this before. So upon the principle of adaptation it may be stated that the absorption of quinine by the phagocytes produces similar molecular changes in them to the changes produced by the ingestion of the parasites or contact with their toxins. The actions of the two substances upon the cell are similar, and curing malaria with quinine is on the principle of similia similibus. Knowing this law, when it shall have been learned *how* it can be called into operation, medical therapeutics will be able to combat directly the causes of diseases, instead of, as now, concerning itself almost exclusively with symptoms or depending upon empirical treatment. In a therapy based upon such principles, drugs will occupy a very much more exalted position than at present. It may be found in the future that, unknowingly, many drugs have been used correctly, but many things will be learned about their actions, which will justify the title of this essay. Knowing the causes of disease, drugs and special biological products will be used together in such a way as to produce definite and accurate

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results—thus realizing the greatest aim of the true physician,. to be always Nature's aid and never her stumbling block."

Dr. Watkins is not the only man in the dominant school who is showing evidence of "seeing things." They are cropping out in every centre, and it is the diligent searchers after truth who are getting the "open vision." But all this means added responsibility to our laboratory workers. We must not let them outstrip us in proving our law a fact, nor must we longer leave it where it has so long remained, an *abstract* truth. It is now "up to" us to make it a *demonstrable* truth.

Valuable as have been our drug proving there is now something more to be done to establish the law of similars upon an unassailable basis. The *place* for doing this is the laboratory., the *time* for doing is now, and the *men* to do it are our own homœopathic laboratory experts.

The establishment of the germ theory of disease was supposed to be the death knell of homœopathy, but instead it strengthened it. The addition of serum therapy and vaccines have but served to demonstrate that in auto-protection lies our great resource for curing disease. Ehrlich has shown that "adaptation" is the key to auto-protection. By adaptation he means a drug or substance which when introduced into the system will enable certain cells to first adapt themselves to pre-existing toxic influences and then as the drug or substance is further introduced to finally destroy the bacteria entirely.

When we can demonstrate in concrete form that a drug which when administered in crude form to a healthy person will so lower the opsonic index as to leave that person susceptible to boils and various suppurative processes and then further demonstrate that the same drug in attenuated form administered to a person suffering from boils and suppurating processes, actually raises the opsonic index to the extent of curing the patient, then we have an ocular, demonstrable, irrefutable proof of the law of similars.

If now we can go one step further,—and we can because it is a logical step,—and show by actual laboratory demonstration that the indicated remedy will when taken internally establish immunity through auto-protection, in other words adaptation, then we have won the long contested struggle.

THE EVANS DEPARTMENT OF CLINICAL RESEARCH.

Purposes and aims in pathology

Ever since the generous provision of Mrs. Evans for a building in which clinical research could be pursued along various lines, the question has been repeatedly asked of all connected, what will be the concrete purposes and aims of the institution? At the present time, when the building thus provided is practically finished, an answer to the query should be made with much exact-

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ness. Accordingly it will be the purpose of this article to detail the plans of the pathological department.

For the proper pursuit of these studies there have been provided large, well equipped laboratories in which most exact investigations can be made, — also wards and private rooms for patients who will receive the benefit of all forms of the most recent and successful treatment for the particular pathological condition with which they may be afflicted.

Let it be emphasized most strongly at this time that the patients coming to the institution are *not* to be the subjects of experiments made without basis or reason. Such is far from the case. During the past five or ten years discoveries of enormous value have been made in therapeutics, the exact limitation of many of which has yet to be made. Still others are now in what might be called the incubation period, and yet others lie before us. By the use of such measures, therefore, where the exact effects can be most carefully observed, it must necessarily follow that not only will our knowledge be much increased but the patients will each benefit accordingly. Certain problems will be taken up for varying intervals and may later be discarded. A citation of some of these may be of interest.

CANCER. In common with many other institutions, one of the first great tasks will be along the line of malignant disease. The work will differ somewhat from that followed elsewhere because, while the cause of carcinoma will be assiduously sought, the greater effort will be directed toward a possible therapeutic agent for its alleviation and cure.

Although it may seem to be a reversal of the natural order to attempt to cure that for which the cause is still unknown, yet one must recall that Pasteur introduced his successful anti-rabic inoculations fully fifteen or twenty years prior to the discovery of the cause of the disease, (even if we at present really do know it).

The writer has during the past three years performed a considerable amount of work in endeavoring to work out some curative method of treatment for these cases and has had under observation and treatment, by a special method devised by him, a quite large number of patients. The procedure has been explained elsewhere and will not be here repeated.

The conclusions are as follows:

It is entirely harmless in every instance in which it has yet been used.

Inoperable or incurable cases can often be made to feel better and the growth of the tumor can apparently be retarded in certain instances.

Operative cases in which treatment is begun immediately after complete operation and especially where the tumor itself can be obtained in a sterile condition will have less danger of recurrence. In other words efforts to establish some artificial im-

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munity to the disease have been apparently successful in an encouraging percentage of the cases already treated.

The procedure from the standpoint of the patient is as follows:

He or she should have the operation at the adjoining hospital (or any other that may be preferred) by whatever surgeon is desired. At this operation one of the Research staff will be present to obtain the uncontaminated tumor mass. The patient can then be taken immediately to a room in the Evans Institute or can be transferred there within a week or so, where the operating surgeon can if desired continue the general care of the case. The treatment will consist of hypodermic injections, at first daily and then gradually less frequent for four to six weeks while in residence. After about that time the patient can leave the institution, returning for treatment once a week (or in some cases this can be administered by the attending physician at home). This later treatment will cover six to twelve months. Decided preference will be given to early and operable cases.

TYPHOID FEVER. The department has devised a method of treating typhoid fever which when used in conjunction with the other approved methods promises to shorten the duration of the disease, decrease the mortality and lower the percentage of relapses.

Suitable cases of this disease will be taken and may be under the supervision of the medical staff of the Hospital or (at the discretion of the Director) may receive the attendance of their personal physicians in addition to that of the Research staff of the institution.

It is earnestly hoped that many such cases may be received as the method of treatment is becoming widely accepted. Prophylactic immunization against typhoid will also be performed. For this no residence in the institution is necessary.

SCARLET FEVER. A means of inducing prophylactic immunity to this disease has been devised that promises much. For this no residence will be necessary. No active cases of the disease will be admitted, all such being referred to the Haynes Memorial (Contagious Department of the Hospital).

ERYSIPELAS. Modern therapeutics has brought forth a very efficient method of treating erysipelas, and one that it is desired to test more thoroughly.

PUERPERAL SEPSIS. Very encouraging results have been obtained in this disease by the careful use of vaccines, and a more thorough study is desirable.

TUBERCULOSIS. VARIOUS LOCALIZED INFECTIOUS PROCESSES. Careful studies will be made as opportunity offers of the efficiency of vaccines, of staphylococcus, streptococcus, pneumococcus, gonococcus, bacillus tuberculosis, bacillus coli communis, etc., in such various conditions as furunculosis, carbuncle, abscess, septic wound, sinus, fistula, bronchitis, pneumonia, peritonitis, pyelitis, cystitis, arthritis, and tuberculosis lesions in various locations.

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From time to time other questions will doubtless come up and the purpose will be to determine as far as possible the exact therapeutic value of each. The results of these studies will be fully reported from time to time in appropriate periodicals, and the attempt will be made to bring the institution to be considered a centre for all the legitimate newest methods in medicine. In their pursuit of such an ambition the staff earnestly requests the considerate co-operation of the medical profession. In return its members will exert themselves to their utmost to prove deserving of such co-operation by faithful work and careful investigation.

SOCIETIES.

Massachusetts Homœopathic Medical Society.

The semi-annual meeting of this Society was held in Lowell on October 11. This we believe is the first time that Lowell has entertained the Society, but judging from the warm reception and the universal words of praise at the success of the meeting, we think that it will not be the last time. Thanks to Dr. Martin and his efficient co-workers the meeting was most successful in every way. There was a large attendance at all sessions, and the papers presented were discussed in an unusually animated manner. At the dinner over 125 members participated. All united in their praise of the meeting and the success of the scientific work.

Three new members were elected, as follows: Harold L. Babcock, M.D., Dedham; Alfred P. Thompson, M.D., Wollaston, and John E. Willis, M.D., Worcester.

A resolution endorsing the attitude of Dr. Harvey Wiley in his stand for pure food was unanimously passed. It was as follows:

Resolved:—

That the Massachusetts Homœopathic Medical Society endorses the course taken by Dr. Harvey Wiley in his efforts to give the people the benefit of the pure food law as enacted by Congress, and a copy of this resolution be sent to him or his secretary.

The semi-annual meeting of the Maryland State Homœopathic Medical Society was held on Wednesday and Thursday evenings, October 25 and 26, with the President Dr. H. H. Stansbury, in the chair. The programme consisted of the following papers:

Wednesday evening. "Thoughts on Bryonia," Dr. G. T. Shower; "Observations on Hay Fever," Dr. R. W. Mifflin; "A Comparison of the Materia Medica of the Two Predominating Schools," Dr. W. F. Skillman; "Remedies used in Gynæcology," Dr. Jos. S. Garrison; "Should we Prescribe for Symptoms?" Dr. John A. Evans; "Homœopathic Remedies in the Treatment of Sore Throat," Dr. Ira L. Fetterhoff; Discussion by Dr. Geo. L. Ewalt; "Treatment of Acute Coryza," Dr Arthur J. Davies; Discussion by Dr. Wm. Dulaney Thomas.

Thursday evening. "What Maryland is Doing in its Fight Against Tuberculosis," Dr. F. H. Heisse; "Some Clinical Observations on the Use of Cactus Cretagus, and the Iodide of Arsenic in the Treatment of Diseases of the Heart," Dr. G. Harlan Wells; "Organization," Dr. Ralph Bernstein; "Some Special Features of Prophylaxis and Treatment in Typhoid Fever," by Dr. H. M. Stevenson.

This was followed by a round table gathering at the Emerson. The Medical Society of Maryland is in a state of rejuvenation, the members of the profession in Maryand gradually getting together into a state of harmony and accord, there being quite an enthusiastic number present at the meeting—some forty in all—which is quite a good representative gathering of the homœopathic physicians of Baltimore and surrounding country.

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The Homœopathic Medical Society of the State of New York held its forty-fifth semi-annual session and banquet at the Hotel Savoy, New York City, on October 12, 13 and 14. The Society has been in existence for fifty years. The annual banquet marked the end of the business sessions of the meeting, while on Friday and Saturday there were medical and surgical clinics held at the Flower, Hahnemann, Metropolitan, New York Hospital for Women, Laura Franklin for Children, New York Opthalmic Hospital, and the Volunteer Hospital. There were about 200 guests at the dinner, among them being 88 women. Dr. J. E. Wilson, President of the New York County Society, was toastmaster.

The Homœopathic Medical Society of New Castle County of the State of Delaware held its annual meeting at Newark, Del., Dr. Walter H. Steele reading a paper on "Insomnia," and who at the same time acted as host. The Wilmington members journeyed to Newark in automobiles.

The Northwestern Homœopathic Medical Society of Rockford, Illinois, held its semi-annual meeting in the Nelson House. The meeting was opened by the address of the president, C. A. Walker, M.D. The meeting was well attended and addressed by Dr. Arndt.

This was known as "An Organization on Meeting of the Northwestern Society," and it argues well to hear of the numerous organization meetings which are taking place throughout the United States among the Homœopathic Societies, certainly showing a renewed spirit of activity and enthusiasm for the cause of Homœopathy.

PENNSYLVANIA NEWS ITEMS.

Pittsburg Institute Meeting..

Things are beginning to shape themselves for the coming meeting of the American Institute of Homœopathy at Pittsburgh during the third week of June of next year. Dr. T. H. Carmichael, the President of the Institute, has called a meeting of the Board of Trustees for December 2 at Cleveland, at which time the details of organization and plans for the coming convention will be perfected. Much enthusiasm reigns among homœopathic practitioners throughout the State of Pennsylvania, there being in all some 1400, at least 700 of whom endorse their State Medical Society, and many of whom it is expected who have not as yet done it will do so at its coming meeting. Sure it is that at the recent meeting of the State Medical Society held at Bedford Springs much favorable comment was made regarding the coming meeting of the Institute; in fact, a set of resolutions were passed endorsing the coming meeting and assuring the President of the National Society the hearty and cordial support of the homœopathic physicians of the State of Pennsylvania. Resolutions were passed instructing the various presidents of the local and County societies throughout the State of Pennsylvania to lend their hearty and cordial support and assistance to make the coming Institute meeting the best in its history.This is a splendid opportunity for Pennsylvania to show her loyalty and devotion to the cause of Homœopathy, and it is not expected that she will be lacking when the time comes to show that she does have the proper spirit of loyalty and devotion to a cause in which her loyalty has never been questioned. Pennsylvania has always been called the "Keystone State of Homœopathy," having the largest and best organized State homœopathic medical society in the Union, and which has fought and won many battles when the rights of Homœopathy have been questioned. Surely she can be looked to at this time to carry the banner and lead the procession on to Pittsburgh in June, 1912. Dr. Carmichael is busy in perfecting details for the coming meeting and is appointing many of the sub-committees to look after the details of the work; while it is understood that Dr. McClelland and the Allegheny County Society are enthusiastic in their preparations. The following Pennsylvanians have been given committee appointments: Organization, Registration and Statistics,—Oliver S. Haines, M.D., Philadelphia;

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Hahnemann Monument,—J. H. McClelland, M.D., Pittsburgh, Chairman; Press,—G. Harlan Wells, M.D., Philadelphia; Dermatology,—Ralph Bernstein, M.D., Philadelphia; Commitee to Confer with National Educational Association,—Augustus Korndoerfer, M.D., Philadelphia; Special Committee. for Women Members,—Mary A. Cook, M.D., Philadelphia, Ella D. Goff, M.D., Pittsburgh, and Emma T. Schreiner, M.D., Philadelphia; Interstate Committee,—D. C. Kline, M.D., Reading, and Augustus Korndoerfer, M.D., Philadelphia; Genito-Urinary Diseases, L. T. Ashcroft, M.D., Philadelphia. Surely Dr. W. Alvah Stewart of Pittsburgh, president of the Pennsylvania Homœopathic State Medical Society, and its president-elect, Dr. G. J. Palen, of Philadelphia, can be depended upon to put their shoulders to the wheels to make the coming meeting the best ever as far as Pennsylvania is concerned.

HAHNEMANN MEDICAL COLLEGE AND HOSPITAL.

The week of November 6 to 13 was indeed a busy one about Hahnemann College and Hospital because of the second annual meeting of the Clinical Congress of North America which was held in Phildelphia during this time. Fully 500 physicians of varying degrees of prominence from all parts of the United States and Canada were in attendance at the many surgical clinics held in the various hospitals in Philadelphia. Hahnemann Hospital and College more than had its share of surgical clinics, which were in charge of Dr. W. B. Van Lennep, Professor of Surgery and Dean of the College. Other surgical clinics were held by Dr. H. L. Northrop, Dr. D. Bushrod James, Dr. H. P. Leopold, Dr. W. W. Speakman, Dr. G. J. Palen, Dr. I. G. Shallcross, Dr. S. W. Sappington, Dr. Gustave Van Lennep, Dr. J. D. Elliott, and others. Surgical clinics were also held at the West Philadelphia General Homœopathic Hospital, the Children's Homœopathic Hospital and St. Luke's Homœopathic Hospital. The work of the convention was divided into two distinct parts. Each day there were held what were known as literary meetings. Following these were clinics held at the various hospitals and medical schools. These clinics included general surgery and its allied subjects such as gynæcology, orthopedics, eye, ear, nose and throat, obstetrics, and special demonstrations in rapid rœntgenology, vaccine therapy, surgical pathology, stereoradiography, cystoscopy, bronchoscopy and esophagoscopy. Philadelphia was the unanimous choice of the members of the Congress as the place for the second annual convention, as the center of medical education throughout the United States and Canada; easily ranking foremost in medical schools and hospitals for general and special work in surgery and medicine. Hahnemann College takes its place among the leaders, being the oldest homœomedical college in the world. RALPH BERNSTEIN.

The Philadelphia County Homœopathic Medical Society held its regular monthly meeting at Hahnemann Medical College on Thursday evening, October 12. "A study of the effect of Millifolium on coagulability and blood pressure," by Dr. John G. Wurtz, was the first paper on the programme, and was the first official report presented to the Society by the Hering Laboratory. An interesting feature of the evening was that instituted by the President, Dr. Harry Weaver, for this year's session, being papers on therapeutic hints, the first of which was by Dr. Weston D. Bayley on "Argentum Nitricum in Chronic Diarrhœa," Dr. E. M. Howard on "Some Cures by Rhus. Tox.," and Dr. O. S. Haines on "Materia Medica Notes." The meeting was one of the most enthusiastic and best attended of the year.

WM. M. SYVIS, M.D., Sec'y.

The Germantown Homœopathic Medical Society of Philadelphia held its regular monthly meeting at the Union League on Monday evening, October 16, the President, Dr. James, in the chair. The paper of the evening was presented by Dr. Ralph Bernstein, of Philadelphia, entitled: "Does the Topical Application of Drugs to Diseases of the Skin Interfere with the Action of the Potentized Remedies?" The attendance was unusually good and hearty discussion entered into. LANDRETH W. THOMPSON, M.D., Sec'y.

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The Clinico-Pathologic Society of Philadelphia held its regular monthly meeting on Saturday evening, October 21, at Hahnemann Medical College. Three clinical cases were reported: No. 1,—Report of a Case of Peritonitis, by N. F. Lane, M.D.; No. 2,—Abnormalities of the Thyroid, by D. Roman, M. D.; No. 3,—The Importance of Gastric Analysis in its Present Status, by H. M. Eberhard, M.D. The following were proposed for membership: Dr. Richard W. Larer and Dr. Walter Cheesman, both of Philadelphia.

BENJ. K. FLETCHER, M. D., Sec'y.

The Twenty-third Ward Homœopathic Medical Society of Philadelphia held its thirtieth anniversary and outing at the Hotel Dennis, Atlantic City, on Wednesday, October 18. Quite a number of members of the Society were present in spite of the unfavorable weather, and all voted the meeting more than pleasant and successful.

J. D. BOILEAU, M.D., Sec'y.

The Philadelphia Society for Clinical Research held its regular monthly meeting on Wednesday, October 18, at the residence of Dr. John F. Rowland, Philadelphia. The programme of the evening consisted of papers by Drs. Walter J. Snyder, W. C. Chesman and Dr. Rowland. This meeting was also the occasion of the annual election of officers.

JOHN F. ROWLAND, M.D., Sec'y.

The Tri-County Homœopathic Medical Society of Chester, Delaware and Montgomery Counties held its fifty-third annual meeting at the Turk's Head Hotel at West Chester on Tuesday, October 10, the annual dinner and banquet being served at two o'clock. The papers presented before the Society were as follows: "Adenoids and Tonsillitis," Geo. W. MacKenzie, M.D.; "The Homœopathic Treatment of Bright's Disease," Walter M. James, M. D.; "Tumors of the Stomach," H. L. Northrop, M.D., all of Philadelphia. The President, Dr Charles R Palmer, was in the chair. The meeting was quite well attended, and hearty discussion entered into.

ISAAC CROWTHER, M.D., Sec'y.

The Women's Homœopathic Medical Association of Pittsburg held its regular monthly meeting at the office of Dr. Anna Johnston, No. 5026 Liberty Place, Pittsburgh, on November 2. The paper of the evening was presented by Dr. Johnston on "Mesmerism and Animal Magnetism." The guest of honor was Dr. Jane Nye Guilliford, of Pomeroy, Ohio.

MARY E. COFFIN, M.D., Sec'y.

Women's Southern Homœopathic Hospital, Philadelphia. The corner-stone of the new hospital for the Women's Southern Homœopathic Hospital was laid October 28, their new building in course of construction being located at the southeast corner of Broad and Fitzwater Streets. Dr. Mary Branson, President of the Board of Directors, presided. The speakers were the Rev. Floyd W. Tomkins, D.D., Dr. H. L. Northrop, Rev. F. F. Farr, D.D., and Mr. H. K. Fries. There was music and singing by the children of the community in costume. The officers of the Hospital are: Dr. Mary Branson, President; Dr. Amelia L. Hess, Vice-President; Dr. Lydia Webster Stokes, Assistant Treasurer.

The Germantown Homœopathic Medical Society announce the sudden death of their fellow-member Dr. Charles B. Wurtz. The society will regretfully miss his genial greeting; particularly his younger friends in the profession will miss his many unobtrusive helpful hints; and the whole field of his extensive professional career will feel the loss of his services.

WALTER M. JAMES, M.D., Pres.,
LANDRETH W. THOMPSON, M.D., Sec'y.

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The death and funeral are announced of Dr. William H. Malin. Dr. Malin was one of the founders of the Germantown Homœopathic Medical Society and until quite recently attended all the meetings he could, even in spite of physical discomfort. His kindly interest in the affairs of the general profession will be greatly missed.

WALTER M. JAMES, M.D., Pres.,
LANDRETH W. THOMPSON, M.D., Sec'y.

Dr. G. Harlan Wells and Dr. Ralph Bernstein, of Philadelphia, were guests of honor at the recent meeting of the Maryland State Homœopathic Medical Society held in the city of Baltimore on October 25 and 26. Dr. Wells addressed the Society on "Some Clinical Observations on the Use of Cactus Cretægus and the Iodide of Arsenic in the Treatment of Diseases of the Heart." Dr. Bernstein gave an address on "Organization," from the standpoint of homœopathic medical societies, as a representative from the Board of Trustees of the Homœopathic Medical Society of the State of Pennsylvania.

Dr. Samuel Sappington, of Hahnemann Medical College of Philadelphia, reported an unusual case of paratyphoid fever before the Clinico-Pathologic Society, in which the symptomatology was identical with that of typhoid fever.

Dr. Ellen Woodward Howell, of Philadelphia, delivered an address before the members of the Graduating Class of the Women's Southern Homœopathic Hospital.

Dr. Chauncey V. B. Vedder has accepted the position of chief resident at the West Philadelphia General Homœopathic Hospital. Dr. Vedder is a recent graduate of Hahnemann Medical College of Philadelphia, and formerly of the Buffalo Homœopathic Hospital.

Dr. J. M. Heimbach, of Kane, Pa., has been spending several weeks in post-graduate work at the Hahnemann Medical College of Philadelphia.

Dr. W. A. Dewey, of Ann Arbor, Mich., was a recent visitor to Philadelphia.

Dr. T. H. Carmichael, of Philadelphia, President of the American Institute of Homœopathy, was a guest of honor at the annual banquet of the Homœopathic Medical Society of the State of New York at its forty-fifth annual meeting held at the Hotel Savoy, New York City.

Dr. Richard Haehl, the well-known Hahnemann historian, recently extended an invitation to the members of the Seventy-ninth German Homœopathic Congress, held at Stuttgart in Wurtemburg, to inspect his relics of Hahnemann, a most comprehensive and precious collection of first edition letters, pictures, and seal rings, cameos, original medicine cases, busts, and many other remembrances of the great man, Samuel Hahnemann. The invitation was eagerly accepted, and quite a number of physicians present at the Congress took advantage of this opportunity. Surely homœopaths travelling abroad should not miss the opportunity to pay a visit to Dr. Haehl at Stuttgart and inspect his interesting museum. Dr. Haehl extends a hearty welcome to all homœopaths to visit him when abroad.

Drs. E. C. Blackburn and W. H. Follmer, of Williamsport, were recent visitors to Philadelphia.

Dr. Percy Craig has opened his office for the practice of general medicine on Broad Street in Chester, Pa.

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The Hahnemannian Medical Society of Reading which flourished a number of years ago was again called into being in response to a call issued to the homœopathic physicians of the city of Reading and suburbs on October 6. The following officers were chosen: President, Dr Charles R. Haman; Vice-President, Dr. Chester B. Jennings; Secretary and Treasurer, Dr. F. H. Lawrence. The following enrolled as members: Drs. Charles R. Haman, Frank H. Lawrence, Paul H. Gerhardt, William F Marks, Clifford D. Harvey, Theodore Pachali, Samuel L. Dreibelbis, Leon S. Dreibelbis, George R. Curry, Archibald S. McDowell, Wm. A. Haman, George I. Keen, and Lewis A. Schollenberger, all of Reading, Pa., and Dr. Francis W. Sunanday, of Hyde Park, Pa.

BOOK REVIEWS.

THE MONTH'S BEST BOOKS.

Tropical Medicine. Daniels. $4.00. P. Blakiston's Son & Co.

Psychiatry. Fursac & Rosanoff. John Wiley & Sons.

Regional Diagnosis in Affections of the Brain and Spinal Cord. Bing. $2.50. Rebman & Co.

Principles of Anatomy. Morton. $12.00. Rebman & Co.

Diseases of the Lungs. Powell. $6.00. P. Blakiston's Son & Co.

Diseases of the Stomach. Aaron. Lea & Febiger.

Practice of Medicine. Anders. $5.50. W. B. Saunders Co.

Practice of Medicine. Stevens. $2.50. W. B. Saunders Co.

A System of Medicine. Allbutt. Vol. 8, $6.00. Macmillan Co.

Medical Chemistry and Toxicology. Holland. $3.00. W. B. Saunders Co.

The Practitioner's Visiting List, 1912. $1.25. Lea & Febiger.

A Text-Book of Pathology. With a Final Section on Post-Mortem Examinations and the Methods of Preserving and Examining Diseased Tissues. By Francis Delafield, M.D., LL.D., Emeritus Professor of the Practice of Medicine, College of Physicians and Surgeons, Columbia University, New York, and T. Mitchell Prudden, M.D., LL.D. Emeritus Professor of Pathology, College of Physicians and Surgeons, Columbia University, New York. Ninth Edition. With thirteen full-page plates and six hundred and eighty-seven illustrations in the text, in black and colors. Price $5.50 net. William Wood & Company, 51 Fifth Ave., New York. 1911.

Whether the great reputation of these authors has done much to forward the popularity of this book or the genuine worth of the work in its previous editions has been the cause of this reputation may be debatable, but the truth of either statement is beyond discussion. Standing in the forefront of the somewhat older generation of pathologists, the book that they have written has for years held a similar position in pathological literature. The previous editions have been uniformly progressive in every line, and the present one is of equal standing. It is noted that in the classification of tumors, Adami's very complex but at the same time most satisfactory arrangement is not even mentioned. The section covering possible etiologic phases of tumors is very full. Infectious diseases are treated to an extent unusual in works upon general pathology. The third section of the book treats of post-mortem examinations and methods of preserving tissues. Numerous illustrations are uniformly excellent. A very complete index helps much to render the various contained facts readily accessible.

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Clinical Diagnosis. A Text-Book of Clinical Microscopy and Clinical Chemistry for Medical Students, Laboratory Workers, and Practitioners of Medicine. By Charles Phillips Emerson, A.B., M.D. Late Resident Physician, the Johns Hopkins Hospital; and Associate in Medicine, the Johns Hopkins University; Professor of Medicine, Indiana University School of Medicine. Third Edition. J. B. Lippincott Company. Philadelphia and London. 1911.

To many of our readers this book is already familiar in its earlier editions. To such it requires no description or recommendation. To others, however, such is necessary, and to the friends already made some notes concerning the alterations seems advisable.

The author states that he has modelled his book after the course of laboratory sessions which he has given and that practically all the points are those that were thus advanced. The sputum, the urine, the contents of the alimentary tract, the blood and other miscellaneous subjects are taken up in detail and with much clearness. It is gratifying to note that when exact determinations are of not more value than approximate ones, the latter are given preference. As would be expected the technic of the Wasserman reaction and of its later modification by Noguchi is well portrayed.

Of particular value are those sections appended to every chapter upon the clinical interpretation of the various results which may be obtained. The reviewer believes that at the present time this is the most satisfactory and "up-to-date" book in the English language, covering both the laboratory methods of technic and the proper interpretation of the same from the standpoint of actual value to the patient.

The Practitioner's Visiting List, 1912. Records of Practice for thirty patients per week. Lea & Febiger, Philadelphia and New York.

The 1912 edition of this very practical little account book, that has received annual attention in the pages of the *Gazette* for a number of years past, has just appeared. It is a very convenient pocket account book, that also contains an abundance of information along medical lines that will frequently be of great value in emergencies.

OPEN LETTER FROM DR. WILCOX.

Dr. ————.

My dear Doctor:—

Your letter of the first has remained unanswered in order that I might have ample time to consider your request and also to inform myself as thoroughly as possible concerning the "League of Medical Freedom." I read Dr. Flower's article when it first appeared in the "Twentieth Century" of June, 1910, and I have read much that he has written since. I have read pretty much everything Collier's has had to say about the League and which the Journal of the American Medical Association has said, and as a climax read every word of Senator Works' long speech before Congress on the Owen bill. Hence you cannot accuse me of not attempting to inform myself whereof I speak.

My conclusion is that the more I learn of the "League of Medical Freedom" the less use I have for it and the deeper is my Conviction that it is at bottom a thousand times more selfish and self-seeking than the American Medical Association ever dreamed of being. I believe that the instigators and framers of the League care infinitely less for the welfare of the dear public and its physical protection than any body or set of men who ever banded themselves together. I am of the opinion that the League was conceived in selfishness and born for that single purpose. It goes without saying that there are many excellent men like yourself who are members of the League, but all such have been drawn into its meshes by the sophistries and false pretenses put forth to catch the unwary. They need you good people for just one purpose, namely, to get their chestnuts out of the fire, which chestnuts, patent medicines, impure foods, drugs, fake methods of medical practice, and other money-making humbugs are in danger of being destroyed.

If the Owen bill threatened one-tenth the danger to the public welfare which the real animus of the originators of the League threatened then I would say fight the bill to the finish. Just consider for a moment, my dear

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Doctor, what the League stands for as presented in Senator Works' speech. It seeks to annul or belittle all the great discoveries made in medicine during the last fifty years. It practically wipes out the germ theory of disease. It would abolish all Public Health Boards. It would not insist upon quarantine of infectious diseases. It would terminate at once all public school medical inspection. It would prohibit compulsory vaccination. It scoffs at typhoid protection in the army. It would only too gladly wipe out all restrictions on pure food, drugs, and medicines. It would annihilate vivisection in toto. To be sure, Senator Works does not say all this in as many words, but it is there and easily read between the lines.

I fail to see how any self-respecting physician can endorse that speech when the speaker heaps upon the physician that invidious opprobrium of advocating public school inspection for the sole purpose of so frightening the parents of the school children that those parents will rush madly to the doctors to have the children cured of disease which, according to Senator Works, they probably do not have, and thus line the doctors' pockets with ill-gotten gains. Will any honest physician take that insult quietly? Yet he places the entire profession in just that sinister light.

Is there a public school teacher in the land who has watched the effect of medical inspection in the schools who will not endorse it most enthusiastically because of the good it renders the afflicted children? It seems to me, Doctor, if we of the homœopathic school are so afraid that the dominant school will legislate us out of existence that we must call to our aid the medical quacks, the Christian Scientists, the poison food squad, and all the other medical sore-heads, then I must say that it is better that we die a respectable death and have a decent burial. For my part I would rather be licked fighting honorably with honest comrades than win by the aid of the Hessians. This "Medical Freedom League" is not *our* fight, it is the sore-heads' fight. We belong to an honorable, self-respecting branch of the medical profession which has never thus far sullied its plumage by resorting to questionable methods of warfare. We have won our way into the hearts of the people, and gained the respect of the dominant school by our endeavors to do honest, scientific, progressive work.

"All that pertains to the great field of medical learning is ours by tradition, by inheritance, by right." Are we going to repudiate that splendid record and stultify ourselves by joining forces with the deadly enemy of medical progress simply because a few in our ranks are seized with an attack of hysteria and yell, "We shall be legislated out of existence?"

If there is not enough truth in Homœopathy and stuff enough in her followers to stand such legislation as proposed in the Owen bill, then she deserves just such an ignominious death. But she will not die that way. There is a fundamental truth in this old law of Hahnemann which you can not choke, hang, stick, strangle, electrocute, or kick to death, and when all those measuures have been unsuccessfully tried it will, like the cat, come home again very much alive. Some day our dear brothers of the dominant school will set to work and prove the truth of that law by laboratory tests (and the shame will be upon us if we do not do it first). Then will that old battered but much alive truth be set upon a pinnacle of perpetual peace.

The fact is we need a National Bureau of Public Health just as much as we need State Boards of Health. It may not be in just the form outlined in the Owen bill, but such a department is necessary to the physical welfare of the American people and being such it will be created. It is simply in the line of progress, and when an individual or a body of individuals throw themselves in the pathway of the Chariot of Progress they are likely to be rendered broader and longer, but being very much flattened they are not altogether useful.

No, Doctor, you are unwittingly in bad company, and much as I think of you, I would not join that same company to save your——well, to save that stunning Norfolk suit I saw you wearing this summer.

Yours most sincerely,

DeWitt G. Wilcox.

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PERSONAL AND GENERAL ITEMS.

Dr. Harold L. Babcock, class of 1910, B.U.S.M., has opened an office in the Charlesgate, 535 Beacon St., Boston, where he will specialize in diseases of the ear.

Dr. Carl A. Williams has removed from New London, Conn., to 61 Passaic Ave., Passaic, N. J.

Dr. John A. Hayward, B. U. S. M., 1906, has removed from Bangor to Waterville, Maine.

FOR RENT.—A physician having a three-room office suite in Warren Chambers, 419 Boylston St., Boston, will sub-let for forenoon or evening hours. Address "Warren Chambers," care of New England Medical Gazette, 422 Columbia Road, Dorchester, Mass.

Dr. H. T. Karsenar, recently a member of the staff of the University of Pennsylvania has been appointed Assistant Professor of Experimental Pathology at Harvard Medical School.

Dr. George Frederick Jelly died in Wakefield, Mass., on October 24, 1911. Dr. Jelly was born in 1842; graduated from Brown University, and from the Harvard Medical School. He has been closely associated with neurological work for the past forty years, having held many positions of prominence in various medical societies. He was perhaps the best known expert in mental diseases in Boston, and particularly in his court work was he highly esteemed as a frank and fearless witness.

Dr. W. Kernig, the well-known Russian physician, has retired from service in the Obuchow Hospital for Women at St. Petersburg, after forty-seven years of activity. He will doubtless be best known in medical science for his sign of meningitis.

The will of the late Mrs. Sarah P. Sears of Waltham provides a bequest of $10,000 to the Waltham Hospital.

The Boston Dispensary receives $100,000 and the Boston Lying-In Hospital $125,000, under the will of the late Dr. Charles G. Weld of Newport, R. I.

Early in October the Medical School of New York University paid the last $20,000 of its mortgage of $175,000 which has been carried for a long time. The payment was made possible by a bequest from John J. Kennedy.

The sixty-ninth anniversary of Ether Day was held at the Massachusetts General Hospital, on October 16. The speaker was Dr. Simon Flexner of New York City.

Mrs. E. H. Harriman has provided a fund for the Roosevelt Hospital, New York, the income from which will be used for a research laboratory at that institution.

Jefferson Medical College has formally received the new building for the new institute of anatomy, made possible by a gift from Mr. Daniel Baugh. This will be known as the Baugh Institute of Anatomy, the director of which will be Dr. Edward A. Spitzka, the well-known anatomist.

The use of saccharine has been forbidden by the New York Board of Health. This action is in accordance with a decision of the Department of Agriculture which forbids the use commercially of saccharine in the District of Columbia after January first next.

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ST. LUKE'S HOSPITAL.

On October 19 the Out-Patient Department of St. Luke's Hospital was transferred to a new pavilion which has just been completed. This building was provided for by a legacy of $200,000 from the late Mrs. John G. Heckscher, and will be called the Travers' Pavilion in memory of her parents. Its two lower floors will be used for dispensary purposes, the two upper for open-air treatment patients, and the intervening ones for dormitories.

It will be surprising to many to learn that this hospital, which is now one of the best equipped in the city, was started by the gift of one dollar made by a sick girl to the rector of the Church of the Holy Communion. This girl asked that the money be used to build a hospital, and the story of her interest went abroad and has brought in several millions.

NEW HAMPSHIRE STATE BOARD RESULTS.

The results of the July examinations in New Hampshire should certainly be very gratifying to those who are interested in Boston University. At that time two students appeared for examination from the University. These two received the highest marks given to any of the candidates, one 87 per cent. the other 84 per cent. The next highest mark received by and other candidate was 83 per cent.

ANNUAL REPORT OF THE BOSTON CITY HOSPITAL.

The forty-seventh annual report of this institution has recently appeared. It shows that during the year 10,365 patients were treated in the hospital proper, 3,250 in the South Department, 38,695 at the Haymarket Square Relief station, and 14,483 at the East Boston Relief station. In the Out-Patient Department there were 40,032. In the report particular emphasis is given to the large amount of routine and research work performed in the Pathological Department.

A PROPOSED GARBAGE PLANT ON LONG ISLAND.

According to the Boston Medical and Surgical Journal, a rumor is circulated to the effect that the city of Boston will use one end of Long Island for a city garbage plant. As the remainder of the Island is already devoted to the almshouse and its hospital, and to Government barracks, the proposition seems unwise, particularly so when one considers that there is a tuberculosis department in connection with the institution, also that the great number of inhabitants are aged and infirm. It is certainly hoped that the rumor is not well founded.

THE POOR BABY IN THE WINTER TIME.

"Imagine the great army of babies seen during the summer time to crowd up every available space; the sidewalk, thoroughfares, roofs, cars, parks, beaches, etc., at all hours from early morning until late at night; then ask yourself where are all these tiny ones in the winter time. Are they to be seen on the sidewalks, thoroughfares, beaches, etc.? Oh, no, they are almost like the summer clothes of a tenement-dweller stored away in a room for the winter, not to see the outside until the next warm season arrives. This their "wise" mothers do to prevent them from catching cold. Think of a baby put away to pass its days in the warmest part of the house, the kitchen, where there are half a dozen other children playing around and creating lots of dust; where an industrious mother sweeps the room, dusts off the mantel piece, removes the ashes from the stove, builds up a fire, and smoke escapes into the room, closes the chimney valve for economy's sake, and coal gas accumulates in the room, fries some potatoes, meat, or the milk scorches and fills the room with a choking suffocation; where the husband, boarders or visitors smoke cigarettes or pipe; and its nights in a bedroom having no window at all, or a shaft-window which is never opened and even many times something pasted around its framework to prevent the least escape of warmth and the ingress of cold air through any possible crevice, etc."—The Dietetic and Hygienic Gazette.

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Vol. XLVI No. 12

"Die Milde Macht ist Gross"

The New England Medical Gazette

A JOURNAL OF HOMŒOPATHY ITS ALLIED SCIENCES AND INSTITUTIONS

Editors:

JOHN P. SUTHERLAND, M.D. W. H. WATTERS, M.D.

ARTHUR H. RING, M.D.

DECEMBER, 1911

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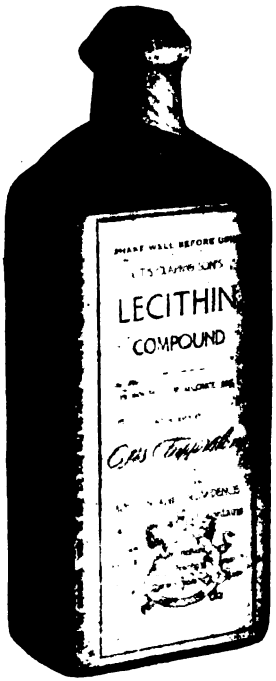
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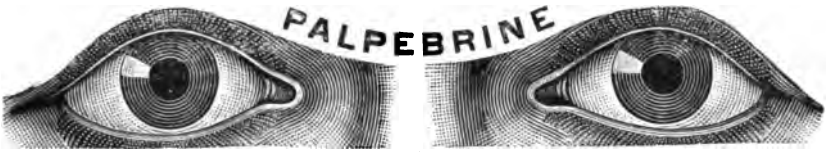
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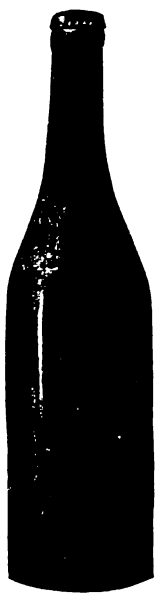
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LIST OF HOMŒOPATHIC MEDICAL SOCIETIES

American Institute of Homœopathy: Organized 1844. President, Gaius J. Jones, M.D., Cleveland, Ohio; Secretary, J. Richey Horner, M.D., Cleveland, O. Next annual meeting Pittsburg, Pa., last week in June, 1912.

International Hahnemannian Association Organized 1880. President, John Hutchinson, M.D., New York City; Secretary, J. B. S. King, M.D., Chicago, Ill. Next annual meeting to be held in Boston, June, 1912.

Maine Homœopathic Medical Society: Organized 1866. President, John T. Palmer, M.D., Portland; Secretary, L. A. Brown, M.D., Portland. Next annual meeting,

New Hampshire Homœopathic Medical Society: Organized 1852. President, W. E. C. Nobles, M.D., Littleton: Secretary, Chas. A. Sturtevant, M.D., Manchester. Meetings in June annually.

Vermont Homœopathic Medical Society: Organized 1854. President, F. Hamilton, M.D., Brattleboro; Secretary, George I. Forbes, M.D., Burlington. Meetings annually second Wednesday in May; semi-annual, October.

Massachusetts Homœopathic Medical Society: Organized 1840. President, Frank W. Patch, M.D., Framingham; Secretary, Edw. S. Calderwood, M.D., 244 Warren Street, Roxbury. Next meeting, second Wednesday in April, 1912.

Rhode Island Homœopathic Society: Organized 1850. President, Arthur H. Wood, M.D., 475 Elmwood Avenue, Providence; Vice-President, Robert S. Phillips, M.D., 194 Angell Street, Providence; Treasurer, Wm. M. Muncy, M.D., 23 Waterman Street, Providence; Secretary, Ralph W. Hayman, M.D., 672 Broad Street, Providence. Quarterly Meetings, second Friday of January (annual), April, July, October.

Connecticut Homœopathic Medical Society: Organized 1851. President, Samuel Worcester, M.D., South Norwalk; Secretary, Royal E. S. Hayes, M.D., Waterbury. Next meeting

Massachusetts Surgical and Gynæcological Society: Organized 1877. President, Clarence Crane, M.D., Boston; Secretary, Harry J. Lee, M.D., 535 Beacon Street, Boston. Next meeting at Pilgrim Hall, 14 Beacon Street, Boston, ————. Regular meetings on second Wednesday in December and June.

Boston Homœopathic Medical Society: Organized 1873. President, Samuel H. Spalding, M.D., Hingham; Secretary, William A. Ham, M.D., Dorchester. Meetings, first Thursday in each month, October to June inclusive, at the hall of the Boston Society of Natural History, Berkeely Street.

Worcester County Homœopathic Society: Organized 1866. Secretary, Lucy E. Weatherbee, M.D., 2 King Street, Worcester. Quarterly meetings held second Wednesday in February, May, August and November.

Homœopathic Medical Society of Western Massachusetts: Organized 1877. Annual meeting is held at Springfield third Wednesday in March; quarterly meetings held third Wednesdays of June, September and December. President, Thomas J. Putnam, M.D., Springfield; Secretary, Erdix T. Smith, M.D., Springfield.

Essex County Homœopathic Medical Society: Organized 1871. President, Richard S. True, M.D., Marblehead; Secretary, Frederick A. Webster, M.D., Beverly. The annual meeting is held at the Essex House, Salem, on the last Wednesday of January. Monthly meetings are held in the same place on the last Wednesday of each month.

New England Hahnemannian Association: Annual meeting, second Monday in January at Boston. President, Edward P. Whitman; Secretary, Wesley T. Lee, M.D., 281 Broadway, Somerville.

Alumni Association of Boston University School of Medicine: President, E. E. Allen, M.D., Charlestown; Secretary, F. R. Sedgley, M.D., West Roxbury. Annual meeting, the Tuesday before Commencement Day.

[Should there be any errors in the above list or should changes occur, the secretaries of the various societies are requested to notify editors of *Gazette*.]

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NOTES AND COMMENTS

THERE AIN'T NO MIDDLE ONE.

The Saturday Evening Post relates that in his early practice Dr. D. B. St. John Roosa, the eminent New York specialist, one day received a letter from a man living in a remote part of Connecticut. The writer explained that he was afflicted with growing deafness, and that a summer visitor to the neighborhood had suggested his going to New York and consulting Dr. Roosa. After describing the symptoms, the man ended by asking what was the probable nature of his trouble. Dr. Roosa suspected from the tone of the communication that the case was not for him, but he, of course, replied, advising the man to consult a local physician, and adding in answer to his direct inquiry: "From what you say, I should presume that your difficulty arises from a diseased condition of the middle ear."

Two days later the doctor found this among his mail:

Dear Sir: Yours received and contents noted. What do you take me for—a ring-streaked willipus-wallipus? You talk about my middle ear; how many ears do you think I've got—three? or five? My ears may be pretty long, and I guess they are, or I wouldn't be writing to no New York doctor for advice, but I'd have you to understand that I've got just two of them, and no more, like other folks, so there ain't no middle one. Don't get fresh. — The Medical Brief.

MY DOCTOR.

The following recently appeared in the October number of the Homœopathic Recorder, dedicated to Dr. J. D. George of Indianapolis by a grateful patient.

"Who laughs at my imagined ills,
Then gives me little worthless pills?
My doctor!

Who skips a visit, then so glib,
Tells why with most outrageous fib?
My doctor!

But who, in spite of this offense,
Has my unbounded confidence?
My doctor!

When really ill in saddest plight,
Who comes through storm and darkest night?
My doctor!

And as I near "the great divide,"
Who fights to keep me off the slide?
My doctor!

So reverently, at close of day,
This benison I softly say:
God bless
My doctor!

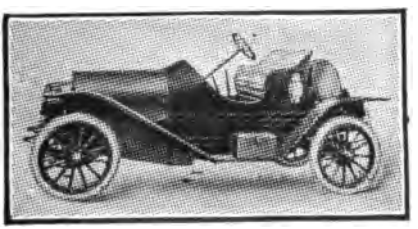
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