BOSTON
MEDICAL LIBRARY
8 THE FENWAY.

THE

NEW ENGLAND

MEDICAL GAZETTE

A Monthly Journal of Homœopathic Medicine

Editors

JOHN P. SUTHERLAND, M. D.

W. H. WATTERS, M. D.

"Die Milde Macht Ist Gross"

Volume XLIV.

BOSTON:
The Medical Gazette Publishing Company
1909

BOSTON MEDICAL
JUN 30 1911
LIBRARY.

CATALOGUED
JUN 30 1911
J. F. B.

INDEX.

ORIGINAL COMMUNICATIONS.

EDITORIAL.

SOCIETIES.

OBITUARIES.

BOOK REVIEWS.

ABSTRACTS.

PERSONAL AND GENERAL ITEMS.

NOTES AND COMMENTS.

BOSTON MEDICAL
JUN 30 1911
LIBRARY

THE NEW ENGLAND
MEDICAL GAZETTE

Vol. XLIV JANUARY, 1909 No. 1

ORIGINAL COMMUNICATIONS.

THE RELATION BETWEEN THE ADMINISTRATION OF PHOSPHORUS AND THE OPSONIC INDEX TO TUBERCLE.

C. E. Wheeler, M.D., London, England.

While the followers of Hahnemann for close on a century have made innumerable clinical tests of the truth of his law, those who have rejected the recommendation, "Similia similibus," have more and more directed their attention to discover the secrets of disease in the hope through pathology to find a law of healing. Incidentally, especially during the last fifteen or twenty years, they have discovered a variety of facts which throw light on the resistance offered by living cells to their enemies, and medical literature is full of information upon toxins and antitoxins, agglutinins, precipitins, and lastly of opsonins. The homoeopathist has always set himself first and foremost to cure, and any clue to the mechanism by which cure is accomplished must be of interest to him, and not the less because the modern discoveries seem to confirm his chosen law of practice. It was therefore a natural desire on the part of homoeopathists to see whether the line of remedial action of their drugs in any way followed the line of natural bodily resistance to disease. When the genius of Sir Almroth Wright and Captain Douglas demonstrated, first the existence of opsonin and next the possibility of measuring its amount, the way was clear for experiment. The object of this paper is to retell the story of a few experiments which have gained in significance from similar experiments made by American observers, notably by Dr. Watters.

Amid much work that has been done on opsonins, there have been found a certain number of physicians to doubt the accuracy of opsonic estimations. After a prolonged experience of the practice of finding the "index," I am quite satisfied that with enough practice and care trustworthy results can be obtained. The estimations upon which this paper is founded were all made at the laboratory of the British Homoeopathic Association by Mr. Collings, the laboratory assistant, and I have satisfied myself of his competence. Before, however, relating the results of more

recent experiment I will mention the first experience that led my attention to the subject.

It happened that I met Sir Almroth Wright early in the course of his opsonic investigations and he examined my blood on several occasions. Although I have never had a sign of tubercular disease and am a healthy individual, my natural "index" to tubercle is low. On the first two occasions of taking it, Sir A. E. Wright found it to be .6. I was urged to take a dose of tuberculin but decided to try instead a drug that is frequently found homoeopathic to cases of tubercle. Four doses of Ars. iod. 3 x. produced no effect, the next index being .58, but after a week of Phos. 3 x. (once or twice in 24 hours) my index rose to .88, and after seventeen days more of occasional doses, to 1.00. I discontinued the drug at this point. Four weeks thereafter my index had fallen to .36, but after three weeks of occasional Phos. taking it reached .99 These figures were all estimated by Sir A. E. Wright, who had at no time any knowledge whether or no I was taking any drug, and they were sufficiently striking to set me to further experiment.

The method adopted was this: Estimations of my index were made by Mr. Collings every three or four days, but at no time was he aware whether or no I was taking any medicine, so that the factor of expectation can be entirely excluded from these results. If two or three indices in series seemed at a steady level I would begin Phos.—take it for a time and then cease, recording the index at regular intervals. I shall only quote the more striking results, but the whole series was laid before the British Homoeopathic Society. 3 x. was the dilution used in the experiences to be detailed. The higher dilution (30) gave anomalous results that require further investigation.

Experiment I.—Index on March 22d, .76; on 28th, .74. Phos. 3 x., one dose daily, begun on April 1st. Index on April 4th, 1.43; on 8th, 1.57. Phos. suspended on 9th. Index on 11th, .74.

Experiment II.—Index on July 19th, .74; on 23d, .85. Later on the same day one dose of Phos. 3 x. taken, also one dose on 24th and 25th. Index on 26th, 1.20; on 29th, 1.23; on August 2d, 1.03; on 12th, .81.

Experiment III.—Index on September 20th, .98; on 21st, .97. On 23d, one dose of Phos. 3 x. Index two hours later, .97; on 24th, 1.75; on 25th, 1.10; on 26th, .81.

Obviously in all these cases the dose was too small to produce a negative phase, a phenomenon which is seldom noticed with small doses of tuberculin. But in the discussion on my paper in London, Dr. E. A. Neathy related the result of a personal experiment of great value. As in my own experiments, the estimator of the indices was wholly unaware beforehand of the results to be expected.

Dr. Neathy's Experiment.—Index on three successive days, .86, .81, 1.00. One-twentieth grain of Phosphorus taken at 10 a. m. Index at 2 p. m., .76; index next day at 10 a. m., 1.25; index next day at 10 a. m., 1.59.

This experiment with a larger dose does show a negative phase and gives a most striking curve.

It is difficult in face of these experiences to refuse the conclusion that at any rate in some individuals Phosphorus can increase the output of tuberculo-opsonin. Since they were made, further investigations by different observers tend to show that opsonin is a double substance, one part being normally present in serum and non-specific, affecting all micro-organisms; the other being manufactured only in response to the specific stimulus and being of value only against its own germ. It might be thought that the action of Phosphorus was probably exerted on the normal content of opsonin rather than on the specific. This is, however, rendered doubtful by Dr. Neathy's experiment, for he found that while his tubercular index was fluctuating as detailed above, his index to the micrococcus neoformans remained unaltered. This therefore hints that Phosphorus encourages the production of the specific opsonin to tubercle. This should not surprise us as we so often find it indicated in tubercular disease.

If opsonin is derived (as seems on the whole probable) from the leucocytes, it is interesting to recall experiments by Lombard and Besredka and others which go to show that the leucocytes are capable of dealing with poisons like atropin, arsenic, iron, silver, calomel and salicylate of soda, and that they have a function to fulfil in keeping these poisons away from tissues that might be damaged by them. It is therefore conceivable that Phosphorus also has a strong affinity for leucocytes, and on the principle of Arndt, "that the agent that damages in a large dose, stimulates in a small," it may very well as given by homoeopathists stimulate leucocytic activity and from its resemblance to tuberculin in its effects on the body, stimulate the leucocytes to produce a substance inimical to tubercular bacilli. In any case, whatever the mechanism, the experiments here detailed suggest a direct influence of the drug and encourage us to believe in the laboratory what we know in practice, that "like cures like." It is important to test opsonins in many bacterial diseases under the influence of homoeopathic remedies, but the evidence as far as it goes suggests that more analogies will be found between the administration of vaccines and the administration of the similli-mum.

VACCINE THERAPY.—Practically every European clinician of note is now, with great satisfaction, using tuberculin, without the index control, in selected cases of pulmonary, peritoneal, osseous and meningeal tuberculosis. In this country the method is gaining advocates every day. . . . Staphylococcus infections have been most amenable to treatment with vaccines. Acne, furunculosis, sycosis, carbuncles, discharging sinuses, pyohoea alveolaris have all yielded or improved so rapidly as to convince even skeptics of their efficiency. . . . Streptococcic infections have not been as amenable to results as staphylococcic ones. . . . Coli infections of the gall bladder, urinary bladder, uterus and peritoneal cavity have been successfully treated with vaccines. . . .Gonococcal infections have certainly been benefited by vaccines.—Bine, California State Journal of Medicine.

THERAPEUTIC IMMUNIZATION.

Observations Upon the Application of Immunizing Methods in St. Mary's Hospital, London.

By Horace Packard, M.D.
Professor of Surgery, Boston University.

In the summer of 1907, while spending a part of my holiday in London, I seized the opportunity to visit the laboratory and clinic in the St. Mary's Hospital devoted to bacterial vaccine work. There I met Sir Almroth Wright, the discoverer of this system of therapy; his co-worker, Captain Douglass; Dr. George P. Sanborn of Boston, who was there working out the laboratory side of the technic as well as observing the practical application of the method; Dr. Bryan, also a laboratory worker, a recent graduate of one of the London hospital medical schools; and other physicians from various parts of the world, in attendance upon the clinics for the purpose of study and observation.

Every afternoon from about 2 to 5 or 6 o'clock the laboratory workers are at their benches engaged in some portion of the enormous work incident to the execution of this branch of the Hospital service. Clinics are held every Tuesday and Friday from 3 to 5 o'clock, and it is on these days that the laboratory workers have their hands more than full. Many blood specimens are taken on these days, and the opsonic index of each must be estimated while the specimen is still fresh. The reading of the index is a most delicate and painstaking affair, involving work far into the night and often into the small hours of the morning. I marvelled at the enthusiasm and self-sacrificing devotion of these workers. They were not doing the work wholly from an unselfish motive, however, but were impressed that there is a future for vaccine therapy in the field of medicine and were preparing themselves as specialists in that field.

The principal interest for the onlooker was in the practical applications of the system for the cure of disease. My own interest was in the hope which it holds out to surgical patients either as a substitute for operative interference or as an aid in effecting cures in cases which defy surgery and all other known methods. A passing comment on the class of cases which come to Mr. Wright's clinic may be illuminating at this juncture. In a word, they are largely the uncured chronic cases upon which other physicians have exhausted all their resources and as a last resort "send them over to Wright to see what he can do for them"; or patients who have been ill a long time and, having failed to find relief anywhere, hear of Sir Almroth's success and appear at his clinic. Thus we see marshalled every clinic day a lot of apparently almost hopeless cases such as would dishearten anyone

conversant only with routine methods in vogue prior to the method of treatment with bacterial vaccines.

The cases exhibited in Mr. Wright's clinic are such as are up and about and able to come and go. The most impressive which I saw, however, were some which were previously in other departments of the St. Mary's Hospital as house cases and had failed of cure. For example, cases of surgical tuberculosis where operative interference had failed to stay the course of the disease and as a last recourse they had been turned over for bacterial vaccine treatment. One such case was a man (no longer under treatment because completely cured) then an employee as helper in the laboratory sterilizing room. He originally entered the surgical ward of the Hospital for tubercular adenitis and was extensively operated on, but the local infection went on invading other glands and a large area of the skin over the cervical and clavicular region. His treatment extended over many months, but with steady improvement in both local and general conditions. When I examined him there were no large glands whatever to be felt or seen, and a large, flexible cicatrix covered the region above referred to.

Another case of extreme interest was a woman who was also formerly a house case in the surgical ward. An exploratory incision had been made, disclosing tubercular peritonitis. The wound failed to heal, she emaciated, and was rapidly failing. She was turned over to Mr. Wright and opsonic therapy. When I saw her, her appearance was of a woman of robust health. Her wound had healed, she had regained flesh and color and was, as far as a casual observer could discern, a well woman. Several months had been consumed in bringing about this result, but it was a pronounced victory for bacterial vaccine treatment.

Another case which made a strong impression upon me was a tubercular tarsus which had been condemned to amputation in the surgical service. The patient was unwilling to lose her foot, refused further surgical treatment and forthwith was put upon Mr. Wright's list. At the time I saw her she was walking on the afflicted foot without embarrassment and but little difference in contour could be seen on comparison with the well side. It seemed to an observer that most of the cases under treatment were of tubercular character, although I recall a number of staphylococcus infections, one or two colon bacillus cystitis cases, and a streptococcus cellulitis.

The general impression was that all or nearly all the cases were on the mend. I recall, however, one tubercular case which was causing a good deal of solicitude because, although she improved at intervals, something always seemed to occur at an inopportune time to retard her progress. Even the tuberculin hypodermics in 1-6000 milligram doses seemed to aggravate. I questioned if still smaller doses might do good without aggravation.

Stock vaccines of tubercle, staphylococcus and gonococcus are kept on hand for immediate use in cases where the diagnosis

is hardly open to question. Streptococcus and colon bacillus cases are cultured and a vaccine made from the patient's own strain of bacteria.

The opsonic index is taken of every patient on beginning treatment, again the next day after and again a week later. If improvement follows, hypodermic injections are repeated once or twice a week. Some of the most convincing cures have been accomplished only after many months of treatment. One gets no opportunity to see the treatment of acute cases in these clinics. In answer to a question as to the effect, if any, from administration of the vaccines per mouth, I was told that Mr. Wright considers that they could have no effect, since the digestive fluids would probably destroy them. There was a remarkable atmosphere of confidence in the efficiency of the vaccine treatment on the part of Mr. Wright and his staff as well as the patients who came and went. There were, however, not a few cases who had been coming to the clinic a long time who were not yet cured and some who had been thought cured but a relapse had occurred. It appears that rapid cures of chronic cases are not to be expected, but that with perseverance many otherwise apparently incurable cases gradually mend and finally fully recover.

This past summer of 1908 I was again in London, and, being curious to know from personal observation if the bacterial vaccine treatment was still carried out in all its original details, I again visited the clinic and laboratories of St. Mary's Hospital. I found much the same routine in clinic and laboratory. The attendance of patients seemed considerably augmented and the number of physicians watching the treatment and its effects was considerably greater.

I gathered that later investigations by Mr. Wright have led him to new conclusions regarding administration of bacterial vaccine per mouth. He had tried it out in a case or cases of typhoid fever and the same reactions, as indicated by the opsonic index and improvement of the patient's condition, followed. He still adheres to the hypodermic method, however, because he deems it a more exact way of administration.

From all that I have seen my impression is that we have in opsonic therapy a valuable addition to our armamentarium, but one totally beyond the grasp of the general practitioner for the reason that a well-equipped laboratory is an absolute essential and the work of estimating the opsonic index and preparation of bacterial vaccines must be done by a trained laboratory worker.

OPSONIC TREATMENT OF FURUNCULOSIS.—"I have treated eleven patients with boils—most of the cases of a very chronic or severe nature. Of those nine did well—that is to say, within forty-eight hours in most cases the pain had disappeared and also almost all tenderness. As a rule these cases proceeded to complete relief without incident. Unfortunately, immunity from relapse is not assured. Some remain well for long periods, while others have a return after varying intervals. This much can be said, however, that relapses are usually of a less severe nature and, furthermore, can be easily controlled by innoculation if the treatment of the primary lesion or lesions was successful."—Ross, Journal of the A. M. A.

VACCINES IN PRACTICE.

By Claude A. Burrett, Ph.B., M.D.

Director of the Pathogenetic Laboratory and Clinical Instructor in Diseases of the Blood and Genito-Urinary Diseases, University of Michigan.

Much has been said and written as to the value of vaccine therapy on the one hand and its uselessness as a curative agent on the other. It must be admitted by all scientists that every new remedy or method of practice is, in its experimental stage, overdone or improperly used and as a result discarded by many, its day as a "fad" passed, and at last it finds its normal field of usefulness.

The use of disease products as curative agents have long been known, in fact since, and before, the time of Hahnemann.

The discovery of bacteria soon made it possible to understand something of their relation to disease, and slowly but surely the medical profession is coming to understand its true relation to abnormal conditions.

The writer is firmly of the opinion that every scientist who understands the homoeopathic principle and who has worked with the vaccines has fully appreciated the close relation existing between drug action short of its physiological action as compared with the, so-called, opsonic theory. In a series of experiments reported in a former paper I have shown that the properly selected drug will increase the opsonic index or in other words increase the bodily resistance to the particular abnormal condition for which the drug is given in the same manner as is done by a vaccine.

If we are willing to admit that the above is true, then why should we administer the vaccines in preference to the indicated drug? The answer can only be partially given. In the first place there are but comparatively few conditions for which we are able to isolate a specific germ and consequently able to procure the indicated vaccine. There are, however, a class of germ diseases, owing to the low bodily resistance to the causative germ, which seem to be peculiarly adapted to the use of vaccines. Vaccines will be curative in that class of cases because they meet every symptom of those diseases. It may be possible to find a drug which will cover the symptomology of the above abnormalities, but it is frequently by no means an easy task.

Two cases have come under our observation which will perhaps illustrate the point in question. Case I—Mr. S., age 21; occupation, student in the Literary Department of the University of Michigan; came to the office April 30th, 1908, suffering from boils on the face and neck. He had been treated with various blood remedies in material doses with no improvement. When first seen there was a large boil over the left cheekbone with a great deal of induration of surrounding tissue and involvement of the cervical glands. In addition there were several smaller

boils about the face. Patient complained of a frontal headache, appetite was poor, and there was a great deal of mental anxiety. Echinacea, Apis and Phytolacca, singly, were prescribed from time to time as seemed indicated. The boil was lanced, cleansed and free drainage instituted. The patient did not improve, other boils developed of lesser severity, but continued to come. On June 12th a culture from a new boil was taken which developed a deep orange staphylococcus. A vaccine was prepared in 1 c. c. sealed tubes each containing 25,000,000 germs in 25 per cent. alcohol. Eight tubes were given the patient to be taken by mouth, one each evening at bed time. All other treatment was discontinued save an aseptic dressing for the boil then discharging. The second day after this treatment was started two incompletely developed boils on the neck became less red, with no evidence of coming to a head. The discharge from the large boil was greatly lessened. At the fifth day all discharge had disappeared, the skin about the other scars became clear, and no new boils had started. Patient left the city at the end of the second week. The face was fast clearing from the dark spots from old scars and no new boils had appeared.

Case II.—In reporting this case I shall quote very freely from a letter written to me by Dr. L. J. Gibson of Vassar, Michigan, who brought the case to the University Hospital (Homoeopathic). The Doctor writes: "In regard to the vaccine treatment of Mrs. G.'s case, will say that I think the vaccines saved her life. Last February she developed a pyemia, due to absorption of pus from the ethmoidal sinuses, with the typical rapid pulse, and alternating chill, fever and sweating. The glands of the whole body were swollen and very sensitive to the least pressure, she lost weight and strength so rapidly that in a short time she was in a helpless condition and continued to grow worse in spite of all I and a local physician could do. I then had Dr. Dean T. Smith come to Vassar and see if he could not help us out. After making his examination he said, 'He had but one suggestion to make and that was to administer autogenous vaccines by mouth, in conjunction with the treatment she had been having.' In ten days' time after commencing them, the enlarged sensitive glands had almost disappeared, and the temperature and pulse rapidly came to normal. Patient soon began to gain in weight.

"During the spring and early summer she had some return of the hectic symptoms and the glands in the neck became sensitive and enlarged as before, due to the blocking of the drainage from the sinuses. Two or three doses of the vaccines at each time corrected the condition together with drainage."

To the mind of the writer Mrs. G.'s case is a distinct triumph for the vaccine treatment in a distinct but limited class of cases that are always looked upon as grave by the medical profession.

The vaccine method of treatment, shorn of all possible technique that can be avoided, is hardly within the reach of any but specialists. However, with the eliminations of the opsonic indices

and by the oral administrations of the vaccine, the general practitioner may use this method of treatment.

We believe that vaccines prepared from autogenous cultures of the invading germ are the ideal preparations. In support of the above we will venture to state that the individuality of bacteria owing to different cultural environment and thereby toxins differing in character cause unlike symptoms in different individuals. The same reasoning justifies the giving of Sulphur in one case of boils and Mercury in another case of boils.

References: Dudgeon's Lectures on Homoeopathy; University Homoeopathic Observer, January, 1908; Medical Century, May, 1908; Journal of the British Homoeopathic Society, January, 1908.

THE OPSONIC TREATMENT AS APPLIED IN A CASE OF SEPTIC LYMPHANGITIS OF THE LOWER EXTREMITY AND IN CASE OF INFECTIVE LYMPHADENTIS OF THE NECK.

By J. Emmons Briggs, M.D.
Professor of Surgery, Boston University.

Case I.

Mrs. M. E. N., aged 65, was seen by me in consultation with her family physician, Dr. F. W. Dodge of Hyde Park, on July 1, 1908. She was a woman in fair health and ordinariliy vigorous, with the exception of a chronic varicosis of the veins of her right leg, which had caused her considerable uneasiness, especially during recent years. At times they would get very painful, "knot up," look dark in color and threaten rupture. No valvular lesion of the heart existed, yet she was at times troubled with dyspnea, which would frequently necessitate rest after one or two flights of stairs.

On June 21 (nine days previous to my visit), while walking upon the street she was run into by a shepherd dog weighing about fifty pounds, thrown to the ground and her right leg injured. The injury was not at the time considered serious, there being no area of ecchymosis nor abrasion of the skin, but following that injury pain and soreness developed along the shaft of the tibia. Walking or using the leg has grown increasingly difficult, until recently it has been quite impossible.

On July 1, 1908, when I first saw her, her condition might be described as follows: Over the anterior aspect of the leg, midway between the knee and ankle, there was a diffuse deep red swelling, slightly elevated from surrounding tissues. In the centre of this indurated area softening was easily detected, in size about as large as a silver dollar. Fluctuation was very distinct at this spot and just outside the zone of softening the skin and subcutaneous tissues were oedematous.

She was advised to enter the Massachusetts Homoeopathic

Hospital, where she was operated upon on the day following—July 2, 1908. As her urine was normal, save a slight trace of albumen, ether was administered, and an incision was made over the anterior surface of the tibia into the area of fluctuation. Here a fairly extensive abscess was encountered, which had dissected along the shaft of the tibia for three or four inches. The periosteum and overlying tissues were necrotic, but no disease could be detected in the bone. Careful search was made along the area of denuded bone for cloacae communicating with a central osteomyelitis, but without avail. I concluded at that time that the bone was not affected and have since had no reason to change my opinion. A counter opening was next made, parallel to the first and about two inches to the outer side. The abscess cavity was then thoroughly curetted and packed with iodoform gauze.

The history of this patient from July 2, 1908, to July 21 was uneventful. Temperature, which was 99.8 at the time of the operation, did not go above normal until July 21. The wound in the meantime had granulated in very nicely and seemed to be closing satisfactorily. On July 21 her temperature rose to 102.6, on the day following a chill occurred, with a subsequent rise of temperature to 103. For several days following the temperature remained high and there was headache, pain in the limbs, nausea and vomiting, great oedema of the leg and distended superficial veins, and the swelling extended from the toes to a point midway of the thigh. A blood examination showed the leucocytes 15,800 and neutrophiles 82 per cent.

On July 26 her temperature at 6 p. m. registered 104, pulse 124. Compresses of corrosive sublimate 1-3000 had been in constant use since July 21, but nevertheless the sepsis seemed unabated. The whole leg was now greatly swollen, oedematous and of a dark red color. Large blisters made their appearance over the knee and lower part of thigh, with stasis and apparent thrombosis of many superficial veins of the leg, the long saphenous most particularly. After 9 p. m. the patient sank into a stupor and her condition seemed most unpromising.

On July 27 an area of discoloration appeared on the outer aspect of the ankle, which was immediately opened. This revealed a moist gangrene of the tissues to considerable depth and exposed tendons of the extensor muscles of the toes. No anaesthetic was required in this operation, as the necrosed area was entirely anaesthetic. During the day the mind wandered and vomiting frequently occurred.

July 28, a slight improvement in patient's general condition occurred, notably in temperature, which did not go over 101.2. She was in a stupor until midnight and her pulse became very weak and irregular, requiring stimulation.

July 29 to 31, many spots, dark in color, and numerous blisters, made their appearance over the leg from the knee to the toes, also a swelling which in assuming definite proportions made itself apparent over the long saphenous vein on the inner aspect

of the leg. This swelling did not increase, and gave her little trouble.

In about three weeks after the gangrenous area on the dorsum and outer aspect of the right foot was uncovered and the slough cut away, granulation had sprung up and the wound had sufficiently cleared up to undertake skin-grafting. On August 21 I removed several Tiersch grafts from her left thigh and applied them to the granulating wound. The result was so satisfactory that within a week's time her extensive granulating wound was entirely healed.

From this time until September 6 the outlook was most hopeful; about this time, however, her leg began to pain her much at the knee joint and motion greatly increased this discomfort. Three days later, September 9, she was again anaesthetized and an abscess of considerable size was opened. This abscess was located on the posterior aspect of the knee joint and extended down the leg for about four inches. It occupied the popliteal space and dissected beneath the inner hamstring tendons. It was also found that this cavity communicated with the area of induration which had for a long time been present over the saphenous vein, about six inches above the knee joint. These cavities were opened up freely and curetted and packed with gauze. Still another point of hardness made itself manifest near the apex of Scarpa's triangle, and was incised, free pus evacuated and the wound drained.

She was discharged from the Hospital October 15, 1908, three and one-half months after admission. Her present condition is as satisfactory as could be expected after such a serious septic process. She can walk about to a limited degree and considers herself improving gradually. There remains, however, an open wound in the popliteal space, which is now granulating rapidly.

I have gone into detail that the reader may comprehend the very serious nature of the septic process which confronted us in this case. We had to deal with a double infection by the streptococcus and staphylococcus pyogenes aureus, which presented a typical clinical picture of a rapidly progressive septic lymphangitis of the lower extremity.

With the thrombosis in superficial and deep veins, we greatly feared the detachment of portions of these thrombi and the lodgment of septic emboli in remote internal organs. That this did not occur is the wonder in this case.

You will observe thus far that mention has been made of superficial treatment only. A consideration of the opsonic treatment which was conducted by the hospital pathologist now follows. On July 22 Dr. Watters made the first blood examination, and on the day following the first vaccine injection was made—8 M. streptococcus, followed the next day by 100 M. staphylococcus pyogenes aureus. During the week following four vaccine treatments were administered, on July 25 10 M. streptococcus, July 27 100 M. staphylococcus pyogenes aureus, July 30 100 M.

staphylococcus pyogenes aureus, July 31 10 M. streptococcus. Within a week from the time the first injection was made the temperature, which had ranged from 101 to 104, had gone down to normal, where it remained ever after, except for a slight elevation at the time subsequent abscesses developed. During the month of August six doses of vaccine were given, three of these were of 100 M. staphylococcus pyogenes aureus and three were of 10 M. streptococcus. During the month of September and the first half of October nine injections were made. It will be interesting also to observe the blood count made at various intervals:

	Leucocytes.	Neutrophiles.
July 22	15,800	82%
" 27	40,000	92%
" 28	24,000	85%
" 29	15,000	85%
" 30	15,000	81%
" 31	12,000	80%
August 1	11,400	68%
" 2	11,400	71%
" 12	9,600	61%

It would be most interesting if we could know to what degree the opsonic treatment contributed to the favorable outcome in the case. In surgery we have had much experience with the anti-streptococcic and streptolytic serum. Cases so desperate that life was despaired of have recovered after these injections. Now we are hearing less of these preparations and more of opsonic treatment. We are in all probability upon the right track, and at our Hospital we are giving this treatment every chance possible to demonstrate its effectiveness.

I contribute this practically without comment, save that it was the most severe case of the kind which I have ever known to recover. You may judge to what degree the opsonic treatment contributed to the recovery.

Case II.

Dr. B., aged 58, first came under my care April 18, 1908. He gave the following history: In perfect health throughout his life, with the exception of one severe attack of diphtheria twenty-seven years ago. Post-diphtheritic paralysis, affecting the muscles of the throat and legs, followed, lasting about four weeks. From this he entirely recovered. At dinner, April 12, he experienced a splinter sensation on the right side of the tongue, near the opening of the sub-lingual gland. This continued to annoy him and on the following day was slightly sensitive to touch from the outside. No gland was felt at this time. The next morning, April 15, a small gland could be plainly outlined. There was no pain except on moving the tongue or swallowing. The gland increased in size and pressed the tongue upward. This occasioned difficulty in talking and his speech was thickened. April 17, the tumor, which had steadily enlarged, extended somewhat to the left of the

throat as well, and on lying down there was difficulty in breathing.

Examination revealed a very extensive and diffuse swelling on the right side of the neck, extending nearly down to the clavicle, posteriorly to the outer border of the sterno-cleido-mastoid muscle; above it was bounded by the lower border of the inferior maxillary bone, while anteriorly it passed over the median line and invaded the anterior superior triangle of the neck. The skin was brawny and thickened, the subcutaneous connective tissues oedematous. The lymphatic glands were not clearly defined from contiguous structures. I have seen a similar appearance in Ludwig's angina. Immediate operation would have been performed, had I been able to detect the least pointing, fluctuation or area of special sensitiveness. As it was, the whole side of the neck was of stony hardness.

An ice-bag was applied and the pathologist was called in to make a blood examination and count and to treat the case opsonically. I expected to operate on the day following, or as soon as practical. On the 18th the blood count showed: Leucocytes, 16,400; Neutrophiles, 80 per cent. The opsonic index revealed to Streptococcus .65, and to Staphylococcus pyogenes aureus .55. Without delay there were administered 50 M. staphylococcus pyogenes aureus, followed that evening by 5 M. streptococcus. Most pronounced improvement rapidly set in. The temperature dropped from 101 to practically normal the next morning, pulse from 104 to 92. On April 20 another vaccine injection of 75 M. staphylococcus pyogenes aureus and on April 23 100 M. staphylococcus pyogenes aureus was made. On April 26, eight days after commencement of treatment, he left the Hospntal in most excellent condition.

Examination on discharge demonstrated the following facts: Area of redness and induration entirely gone; swelling had subsided so that there was scarcely any tumor discernable by inspection; anterior to the sternocleidomastoid, and on a level with the digastric muscle, a well-rounded lymphatic node about as large as a walnut could be clearly felt. The pain in the neck, sore throat, headache, etc., had entirely subsided, and he was in excellent shape to return to his home. Soon after, the glandular enlargement entirely disappeared.

Were comment necessary upon this case it would be most favorable to the opsonic treatment which was employed. Never before have I seen such a striking improvement in a patient's condition without operative interference, nor would I have expected such rapid restoration to normal conditions had the knife been employed.

TUBERCULIN IN ORTHOPEDICS.—Tuberculin is of decided value in the treatment of tubercular joints. It may be administered during any stage of the disease. The usual dose should be from .0001 to .0002 mg.—Nutt and Hastings, American Journal of Orthopedic Surgery.

BACTERIAL INOCULATIONS IN SKIN DISEASES.

By Rollin H. Stevens, M.D.

Lecturer on Skin Diseases, University of Michigan, Member of International Dermatological Congress, American Roentgen Ray Society, Etc.

The dermatologist is frequently asked the following questions: Is the autogenous or stock bacterial inoculation specific for any skin disease? If not, is it curative in a goodly proportion of cases? Is it necessary to work out the opsonic index in each case to determine the indications for treatment by this method, or for the repetition of dose? What is the dose and how long does it take for a cure? Are relapses frequent?

These are the questions the general practitioner desires answered. The intelligent patient, too, usually asks them. Can they be answered satisfactorily at this time? Not entirely, and the reason is, I think, that we are not familiar enough with bacteriology of most skin diseases.

In considering these questions it should be profitable to analyze the results of three years' experience in this work.

First, is any bacteriological inoculation now in use a specific for any skin disease? In the sense that antitoxin is a specific for diphtheria we cannot claim that any bacterial inoculation is a specific for any skin disease. At first the method was regarded as a specific for acne, but a large percentage of the cases (fully 50 per cent.) in my own practice fail to respond to either the autogenous or stock vaccines of one or two varieties of the staphylococcus. The staphylococci are the ones nearly always found in acne and vaccines are made from them in a routine sort of way. But is it not possible that Sabouraud's microbacillus or some other germ may be the offending organism as is claimed by Sabouraud and others.

Of course there is another possible cause of failure, and that is the immunity mechanism of the patient may be worn out, either by constant auto-inoculation, or by the too frequent, or too large doses we administer. We do not yet understand regulating that to a nicety. Even the examination of the blood may reveal a high or low opsonic index which may be only temporary. Also the idiosyncracy of the patient is always an unknown factor.

Many of these cases which do not respond readily to the inoculations do very nicely under mild and in frequently repeated doses of the Roentgen ray, the indications for repetition of a dose of which must be practically the same as for injections, namely about every five to seven days. An auto-inoculation of not only the germ present in the lesions, but also of other disease products as well, takes place as a result of the action of the ray. It is my experience that the cases which respond best to the Roentgen ray are the cases of acne punctata, with plenty of blackheads and few

pustules, and these are the cases I have usually made failures of in the opsonic treatment. The latter treatment is best suited to the more severe cases with plenty of large pustules.

Eczema, particularly of the seborrhoeic type, and those with psoriasiform scaling nearly always respond to the autogenous inoculations of staphylococcus aureus or citreus, which are nearly always found in these types under the scales, or in the vesicles or pus.

Case—A young lady, twenty-one years of age, had a severe raw, red, weeping eczema of the hands, arms, neck, face and scalp since infancy. Inoculations of the autogenous staphylococcus aureus in doses of two hundred millions to four hundred millions every five days for a few weeks, together with a little light and Roentgen ray treatment, soon brought complete relief. Slight relapses followed discontinuance of treatment for a month, but at the end of about four months from the time of starting treatment she was completely well.

Case—A man seventy years of age had suffered terribly for eighteen years with eczema. At first it was confined to the lower extremities. For the last four or five years it was general and all types of eczema were present. Inoculations with autogenous staphylococcus aureus in doses of two hundred to five hundred millions made a complete cure in four or five months, and he has remained well a year. This patient received some X-ray to a very persistent licheniform papular eczema of the forearms and hands which was slow in responding to the innoculations. Several other cases of eczema have not done so well, but have improved. Some of these were living at great distances away, and I had to intrust the inoculations to them or their doctors, which is not always satisfactory. I have had enough failures in eczema, however, so that I do not consider the treatment a specific, but it has proven curative in several cases where all other means had failed, and it was certainly the indicated remedy in those cases.

In rosacea of severe type involving most of the face I have seen temporary improvement in several cases. I tried both autogenous and stock vaccines, but in no case did I succeed in making a cure with the inoculations alone, although I continued them as long as two years in some cases. With the assistance of a mild X-ray later, however, these, in each instance, have gone on to a complete cure.

One case is of interest, the worst case of pustular rosacea I have ever seen. A young woman, thirty years of age, had typhoid four years ago. Immediately after, her face became inflamed, red, pustular. Two years were spent in treatment with various skin specialists without avail. She then tried opsonic treatment under a competent specialist for two years, when the latter referred her to me. She was extremely dispondent. Her face was covered with crusts and pustules from pin point in size to large ones which seemed to develop a proteclytic ferment, which digested the tissues

and caused much undermining. Epithelial cells examined were found to be digesting leucocytes. Microscopically it exhibited a cancerous appearance. Her face pained her constantly; she would become hysterial if it were touched. At first the inoculations of one hundred to four hundred millions of autogenous staphylococcus albus were borne all right, but latterly even ten millions would bring about a most severe negative phase. Repeated cultures during two years showed only staphylococcus albus. Very mild Roentgen ray treatments lasting three to five minutes every five to seven days were given and the inoculations discontinued for two months, at the end of which time her face was quite free from pustules. In another month she was entirely free from pus and the erythema was disappearing. Inoculations of less than ten million were now given every five days, but occasionally would produce severe negative phase. This was also the case if the ray was prolonged beyond five minutes or repeated too soon. She is now apparently perfectly well, after four months' Roentgen ray treatment, and has gone to her home in New York with small doses of vaccine to use occasionally.

Boils improve rapidly under autogenous inoculations, but patients are very prone to relapse after a time. Their resistance is likely to fall below par and further inoculations must be given.

Sycosis. The three cases I have treated have all improved under the inoculations, but did not get completely well. The use of Finsen light or Roentgen ray was necessary in each of the cases to make a complete cure.

In various pustular conditions, such, for instance, as pustular eczema, associated with rodent ulcer of ear, being treated with X-ray, the inoculations healed the eczema, which was growing worse under the ray. In pustular syphiloderm it has been helpful in conjunction with specific treatment, but syphilis and tuberculosis are, as a rule, barriers to the successful treatment of staphylococcic infections with bacterial injections.

In all my experience except the first few months, I have not had indices made, but have repeated the dose empirically every five to seven days to start with or depended on clinical indications.

In acne I found the dose, as a rule, should be small (100 to 200 M) and not be repeated oftener than once a week or ten days, but in boils and eczema it should be given every five days and in doses large enough (200 to 500 M) at first to produce quite a local reaction at site of injection or some decided symptoms of a negative phase.

Idiosyncrasies, of course, are observed occasionally and require treatment according to indications and experience. The time required to make a cure will depend upon one's accuracy and judgment in first isolating the proper germ; second, in administering the proper dose, and third, in repeating the dose at the proper time.

In conclusion, while we cannot yet regard bacteriological inoculations as specifics in any given skin diseases, their use is a

distinct advance in the treatment of these diseases. Many diseases which are promptly cured by this method have been well nigh, if not quite, incurable by other recognized methods. The results of this method emphasize the sadly makeshift nature of the authoritative local treatment which Hebra so firmly established. Later developments in bacteriology and immunity will, no doubt, have the effect of placing many more diseases in the promptly curable list by means of bacteriological inoculations.

VACCINES IN TYPHOID FEVER.

By Edward E. Allen, M.D., Boston, Mass.
Professor of Anatomy, Boston University.

When beginning my service at the Massachusetts Homoeopathic Hospital on July 1st, it seemed to me that a good opportunity offered for trying the vaccines in the treatment of typhoid fever. Accordingly I requested that a dose be administered to each and every case admitted, as soon as the diagnosis was made.

Otherwise the cases were handled as usual.

The indicated remedy was sought for and administered; the diet consisted of peptonized milk or some equally good substitute, and hydrotherapy resorted to as needed.

I recognize at the outset that the use of the indicated remedy must of necessity prejudice any deductions which I may draw from the results of treatment, but I hardly dared to trust it absolutely in so serious a disease as typhoid fever. I will say, however, in the light of my experience, that were I now entering upon another three months' service I would unhesitatingly give every case the benefit of the opsonic treatment at once, administering no other remedy until it was demonstrated that the case did not respond.

Thirty cases were treated, with one death, and these have all been sufficiently reviewed in Dr. Watters' article.

As I watched the progress of these cases I found myself relying more and more upon this new method. It was a very unique and interesting phenomenon to me, to see repeatedly apparently serious cases of typhoid fever, presenting all the usual symptoms, rapidly overcome them, and in a few days change the whole complexion of their illness for the better, going on to a rapid convalescence. After but one treatment some of them began immediately to improve in every respect. The fever became less, the headache and backache disappeared, the tongue cleared up, and they began to complain of hunger. Most of them would say, if asked, that they felt better, and that, also, very soon after the initial treatment. About 75 per cent. of all the cases were favorably influenced, and I believe the illness shortened from one to three weeks in all of them.

An interesting question as to when to commence to feed the patient came up for solution. Some of them rapidly recovered from the fever during the week or ten days after receiving the

vaccines; that is, they were at the end of the second week or beginning of the third, where the usual case is at the end of the fourth or fifth week. The question as to there being any ulceration of the intestine persisting after all symptoms had subsided, particularly all tenderness of the abdomen, seemed to me to be answered in the negative. Consequently I proceeded as has usually been my custom; that is, to gradually increase the diet after the temperature has remained normal for one week. I got into no trouble, and therefore argue that all ulceration had healed as the case progressed favorably in other respects.

In conclusion let me say that I firmly believe that a good long stride has been made in the treatment of typhoid fever by the opsonins, and that a great many cases will be cured in the future *by it alone*, using only those rational hygienic and dietetic measures which seem necessary.

TYPHOID VACCINATION TREATMENT OF TYPHOID FEVER.

By J. Herbert Moore, M.D., Boston, Mass.
Professor of Diseases of Children, Boston University.

Some interesting clinical work has been done in the medical wards of the Massachusetts Homoeopathic Hospital during the past few months, and I have been asked by Dr. Watters, under whose directions these vaccinations have been made, to give to the Gazette my impressions of the effects of the treatment as observed in my service at the Hospital, consisting of the medical cases of patients of fourteen years of age and under. This I am especially willing to do because I believe all efforts toward carefully conducted and accurately recorded clinical work in our Hospital should be encouraged to the greatest extent.

While conservative medicine should prompt us to go slowly in drawing our conclusions concerning innovations in therapeutics, which has not always been the case in the past history of medicine and to the regret of its practitioners, in this case of typhoid vaccination it seems to me to be an innovation only of agent employed rather than of principle involved; inasmuch as the latter seems to be closely allied to the underlying principle of similar specific relationship between the disease and the curative agent in accordance with which homoeopathy always has selected its remedies not only for the treatment of typhoid fever but of all other curable diseases and disturbances calling for remedial agents.

In my experience with the treatment of typhoid fever by homoeopathic drug remedies, covering a period of over twenty-four years, I am not only convinced of their curative action so far as their action upon the various organs and parts of the system is concerned, which in turn are specifically affected by the toxins of the disease, but have been more than gratified at the results obtained. At the same time I have always been impressed

with the fact that however well they might dispute the action of the toxins upon abdomen, lungs, brain, nervous system or other parts specifically affected by the toxins, our remedies seemed to lack the power of going to the fountain-head of the disease and directly antagonizing the toxins before their localizations upon these parts.

From observation of cases in my ward, and under my personal treatment, I have very conservatively come to the conclusion that is just what typhoid vaccination does.

Furthermore my observation has been that there is no incompatibility between the action of typhoid vaccination and homoeopathic drug remedies upon the same patient and operating at the same time. On the other hand it seems reasonable that the action of the remedies should be helped rather than hindered by the action of typhoid vaccination; because the latter, acting anticipatory to the remedies in neutralizing the toxins before their localizations upon the parts specifically affected by them, should make easier and more effective the action of the remedies by giving the remedies less work to do. In other words, the less toxin, due to the antagonizing or neutralizing effect of typhoid vaccination, the less subsequent toxic effects upon the local parts to be overcome by the remedies.

During the course of these observations, and for the purpose of demonstration, some typhoid cases in my ward have been treated by typhoid vaccination alone, others by homoeopathic remedies alone and still others by employing both therapeutic agents at the same time.

As a result of the demonstration my conclusion is that while typhoid vaccination treatment is not needed in certain cases, and especially in those of a lighter degree of toxaemia, in every case in which the vaccination is employed the indicated homoeopathic drug remedy, on account of its marked curative action in its sphere of the disease, should also be employed as in the analogous case of diphtheria and antitoxin.

In a subsequent number of the Gazette I will publish the clinical charts and records from which these deductions have been drawn, an undertaking which time does not allow at this writing.

OPSONIC TREATMENT IN TYPHOID FEVER.

By Nelson M. Wood, M.D., Boston, Mass.
Instructor in Hygiene in Boston University.

I wish briefly to report a most interesting case of typhoid fever in private practice that, in addition to the usual treatment in such cases, was treated by bacterial vaccines made from dead typhoid bacilli.

The patient, Prescott Dickey, six years of age, American, family history excellent, parents and all grandparents living except one, who died at 89.

He was taken ill Sunday, September 13th, with headache, epistaxis, abdominal pain, vomiting and constipation; his temperature gradually increased during the first week until it reached 104½. He was delirious one or two nights at the end of this first week. Sunday, the 20th, the eighth day of the illness, there was a positive Widal test, a good crop of rose spots covering the abdomen, considerable tenderness in the abdomen, and was a typical well-developed case of typhoid fever. At this time Dr. C. A. Eaton of the Pathological Department of Boston University School of Medicine was called in and 25 M. typhoid bacilli were administered subcutaneously in the arm. The only apparent change for the next four days was a slight decrease in temperature and less delirium; this latter symptom began to improve at once after the first treatment. On the 24th, the treatment was repeated by Dr. Eaton, the same size dose as before being given. The change after this treatment was very marked, the temperature falling one degree daily and all other symptoms clearing rapidly. On the 28th, just two weeks from the time of the first-noticed symptoms, the temperature fell to normal and remained so. The patient called for playthings and insisted upon having something to eat, and it took considerable persuasion to keep him quiet in bed for a sufficient length of time to convince me that he was really cured. As previously stated, my usual treatment was carried out, consisting of cold compresses on abdomen, and the indicated remedies, and in this case we used Bryonia 2x and during the second week used Cuprum Sulph. 2x, one tablet every two hours.

As the case was so clearly defined and the treatment so similar to many others, excepting the vaccine, the results obtained so quickly and easily brought out the great contrast between this recovery and the usual one. I cannot help believing that the case was shortened at least two weeks and all the possible complication of the third and fourth weeks avoided by the vaccine assistance.

PUERPERAL SEPTICAEMIA—A CASE.

By C. T. Howard, M.D., Boston, Mass.
Surgeon and Obstetrician, Massachusetts Homoeopathic Hospital.

The following case in which the opsonic method of treatment was employed may be of some interest.

Mrs. N. S., age 35, primipara, was delivered of an eight-pound boy October 28, 1908. Her pregnancy had been rather trying. In May she had been operated upon for an acute appendicitis and had apparently made an excellent recovery. In the later months the amount of urine was small and showed albumin and casts.

Her delivery was a normal L. O. A. with only a very slight tear of the perineum. Labor lasted fourteen hours.

The following morning, October 29, her temperature was

99, and in the evening, 100.3. October 30, morning, 99.6; evening, 101.3. October 31, morning, 100.8; evening, 103. November 1, morning, 101.8; evening, 101.8. I then gently swept over the uterus with a dull curette followed by an intrauterine douche of permanganate. Nothing abnormal was found. Her temperature continued to rise until on the ninth day it reached 104. Her blood count at this time was, briefly: erythrocytes, 4,220,000; leucocytes, 22,000; neutrophiles, 71 per cent. A culture from the cervix showed a very slight growth of staphylococcus pyogenes aureus. November 7, she was given hypodermatically four million streptococci, her temperature being at that time 104. November 8, morning temperature, 102.4; evening, 103; and she was injected with 75 million staphylococcus. November 9, morning temperature, 102.2; evening, 100.2. November 10, morning, 99.6; evening, 102.4. November 11, morning, 99.8; evening, 101.8. November 12, morning, 100.4; evening, 101.3; and she was again given 150 million staphylococcus. November 13, morning temperature, 99; evening, 101.2. November 14, morning, 97; evening, 100. November 15, morning, 100.2; evening, 103. November 16, morning, 99.2; evening, 101; and she was again given 150 million staphylococcus. November 17, morning temperature, 98.6; evening, 105.8. November 18, her temperature dropped to normal and has remained so since. November 16, her leucocyte count was 8,400; neutrophile, 65 per cent.,—showing an entirely normal blood.

In order to understand this case it is necessary to analyze the chart pretty carefully. While at first the rise was gradual and was not typical of puerperal sepsis, the fact that a growth, however slight, of staphylococcus was obtained from the cervix and the absence of any other demonstrable lesion leads me to believe it was a case of sepsis pure and simple.

Now, how did the opsonic injections modify the course of the disease?

The first injection, November 7, the eleventh day after confinement, was a very small one and was followed by no appreciable change. The same may be said of the injection of 75 million staphylococci on the following day. On November 9 the injection of 8 million streptococci was followed by a drop in temperature from 102.2 to 99.8 and a secondary rise to 102. The fourth injection on November 12 was followed by a drop from 101.8 to 99 and by a secondary rise to 101. The fifth injection was followed by a drop from 101 to 98.6 and by a secondary rise to 105.8, which quickly subsided to normal and remained normal.

An analysis of the chart shows also that immediately upon beginning the opsonic injections the course of the temperature variations changed materially in character. Remissions were more marked and continued so until the final sharp rise to 105.8 and final drop to normal.

Aside from the opsonic injections the treatment consisted of the administration of Arsenicum 3x. for the first twelve days,

Merc. corr. 3x. from the twelfth to the sixteenth day, and China from the sixteenth day on.

Daily vaginal douches of permanganate were given, although the lochia was at no time offensive and seemed practically normal in character.

I wish that the results from this line of treatment had been even more rapid and more conclusive, that the drops in temperature had been more permanent, so that it would be apparent even to the most sceptical that the course of the disease had been materially modified. However, the fact remains that the patient recovered, as many do not, and that more speedily than most cases of puerperal sepsis.

DIFFUSE PERITONITIS TREATED BY VACCINES.

By W. G. Hanson, M.D., Everett, Mass.

Mrs. M., 37 years of age, suffering from an acute attack of appendicitis, was operated upon at the Whidden Hospital, May 8th, 1908, by Dr. J. Emmons Briggs. It was found that the appendix was ruptured, owing to the fact that the sharp angles of a calculus had thinned the appendix walls. There was a quantity of free pus in the peritoneal cavity and consequent septic peritonitis, no attempt of walling off having been made. After washing out with saline solution, drainage was provided for by eight gauze wicks. The outlook was as unfavorable as possible, Dr. Briggs giving an almost hopeless prognosis. Fortunately there was no nausea nor vomiting following the operation. Assuming that there was mixed streptococcus and colon bacillus infection pending an examination of culture from pus from the wicks, one hypodermic injection was given on the afternoon of the 9th of stock vaccine obtained from Dr. Watters of mixed streptococcus and colon bacillus. Microscopic examination proved the correctness of the assumption of a mixed infection. Drainage wicks were removed on the 10th under gas anaesthesia. At the time of injection the temperature was 99.8. The next morning the temperature was 99.6 and evening 100.4. The highest temperature was on the 16th, 100.8. Throughout the entire sickness subsequent to inoculation no serious symptoms were manifest. She made an uninterrupted recovery and was discharged cured from the hospital June 19th. While one such case does not of course prove anything, nevertheless the favorable outcome of an apparently hopeless condition will if sufficiently frequently repeated be indicative of beneficial results from the use of appropriate vaccines.

OPSONIC TREATMENT IN PYAEMIA.

By F. P. Batchelder, M.D., Boston, Mass.
Professor of Physiology, Boston University.

One of the first cases coming under my observation to which the opsonic treatment was administered was that of Mrs. ——, who developed croupous pneumonia in a portion of the lower lobe of the right lung, followed by empyaema. Free drainage for the latter was established, but the clinical symptoms of a profound septic invasion persisted, and she soon developed phlebitis of the left leg and then of the right leg.

The battle for life was waged very earnestly, but without material progress, until the addition of the opsonic treatment to the measures already in use. Up to this time there seemed but little hope of any favorable progress, but the repetition of the opsonic injections bore fruit, so that the temperature declined greatly, the phlebitis subsided and the reparative process improved at all observed foci of invasion, so that at the time the patient was removed from the Hospital the outlook was *at least quite* hopeful.

Prior to the patient's admission to the Hospital for a nephrorrhaphy, she had greatly exhausted her reserve of vitality through many social and domestic activities with very inadequate sleep and insufficient food, as was learned while the pyaemic process was at its height. She also had but imperfectly recovered from a severe cold and bronchitis. All these, no doubt, served to render her body an easy prey to the bacterial invasion which occurred.

After leaving the Hospital the opsonic treatment could not be adequately continued, and in time a severe splenitis occurred. The closing chapter in this illness is believed to have been a septic endocarditis, with its characteristic chill, high temperature and sweating with intermissions. Prior to the appearance of this supplementary method of treatment in such profound cases, the outlook has been most hopeless.

The results attained in the case cited warrant the conclusion that, under appropriate environment, the opsonic treatment affords marked benefit and in the less profound invasions an effective solution of very difficult problems.

VACCINE TREATMENT.—In such acute cases of more or less generalized sepsis, inoculations with the appropriate vaccine may be enough to turn the scale in the right direction. It may stimulate Nature at some crucial point. Often, after the natural defences are once started, no further inoculations are needed. In a fairly large experience I have never seen inoculation cause any alarming symptoms. It is then safe. Moreover, in such sick cases, it interferes in no way with whatever other treatment it may be desired to carry out. It is another string to the bow. While surely the treatment with bacterial vaccines will not cure all cases, yet from our experience it is a method of therapeutics to be considered seriously.—Roger I. Lee, Boston Medical and Surgical Journal.

A CASE OF ADDISON'S DISEASE.

By F. S. Piper, M.D., Lexington, Mass.
Lecturer in Clinical Medicine, Boston University.

Mr. J. J. O'N. Age, 40. Born in N. B. Occupation, car inspector. Work out of doors at present, but was in a machine shop when disease started.

Father always healthy; died at 72 of heart disease. Mother was in poor health several years and died at the age of 68 of apoplexy. Has five sisters and one brother living, and all healthy. Two sisters and two brothers died when quite small. His wife died of tuberculosis in the summer of 1906.

Mr. O'N. came to the O. P. D. of M. H. H. on September 9, 1907. He reported substantially as follows: Has had spells of diarrhoea without apparent cause. Appetite is poor; sleeps lightly. Has lost 30 pounds in the last year. Has spells of nausea and "bilious attacks." Began to grow yellow shortly before wife died (a little over one year ago). Had spells of feeling weak, and bad headaches. Now has sudden short faint, sick spells several times a day. Wakeful at night but not in pain. Tongue normal; eyes practically normal. Skin is dark bronze color; darkest on extensor surfaces and about nipples, scrotum and penis. Scrotum and penis are the darkest places. Diagnosis, Addison's Disease.

℞ Ars. iod. 2X — q. i. d.

September 16th, 1907, feeling better. September 25th, 1908, feeling well except had diarrhoea and cramps for two days. Urine normal.

℞ Ars. iod. 2X — q. i. d.

October 16th, 1907, has been feeling generally better and has gained 12 pounds in weight. Now weighs 120.

℞ Ars. iod. 2X — q. i. d.

℞ Opsonic treatment — T. R. .0002.

October 30th, 1907, feeling well except slight cold; no feverish attacks and no trouble with stomach or bowels. Sleeping much better.

℞ T. R. .0002.

November 13th, 1907, feeling well; slight headache one day which was relieved by eating supper.

℞ T. R. .0005.

November 23d, 1907, doing well. ℞ T. R. .0005.

November 27th, 1907. ℞ T. R. .0002.

December 4th, 1907, feeling well except had a headache for three days.

℞ T. R. .0001.

December 11th, 1907. ℞ T. R. .0001.

December 18th, 1907, feeling well and is working every day.

℞ T. R. .0002.

January 1, 1908, was very tired on December 23d and after

making severe efforts had a faint spell on the street and was dizzy the following day. ℞ T. R. .0005.

January 15th, 1908. Had attack of grippe last week. Feeling well again. ℞ T. R. .0005.

January 22d, 1908. ℞ T. R. .0008.

January 29th. ℞ T. R. .0005.

February 5th. ℞ T. R. .0005.

February 19th. ℞ T. R. .001.

February 26th. ℞ T. R. .001.

March 4th. ℞ T. R. .001.

March 11th. ℞ T. R. .001.

March 18th, 1908, diarrhoea and cramps in abdomen.

℞ Ars. cop. 3X — 6 times a day.

℞ T. R. .001.

April 1st. ℞ T. R. .001.

April 8th. ℞ T. R. .001.

April 22d. ℞ T. R. .001.

April 29th. ℞ T. R. .001.

May 13th. ℞ T. R. .0005.

May 27th. ℞ B. E. .001.

July 24th, July 15th, August 12th, September 9th and October 28th, each date, ℞ B. E. .001.

At this time Mr. O'N. has no ill feelings; is working every day and doing full day's work. His color is noticeably lighter and the prospects for his future appear favorable. He made a decided improvement while he was taking the iodide of arsenic before beginning the opsonic treatment, but I believe his present improved condition is largely due to the tuberculin treatment.

Considering the general history of these cases and their average duration, it is certainly interesting and agreeable to witness his very great improvement.

This patient was presented to the clinic during "Clinical Week" at Boston University School of Medicine, last June, when several very reliable clinicians concurred in the diagnosis.

A REPORT OF AN OBSTINATE PUSTULAR ERUPTION CURED BY INOCULATION.

By E. P. Ruggles, M.D., Boston, Mass.
Lecturer in Obstetrics, Boston University.

In the early part of December, 1907, I had a little patient, aged one year, who was attacked by whooping-cough. She was at that time in good health and previously had never showed signs of any disease or eruption, with a good family history.

The whooping-cough, not a mild case, was treated by the ordinary methods—Ipecac, Drosera and Belladonna, particularly the last apparently gave some relief. The family of its own accord made use of the cresolin lamp, while the child's general health and nourishment were supported in every way possible. She

recovered from the cough in fair condition during February, except for the tendency to the development of boils. During the latter part of January she showed several papules upon one buttock, two of these going on to pustulation with discharge, leaving bluish scars. From February to August she continued this process, at no time being free for a longer period than one week. They were usually found upon the buttocks, upper part of the thighs or lower lumbar region. As a rule, one or two appeared at a time, usually one suppurating, the other clearing up. Several developed into small abscesses in the deeper connective tissue of the skin which required surgical treatment and were readiliy healed. The child appeared quite well, but not robust. General treatment was advised and well carried out. Remedies, such as Hepar sulphur, low and high potencies, Silica, Arnica, Lachesis, which seemed well indicated by the conditions present, Echinacea in dilution and the tincture, did not check the infectious process. In the first week of August an opsonic inoculation was advised and explained to the parents, who readily agreed to the treatment. On August first an inoculation of 100 M. Staphylococci was given, and three or four days later another injection of 250 M. was used.

At the time of the first inoculation the child had one small abscess which was opened, another pustule, and one or two papules upon the buttocks. Two days after the first injection these were much improved, and by the time of the second inoculation they were healed and disappearing. From that time up to the present writing, November 20th, she has had no pustular inflammation whatsoever and is in perfect health.

PHYSIOLOGIC ERA IN SURGERY.—In a paper read by Dr. Robert T. Morris before the New York Academy of Medicine, the author speaks of the latest, or as he calls it, "the physiologic era in surgery," in the following words:

Our faces are now turned toward Metchnikoff and Wright, with their descriptions of phagocytes and opsonins, and of the natural protective forces of the patient. We are at the dawn of the fourth, or physiologic, era in surgery. We are to conserve the natural resistance of the patient and to turn him over to his phagocytes and opsonins as helpfully as we can. We are to leave the patient in his best condition for manufacturing phagocytes and opsonins, through the shortest possible method of anæsthesia and the least degree of surgery which will suffice to turn the tide of battle between bacterium and leucocyte.

That is the new principle—turning the tide of battle only and leaving the patient with his physiology as nearly intact as possible.

The object lesson furnished by the patients of the physicians who did not believe in operating for appendicitis, and the object lesson furnished by the results of operations which neglect the details of the art of the pathologic era, are lessons sufficient for a basis of the coming art of the physiologic era in surgery.

VACCINES IN PRACTICE.

By G. W. Worcester, M.D., Newburyport, Mass.

I was called about a year ago to see a man about fifty years of age who had been suffering for over two years with abscesses and fistulous openings in the perineum and scrotum. No history of venereal disease, had been under the old school treatment, and during the two years he had undergone several operations without any special benefit. He was told he would simply have to endure his condition the rest of his life. Admitted him to the Homoeopathic Hospital last March, where he remained about two months. His physical condition improved very much. There were some four or five fistulous openings discharging pus. These openings connected with the urethra, and whenever he urinated urine would pass through them. We operated at two different times by laying open these openings and treating them antiseptically until nearly all had healed, but he would occasionally have a new abscess which would leave another opening. In April I took a culture from the discharge of one of these openings, sent it to Boston to have a vaccine prepared from it. This was returned to us in about four days. He had four injections of this vaccine three days apart, and at the end of two weeks all openings had completely healed, and he was discharged from the Hospital cured. He reported at my office a few days ago and said he was in perfect health, had been ever since leaving the Hospital; no more abscesses or discharges from any point, had gone to work and felt strong and well as ever.

Another Case.—A man of forty-eight cut his knee with an axe. It became infected and he had septicaemia. Was brought to the Hospital, knee opened in several places which discharged a large quantity of pus. After some three weeks the knee got nearly well, but the man's condition did not improve. His temperature every night was one or two degrees above normal, tongue heavily coated, bowels constipated, loss of appetite, and very irritable. I made a culture from one of the openings that had not quite healed and sent it to a Boston pathologist. He returned the vaccine and after three injections the man's condition improved wonderfully, and he was discharged from the Hospital ten days after the first injection.

I was called to see a lady, age 30 years, who had aborted. She had a temperature of 104 degrees, constant vomiting, shooting pains all through the body, tenderness of the abdomen; evidently a case of septicaemia. I did not wait to make any culture in this case, but obtained from our druggist some streptococcus serum. I gave her an injection about 4 o'clock in the afternoon, and I saw her again at 8 o'clock the next morning. Her temperature had dropped from 104 degrees to normal, pulse 80, headache had entirely gone, and she made a complete recovery.

A CASE OF CYSTITIS — OPSONIC TREATMENT.

By Deborah Fawcett, M.D., Newton, Mass.

Mrs. B. Age, 35. Was in absolutely good health till the age of seventeen, when she was thrown from a horse's back. Shortly after this accident she suffered from a severe attack of cystitis, which persisted for some months. She was married at the age of nineteen. A year after marriage came another attack of cystitis, which was of long duration. She consulted well-known physicians, of different schools, in Boston, New York and Baltimore, trying all the various remedies and methods of treatment advised. The symptoms did not abate. Later she became pregnant and for nine months suffered untold pain.

After this the symptoms would abate for a short time, only to return with renewed force. Five years after the birth of the child she had an attack of appendicitis. The appendix was removed, as was one ovary and one tube, both of which were diseased. After this the cystitis still persisted, the patient growing prostrated and extremely nervous. Social duties, of which she was very fond, became impossible and were entirely abandoned. This condition had now lasted about eight years, with little intermission and apparently steady progression.

In August, 1907, opsonic treatment was instituted, associated with rest in bed for several weeks and weekly bladder irrigations, methods tried in vain before opsonic treatment was introduced.

The urine, which always showed an abundance of pus (some of which had previously been inoculated into a guinea pig to exclude tuberculosis) showed staphylococci, streptococci and colon bacilli.

Autogenous vaccines, first of bacillus coli, then of staphylococcus, and finally of streptococcus, were successful in eliminating all three varieties of bacteria, one after the other. From August to December 24th, weekly inoculations were given, at which time all symptoms had disappeared. During the month of January they returned to a slight extent. Another inoculation was given.

Since February the patient has been absolutely free from pain or other form of discomfort and has been fully able to attend to her varied social interests. All pus has disappeared from the urine, and as far as one is able to discover she is a well woman.

STOCK VERSUS AUTOGENOUS VACCINES.—The question whether a stock or an autogenous vaccine should be used varies with the individual case. Wherever possible, it is our custom to use an autogenous vaccine. In cases of long duration, however, it has been observed by us that at times an autogenous vaccine no longer produces good results, for the reason that the patient has become tolerant to it. This tolerance may be due to the fact that the dose is too small, or that there are too frequent injections in one spot, or that the vaccine has too little virulence.—Beebe & Medalia, Boston Medical and Surgical Journal.

A CASE OF FURUNCULOSIS.

By Harriet Horner, M.D., Newton, Mass.

A severe and protracted case of furunculosis, or carbunculosis, if such a term may be used, has come under my observation, which was benefited so decidedly and permanently by the opsonic treatment that I gladly welcome the opportunity to report it.

The patient, a woman, had suffered with carbuncles for ten months when the treatment was commenced, not having been free from one or more lesions at any time during that period. Naturally she was much exhausted from the pain and toxaemia, and was quite unable to continue her work. During this period various methods of cure were tried. In the beginning surgery was resorted to, with very bad results. Later she received the most painstaking and skillful homoeopathic treatment, with complete rest under the most favorable surroundings.. All that nourishing food, an out-of-door life and the most careful prescribing could do for her was done; the remedies greatly alleviated the pain and discomfort, giving her restful sleep, where before she had been awake night after night, suffering pain, such as only those who have been similarly afflicted can understand. In one instance the further development of a threatened carbuncle was entirely aborted by the appropriate homoeopathic remedy. Under this careful regime the patient gained steadiliy in strength and reached a point of resistance which made her hopeful of ultimate recovery, but again she was doomed to disappointment—the furunculosis persisted.

It was decided at this time—May 1st, 1907,—to try the opsonic treatment, and the case was submitted for such. The first inoculation was made May 3d, and raised the opsonic index from .45 to .79, and the patient became greatly encouraged, but again she fell from grace. She received five more inoculations at different periods during the succeeding three months, the case yielding slowly and reluctantly, inch by inch, until at last the opsonic index reached 1.2 and there remained. This resistance having been reached, and maintained, without any relapse, the patient considered herself well and resumed work until October, when, after three weeks of unusual exertion, there were threatenings of further trouble. These entirely subsided after another inoculation, this being the sixth and last. After a period of rest succeeding this relapse, the patient returned to her duties, renewed in health and strength, grateful to one and all who contributed to her restoration to health, but feeling sure that in spite of her faith in the homoeopathic remedy, the treatment by opsonins was in this instance homoeopathic to the case, and to it should be attributed the cure.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only, and preferably to be type written—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.

ASSOCIATE EDITORS:
F. W. COLBURN, M.D. C. T. HOWARD, 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, if possible.

THE PRESENT STATUS OF VACCINE THERAPY.

So much has been written during the past two or three years concerning the subject of opsonins, the opsonic index and vaccines, and such divergent reports have been advanced, that it seems appropriate to review in a somewhat abbreviated manner the clinical advantages that have already been obtained from them, leaving theoretical considerations for more technical treatment elsewhere.

The principle involved in vaccine therapy is an old one, dating back to the immunization against small pox by vaccination introduced by Jenner, and, as some claim, to the alteration in the method of using drugs introduced by Hahnemann. With the latter method extensive clinical application has been and still continues to be made, with satisfactory results. With the former practically no enlargement of scope, beyond the one disease was attempted for many years, although in this one practically world-wide recognition was achieved.

The next savant to give practical exemplification to the idea involved was Pasteur, who by his methods of forced immunity in rabies and in anthrax has much decreased our fears of those diseases. Then came Koch with his tuberculin; the much heralded, but at that time very disappointing specific for tuberculosis. Haffkine soon after announced his prophylactic for bubonic plague. Still later, similar measures were attempted, with considerable success, against cholera. Along allied but somewhat divergent lines was the treatment of diphtheria and of tetanus. Numbers of experiments were made to obtain prophylactic or curative agents for other infectious diseases, but with only meagre results.

It remained for Wright, by a number of methods modified from others combined with many original ones, to open up the possibilities for the treatment of the entire class of infectious diseases by a single principle of general application to all.

The medical profession, particularly the Anglo-Saxon part of it, proved most receptive to the new ideas, and for about two years various medical periodicals seemed to vie with each other in their attempts to give it greatest prominence. Later came, as always does come in these too enthusiastically accepted innovations, the reaction. Like so many other of its predecessors in professional attention, opsonic therapy from being a cure-all of simple application was discarded as useless by many of its recently enthusiastic supporters. Medical interest largely subsided or was diverted elsewhere. Hundreds who had thought to find in it a quick and easy way to cure sick people with little or no effort, after a varying amount of promiscuous trial, found it disappointing and discarded it. Wright, however, and a number of others on both sides of the Atlantic, remaining unaffected by the popular opinions, continued their investigations carefully and cautiously. The result is that today we are beginning to see the true field for the method, some of its possibilities and some of its limitations.

The Opsonic Index.

One of the important parts of Wright's claims has been his insistence on the necessity of determining the opsonic index prior to treatment. It will be noted that his procedure, while at all times intimately associated with the therapeutic aspect, has really no integral connection with it, and that accordingly the value of the latter is in no way influenced by proving the accuracy or inaccuracy of the former. This point has too often been lost to sight in the past with much resultant misunderstanding.

Probably no other one clinical method has ever been introduced into medicine, the performance of which requires so much skill and precision by fully competent experts as does the determination of the opsonic index. The slightest deviation from accuracy at any one of a dozen points wholly vitiates the entire result. It can be readily seen, therefore, that many who have undertaken the work with inadequate preparation could only be expected to do as they have done—make complete failure of it. With a certain reservation and after the consideration of the sources from which the reports have originated, it seems safe to say that the determination of the opsonic index by properly trained workers is a method that is, in a general sense, fairly accurate and one that is capable of revealing much useful information.

Concerning the necessity of invariably determining it prior to treatment, however, is quite another question. The technique is so complex and the time requisite for the performance so long, that in the minds of all but a very few it is felt to be impracticable. Not but what knowledge of the index might the better enable one to treat the patient, but if this were fully carried out, ten or at most fifteen patients, are all that any one person could attend. It seems safe to say that determination of the index for therapeutic purposes will be largely omitted except in a certain few puzzling cases, unless some simplification in the technique be introduced.

As a means of carefully following for experimental purposes the influence of drugs or other substances upon the body, the outlook for the opsonic index determinations seems most hopeful. As stated earlier, we must not confuse this part of the subject with the efficiency of the bacterial vaccines.

Therapeutic Inoculation.

Many papers have recently been written denying the value of the opsonic index, and just as many have been written as positively affirming it. Practically none have appeared, however, denying all value to vaccine therapy. Some have been unduly optimistic, while in the least enthusiastic we find it admitted that in a limited sphere of otherwise intractable diseases, vaccines are of decided value. None, therefore, claim that the method is valueless, the principal aim now being to mark out its limitations. In the present state of our knowledge accurate demarcation is impossible, for with greater clinical experience and wider knowledge new possibilities are constantly appearing. It is therefore, with the view of showing some parts of the field within our now-known limits that this number of the *Gazette* has been prepared. Certain it is that no method of therapeutics will cure all cases of any one disease, and so it is equally certain that some of the opsonic cases will not prove amenable to treatment. Nevertheless, so much has been already done as to lead us to hope that even some of these intractable ones can be much benefited, even if complete cure is impossible.

Homoeopathicity.

In many respects the means employed are so closely allied to those of homoeopathy that it is particularly gratifying for an homoeopathic journal to give them publicity. In the use of the simillimum or similia, in the size of the dose, in the single dose and in the repetition of the remedy we encounter very familiar directions, as well as in the once scoffed at fact, that the medicine will not do any harm, even if it does no good.

Opsonic treatment properly employed, like homoeopathic, never injures the patient beyond a temporary and occasional aggravation, but space forbids following this topic further at present, however alluring it may be.

Diseases Treated.

Let us now consider what diseases best respond to vaccines subcutaneously introduced. From the bacteriologic side we may enumerate the diseases thus far treated with varying degrees of success, as those caused by the staphylococcus, the streptococcus, the bacillus pyocyaneus, the colon bacillus, the pneumococcus, the gonococcus, the bacillus tuberculosis, the bacillus typhosus, the diphtheria bacillus and the influenza bacillus. A brief consideration of the individual organisms may be of value. Going from the end toward the beginning of our list we find that a number of cases of chronic bronchitis, due to the influenza bacillus, have

been apparently much benefitted by vaccines. Others have been uninfluenced. Therefore, since a relatively small amount of work has been done along this line, this subject must for the present remain *sub judice.*

Diphtheria—In a certain number of instances infections by the diphtheria bacillus in locations other than naso-pharangeal, oral or respiratory, have seemed to respond to the treatment. This has been particularly true in some cases of otitis media of long standing and suggests the possibility that even in true diphtheria infection negative cultures may be earlier obtained in cases otherwise very prolonged. This field is at present practically unworked and may prove very fertile. In fact, it is supposable that it might be used in association with antitoxin, the former being bactericidal, the latter neutralizing the extra-cellular toxin.

Typhoid—In typhoid fever the outlook for success is excellent, both from the prophylactic and from the therapeutic standpoint. Résumé of Wright's results in immunizing soldiers in South Africa will be found elsewhere, as will also the impressions by several well-known clinicians concerning its value in the actual course of the fever. These seem to all unite in the opinion that the future of vaccine treatment of typhoid is very hopeful. Certainly no harm has been done to any case and apparently a decided majority show benefit.

Tuberculosis—Concerning tuberculosis and tuberculin volumes have been written. No one now denies that the original method of using tuberculin was faulty and often dangerous. It produced many aggravations and often rendered more intense conditions over which it now seems to exert a beneficial action. The large doses of fifteen years ago have been replaced by infinitesimal ones, doses corresponding to our sixth or eighth decimal dilutions. Following this change there is a steadily increasing feeling that tuberculin, while by no means the once loudly hailed specific, is, nevertheless, an agent of definite value to be used in the treatment of the disease in association with general hygienic measures so much in vogue. Various opinions appear elsewhere. The growing knowledge concerning bovine tuberculosis may in future explain why our treatment with human tuberculin at times is a failure, even in well-selected cases.

Gonorrhoea—Inoculation with gonococcus vaccine, for the acute diseases or for some of its various sequelæ, has resulted in much success in the hands of some, less so in those of others. Here, again, we must leave it for the future to draw the limitations.

Pneumonia—A number of workers report convincing results following the use of pneumococcus vaccine in pneumonia, but as sudden changes are so characteristic of this disease, our deductions should be at present made with caution. In other pneumococcic inflammations, such as empyema, otitis media, etc., beneficial effects of unquestionable character have been noted subsequent to inoculation.

Colon Infection—The almost protean manifestations of the colon bacillus are frequently much helped by the vaccines, at other times no effect is seen. Colon cystitis, pyelitis and peritonitis seem to present the most hopeful cases. When used in conjunction with sodium citrate a number of long-standing sinuses have been closed.

Pyocyaneus—Infections by bacillus pyocyaneus, now relatively rare, have been treated with quite a degree of benefit in the comparatively few cases reported.

Streptococci—Streptococci produce so many severe infections that anything offering hope is here readily welcomed. And certainly many of the results following the use of streptococcus vaccine have been most brilliant. In erysipelas, in carbuncles, in infections of various localized parts, particularly sub-cutaneous, and even in a few cases of streptococcic pyæmia, the vaccines have been satisfactorily used.

On account of the probable existence of a number of unrecognizable species, an autogenous culture for each case has been wisely emphasized, although stock vaccines often are of service.

Staphylococcus—Probably of all the diseases most amenable to treatment, those produced by the staphylococcus easily stand first. This is particularly true of those long-continued cases of furunculosis that usually entirely fail to respond to other remedial agencies. Here the vaccines seem to be as nearly specific as in any one place, and by unanimous consent this is now the most satisfactory therapeutic device. In various other forms of staphylococcus infection very gratifying results have been obtained, even including a number of forms of skin diseases characterized by the formation of pus, as elsewhere noted.

The "Practitioner," in a recent number that was wholly devoted to vaccine therapy and the opsonic index, editorially summarizes the real value of forced immunization in such a satisfactory manner that it may well be here introduced: "The practitioner who is not a trained pathologist, and who has read the various articles in this issue of the "Practitioner," will probably ask, What, exactly, is the practical value of the opsonic method as it stands today? He will probably obtain different replies from different sources. The enthusiast may lead him to believe that the method forms a panacea for all the infectious diseases, whilst another may deny that it is of the slightest value. The truth, no doubt, lies between these two extremes. In the case of tuberculous infection, the method, on the whole, has been somewhat disappointing, though many striking cures have been obtained, and we hope that the future will lead us to a better recognition of the class of cases likely to be benefited by this particular method of treatment. At present we are justified in concluding that the method cannot do harm and certainly may do good." . . . . "In the case of the other infectious diseases, the results have been, on the whole, decidedly more encouraging. This is particularly the case with staphylococcic infections of all kinds; here the vaccine method

should be regarded as the chief of all therapeutic measures. In the more chronic lesions, due to pneumococci, gonococci, especially in gonorrhoeal arthritis, the new process is one of great value and should certainly be tried. It is true, simpler methods may be used first; but, should they fail, the opsonic method is surely indicated." . . . . "The method is a new and complex one, and, until its use has been more thoroughly explored, it should only be carried out under the guidance of an expert. In the enthusiasm begotten of the introduction of a new process, there is always the possibility of too much being attempted, and, if practitioners in general act on the notion that they have only to obtain so many millions of bottled bacteria and to inject them into their patients, the process is doomed, and we shall have another fiasco similar to that which followed the first introduction of tuberculin. Whether an opsonic control of the injections will always be necessary still remains to be shown, but for a long time yet the exhibition of the vaccines should be preceded by a most careful bacteriological examination, and, if possible, the particular vaccine should be prepared for each individual patient. If these precautions are taken, there is little doubt that the opsonic method and vaccine-therapy, has a brilliant future before it."

In the same journal Wright has contributed a paper from which the following is abstracted: "Already in my first paper on the treatment of staphylococcus infections by the therapeutic inoculation of staphylococcus vaccines, I suggested that we had in vaccine therapy a general therapeutic method which would be applicable to the treatment of all kinds of localised bacterial infections. In my next publication on therapeutic inoculation, I made bold to predict that the physician of the future would be an immunisator. Already these anticipations are justifying themselves. I do not know that there is anyone who has made trial of vaccine-therapy in connection with localised bacterial diseases who is not satisfied with its efficacy as a therapeutic measure, and the day when the physician will be an immunisator is, I think, perceptibly nearer."

"Far from the possibilities of vaccine-therapy in the field of the treatment of localised bacterial infections being already exhausted, those possibilities have as yet been only very incompletely explored. Only few and tentative experiments have, up to the present, been undertaken in connection with bacterial infections of the mucous membranes. The application of vaccine-therapy in connection with endometritis and bronchitis is almost unstudied, and the method has not yet been applied to whooping cough or to mumps. The question as to whether the Klebs-Loeffler bacilli, in the case where these survive on the throat after an attack of diphtheria, can be eradicated by vaccine-therapy, and the precisely similar question which presents itself in connection with the persistence of typhoid bacilli and other pathogenetic bacteria after convalescence, are in like manner still untouched."

It will be seen, therefore, that instead of having reached an

end of the benefits possible to be obtained from vaccines, we are now only just beginning to learn how to use them and already begin to anticipate results hitherto unhoped for. In the meantime, let us not hope for universal success nor condemn to oblivion a method as yet but imperfectly understood. On the contrary, let much work be performed along the various lines, controlled by expert, unprejudiced clinicians who are in the best position to decide the absolute amount of benefit ensuing.

In conclusion, the following quotation from Harris, also taken from the "Practitioner," gives his opinion as derived from personal experience: "I have endeavored to show that the use of bacterial vaccines is but a link in the chain of general treatment of which medicine stands at one and and surgery at the other. It is as much a part of medicine as it is of surgery; and though, perhaps, now rather a special study in itself, may largely in the future replace the pharmacy of the past."

PROPHYLACTIC TYPHOID VACCINES FOR THE ARMY.

It is a well known fact that during wars more men die from disease than are killed in battle. This was a particularly melancholy fact in our late Spanish war, when in a number of locations far from the front the mortality was higher than among the armies in active service.

By far the largest part of this mortality is caused by typhoid fever. Any means of decreasing or eliminating this danger should, therefore, be carefully investigated.

Influenced partly by the results of Wright's work on prophylactic immunization in Africa (quoted elsewhere), and partly by similar work in Germany, the medical staff of the United States army decided to give the subject careful consideration. Captain Russell, pathologist of the Army Medical School, was sent abroad for personal investigation. Upon returning he reported favorably on the subject. The entire question was then submitted to a specially appointed board comprising some of the best-known men in America. These were Vaughn of Ann Arbor, Councilman of Boston, Musser of Philadelphia, Flexner and Lambert of New York, and Thayer of Baltimore. After mature consideration they reported as follows:

"The board is convinced of the usefulness and the harmlessness of anti-typhoid vaccination and has recommended that the practice of voluntary vaccination be introduced in the army of the United States as a practicable means of diminishing the amount of typhoid fever."

This would seem to positively fix the seal of approval upon at least one part of the opsonic or vaccine question, as it was only after analyzing the results from thousands of cases that the conclusions were finally reached.

TUBERCULIN AN HOMOEOPATHIC REMEDY.

In the December number of the Hahnemannian is found an editorial on the therapeutic administration of tuberculin that may well be of interest to homoeopaths. In this are summarized the results of Dr. Arthur Latham, the eminent English physician, in his studies of tuberculin in tuberculosis. After giving a resume of the work that led up to the introduction of the material by Koch, Dr. Latham is quoted as saying:

"A brief trial of tuberculin in the doses recommended by Koch led to its emphatic condemnation at the hands of most leaders of medicine at that day, although Koch's work was founded on the sound scientific basis of active immunity. The profession in this country, after a short trial of the remedy, allowed it to fall into discredit and disuse. It apparently never occurred to any of those who so roundly condemned, and who, it may be added, still continue to condemn, tuberculin, that the ill-effects produced were due to an improper use of the remedy, and that tuberculin, like many other remedies which do harm when given in excessive doses, would give good results when given in proper doses."

It is of interest, as the Gazette has already done several times, that tuberculin originally administered in material doses is the cause of frequent aggravation of the disease, yet when used in infinitisimal amount is often capable of producing beneficial results of most decided character. The initial dose now universally recognized in an amount varying from one seventh to eighth decimal dilution while the maximum amount used by the Wright school is equivalent to one sixth dilution. Latham also agrees with the later studies of Inman and others concerning the injection of tuberculin per oram, whereby the opsonic index will show a similar curve to that produced by subcutaneous inoculation. In the size of the doze, in the method of its repetition and in its opposite actions when in large or in small amount, tuberculin is, therefore, a good illustration of the use and mode of action of drugs when used homoeopathically. It is not surprising, then, that several prominent men of the dominant school of medicine have not hesitated to admit that this was the best argument for the truth of homoeopathy that had been brought forward in recent years.

GONOCOCCUS VACCINE IN GONORRHOEA IN THE FEMALE.—"In summarizing the results of our work it appears to us that in the treatment of gonorrhoea in female children, gonococcus vaccine is more effective than local applications, which we think in some instances actually delay recovery. The vaccine treatment is not only effective but in many cases, more particularly those of some standing, produces very rapid improvement, and often recovery. This does not, however, hold good in all chronic cases, nor in all acute cases, many of which require a prolonged course of inoculations. This latter point should be held in mind by those undertaking this work."—Butler & Long, Journal A. M. A.

OBITUARY.

EVELYN GREENLEAF SUTHERLAND, wife of Dr. Preston Sutherland, died December 24, 1908, from shock following accidental burns received the preceding morning. This tragic death of one who, although not a member of the medical profession, was in full sympathy with it and actively co-operated in her quiet but effective way with all that made for progress, has cast a shadow of sadness over all who knew her.

In the long editorial management of the Gazette by Dr. Sutherland her facile pen and quick mind were always ready to supply leaders and correct proof when his exacting professional duties made it impossible for him to meet the demands of the printer.

Her masterly originality, organizing and executive ability in connection with the work of the New England Hahnemann Association in financing Boston University School of Medicine are known to all who had the pleasure and privilege of following her leadership.

This co-operation in her husband's literary and professional work was, however, but a side issue. Her life work was as a writer and dramatist. For years she was a regular correspondent and dramatic critic of the leading Boston papers under the nom de plume of Dorothy Lundt. In recent years her literary genius has been devoted to dramatization. Her plays have found popular acceptance both in this country and England.

Her work as a dramatic critic and dramatist brought her in close relation with the theatrical fraternity. Those who enjoyed the privilege of meeting her in her home life never failed to imbibe the intangible something that stimulates to higher ideals.

To Dr. Sutherland in his bereavement over this shocking tragedy and loss of wife, companion and helper the deepest sympathy of all his professional colleagues goes out.

NEW LORD MAYOR OF LONDON.—The Gazette notes with pleasure the elevation to the new dignity of Lord Mayor of London of Sir George Truscott, one of the strongest of the British homoeopathic laymen. The Homoeopathic World of London expresses the pleasure that is so fully shared by American homoeopathy and cites as an illustration of the continued active interest of this eminent gentleman the fact that he recently journed to St. Leonards to open the new wing of the Buchanan Homoeopthic Hospital. Sir George is president of the Phillips Memorial Homoeopathic Hospital and vice-president of the British Homoeopathic Association, in both of which places he is a very active worker.

SOCIETIES.

The regular meeting of the Boston Homoeopathic Medical Society was held in the Natural History Rooms, December 3, 1908, the meeting being called to order by the president, Dr. J. Arnold Rockwell.

Business Session.

The reading of the minutes of the last meeting was waived.

The following were proposed for membership: Florilla Mansfield White, M.D.; Winifred Morrill Woolls, M.D.; Elizabeth Emma Shaw, M.D.; Howard Lewis Cushman, M.D.; John A. Hayward, M.D.

The following physicians were elected to membership: Charles Alexander Eaton, M.D.; John Lewis Mahoney, M.D.; Patrick J. Murray, M.D.

Scientific Session.

"What Is Medicine?" From the standpoints of education and legislation, John P. Sutherland, M.D., Dean of Boston University School of Medicine.

William E. Huntington, LL.D., President of Boston University, discussed the subject from the educational standpoint.

Edmund A. Whitman, A.M., LL.D., of Elder & Whitman, President of the New England Hahnemann Association, discussed the subject from the legal standpoint.

Richard C. Cabot, M.D., Professor of Clinical Medicine at Harvard University, spoke on Psycho-Therapeutics.

The Rev. Elwood Worcester, D.D., Ph.D., was to have spoken on the Relationship of Psycho-Therapy to Medical Science, but was unavoidably absent.

Howard T. Crawford, A.B., D.O., Dean of the Massachusetts College of Osteopathy, spoke on the Relationship of Osteopathy to Medical Sciences.

After a prolonged general discussion the meeting adjourned.

SIZE OF DOSE OF TUBERCULIN.—Matson, in the Medical Sentinel, gives the following directions concerning the size of dose of tuberculin:

In using T. R. 1-10000 mg. is a safe dose, I think, to begin with. It may have been increased to 1-3000 mg. (I have never had occasion to go beyond this), or diminished to 1-20000 in some hypersusceptible individuals. Injections are to be given every week to ten days or two weeks, depending upon the case.

VALUE OF TUBERCULIN IN PULMONARY DISEASES.—An article upon the results of treatment of pulmonary tuberculosis by tuberculin written by Matson in the Medical Sentinel thus summarizes his opinions:

1. Tuberculin, if used early in tuberculosis, is likely to be of more benefit than later, when the substance of the affected lung is so extensively destroyed as to cripple the individual by the loss of such an important structure.

2. Tuberculin will not check the action of streptococci, staphylococci and other bacteria that may constitute a coincident or mixed infection.

3. It is therefore in incipient tuberculosis that we can expect the most satisfactory results. Many failures in tuberculin have been and are now due to too much reliance being placed upon it to accomplish a cure alone and unaided. Open air, rest, proper feeding and other hygienic measures are not to be neglected.

4. The best sanatoria throughout the world are using it, clinicians have accumulated a great mass of evidence in its favor, and modern methods in the study of immunity, especially those of Wright, have placed it upon a scientific footing.

BOOK REVIEWS.

Diseases and Surgery of the Genito-Urinary System. By Francis S. Watson, M.D., Senior Visiting Surgeon to the Boston City Hospital; Lecturer on Genito-Urinary Surgery, Harvard Medical School; etc. Assisted by John H. Cunningham, Jr., M.D., Visiting Surgeon to the Long Island Hospital, Boston; Assistant Visiting Surgeon to the Boston City Hospital; etc. Vol. I: The External Genitals; The Prostate and the Bladder. With 339 Engravings and 23 Colored Plates. Vol. II: The Kidneys and Ureters. With 115 Engravings and 24 Colored Plates. Lea & Febiger. Philadelphia and New York. 1908. Price for the complete work, $12.00, net.

Among the various books coming to the Gazette for review are a number of very mediocre character, many of a good average, and but comparatively few of surpassing excellence. In this last limited class we feel inclined to place the work now under consideration. The first impression is favorable and more thorough examination merely serves to strengthen this good opinion.

As will be seen it is published in two volumes, one dealing with the external genitals, the prostate and bladder; the other with the ureters and kindneys. Nearly five hundred engravings and fifty colored plates serve to profusely illustrate the text. The colored plates illustrative of kidney lesions and of cystoscopic pictures deserve particular commendation, as being as a whole the best collection the writer has yet seen. Apparently financial outlay has been given no consideration.

The text is equally as satisfactory as the illustrations and we should be proud to claim the authors as fellow Bostonians so well have they covered this important subject. This cannot of course be here considered in detail as any adequate treatment would require much more space than is available. We can say, however, that both the medical and the surgical aspects of the subject are fully covered, and that very full statistical data concerning the after results of surgical procedures are included. It is accordingly a book adapted to the specialist in the subject as well as to the general practitioner to whom come almost daily for diagnosis and treatment many of these cases.

While at first thought the price may seem excessive, yet when a careful examination of both books has been made, we wonder how it could have been prepared even for this price. The type is large and easily read and the book work excellent; and the whole work holds a position in its specialty that Osler's "Practice" is making for itself in general medicine; that is, one unrivaled and alone.

We unhesitatingly give to this book our hearty commendation.

A Manual of Bacteriology. By Herbert U. Williams, M.D. Professor of Pathology and Bacteriology, Medical Department, University of Buffalo. Revised by B. Meade Bolton, M.D., One Time Associate in Bacteriology, Johns Hopkins University; Chief of the Bureau of Health Laboratory, Philadelphia, Penna.; Professor of Pathology and Bacteriology, University of Missouri, etc. With 113 Illustrations. Fifth Edition, Revised and Enlarged. Price, $2.00 net. P. Blakiston's Sons & Co., Philadelphia. 1908.

In the earlier editions of this work as well as in the present one the avowed purpose of the author has been "to give in the smallest possible space the facts that a physician must know, with some of those which it is desirable that he should know, and a little of that which he may learn if his needs or inclinations lead him to go further." It was originally designed almost exclusively for students, but as it has from time to time been amplified it now serves as an excellent manual for the

physician who desires to ascertain in a brief time the results of the latest investigations.

The present edition shows numerous additions and some alterations. This is particularly true on the chapters on milk and on water examination. As would be expected from the many discoveries of recent years, the chapters on bacterial poisons and on immunity show many changes and much improvement. We wish that surgical antisepsis had received better attention.

Also in accord with modern progress is the enlargement of that part of the book dealing with pathogenic protozoa.

Part I dealing with bacteriological technique is complete and very plainly written. It should give to each reader a very clear idea of the various steps involved in the various methods of study and at the same time is one of the best laboratory guides for the medical student with which the reviewer is familiar.

In fact, any person, professional or otherwise, who may desire a good general knowledge of bacteriology without voluminous reading can do no better than to obtain it from this neat, attractive, well illustrated book.

Arteriosclerosis: Etiology, Pathology, Diagnosis, Prognosis, Prophylaxis, and Treatment. By Louis M. Warfield, A.B., M.D. Instructor in Medicine Washington University Medical Department; Physician to the Protestant Hospital; Adjunct Attending Physician to the Martha Parsons Hospital for Children, St. Louis, Mo., etc. With an introduction by W. S. Thayer, M.D., Professor of Clinical Medicine, Johns Hopkins University. Eight original illustrations. C. V. Mosby Medical Book Co., St. Louis, Mo. 1908. Price, $2.00.

This is an excellent little monograph written upon a very common disease by a man who is very evidently very familiar with his subject. It is written in the form of an essay that contains the results of the latest researches in the laboratory and by the bedside. Anatomy, physiology, pathology, etiology, symptoms, diagnosis, prophylaxis and treatment are all carefully taken up in turn and briefly but clearly discussed. The few illustrations are unsatisfactory for the most part, serving to rather inadequately demonstrate parts of the otherwise very satisfactory work.

A Laboratory Guide for Histology. Laboratory Outlines for the Study of Histology and Microscopic Anatomy. By Irving Hardesty, A.B., Ph.D.. Associate Professor of Anatomy in the University of California. With a Chapter on Laboratory Drawing by Adelebert Watts Lee, M.D. Assistant in Anatomy in the University of California. With 30 Illustrations, 2 of which are in colors. Price, $1.50, net. P. Blakiston's Son & Co., Philadelphia. 1908.

Of the somewhat numerous laboratory guides or texts for histology that are at present in print, the one under consideration at the present time has impressed the reviewer most favorably. It covers general histology, minute anatomy of the organs and neuro-histology. The time required for a class to follow the outlines here made is approximately three hundred hours.

One of the features of the syllabus accompanying each section of the various chapter is a number of questions on the subject being studied. The answers are left for the individual student to make by his own reading elsewhere.

A feature entirely unique and one in every way most commendable is the inclusion of a chapter on laboratory drawing, a subject too often neglected in this work. This section in partcular is worthy of careful study by all laboratory workers, whether histological or otherwise. It seems certain that any class carefully following the synopses here given cannot fail to obtain a most comprehensive understanding of one of the basic studies of medicine.

A Manual of Diseases of the Nose and Throat.—By Cornelius Godfrey Coakley, A.M., M.D., Professor of Laryngology in the University and Bellevue Hospital Medical College, New York City; Laryngologist to Columbus Hospital, the University and Bellevue Hospital Medical College Clinic, etc. Fourth Edition, Revised and Enlarged. Illustrated with 126 Engravings and seven Colored Plates. Lea & Febiger, New York and Philadelphia. 1908.

To the man in general practice a detailed treatise upon any one of the specialties, however excellent it may be, is not of great practical value. Far more useful is a smaller book giving all the salient points of symptomatology, diagnosis and treatment.

In this latter class of books belongs Coakley's "Diseases of the Nose and Throat," now in its fourth edition. Those who have had personal experience with publishing houses well know that "the house of Lea" is pre-eminent for the famous authors of famous medical books. Dozens could be named illustrative of this fact, and the one at present under review is no exception. Freely supplied with excellent illustrations, a number in colors, one seems almost to have a continuous demonstration of those subjects treated in the text. Three illustrations in particular, showing results of transillumination of the antrum and of the frontal sinus in health and in disease are particularly instructive. A welcome innovation is found in the fact that instead of befogging the ordinary man by a multiplicity of methods for doing one thing, the author selects those few that he thinks best suited for the non-expert operator who may not have received the advantages of post-graduate instruction.

The present edition deserves, and will receive, the hearty approval of the profession that has already been accorded to its predecessors.

A Handbook of Suggestive Therapeutics, Applied Hypnotism, Psychic Science. By Henry S. Munro, M.D. Americus, Georgia. Second Edition. Price, $3.00. C. V. Mosby Medical Book Co., St. Louis, Mo. 1908.

This is the second edition of this book to appear within nine months. The popularity of the subject at the present time probably has something to do with the unusually great demand, but even so, that alone would not serve to so widely distribute an inferior production.

Hynotism is fully covered in all its manifestations, both in regard to its phenomena and in connection with its therapeutic uses. Suggestion, the sub-conscious self and psychologic subjects of various sorts are all treated in a clear manner.

In addition to the usual theoretical discussions, explanations are given in detail of the manner of effectually using suggestion, either with or without hypnotism for therapeutic purposes. An innovation in the text is noted in the use of different kinds of type to give emphasis to certain phrases or sentences. This is good in part but has been rather overdone by thus directing attention to numerous unimportant and insignificant parts.

The reader of this book, whether he be physician or layman, will, nevertheless, be almost certain to gain new light on an important subject, and to accordingly be better able to cope with many problems that may bo encountered.

Messrs. Boericke & Tafel announce two very interesting books in press: "Diseases of the Respiratory Organs," by Dr. E. B. Nash, and "The Food-Tract; its D seases," by Dr. A. L. Blackwood. Dr. Nash confines himself to the homoeopathic treatment of the diseases of the respiratory organs, Dr. Blackwood takes up every disease of the food-tract from mouth to rectum, giving everything concerning the subject that the student needs to learn and the practitioner to remember, including homoeopathic and accessory treatment.

The Practitioners' Visiting List For 1909. The Weekly, Monthly and 30-Patient Perpetual contain 32 pages of data and 160 pages of classified blanks. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil and rpbber, and calendar for two years. Price by mail, postpaid, to any address, $1.25. Thumb-letter index, 25 cents extra. Lea & Febiger, Philadelphia and New York. 1908.

As noted above, this visiting list comes in four different forms adapted to the various needs of the medical profession.

Among the various subjects briefly covered by the text are dose tables, ligation of arteries, poisons, list of diseases with common remedies for each, diagnostic table of eruptive fevers, directions for uranalysis, etc., etc.

The entire book is printed on special, tough paper, suitable for pen or pencil, and is made to withstand heavy usage.

Physician's Visiting List, With Special Memoranda. 25 Patients per Week. Bound in flexible leather, with flap and pocket, pencil and rubber, and calendar for two years. Interleaved. Price, $1.00. P. Blakiston's Son & Co., Philadelphia. 1908.

This neat, little leather-bound book has been favorably noticed in these columns from year to year for some time past. The very fact that this is the fifty-eighth annual issue is significant of the success that it has achieved. It can be obtained in several styles as desired, for twenty-five, for fifty or for seventy-five or for one hundred patients per day or per week, (the last three in two volumes). A perpetual edition is also printed. Of this value and usefulness we are able to speak after a considerable personal experience extending over several years.

McClure's Magazine for January is of more than usual interest, containing as it does the opening charter of Mrs. Humphry Ward's first American novel, "Marriage a la Mode," General Kuropatkin's account of The Treaty at Portsmouth, "The Mortality of Overweights and Underweights," by Brandeth Symonds, A.M., M.D., and many other good things. Price, 15 cents per number, $1.50 per year. See subscription offer on last page of this number of the N. E. Medical Gazette.

BOOKS SOON TO APPEAR.—E. B. Treat & Company announce the following books already in press and shortly to be ready for publication: Surgical Diseases of Children. Kelley. $5.00. Ptomaine Poisoning. Dieudone. Translated by Bolduan. $1.00. Disorders of the Bladder. Cabot. $2.00.

THE MONTH'S BEST BOOKS.

Emergency Surgery. Sluss. $3.50. P. Blakiston's Son & Co.
Nervous System. Gordon. $2.50. P. Blakiston's Son & Co.
Guide for Histology. Hardesty. $1.50. P. Blakiston's Son & Co.
Manual of Bacteriology. Williams. $2.00. P. Blakiston's Son & Co.
Pharmocology. Tyrode. $1.50. P. Blakiston's Son & Co.
Suggestive Therapeutics. Monro. $3.00. C. V. Mosby.
Therapeutics of the Circulation. Brunton. $1.50. P. Blakiston's Son & Co.
Human Physiology. Brubaker. $3.00. P. Blakiston's Son & Co.
Surgical Memoirs. Mumford. $2.50. Muffat Yard & Co.
Diseases of the Nervous System. Wilson. $3.50. Boericke & Runyon.
High-Frequency Currents. Strong. Rebman Company.
Surgery of the Ear. Kopetzky. Rebman Company.

AN ENGLISH-CHINESE LEXICON OF MEDICAL TERMS, prepared by Dr. Philip B. Cousland, has just been published in Shanghai. Though the author is an Englishman by birth, he has based his book largely upon the Medical Dictionary of Dr. George M. Gould, of Philadelphia, a high compliment to American scholarship. Dr. Cousland has recently published a translation of Prof. Halliburton's edition of Kirkes' Physiology.

ABSTRACTS.

A COLLECTION OF OPINIONS CONCERNING OPSONIC THERAPY FROM VARIOUS SOURCES.

Facts alone speak; all else must be rejected unhesitatingly. Those of us who have seen Wright's work in London can have no doubt as to the large field of usefulness it has opened up. Disappointments we shall have, but I am convinced it will be rather the pupil's error in technic than a failure in the master's theories and facts.—Martyn, Journal A. M. A.

The vaccine treatment, when used in conjunction with medicine or surgery, may lessen suffering and deformity and frequently save life.—Floyd and Worthington, Boston Medical and Surgical Journal.

If we will but employ this treatment with judgment and care, following closely all details, being careful not to jump to conclusions, and become skeptical because we do not always get results, in the end bacterial vaccines will be looked upon by the majority as occupying a highly important place among our agents for combatting disease.—Gildersleeve, The Monthly Cyclopædia of Practical Medicine.

The brilliant results recorded by Wright and his colleagues compel enthusiastic attention to the subject, intricate and laborious though its demands are. If others can achieve the results which Wright and his fellow-workers record we shall be able to treat effectively cases of surgical tuberculosis in which operative treatment and other surgical measures now leave so very much to be desired.—Dunham, Annals of Surgery.

It seems fair, with the weight of rapidly increasing evidence, to admit that Wright's opsonic therapy opens a new and vast field for the remedial use of bacterial inoculations, and there are humanitarian considerations which urge the extension of the new practice as speedily as possible.—Editorial, American Medicine.

I am hopeful, in lieu of the work done, that we have in the opsonic theory that which will prove to be a valuable asset in combating disease. More than this, I believe it is going to lead to a more general acceptance of the homoeopathic idea, and also is going to, in some way, help to put our practice on a more exact basis.—Smith, The Clinical Reporter.

Finally, from what I have already seen, which is tempered by a rather extensive experience in private and institutional medical work, I am prepared to assert that with the proper artificial auto-inoculation we can obtain constitutional and local improvement in many subacute and chronic infections entirely beyond anything previously possible in medicine. And I am personally assured that in these bacterial inoculations we possess therapeutic agents of a specificity and potency exceeding anything heretofore employed in the treatment of disease except possibly the antitoxin of diphtheria.—Ohlmacher, The Journal A. M. A.

I may state that I have endeavored to analyse all my results coldly and critically, with a due allowance for coincidence and the intervention of other, though unknown, agencies. Nevertheless, I find my belief firmly established that proper inoculation with appropriate bacterial vaccines is a powerful expedient for the cure or control of many diseases due to micro-organisms. To my own mind the evidence in favor of this belief is almost overwhelming.—Ross, The Journal A. M. A.

1. Tuberculin in small doses at proper intervals is of undoubted value in the treatment of selected cases of tuberculosis bone and joint infections.

2. The rise of the opsonic index is accompanied by an improvement in the local and general conditions of the patient, if no secondary infection exists.

3. The opsonic index will prove of value in determining the advisability of discontinuing mechanical treatment.—Ogilvy and Coffin, The Journal A. M. A.

There is no doubt, however, that treatment by means of bactrial vaccines deserves more extended aplication.—Bolduan, Medical Record.

My experience with opsonic therapy in microbic diseases is that of every opsonist who correctly applies it. I have been peculiarly fortunate in having so many streptococcus infections to treat, as the result of these cases alone demonstrates the usefulness of opsonic therapy.

That the employment of this treatment, if it be successful, must remain in the hands of those who have had years of experience in bacteriology and pathology, along with sufficient clinical education to enable them to use proper judgment, seems self-evident.—Ohlmacher, American Journal of Surgery.

Sufficient reports, of a reliable nature, have been made to make it certain that this method has attained a due place in therapy. Just how great a place only time can tell.—Blair, The Medical Counselor.

The results of treatment of acute B. Coli infections have been uniformly satisfactory.

The results of vaccination in staphylococcic processes have been so constantly good that comment is unnecessary.

In the diagnosis of doubtful or cryptogenetic infectious processes, including tuberculosis, the determination of the opsonic index furnishes a valuable addendum to present methods.

The occurrence of an opsonic negative phase following injection of Tuberculin T. R. is a more exact diagnostic test for tuberculosis than any which we possess at present.

In treatment as an adjuvant to standard methods, the use of vaccines, guided by the index, where possible, has almost uniformly made the progress of cases more satisfactory and rapid than ordinary methods of treatment could have done; in many cases vaccine treatment has been followed by results which could not have been obtained by any other method of treatment.—Leary, Medical Communications of the Massachusetts Medical Society.

I, for one, desire to enter a plea for the addition to every municipal laboratory of an opsonic department to which we might send our sera for examination, our smears for identification, and in return receive properly prepared vaccines, either autogenous, or stock, with which we may determine for ourselves the future of vaccine therapy. Surely the burden of such work ought not to fall upon the individual.

As to the value of vaccine therapy we may say: (a) It is of distinct value in the treatment of chronic localized tuberculosis of the bones, joints, glands, and urinary tract, acting not only as a general tonic, but as a local stimulant to repairing of tissues; (b) It is of marked value in the treatment of staphylococcus affections, such as acne, furunculosis, etc. (we do not report a large number of such cases, but clinical improvement has been universal in all cases we have treated); (c) It seems to be of definite value in the treatment of urinary tract infections by the colon bacillus.

The outlook for the value of vaccine therapy in gonorrhea infections seems excellent.

The opsonic index is a valuable guide in the administration of the tubercule vaccine.

We have found, on the contrary, that after skill has been acquired and like conditions governing findings (like fields on the film, etc.) followed, that the final results of different observers grow more and more accurate and agree with but very slight variation.

Of the 75 cases examined for dioganosis, the clinical and the tuberculo-opsonic index diagnosis agreed in 95 per cent.

The simplicity of the diagnosis is a great advantage over other obscure internal infections, rendering the treatment and cure of acne, furuncles, and abscesses by the opsonic method most satisfactory, the improvement being actually visible from day to day in case of boils, and from week to week in case of acne.—McArthur and Hollister, Surgery, Gynecology and Obstetrics.

The class of diseases in which vaccines are recommended for therapeutic purposes is a large one, including as it does all diseases due to localized bacterial infection. Wright claims to have employed them successfully in the treatment of acne, lupus, puerperal septicemia, tubercular adenitis, pulmonary tuberculosis, boils, carbuncles, rheumatic fever, empyema, cystitis, necrosis of bones, suppurative inflammations of the accesory nasal sinuses, gonorrheal rheumatism and infected wounds.—Editorial, The Hahnemannian Monthly.

Bacterial therapy is becoming of greater importance as our knowledge of the subject advances. Some investigators have been altogether too enthusiastic, but the majority have, however, settled down to look upon the vaccines as valuable therapeutic agents, but not as cure-alls; there is still much adverse criticism on the part of its opponents. We are, however, by using them with intelligence, gradually adding to the list of infections that can be benefited by the use of appropriate vaccines; those that do not respond so well as to other treatment, are being eliminated, and the treatment modified or supplemented as the condition demands and experience teaches is necessary.

The vaccines have come to stay, and we can only ask certain members of the profession to be patient and not condemn bacterial therapy because they cannot employ it.—Monthly Cyclopaedia.

VACCINE AGAINST TYPHOID.—As a result of the extensive application of vaccine as a prophylactic agent against typhoid during the South African war, Wright claims decided benefit for the method. These results have been examined by Muir and Ritchie, who write concerning them as follows:

"Though in isolated cases not much difference has been observed among those treated as compared with those untreated, yet the broad general result may be said to leave little doubt that on the one hand protective inoculation diminishes the tendency for the individual to contract typhoid fever, and on the other, if the disease be contracted, the likelihood of its having a fatal result is diminished. Thus in India, of 4502 soldiers inoculated, .98 per cent. contracted typhoid, while of 25,851 soldiers in the same stations who were not inoculated, 2.54 per cent. took the disease. In Ladysmith during the siege there were 1705 soldiers inoculated, among whom 2 per cent. of cases occurred, and 10,529 uninoculated, among whom 14 per cent. suffered from typhiod. In Harrismith, Birt's statistics show that in typhiod occurring in uninoculated persons the mortality was 14.25 per cent.* Wright has collected statistics dealing in all with 49,600 individuals, of whom 8600 were inoculated, and showed a case incidence of 2.25 per cent., with a case mortality of 12 per cent.; in the remaining 41,000 uninoculated the case incidence was 5.75 per cent. and the case mortality 21 per cent. The best results seem to be obtained when ten days after the first inoculation a second similar inoculation is practised. Wright has found that in certain cases immediately after inoculation there is a fall in the bacterial power of the blood, and he is of opinion that this indicates a temporary increased susceptibility to the disease. He therefore recommends that when possible the vaccination should be carried out some time previous to the exposure to infection. There can be very little doubt that in this method an important prophylactic measure has been discovered."

*While among 263 inoculated the mortality was 6.8 per cent.

VACCINE TREATMENT OF CARBUNCLE.—"In Boston I treated a patient with severe carbuncle by inoculation with a staphylococcus vaccine with striking effect. The patient was a laborer of 45 who had a carbuncle on his back as large as a baby's fist. Inoculation with 300,000,000 staphylococci removed all pain and tenderness in forty-eight hours, the central slough came away in eight days and almost all the inflammatory mass was dissipated a week later."—Ross, the Journal of the A. M. A.

PLAGUE VACCINE.—An anti-plague vaccine was first prepared by Haffkine and is the one most generally used. The plague bacillus is grown in Warden's bouillon and the cultures then sterilized by heating to 65° C. for one hour, and a .5 per cent. of carbolic acid added to them. Two injections are given.

The value of this vaccination can be estimated only from statistics, and these show evidence that both the incidence of plague and the mortality among the vaccinated, who happen to contract the disease, are very much lessened by the inoculation.—George E. McLaughlin in the Post-Graduate.

BACTERIAL INOCULATION IN GONORRHOEA.—I think that the course of acute urethritis is materially shortened and complications are less likely to occur when vaccines are employed together with other treatment. Of the four cases of this condition treated with vaccines alone, in two the discharge stopped after two vaccinations given at intervals of five days. In the others, the discharge was reduced in amount only, but was easily stopped by local treatment. The two chronic cases in which vaccines alone were employed were much improved, but required local treatment to stop the discharge. Five of the cases of arthritis are cured from periods of eight to two months. One is greatly improved, while in the other, the improvement is only slight. When other vaccines are used with the gonococcus vaccine the discharge diminishes more rapidly than when gonococcus vaccine alone is used.—Hutchings, American Journal of Dermatology.

VACCINE TREATMENT OF ERYSIPELAS.—In the New York Medical Journal Duncan and Illman report three cases of erysipelas successfully treated by vaccines. The doses vary from 30 to 60 M, Streptococci. In the first case the fever dropped to normal in twelve hours with an uneventful recovery, and in the second case within 24 hours. The third case, which was very serious in its clinical aspects, responded less readily, although here the temperature was normal on the fourth day and the extension of the inflammation ceased.

VALUE OF TUBERCULIN.—Tuberculin is the most valuable adjuvant to fresh air, rest and good food that we possess in the treatment of pulmonary tuberculosis. Tuberculin is indicated in many types of cases, and in the hands of a competent administrator will do no harm. Dosage should be at first infinitesimal; increase should be gradual; the word "haste" has no place in tuberculin therapy. Time and tolerance bring success in the treatment by means of tuberculin.

TUBERCULIN IN TUBERCULOSIS.—"We have only begun to learn, in a small way, the value of tubercule bacilli products in the treatment of tuberculous lesions. As the physiological and therapeutic action of the drug becomes better understood, its application in suitable cases will become more general. Tuberculin can never be considered a specific in tuberculosis, but at the present time we know it as a most valuable adjuvant to other well-recognized therapeutic agents in the treatment of tuberculous lesions in the early stages of the disease."—Pogue, Medical Record, Aug. 29, 1908.

DEFINITION OF BACTERIAL VACCINE.—"By a bacterial vaccine is meant 'bacteria or their products.' In actual practice we use bacteria grown in culture-tubes and then devitalized. The principle involved in therapeutic inoculation is that a vaccine, consisting of devitalized bacteria of the same strain as that responsible for the patient's infection, should be administered by sub-cutaneous injection in correct doses at appropriate times."—Ross, Journal of the A. M. A.

PERSONAL AND GENERAL ITEMS.

Dr. P. W. Shedd, of 204 West 78th Street, New York City, has resigned from the editorial staff of the North American Journal of Homoeopathy.

The Gazette has to announce the death, on October 16th, 1908, of Dr. Louis Everett Foster, of the class of 1899, Boston University School of Medicine.

Dr. James W. Ward of San Francisco has removed his offices from 1380 to 391 Sutter Street, corner of Stockton Street. His residence is at the Fairmont Hotel.

An examination of candidates for the position of medical interne (female) at the Government Hospital for the Insane, Washington, D. C., will be held on January 13th, 1909, and application should be made to the U. S. Civil Service Commission, Washington, for application Form 1312. Only unmarried women will be admitted to the examination. The salary is $600 per annum, with maintenance. Examinations are to be held at convenient points in all the States of the Union.

The Gazette extends its congratulations to Dr. Walter B. Hayward of Taunton (class of '97, B. U. S. M.), upon his return to his practice after a number of weeks spent in the Emerson Hospital as an appendicitis patient. During his absence, Dr. A. N. Bruckshaw (class of 1907, B. U. S. M.), took his practice.

Dr. George E. May of Newton Centre has been elected to the presidency of the Massachusetts Surgical and Gynaecological Society. Dr. May is also chairman of the executive committee of the Newton Hospital.

WANTED.—A woman physician of six years' experience in general practice wishes to become assistant to some Massachusetts physician; one who wishes to divide or sell practice later preferred. Address, "T. T. N.," care N. E. Medical Gazette, 422 Columbia Road, Dorchester, Mass.

MATERNITY DEPARTMENT FOR GRACE HOSPITAL.—Grace Hospital of New Haven, Conn., has recently opened a maternity ward which will be known as the Mary J. Munsill Maternity Ward, accommodations being provided for about twenty patients. This enlargement is made possible by the gift of a house situated on the grounds adjoining the present hospital building.

NEW OFFICERS OF THE WORCESTER COUNTY HOMOEOPATHIC MEDICAL SOCIETY.—At its annual meeting held in Worcester November 12th this society elected the following officers for the ensuing year: President, Dr. Henry I. Klopp of Westboro; first vice-president, Dr. George N. Lapham of Rutland; second vice-president, Dr. Albert E. Cross; secretary and treasurer, Dr. Lucy E. Weterbee; auditor, Dr. John P. Rand; Librarian, Dr. Jennie T. Lane; censors, Dr. J. K. Warren and Dr. Carl Crisand of Worcester, and Dr. E. R. Miller of Leominster.

DONATION OF LIBRARY.—The library of the late H. C. Martin has been donated to the Medical school of Maine, of which institution he was a graduate in 1895.

A peculiarity noticed in the accoutrement of physicians is that the more recent a medical graduate is, the larger the size of his bag. When he has become gray in the service he carries his instruments in his coat pocket.—American Journal of Dermatology.

THE NEW ENGLAND
MEDICAL GAZETTE

Vol. XLIV FEBRUARY, 1909 No. 2

ORIGINAL COMMUNICATIONS.

SOME INFECTIONS FOLLOWING APPENDICITIS.*

By William Francis Honan, M.D., New York City.

Appendicitis has received so much attention from the surgical bureaus of our societies that the introduction of the subject, nowadays, should be preceded by some apology or explanation justifying the essayist's claim upon your patience. The cases which I give are selected out of a great number to report present features, from which some data may be obtained that will serve to impress some important points.

Case 1. F. N., aet. twenty-one, college athlete, about six feet in height, weighing about one hundred and seventy-seven pounds, had been perfectly well and had participated in a match water polo game of rather strenuous character. He arrived home from New Haven rather late Saturday evening after the game and awakened Sunday morning, as he expressed it, "feeling out of sorts." Decided to walk it off. After a brisk walk of about an hour he returned home, ate a hearty luncheon, shortly after which he was seized with severe pain in the abdomen and had some nausea and vomiting. The family physician was summoned and a possible acute appendicitis diagnosed. After an enema and application of an icebag to the iliac region, the symptoms of pain and tenderness so subsided that it was supposed the attack would subside without the necessity of operation at that particular time. In view of probable dangers that attend every acute case I was asked to see the patient the following day, which was a little over twenty-four hours after the onset of the first symptoms. The afternoon temperature was ninety-nine, pulse eighty, patient comfortable, no muscular rigidity on either side, abdomen almost perfectly flat, and it required very deep pressure over McBurney's point to elicit even ordinary tenderness. Examination per rectum revealed nothing of importance. Leucocytosis twelve thousand, polymorphonuclears eighty-two per cent. We decided we had a defervescing condition that did

*Read before the Massachusetts Surgical and Gynecological Society, December 9, 1908.

not require immediate interference, but to be perfectly safe decided to perform appendectomy next morning. This decision was reached not necessarily on account of possible danger of further or more serious trouble from the condition but more for the reason that the patient was of a strenuous type of young man, fond of outdoor sports, hunting and fishing, which trips took him several times a year beyond the range of surgical assistance should another attack supervene. Some time during the night the patient was seized with abdominal pain of such severity that an opiate was administered, after which he was fairly comfortable until the time arranged for the operation the following morning. The abdomen was opened by the McBurney gridiron incision, as we advanced toward the abdominal cavity, the oedematous conditious of the tissues indicated a more serious state of affairs than was anticipated. On opening the peritoneum the stench from the abdominal cavity was extremely putrid, the appendix and mesoappendix were entirely gangrenous even into the caecum. There were no adhesions, the appendix pointing inward and downward. The infection seemed fairly widespread, the coils of intestines only slightly distended were despoiled of their lustre, showed capillary injection and a rough, red, shaggy appearance, some deposits of whitish-yellow fibrous exudate on some of the coils, quite a turbid serous fluid in the abdomen, particularly in the pelvic cavity. The fluid was removed by sponging, a number 2 chromicised gut ligature passed low around the softened appendix until it included a portion of the caecum, protected by a clamp above the ligature, the appendix was amputated with actual cautery. A few chromic gut sutures were gently inserted to bring a portion of the gut over the now more or less sterilized stump, with a view to preventing fecal fistula. The region of the appendix was wiped off with a formalin solution, one to five hundred, and a rubber capillary drain, such as was shown at the N. Y. State Homoeopathic Society last year by Dr. Horace Packard, was pushed into the pelvis. Two other cigarette drains, one to the vicinity of the stump of the appendix, the other towards the upper angle of the wound, were introduced and both extremities of the incision closed in layers, with through and through silk worm gut retention sutures. The patient returned to bed, placed in Fowlers' position in good condition. Murphy's proctoclysis or continuous saline absorbtion plan was put into operation in a very satisfactory manner. It was accomplished by using a five-gallon, porcelain ice water cooler as a reservoir. To the small faucet was attached a rubber tube ending in a hard rubber rectal nozzle; regulating the fluid by turning the tap until it escaped at about a fast drop, the nozzle was introduced into the rectum. The cooler was placed on a table which brought it only a few inches above the level of bed. The saline solution was kept at one hundred and fifteen degrees

BOSTON MEDICAL JUN 30 1911 LIBRARY

in the tank, which made it about blood warm when it entered the rectum. The equable temperature of one hundred and fifteen was maintained by keeping one-half gallon continually on an alcohol stove, which, when it came to the boiling point, was poured into the tank, stirred around, and another half gallon removed and placed on the stove. It was somewhat difficult to estimate the amount absorbed, but by rough estimate, between four and five gallons went into the system of that patient in thirty-six hours. Gas passed freely the first twenty-four hours, skin acted profusely, thirst was never a feature of the case, and the excretion of urine amounted to one hundred ounces in twenty-four hours. Condition of the patient excellent. All went well until the tenth day, when after a slight chilly sensation the temperature rose to one hundred and one, pulse ninety-eight, the left leg began to swell, and patient complained of pain in the lower left portion of abdomen and down the thigh in the direction of the femoral vein. There was no question about the diagnosis and we overstepped the canons of conventional treatment by applying cold to the limb for twenty-four hours with great relief of pain, after a wide area following the course of the vein was gently painted with a twenty per cent. solution of Icthyol in Glycerine, the limb elevated and wrapped in thick layers of cotton. This dressing was removed daily and the limb inspected. The vein could now be felt from its origin until it lost itself in the deep structure of the thigh. Very strict instructions were left with the nurse about manipulations, for I know of one case in which the well-intentioned efforts of a nurse in the practice of a confrere, a similar case was tragic in the extreme. On her own responsibility she massaged the limb, and in a few moments the patient was dead from presumably pulmonary embolism. In about six weeks our patient was about, the left leg was even smaller than the right and so far as pain or distress was concerned he has not had much trouble.

To my mind the interesting points in this case are: First, diagnosis; second, Murphy's proctoclysis, and third, the complicating phlebitis. As to the matter of diagnosis I saw a number of cases last year in which even some of the best observers failed to make an early diagnosis. These cases were departures from the classic types in which many of the usual symptoms were absent. One particularly noteworthy case in which examination was made by several distinguished observers without reaching a correct conclusion, was diagnosed promptly by the physician who was thoughtful enough to introduce his finger into the patient's rectum and discover a large abscess in the pelvis. A case which I personally was called to see, and from clinical symptoms of onset and development, leucocytosis, etc., led me to venture a very slightly-guarded diagnosis, entirely cleared up when a suppressed urethral

discharge was reinstated. Rectal and other examinations were not omitted in this case. The value of blood count is mainly corroborative, but a leucocytosis with an increasing polynuclear count should indicate immediate operating. Murphy claims that sudden onset, abdominal pain, nausea and vomiting, local pain and tenderness, muscular rigidity, elevation of pulse and temperature "in the order named surely mean appendicitis," and that if those symptoms come not in such order he is inclined to suspect something else. It must be remembered that the appendix itself is devoid of sensation and sensory nerves, but the parietal peritoneum is exquisitely sensitive, and the least degree of inflammation increases it tremendously. Those cases occasionally seen where the appendix is adherent to the abdominal wall will exhibit the greatest sensibility. To put one's finger on the abdominal wall over the adherent appendix is like touching the patient's cornea. Gradual alleviation of pain usually means subsidence of the attack, but rapid cessation of pain after twenty-four or thirty-six hours is a most disquieting symptom, often means that the appendix is becoming gangrenous and the patient being rapidly poisoned. He does not feel pain because he has lost the capacity to feel it, and even the skin of the abdomen over the right iliac fossa, as noted by Moullin, has areas of hyper-analgesia. The quiet calm preceding the peritoneal storm is a period of deceptive calm in which the family and often the physician fail to appreciate the imminent danger. This is particularly shown in the case reported above. As to the second point of interest, that of the employment of Murphy's protoclysis, seven gallons have been absorbed in twenty-four hours. In elderly people there might be danger of producing pulmonary oedema or seriously affecting the heart by too great increase of the blood pressure. This technique must be regulated by individual judgment. In my own opinion the increase of the elimination is as important as dilution of the toxins. It is the opinion of some of our best observers that after the above conditions are fulfilled recovery is based on the resistance of the patient, and that the surgical therapy of the future will be to inject before operation a solution of nuclein or some similar substance, which will act like an opsonin. Nuclein forms the essential chemical constituent of all living cells, and is supposed also to represent the germicide element of the blood serum. As to the third consideration, that of the thrombo-phlebitis, this condition occurs once in every one hundred aseptic laparotomies, and strangely enough affecting the left side or median. Some surgeons regard all of these cases as due to infections, others cold, trauma, from retractors or ether.

In appendicitis about two per cent. show thrombosis of saphenous, portal or vena cava, and according to Sonnenburg occurs more often in interval operations than in acute attacks.

Notwithstanding its frequency in clean cases, thrombosis after appendicitis is probably due to sepsis or infection. Other factors, no doubt, are contributing, but appendicitis is an inflammatory process during which thrombi form not only in the veins of the portal system but also in those of the vena cava. The prognosis should be guarded and the instructions to nurses very clear and distinct. Again there is very great danger of septic pyophlebitis with abscess, a condition, according to Gerster, occurring nine times in one thousand one hundred and eighty-seven cases.

Case 2. Douglas Graham, age 15, had been ill about ten days, physicians had suspected typhoid until the day before operation, when symptoms of unmistakable peritonitis began to appear and the boy was taken to Hahnemann Hospital. When seen on the night of admission the temperature was 100°, pulse 128, respiration 28, abdomen distended, tender to touch, rigidity of both recti muscles, tongue coated, and facial appearance indicating some severe abdominal condition. Rectal examination was negative. In view of the suspicion of typhoid a differential blood count was made which showed:

White cells, 14,000.

Polynuclears, 80 per cent.

Small lymphocytes, 8 per cent.

Eosinophiles, 2 per cent.

Subsequent Widal reaction made three times was negative. In view of the leucocytosis and polynuclear percentage, absence of roseola, splenic enlargement, typhoid was excluded, though the suspicion of the possible presence of that disease did somewhat linger in my mind. Typhoid is, indeed, a protean disease in its onset and symptomatology and is more often diagnosticated by exclusion, but I have found the blood findings give positive information before the roseola appears, before Diazo reaction is present or Widal is positive, or a temperature curve is established. In 90 per cent. of the cases of typhoid seen the first week the total number of leucocytes is below normal, and, according to Ewing, the more severe the typhoid intoxication the lower is the leucocyte count. However, the boy was immediately operated upon. The abdomen was opened by an incision through the posterior sheath of the rectus. The abdominal cavity contained some turbid fluid, the intestines in the right iliac region had exudate upon some of their coils, and the condition was one of spreading peritonitis. The appendix was found free in the abdominal cavity, pointed towards the median line, was cherry red in color, gangrenous near the tip. The meso-appendix was ligated, a No. 2 chromic catgut ligature tied about the base of the appendix, a heavy Kelly artery forceps placed about 3-8 of an inch distal to the ligature, and the appendix amputated between the two with actual cautery and the remaining stump thoroughly

seared. Fluid in the abdominal and pelvic cavity was sponged out and two large cigarette drains introduced, one to the region of the caecum and the other into the pelvic cavity. Incision partly closed, wet formalin dressing applied, and patient put to bed in Fowlers' position. Murphy's continuous saline absorbtion plan put into immediate operation. Until the tenth day the condition of the patient was excellent and his progress had been all that could be expected, except that the temperature had slowly crept up and the respirations were higher than one would expect. Having kept in my mind the possibility of the development of subphrenic abscess and feeling satisfied that such condition was present, I inserted an aspirating needle in the ninth costal interspace and withdrew a syringeful of very watery, foul-smelling pus. A few hours afterwards, under anaesthesia, an incision about two inches in length over the ninth rib, midway between the anterior axillary and posterior scapular lines, was made, and one inch of the ninth rib resected. Rapid dissection revealed the pleural reflection above and the diaphragm in the lower part of the wound. If the pleural cavity does not contain fluid, and it seldom does at this stage of the disease, care should be taken lest it be inadvertently opened. Sometimes the costo-phrenic sinus is obliterated by adhesions, and great care should be taken not to tear them. It is a better plan to suture the upper portion of the wound, that is, the two with catgut or silk, and further to protect it with gauze as was done in my case. An aspirator is used to perforate the diaphragm below the pleura. When the needle enters the abscess cavity it may be allowed to remain and be used as a director. A small incision is now made along side of the needle which can be dilated with dressing forceps and the cavity drained and treated according to the practice of the operator in abscess cases, that is, rubber tubes, cigarette drains, or any method which one has found sufficient. I think, however, it is a mistake to use an aspirator, and I should omit that part of the technique in a similar case. One has no knowledge of the relation between the abscess cavity and the position of the point of the aspirator, for Weir reports having pushed an aspirating needle through a cavity containing two quarts of pus, into the liver and withdrawing nothing but blood. After the rib has been resected fluctuation is as easily demonstrated as in any situation in the body and a small incision, whose dimensions may be increased at the pleasure of the surgeon, is much safer and more surgical. About half a pint of very foul-smelling pus was evacuated and a large, rubber drain was inserted. The following days the temperature gradually fell, but the respirations were more or less shallow and embarrassed. About one week after the evacuation of the subphrenic abscess physical signs were such as to make a diagnosis of empyema quite certain and a portion of the sixth rib in the axillary line was resected, but no pus was found on

account of the high arching upwards of the diaphragm and diaphragmatic pleura. A portion of the fourth rib being removed and the pleural cavity opened, a large amount of pus was evacuated, a drainage tube inserted and the after treatment continued as in a case of empyema, with daily irrigation and dressing of the other wounds. Notwithstanding free drainage the boy looked septic, urine contained some albumen, and at times a few blood cells, but no casts were present. Afternoon temperature rose to 103.8 to 104, pulse, 128 to 134. Careful prescribing in excellent hands seemed not to materially change the status of the patient. About twenty days after the operation for empyema I decided to try a nuclein solution as suggested by John B. Murphy, and he received by mouth one drachm four times a day of the Parke, Davis & Co. solution which represents 5 per cent. of nucleinic acid made from yeast. The effect was apparent in forty-eight hours, it seemed to act as a tonic, and the change for the better was noticeable to the doctors and nurses who had charge of his case. The cavity in the chest rapidly filled up, the lung expanding in a very satisfactory manner, much better result in shorter time than I have ever seen in the ordinary uncomplicated empyema of the chest. To recapitulate: Operation for general peritonitis and appendicitis, September 17th; operation for subphrenic abscess, September 26th; operation for empyema of the chest, October 3rd; October 21st, began administration of nuclein solution; November 15th, allowed out of bed; November 25th, discharged from hospital with a small simus in the right chest wall.

It is my purpose to limit this discussion to subphrenic abscess, a complication of appendicitis, though a collection of pus beneath the diaphragm may result from perforation of gastric ulcer, perforation of the diaphragm, ulceration of the duodenum, diseases of the liver, spleen and kidneys, pancreas, intestines, metastasis, external injury, diseases of the pleura.

A subphrenic abscess may be right or left-sided, may be intra-peritoneal or extra-peritoneal and is more frequently found on the right side. Infection from the appendix may extend intra-peritoneally along the colon until it reaches the edge of the liver and may extend between the liver and diaphragm. It may extend between the layers of the mesentery and the vermiform appendix and work up through the loose connective tissue behind the caecum and colon and liver until it reaches the subphrenic space. Injections of staining fluid show how easily this channel may spread an infection. It may be a localized abscess forming a part of a general purulent peritonitis. It may also come by way of the blood current as a part of a general embolic septic process or as a sequence of liver abscesses, which are of embolic origin, by way of the portal vein. The greater number of subphrenic abscesses originate by extension methods, that is

by the extra or intra-peritoneal routes. In seventy-three cases collected by Elsberg there was an abscess around the appendix in fifty cases, no details being given about the remaining thirteen. In 15 per cent. of the cases the abscess contained gas, perforation of the diaphragm occurred in 25 per cent. of the cases. We are indebted to the classic publication of Van Leyden in 1800 for the description of this condition, and to Volkman for suggestion as to operative relief. Nothnagel found the greatest number of cases following round ulcer of the stomach. It is not a common affection, being found only in 2.5 per cent. of appendicular abscess cases. The gas is formed from perforation of some air containing viscus or is produced in situ by the bacillis aerogenes capsulatus of Welch or some one of the bacilli coli communis group.

Mode of onset (after appendicitis). Symptoms may come on days, weeks or months after the disease of the appendix or operative measures on the appendix. (a) A few days after the acute symptoms of appendicitis have been relieved and the temperature fallen to normal, the patient complains of pain in the lower, right chest, temperature rises, the area of liver dullness is enlarged, there are friction sounds over the hepatic area in the back and side particularly, tenderness in one or two intercostal spaces (this was a marked sign); there may be slight or well-marked jaundice. (b) Before the acute symptoms have entirely subsided, though the local symptoms are much improved, the temperature takes on a remittent type, patient loses strength and flesh, and begins to look seriously ill. He does not complain of much pain, and except loss of flesh and strength no physical signs are noticeable until there is a bulging in the lumbar region. (c) In this type the patient having recovered from the attack of appendicitis never regains former health. There may be no change in the temperature, pulse and respiration, but the patient complains of pain in the right chest. Physical examination and aspiration of the chest may be negative but the pain persists. Patient never looks ill, after a time fluid is discovered under the diaphragm. When the abscess contains gas the diagnosis is easier because of the obliteration of liver dullness and the presence of succussion sounds, when it does not contain gas the question may arise if we are dealing with fluid in the right chest. Three conditions are possible, there may be an effusion into the pleural cavity, there may be both a subphrenic and a pleural effusion, or there may be a subphrenic effusion alone. The differential diagnosis must rest upon the fact that there is a well-marked effusion under the diaphragm with usually no thoracic symptoms. The upper edge of dullness is a straight line, or it may be convex upwards. Little change in the line of dullness with change of the patient's position. In pleural effusion the respiration is diminished or lost below the level of the fluid,

while in subphrenic effusion sounds can generally be heard below the level of the fluid. Depression of the liver is frequent in subphrenic abscess, rare in pleurisy unless the quantity of the effusion be large. The heart is not displaced nor the intercostal spaces bulged out as in pleural effusions. If pus is drawn out by aspiration through the lower intercostal spaces and clear fluid higher up, an associated condition is present. When perforation of the diaphragm occurs it is characterized by the symptoms of invasion of pleural cavity, cough, rapid respiration, expectoration and collapse, as between abscess of the liver. Liver: Not frequent after appendicitis; pain in the shoulder blade; chills and profuse sweats; characteristic pus of liver, little or no odor.

Case 3. Alston Burleigh, admitted to Hahnemann Hospital with symptoms of acute indigestion apparently brought on by eating a large quantity of Damson plums. After the pain and acute symptoms subsided constipation of an obstinate form was present, and the attending physician feared obstruction of the bowels. When seen by me shortly after his admission to the hospital, temperature was 99.6, pulse 138, respiration 28; abdomen distended, generally painful on pressure but no local tenderness or rigidity, rectal examination negative, likewise Rovsing symptom. Blood examination immediately before operation:

Leucocyte count 21,000.

Differential:

Polymorphonuclears, 91 per cent.

Small lymphocytes, 6 per cent.

Large lymphocytes, 3 per cent.

Operation two hours after admission. Incision through the posterior sheath of the rectus, retraction of the muscle to the median line. Immediately upon incising the peritoneum there was a gush of pus and turbid fluid. Lengthening of the incision brought distended coils of intestines with injected capillaries and extensive areas of curd-like exudate here and there. This was the most extensive involvement of the peritoneal cavity and its contents that I have lately seen. Appendix gangrenous for two-thirds of its length. Easily removed by ligature of mesentery and chromic catgut at base of appendix; amputation with actual cautery without inversion of the stump. One large cigarette drain into the pelvis and one to the stump of the appendix, no flushing of the abdominal cavity was done or any attempt made to remove exudate on the intestines, merely gentle sponging in the pelvic cavity and in the region of the appendix. At this juncture two ounces of a suspension of sterile living lactic acid bacteria were poured into the peritoneal cavity and the wound closed about the drainage tube in layers. Patient was placed in Fowler's position, Murphy's continuous saline absorbtion plan put into operation and twenty drops of nuclein solution every six hours hypo-

dermically. No food or drink by the mouth and anodynes ordered withheld. The wounds were dressed daily, and according to the suggestion of Dr. North of the Lederle Laboratory, the suspension of lactic acid bacteria was applied locally on the dressings. Convalescence was uneventful and recovery complete.

The points of interest which I think are worthy of discussion are: (1) Traumatism as an etiological factor in the first case (game of water polo); (2) Absence of serious symptoms in a case which would undoubtedly have had a fatal termination; (3) The complicating phlebitis. Second case: (1) Resemblance to typhoid fever; (2) Early recognition and treatment of subphrenic abscess and empyema; (3) Effect of nuclein in raising resistance. Third case: (1) Late diagnosis; (2) Use of nuclein and lactic acid bacteria. Under the head of general treatment of diffuse peritonitis Fowler's position and the use of Murphy's continuous absorbtion of saline solution. For the carrying out of Murphy's proctolysis I have found that a thermos bottle with a syphonage arrangement through a rubber stopper fulfills all conditions and requires very little attention from the nurse to keep the solution at a uniform temperature.

DISCUSSION.

J. Emmons Briggs, M. D. "We are all of us very glad to hear from Dr. Honan and have him bring us some ideas from our neighboring city.

"The subphrenic abscess has been very clearly illustrated, both by the speaker and the excellent drawings which he has shown us. I can recall two cases of subphrenic abcess, perfectly typical cases. There was one case of appendicitis operated on in a distant city. The patient had practically recovered from the operation and left the hospital. Later he came to Boston and began to have a great deal of pain in the neighborhood of the liver and an abscess occurred which was later opened and drained for a very long period of time without any attempt at spontaneous closure. I operated and made a good-sized incision and let out considerable pus. Another case, where I operated for appendicitis, developed on about the twelfth or fourteenth day, a subphrenic abscess which was opened and drained and from which the patient made a fairly rapid recovery. This abscess contained something like a pint of pus.

"The questions of phlebitis is one of considerable importance, but I won't take much of your time with it. In regard to the treatment, while patients are suffering considerably they might appeal to their nurse to give them some gentle massage and manipulation of the leg and allow a change of position for relief. I want to emphasize what Dr. Honan has said, that that treatment is very likely to result in a very serious complication, even to the speedy death of the patient. This is different from phlebitis in other regions of the body.

"I operated once for Dr. Hopkins on a large ovarian tumor with twisted pedicle. The sac was undergoing necrotic changes. I put a ligature around the stump and tied the ligature tightly. It broke and my patient died that instant. I knew perfectly well what had happened in that case and that the pampiniform plexus of veins contained thrombi and that in my manipulation I had injured or cut through a thrombus. If that ligature had not broken the patient might have been alive today. An

autopsy the following morning revealed a large thrombus in the pulmonary circulation.

"About peritonitis, I am perfectly well aware that surgeons have different methods of treating general acute peritonitis. I admire those who have confidence enough in themselves to close the abdomen without drainage. It is my practice to open the abdominal cavity, to disturb the intestines as little as possible, to spend little time in wiping off the exudates, to flush the cavity only when there is a lot of free fluid in it and then to put in cigarette drains, or in one or two cases I have used Dr. Packard's multiple drainage tube. I want to say here that I think this is one of the best methods to procure continuous drainage that I know of. I would like to say that I dislike the use of the ordinary drainage tubes in the peritoneal cavity because I have seen serious results in the way of fistula. The tube is not moved at all, a stasis of blood is produced and perforation occurs, often within a few days. If a drainage must be left in let it be moved slightly from side to side or pulled out a little distance each day.

"I believe that in cases of peritonitis there is going to be a great deal done in the future along the lines of the opsonic treatment. I have seen some very striking results during this term of service following this treatment. I have one case of Ludwig's Angina in the hospital now with a very hard, brawny condition of the whole side of the neck. We have watched it as it began under the jaw and went clear down to the clavicle. Dr. Watters has stopped it by the opsonic treatment. I say that because I have seen quite a number of cases where the patient only lived four days or so from the beginning of the manifestation.

"We have also tried the anti-streptococcic serum and anti-syphilitic serum. I recognize the fact that it is absolutely impossible for us to form any definite conclusion about the results in the use of any of these preparations except as they come about through a long series of carefully reported cases. It is useless to say that a patient got well or did not from an injection of serum. We must have a great many cases and treat them with something like uniform methods to be able to say anything about them definitely.

"Some complications that were not spoken of are cases of intestinal obstruction following appendicitis, whether after operation or not. One case occurred in my practice two or three years ago. A young man had a typical attack of appendicitis. I did not see him in his original attack. About a month later after he had practically recovered from his appendicitis I saw him with acute intestinal obstruction. He did not call it to anybody's attention until he was in extremis. His abdominal cavity was distended, his bowels were distended, he was vomiting. I made an attempt to save his life. The interesting part of the case is that no trouble was found in the intestinal tract until we came to the caecum, and there there were very strong adhesive bands and a complete occlusion about the junction of the ileum and caecum. This was the result evidently of a previous inflammatory process located in the neighborhood of the appendix.

"Faecal fistula is another complication and will be from the appendiceal stump or wherever a drainage tube has been used. I have never met a case of this kind that did not spontaneously heal. They invariably close after a protracted illness.

"The use of the finger in the rectum for detecting abscesses appendiceal in origin is a point which Dr. Honan has made and is of the utmost value in all doubtful cases. We frequently meet with cases of appendicitis in which there is no sensitive mass to speak of over McBurney's point, and the reason is that the appendix has fallen over the pelvic brim and has become inflamed there. I have a patient where I neglected to make this rectal examination. When I operated upon the case I could not detect any hardness or thickening or inflammatory condition over

McBurney's point, but upon opening the abdomen and sweeping my finger where the appendix ought to be, there was nothing wrong. On proceeding further down into the pelvis, however, I found an abscess and a gangrenous appendix. This would have been more definitely diagnosed if I had made a rectal examination.

"Just a word in conclusion. The question of traumatism is an element in the development of internal abdominal conditions as well as of some external conditions. We have histories of patients who have received injuries to the breast, as Dr. Crane remarked in his typical case, which have been followed within a short time by a typical carcinomatous degeneration. I had one case of a woman who fell and struck her breast against a chair. She had never before noticed anything wrong with her breast. After this fall the breast become ecchymotic, and soon after that I saw her with a rapidly progressing carcinoma. I had another patient, a man on the Harvard football team, who was kicked in his abdomen and within forty-eight hours I operated upon him and removed a gangrenous appendix distended with pus and black in color. Traumatism had been inflicted and this appendix followed in two days. I operated on a young man thirty-five years of age this summer who was thrown from a horse. He struck his right side upon some rocks. Within a week I operated upon him for acute appendicitis.

ABORTIONS: COMPLICATIONS AND SEQUELLÆ.*

CHARLES T. HOWARD, M.D., Boston, Mass.,
Surgeon, Massachusetts Homoeopathic Hospital.

Strictly speaking, the term abortion refers only to those cases of pregnancy terminating before the end of the third month, the term miscarriage being applied to those cases terminating between the third and seventh months, and premature birth to those between the seventh and ninth months. Practically the distinction between abortion and miscarriage is unimportant, and I shall include both under the head of abortion.

Simple abortions, that is, those coming on without illegal interference, may be dismissed with a few words. Coming about as they often do from falls, overwork, laceration of the cervix, etc., they usually run an uninterrupted course to recovery, the only common complication being retention of the secundines with a consequent sapraemia and continued flowing. Such cases yield promptly to curettage by competent men and the recovery is usually prompt and satisfactory.

So much for ordinary abortions. I wish to discuss with you more particularly the criminal cases.

Most women desirous of being relieved go to the abortionist early,—after they have skipped only one or two periods,—believing that the earlier they go the less dangerous is the operation. A catheter or bougie is introduced into the uterus, held in

*Read before the Massachusetts Surgical and Gynecological Society, December 9, 1908.

place by a tampon, and contraction of the uterus thereby excited, which throws off the foetus. Why is it that so simple a procedure is so often followed by such dire results? The causes are but two. First, retention of some portion of the foetal products and the introduction of sepsis.

As stated before, most women seek the abortionist before the third month, that is, before the placenta has become fully formed. At this period the membranes and placenta are more intimately connected with the uterine wall, and with the contractions of the uterus the amniotic sac is often ruptured, the foetus expelled and the placenta and membranes left behind,—just such a condition as so frequently occurs in simple abortions.

If no sepsis has been introduced, an ordinary sapremic condition exists, due to the decomposition of the retained secundines, and a prompt recovery usually follows a cleaning out of the uterus, the temperature often being 104° or 105° prior to curetting and dropping to normal in twenty-four hours.

Where sepsis has been introduced the results are much more serious, a chill followed by a sharp rise in temperature usually occurring on the third or fourth day and varying in its subsequent course according to the virulence of the infection and the tissues invaded. With the streptococcus the chill is usually very severe, the ensuing temperature very high and marked by sudden and decided remissions. Unless the process becomes localized, the patient's condition rapidly becomes serious and death often ensues. Occasionally with a streptococcic infection the run of temperature will be low and the pulse high. Such cases are the most fatal of all and but few recover, such a course of temperature with so virulent an infection indicating that the patient's power of resistance is low and that she is rapidly being overwhelmed by the accumulating toxins. With a staphylococcus infection the patient usually has a chill with frank rise of temperature, but occasionally, as in a case I have recently had, the rise is gradual and closely resembles a typhoid chart. The temperature seldom goes as high as with a streptococcus and the remissions, while present, are not so marked. Many such cases will recover after a long run of fever. The gonococcus infection is a slow process, and while the course of the disease may be very protracted, many more patients will recover than either with the streptococcus or staphyloccus. The various other bacteria need not be considered here, any one variety occurring in but a small per cent. of the cases.

The uterine cavity is, of course, the first to become infected, and nature attempts to protect the general system by the formation of a pyogenic membrane, more or less effectively sealing the open sinuses of the uterine wall. In those cases where she succeeds recovery occurs after a long run of temperature and a slow convalescence.

The line of treatment to be followed should be merely to assist nature. Any violent interference is to be deprecated. A very, very gentle sweeping over the cavity of the uterus with a dull curette or the finger should be performed, merely to be sure that no putrefying mass of placental tissue is within. Extreme caution should be employed not to use violence and thereby open up fresh surfaces through which the infection may become general. Following this it is well to employ daily intra-uterine douches to cleanse the uterine cavity and remove the pus which has not drained away. As with any septic process, a plain but very nourishing diet should be maintained, regardless of the temperature, and all measures employed to conserve the patient's strength.

In those cases where nature fails to shut off the infection the bacteria gain admission to the general circulation through the open sinuses of the uterine wall, a general pyaemia supervenes and death is the frequent outcome; the usual pyaemic temperature is present, frequent and severe chills, marked remissions of temperature, ranging in a few hours from normal to 105° or so, often accompanied by vomiting and diarrhoea and a rapid loss of strength. The vaginal discharge is oftimes slight and normal, and is consequently misleading, the most septic cases, that is the streptococci, having nothing in the lochia to indicate so violent an infection. It is a safe rule, I believe, that the more offensive the discharge the less violent is the infection.

The treatment of such cases is to assist nature, to help her to manufacture leucocytes and antitoxins to combat the array of bacteria in the blood stream, absolute rest in bed, plenty of good food and an abundance of fresh air. The opsonic method of treatment should be employed. If the theory is correct, there is no one class of cases where it is more strictly indicated. The method of Wright should be strictly followed. It is not sufficient to inject merely a streptococci or staphylococci solution; it must be a solution of bacteria grown from the particular strepto or staphylococcus in the individual case, as these germs apparently vary much in activity, even though no microscopic variation is demonstrable.

Where the infection does not early become general, or fails to be confined to the uterine cavity, it extends upwards into the tubes with the formation of pyosalpinx. If the process is slow the tubes become inflamed, the fimbriated extremities become closed and abscess cavities are formed. Two courses of treatment are then open, either to wait until the activity has spent itself and then remove the tubes or to operate immediately, in the acute stage, and rely upon the patient's natural resistance to overcome the existing toxaemia. The tendency today is towards waiting, preferring to give nature a chance to manufacture antitoxins rather than to run the risk of infecting the peritoneal

cavity in a patient whose resistance may be low. By waiting, however, we do run the risk of a peritonitis. In those cases of virulent infection which rapidly ascend into the tubes the process is often so rapid that the protective closure of the fimbria does not have time to occur. Pus then exudes in a constant stream into the peritoneal cavity and a severe septic peritonitis follows.

The treatment of such cases is the same as when they occur from other sources; rapid removal of the focus of infection with as little handling of the intestines as possible, the introduction of a generous drain into the pelvis, the Fowler position and the Murphy method of saline enteroclysis.

Such are the usual complications of criminal abortions. Now why do they exist? Many of the abortionists, though not all, are men untrained in asepsis, and catheters or bougies are frequently introduced without proper sterilization. Again, the work is always done under the strictest precautions of secrecy and adequate equipment for asepsis might induce unpleasant inquiries. Many of the patients, moreover, are unmarried girls carrying their first child, consequently the vagina is small and cleansing without anesthesia is too painful to be thorough. The same class of patients, too, are often infected with gonorrhea and the bougie in passing through the vagina, even though sterile at first, becomes infected and the infection is carried directly into the uterine cavity, with consequent dire results.

I have not mentioned the fact that many women induce abortions upon themselves by the introduction of bougies or catheters. Under such conditions, of course, the dangers of infection are great, and any of these complications which I have enumerated are even more apt to occur than through the abortionists.

So much for the dangers and complications of abortions. The moral and economic sides deserve consideration.

Dr. Frank H. Jackson, in a recent paper before the Maine State Society, makes an estimate of 50,000 criminal abortions annually performed in the State of Maine. Should the same percentage hold good for Massachusetts, it would mean that over 200,000 women are annually relieved of maternity in our Commonwealth. Considered purely from the standpoint of political economy, this means the loss to the community of 200,000 potential industrial units. Each individual is of value according to what he produces, consequently this annual slaughter of the unborn represents a tremendous loss in dollars and cents. Moreover, we must take into consideration that many of these women are obliged to come to the operating table sooner or later for removal of the tubes, and this unsexing loses to the community children which each might bear. When we consider the moral side of the question we cannot fail to be surprised at the attitude taken by many laymen and the profession. To them the crime

consists not in the commission of the deed, but only in the being found out or in the death of the mother. The mere fact that the woman does not desire children is to many sufficient justification for procuring abortions. Their blunted moral sense cannot perceive that life begins with the fertilization of the ovum and that the termination of that life three months after conception differs in no degree from terminating that same life three months after birth. In fact, the latter is really the lesser crime, since the mother's life is not also endangered.

The causes which compel women to seek the abortionist are manifold. It is easy to understand why the young unmarried girl should desire to avoid maternity. The shattered reputation causing the finger of shame to be pointed at her for years to come, the isolation from respectable people, the loss of matrimonial prospects and home of her own, all drive her to the abortionist early, regardless of the dangers surrounding her.

This class of patients is a fertile field for the abortionist and will long continue to be. Just so long as the two sexes coexist, just so long will sexual desire rule the weak willed among the young men and cause the downfall of their weak sisters, and just so long, too, will the sisters be compelled to bear their shame alone or brave the dangers of the abortionist's table.

Married women seek the abortionist for other reasons. Fifty years ago it was considered honorable to be the mother of a large family. Today it is no longer fashionable, in fact, by some it is considered positively vulgar. In many cases financial reasons deter the wife from desiring more children. The raising of a large family is too severe a drain upon the family purse, and in these days of high cost of living the family purse usually has as great a strain as it can well stand in buying steak for the family breakfast. Life in America is a strenuous struggle and the mother desires for her children the fullest equipment possible to render their future position one of comfortable affluence. This is, I believe, the chief reason why so many women are averse to large families. It is not because of a weak maternal instinct or cowardice to bear the throes of labor. When, however, it is a question of bringing up a small family in comparative comfort or a large family in comparative poverty the love for the children she already has outweighs the love for the child unborn and she goes to the abortionist as much for her children as for herself.

In a field of so great fertility, and where the garnering of the golden harvest is so easy, it is inevitable that there should be a large army of harvesters, some of them rapscallions, others apparently respectable. The greed of gold is the impelling force which drives all abortionists into the business. None of those making a practice of producing abortions are so blunted in their moral perceptions as not to realize they are committing a crime. For the great majority of the abortionists we need waste no more

words; it is sufficient to class them as the worst sort of scoundrel, and to rejoice when one is brought to justice. We must recognize the fact, however, that undoubtedly there are within the medical profession men with large practices, men who to all outward appearances are of eminent respectability, that are daily guilty of inducing abortions.

Now as members of the medical profession and as members of this Society what course should we pursue and what should be our attitude towards abortionists? All will agree, I think, that when called upon to treat a woman suffering from the effects of a criminal operation we should immediately call in council another physician in good standing, and that nothing should be done before such council has arrived unless the emergency be great. This is a step merely for one's own protection. The treatment of a case alone may easily cause embarrassment or total loss of reputation, the crime being attributed to you rather than where it belongs. Further than this our proper conduct is not so obvious. We are advised by some to refuse to treat such a case unless the patient consents to tell before witnesses the name of the abortionist and all confirmatory details, and we are further advised to then lay such information before the proper authorities and do our best to obtain conviction. Failing to do this, we are accused of shirking our duty; we are told we shun the notoriety and the inconvenience of appearing as witnesses and that we fear lest we be regarded as endeavoring to ruin a fellow practitioner and gain an increased clientele.

The Police Department of Boston not only advises but orders us to report immediately all cases of suspected criminal abortion coming to us for treatment. They then assume all responsibility for obtaining a confession from the patient and for the arrest and conviction of the offender. This would be an easy and comfortable way out of our dilemma were we to consider the abortionists alone. But, unfortunately, we must consider the welfare of our patients, and the fact of their having had an abortion induced does not alter our position towards them. The Hippocratic oath of secrecy is not a thing of the past and immediately we violate it we are on a path whose end no man can see. We might obtain convictions of a certain number of abortionists, but must inevitably sacrifice the public's confidence in our inviolate secrecy, and many patients suffering from secret diseases would hesitate to come for help lest their condition be published broadcast.

It must also work needless hardship on many erring girls and women and expose them to a publicity which ruins their entire future happiness. The necessity of telling on the witness stand the history of her abortion would seal the doom of any young woman as inevitably as if convicted of felony; and she would not suffer alone, her family must also bear the stigma and

unhappiness consequent upon such publicity. Since, then, this course entails much needless suffering and involves the sacrifice of our Hippocratic oath, what shall we do as individuals and as a society? I can think of but one course which entails no wrong to our patient and no sacrifice of our professional principles. Briefly it is this: When called to attend a case of criminal abortion, call in council a fellow physician in good standing and obtain from the patient if possible a clear and definite statement as to the abortionist and confirmatory details. Such evidence should then be laid before the executive committees of the societies of which the abortionist was a member. If to such committee guilt seems established a recommendation should be made to the society for his expulsion, the name of the patient not going beyond the executive committee.

I am well aware that in this plan I am offering but a partial solution of the difficulty and that it would reach only those abortionists who were in good standing in our medical societies. The large number of advertising abortionists would go untouched. But the medical profession is not a detective bureau, and all we ought to do is to endeavor to keep our ranks free from rascals and criminals, and immediately we have expelled such men from our societies we have done our duty. To our patients our position is that of a medical priest. We have their confessions and keep them secret, even though they be confessions of sin. Such has been our position for ages and such, I believe, it should remain.

DISCUSSION.

Edward E. Allen, M.D. "Mr. Chairman, I think the society will all agree with me that Dr. Howard's paper is to the point. Of course, in discussing abortion I have to look at it from a general practitioner's standpoint, as most of you do.

"The following is typical of such cases. You get a hurry call and after a few questions you elicit the fact that there is a hemorrhage. You get there as lively as you can and many times you find that the work has been done rather badly and the bed is full of blood. The patient is white and pulseless and you have got to do something quickly. You get off your coat and go to work. You get in the stimulants and the saline, and then questioning will reveal the fact that the patient has been doing something herself or that she has been to an abortionist. Going for counsel then is out of the question. You have got to get your patient in condition first. I have been several times in such a dilemma as that. The patient being brought into some sort of shape we must either send her to the hospital or carry it through. And then you curette. By curetting I mean not the use of a sharp curette, but the use of the fingers or a dull curette or simple forceps, and we have got to be awfully careful about the way we do it. Of course, we cannot have the conditions anything like what we have in the hospital in the matter of asepsis.

"A point to be made is that the uterine canal must be straight when we are doing this; otherwise there is danger. Supposing, for instance, it is an early pregnancy and there is a retroverted uterus, I think it is a good plan to pull that uterus down before introducing any instrument.

"As to the moral side of the question, I think a part of it is due to lack of education. Many of the women are ignorant and they come to

us and importune us to terminate their pregnancies. Many times a patient will ask you to do it and you say to her that you had just as lief shoot her as to touch anything of this kind. She says, 'Why, there is no life and you might as well do it as not.' They think quickening is the first sign of life and if you interfere before that time there is no harm done. It is education in this class of inferior women that needs to be brought about.

"As to our duty in these cases, I think that the time will come when the doctor and the lawyer or the prosecutor have got to get nearer together to stop it. We have to protect our patients. We are the ones that know most about it, and until, as I say, we get nearer to the prosecutor these things are going to continue.

"Another way is to educate our boys and girls in the higher schools. I think that every high school, every branch of higher education above the grammar school, should have the thing taught thoroughly. We ought to have some one who understands to tell these girls and boys when they are fifteen years old just what fertilization is and what pregnancy is and what it means in a physiological sense. I think that is the way we will do a great deal toward obviating some of these evils.

"Dr. Howard's statistics mean, of course, a great national calamity. There is not a thing facing the Republic today that compares with it in importance. The President has spoken of the fact that the women of our day are not bearing their share of children. The other great issues of the Philippine Islands and the tariff do not begin to be such living questions as this one of abortion."

THE YEAR'S PROGRESS IN GYNECOLOGY.*

Clarence Crane, M D., Boston, Mass.
Assistant Surgeon, Massachusetts Homoeopathic Hospital.

As we glance backward over the records of past years in reviewing the history of gynecology we may well stand amazed at the results that have been accomplished and the advances that have been made along all lines during the past quarter of a century. The accessions and development of knowledge in bacteriology, asepsis, pathology, serum-therapy, operative procedures, etc., have opened broad spheres in the treatment of those diseases peculiar to women and have given health and comfort to many sufferers. To mark the progress for one brief year is difficult. We may view the trend of events, but we cannot mark the milestones of medical progress until we look back upon them. We may today herald widely the accession of some new idea, some new discovery or method, with enthusiasm we may be ready to accept some line of treatment recently evolved, only to find in a few short months that it is fallible and with disappointment turn to the realms of research for some new aid. And so it comes that the heralded advance of today becomes a forgotten dream of yesterday. With caution, then, must we record our progress.

*Read before the Massachusetts Surgical and Gynecological Society, December 9, 1908.

There has been great improvement in methods of anesthesia during the past few years. Rectal anesthesia has again been revived and is being discussed. Spinal anesthesia has its adherents, but does not seem to be widely popular, as it is being used in a limited way. Von Valenté reports 150 gynecological cases operated under lumbar anesthesia; in 127 complete anesthesia occurred; no bad results. One authority, Brunner, after carefully testing it on many cases, says that while it may be useful in some cases where a general anesthetic would be dangerous, concludes that it has disadvantages, in that it is uncertain and the psychical effect is undesirable. General anesthesia as produced by drug injections, if we are to judge by current medical literature, is being used extensively. From Canada to the Gulf of Mexico, from the progressive West to the conservative East, come reports of the satisfactory use of this method. The drug combinations in general use are Morphine, Hyoscin and some cardiac stimulant, generally either Cactin or Digitalin. Hypodermic anesthesia is used widely in obstetrics and, if we are to judge by the reports, it is proving most satisfactory. As an anesthetic in gynecological and other surgical operations it is being reported frequently and very favorably by operators who are using it. Abbe, Washington, D. C., says it not only decreases the quantity of inhaled anesthesia but displaces it in many cases. Injections are usually given 2 1-2, 1 1-2 and 1-2 hours before operation, the number of injections modified by the reaction shown. He makes a few suggestions. Injection should be under and not into the skin. All unnecessary noise and conversation should be eliminated from the operating room. That the operator avoid the slap-dash kind of surgery and proceed with deliberation. Its use is therefore somewhat interfered with in large clinics where much demonstration is desirable, and owing to its delayed action it is not useful in emergency operations.

Dr. Horace Packard has used this method for about two years in the Massachusetts Homoeopathic Hospital, with excellent results. It is claimed that memory is abolished after the second injection, that the anxious hours of dread immediately preceding an operation are replaced by a quiet sleep. Lanphear says he has performed many major and minor operations without any evidence of suffering by the patient, without shock, without post-operative pain and without vomiting, and that this method is safe. According to Reis, who reports 185 cases, about fifteen or twenty per cent. of cases require no other anesthetic, but the balance require a very small amount of chloroform or ether. Should we, then, not consider subcutaneous anesthesia an adjunct to ether and chloroform, eliminating much of the dread of operation, many of the unpleasant symptoms and much of the danger that attends the use of these more commonly used narcotics?

The therapeutic use of bacterial vaccines has taken a promi-

nent place in the progress of the year. During this time excellent results in a number of cases treated by this method have come under my observation. These were gynecological cases where various forms of infection had occurred. The curative influence of bacteriological therapeutics was manifested clinically in various cases, by abatement of temperature and in improvement in the symptoms of many patients so treated. Discharging wounds in some cases seemed to show less discharge, and healing to occur more rapidly following the injections. The determination of the opsonic index requires such an elaborate technic that its use is not likely to become widespread unless simplified.

Among the more recent operative procedures described, and recommended, a few seem of special value, and would appear to warrant mention. Several operations for cystocele have been described. All suggest rather deep dissection and a separation of bladder wall from vagina before sutures are placed. Reynolds' method, which from his description might be called the four-leaf-clover operation, seems to be practicable. In the Journal of the American Medical Association is an article by Hill on "Restoration of the Pelvic Floor," it calls for deep lateral dissection, exposing and suturing of the levator ani muscles, besides uniting the more superficial layers. During the past four years Dr. Hill and a colleague have performed this operation 150 times, with excellent and permanent results.

At the present time the subject of cancer is probably receiving more attention than any other. Experimentation with cancer in the lower animals has been extensive. A spirochēta has been observed in both spontaneous and transplanted tumors in mice. Gaylord says "No etiological relation has been established, but that the presence of the organism is suggestive." Some authorities suggest a relation between cancer and water supply and infer the presence of a parasite or some substance in the water. Clark minimizes the importance given to irritation, either traumatic or chemical, as a cause of cancer, by stating that cancer cannot be experimentally produced in this way. Councilman believes the history of injury so often attending cancer is merely a coincidence and compares it in importance to the theories of malformation following maternal impression. This authority believes the germ theory accords best with what is known of tumors. Anderson believes the function of the thymus gland is related to cancer. Beard's theory of cell development may be mentioned.

The surgical treatment of cancer unquestionably stands first, and the plea is for earlier recognition of the disease, that this treatment may be more successful. Cancer of the uterus being more frequent than any other form of cancer in women, it is urged by Montgomery that early operations for laceration of the

cervix uteri be performed, and that pelvic symptoms be studied carefully, so that cancer may not be overlooked in its incipiency.

The non-surgical treatment of cancer includes Beard's trypsin-amylopsin treatment, which seems to be the most used of the non-operative measures. Sunlight is suggested by Widner in superficial ulcerating cancer.

After all is said, and there has been a great deal both said and written, we have added but little to our knowledge of cancer, and we must return as yet to the rule of early diagnosis and radical operation.

It has been of interest during the past decade to note the great change that has occurred in the movement of minor gynecological cases in the Massachusetts Homoeopathic Hospital. For instance, during the year 1899 the total number of surgical cases was 1318, and of this number (about 11 per cent.) 148 were operated upon for laceration of the cervix uteri and rupture of the perineum. During recent years, although the census has more than doubled, the average number of cases requiring these operations has been barely more than one hundred each year, or about 4 per cent. of total cases. This has been due, no doubt, in part, to an improvement in obstetrical technic, and also to the fact that primary repairs are more frequently made than formerly, either by the general practitioner, who is now often well equipped for this work, or by the gynecologist who has been called to the case by the physician in charge. The development of numerous well appointed suburban hospitals has afforded nearby facilities for the care of these cases, and in them much excellent work is being done.

In conclusion we must admit that there has been but little progress in gynecology. The hypodermic method of anesthesia, the treatment of disease by bacterial vaccine and operative measures are all being perfected. Let us hope that the future holds for us greater progress in this line of work.

DISCUSSION.

Dr. George E. May. "My experience with the H. M. C. Tablets is very favorable indeed. I am using them now in all cases in my Newton Hospital service and am very much in favor of them.

"In obstetrics they work like a charm, so to speak, and yet there is a danger which we must recognize. I never give a full dose in obstetrical practice, and none at all except in the early stages of labor. They certainly are a great time saver and strength saver in some of these tedious cases of labor, but there have been a number of cases of ill effect upon the child, and I think that that is to be considered."

In reply to a question, Dr. May said that the ill effects observed on the child were stillbirths.

In answer to the question as to whether this form of anesthesia was not more useful in hospitals than in private practice, Dr. May said: "My experience is that the less help you have the more favorable the opportunity for the use of the H. M. C. Tablets. It is decidedly the anesthetic

for general practice. In a hospital you can use almost any anesthetic you please because there is plenty of help if you need it."

In reply to a question, Dr. May said that he used half the usual surgical dose in obstetrics, and that for surgical use he employs the 1-4 gr. dose.

Dr. Horace Packard. "I have hesitated to make any public declaration of my results in the use of the anesthetic tablets until I have had enough experience to speak from positive knowledge. Anything new of this kind that comes to the front and which deals with such potent drugs as morphine and hyoscine is sure to be looked upon askance by a large number of physicians, irrespective of what surgeons may say about it.

"About a year ago I decided to try it and began in a very mechanical way to use it, and as time has gone on I have become so profoundly impressed with its excellence that now I should not want to give it up. Used carefully, I have seen no reason to fear injurious or fatal consequences, and by carefully I mean this: After administering one dose, allow a short time to pass by during which period the patient is still wide awake and recognizes that he is being spoken to, and then administer another dose, and after the lapse of another half-hour or hour when the patient is still wide awake, another dose should be administered. Patients differ very much in the dosage required. All elderly persons require less. A single dose is usually sufficient for the aged.

"The satisfactory features are these. In the first place, the patient quietly sinks into unconsciousness in her own room in her own bed and is taken from her room without knowing that she leaves it, undergoes the operation and goes back into her room and sleeps quietly and frequently says when she awakes, 'When is my operation going to take place?' Another very desirable feature is that you have none of the pulmonary effects from the inhalation anesthesia. To me these have been the source of greatest anxiety. I have always had a horror hanging over me in every case of ether anesthesia lest a patient develop a fatal bronchitis or fatal pneumonia. A further desirable feature is that there are no kidney complications as far as I have observed. You all know what very serious complications sometimes arise after ether anesthesia and after chloroform anesthesia. There is very good evidence that cases which have died three or four days after an operation have died from the remote effects of the anesthesia. Still another feature is that there is no nausea and usually very little vomiting.

"There is a chance for a great deal of discrimination in measuring up the dose, and the right dose is the one that requires no additional general anesthesia. A person who is over-cautious will shrink from giving more than a single dose or more than two doses and then if the patient is somewhat resistant or shows some consciousness will administer a lot of chloroform or ether. It is better that the anesthesia should be from the drug entirely or as complete as possible and thus reduce the post-anesthetic gastric disturbances to a minimum.

"As an illustration of some of the desirable conditions which follow this form of anesthesia I may cite the way the memory is abolished, even though the patient may seem to be somewhat conscious of the surrounding things. Here is an example. A patient was prepared in the usual way, underwent a gynaecological operation, for a bad rupture of the perineum, and during the operation was in a muttering state. I said to myself that this patient would tell me she knew all about it. Some three or four days afterwards she said to me, 'What a wonderful way you have of etherizing your patients!' I asked her what her opinion was about it. She said, 'I had no conception that a person could be rendered unconscious with so little discomfort. I have a vague remembrance of some one taking me in his arms, but no more.' As I entered on the amphitheatre floor she heard my voice, recognized it, lifted her

bandage from her eyes and waved her hand to me, and yet she had no recollection of doing that or of anything that happened at the operation.

"Originally morphine and scopolamine were used, but later hyoscine was substituted for the scopolamine. To these was added cactine. In using these tablets these phenomena were sometimes apparent during th course of the anesthesia. For a brief time there would be exaggerated heart action and then the heart would gradually calm down and go on in a fairly normal way. Also the respiration is sometimes retarded very materially .It would be startling, perhaps, to a beginner, but nothing has ever happened. A patient's breathing sometimes goes down to ten a minute and very deep breaths are taken.

"A slight modification has been made in using digitaline instead of cactine, and this has seemed to do away with those features, the exaggerated heart action and the slow respiration."

Dr. George R. Southwick:

"It may be interesting to know about the reverse side of this question. It has been my pleasure to see a great deal of the work done at the clinic by the Mayos, which is one of the largest ones for certain classes of work. Here this same preparation was tried in a series of 112 cases and they abandoned it; first, because of their fear of idiosyncrasies, and second, because of dangerous symptoms, and third, because with a record of over 15,000 successful cases with ether without any serious trouble they felt they had better stick to ether. They had had a great deal more trouble with these 112 cases than they had with their thousands of cases of ether anesthesia. The dangerous symptoms were the slowing of respiration and heart troubles. They found that just as much anesthetic is required after the tablet as without it, and that for that purpose chloroform was better than ether.

"One of the men on the staff of the City Hospital at the present time said that he did not know of a man in St. Louis who was using it. I heard similar statements from physicians from Chicago and the South, showing that they were afraid of it. They felt that putting in a one-half grain dose of morphine was liable to be in some cases a serious matter. After laparotomies many surgeons are very desirous of having peristaltic action take place normally, and they are afraid of the use of the morphine. Some operators give very little morphine, because they do not like the drying up of the intestinal secretions and the cessation of the peristalsis, conditions which tend to favor the development of sepsis.

"I speak of this merely to show the other side of the picture, and to give you the opinions of prominent men who have expressed their opinions about it.

"In regard to the abolishment of memory, that is quite true. I have personal knowledge, however, of two cases in whom that did not occur, and one of them can give a very detailed account of what took place from start to finish. These cases were exceptions to the rule.

"This form of anesthesia has been tried in Germany, and so far as my knowledge of German literature goes, it is not so popular today as it was in its beginning. It is certainly a valuable contribution to modern therapeutics, but its real place has yet to be determined."

Dr. Honan in the conclusion of his paper said:

"In New York City, as far as I can see, about the only treatment of diffuse peritonitis following appendicitis is removal of the appendix. We have men who are operating in the hospitals in New York, men of first-class character, who do not drain at all, who open the abdominal cavity, wipe off this exudate, remove the appendix and sew up the wound tight, and their reports are about as good as anybody's. This is done at the German Hospital and at the Roosevelt Hospital, under Blake and Peck.

"I do not make multiple incisions. I open the cavity, wipe off anything in sight, put the patient in Fowler's position, and use the saline solution.

"A few years ago, when the interest in puerperal sepsis was brought about by the introduction of the formalin solution, I made up my mind that a successful issue in the case of streptococcic infection was brought about by the stimulation of the heart and by increased elimination, and when this saline gets to working well the effect in the general appearance of the patient is apparent at once. They pass gas within twenty-four hours, the tongue becomes moist and the urine on the third day will run up to 100 ounces in twenty-four hours.

"A difficult thing is to get a nurse to give this saline in the right way. The technique should be to have the solution made up at 150 to 160 degrees. It will lose 25 to 30 degrees in passing in. When this solution is once arranged properly the nurse does not have to pay any attention to it for two hours. You can regulate it so that they take in a drop every second or half-second. I am not a faddist, but I know that this solution is valuable. After any ordinary laparotomies I give the patient about seven ounces every three hours for absorption. There is no vomiting or thirst. In all of these septic cases I give them absolutely nothing by the mouth. We in New York are using it a great deal and consider it a sine qua non."

Dr. Honan showed the apparatus used in this continuous saline administration and demonstrated the method of using it.

AMALGAMATION IN MEDICINE.—In the meantime, a question of engrossing importance has loomed into sight. It is the question of reconciliation of differences between the two dominant branches of the medical profession. And here again, there is a division of sentiment as to the proper course to adopt at the present juncture. Some are for an uncompromising attitude, an attitude which demands the recognition of rights of the homoeopathic school, without at the same time recognizing the rights of the older school. The less arbitrary members of the Institute show signs of meeting the overtures of the older school, and accepting the invitation to come into the various organizations, and to merge their individuality, both as believers in homoeopathy and as physicians, into the great mass represented by the American Medical Association. There is also a third but more careful and conservative element among us, which advocates an attitude of respectful and self-respecting consideration of the situation before final decision.

The question must sooner or later be definitely settled, but during the stage of consideration of the situation there are some points that should not be overlooked. One of these is that in this suggested reconciliation we of the homoeopathic school should recognize the fact that we must be willing to grant just concessions if we are to expect them. We should not ask more than we are willing to grant. If we expect to be granted the right to believe and practise according to our judgment, we must also grant the same right, and we must also recognize the fact that men may differ from us on vital points and yet be quite as honest as are we; and above all others there is one thing we must rigidly avoid, and that is the repellant, antagonistic attitude, the desire for a fight at the slightest provocation.—Price, The Hahnemannian Monthly, September, 1907.

UNUSUAL CONDITIONS FOR AMPUTATION.—It is reported that certain surgeons of the Cook County Hospital of Chicago obtained from the court an order directing the amputation of the arm of a fourteen-year-old boy. This order was requisite as, following a fracture, gangrene appeared, in spite of which the parents refused to give their consent to the operation.

DEVELOPMENT OF THE USE OF ELECTRICITY IN MEDICINE.*

Benjamin T. Loring, M.D., Boston, Mass.

Since 1895, when Roentgen discovered the light which bears his name, there have been several developments in the use of electrical currents by the medical profession.

Mechanical improvements in small motors have made their use to furnish power for drills, pumps and vibrators much more common than formerly.

Apparatus has been adapted to the commercial currents, so that where those are available there is a uniform and satisfactory current always ready for use. The electro-cautery and the various diagnostic lamps have been brought to a state of high efficiency. Large candle-power incandescent lamps in considerable variety have been placed on the market, and now are sufficiently reasonable in price as to be within reach of the general practitioner as well as the specialist. The fact of their usefulness is well established. The use of static machines has already given way to the more reliable and less cumbersome high frequency machines. These have been developed, until now it is possible to secure in a portable box about the size of a suit case and weighing forty pounds, an apparatus which will work on either the direct or alternating current, and give a fairly satisfactory X-ray or high frequency discharge.

X-ray apparatus has been improved by the use of larger coils and larger vacuum tubes with heavier anodes. By this means diagnostic exposures have been greatly shortened and a variety of detail secured in a skiagraph which was unknown a few years ago.

The mercury vapor, or Cooper Hewett lamp, is the last to be added to the list of new agents, and this light from quartz instead of glass tubes has been found to be a very powerful one, though not yet of proven value.

Whether apparatus is of value is a secondary consideration with some of the manufacturers, the most important thing for them being the salability of the goods, this fact has led to the construction and sale of much worthless apparatus. One such instance will illustrate. There is a high frequency electrode made and widely sold with the idea of having some medicated substance inserted between the electrode and the skin. The medicine was supposed to be carried into the body in the same way that it is by a unidirectional current, with resulting benefit.

Now one who gives any study to such a theory could readily ascertain that the high frequency current alternates its direc-

*Read before the Boston Homoeopathic Medical Society.

tion with extreme rapidity. Therefore, any transfer of medicine in the manner proposed could not be expected. Moreover, the facts could be readily proven by simple experiment, without going to the trouble of a clinical test on a large number of patients. I recently read a description of the rapidity with which a balloon dropped upon encountering a colder atmosphere. As proof that they descended very rapidly the enthusiastic balloonists stated that on throwing out sand ballast the sand apparently went up, striking against the balloon, so rapidly were they falling. When we recollect the law of gravitation for a moment we know that they must have been deluded by the dust blown in their eyes.

There have been more than a few enthusiastic physicians experimenting with electricity, whose ultimate conclusions showed that in their earlier observations their enthusiasm had run away with their intelligence in a similar manner. Sufficient time has now passed, however, to demonstrate some of these fallacies, and now the use of the various electrical currents is resuming the normal condition which it occupied previous to the period of unusual growth stimulated by the discovery of Prof. Roentgen, and also by the work of Drs. Finsen of Denmark and D'Arsonval of France at about the same time. During this period the profession has, to too great an extent, abandoned the use of agents of tried and known value, such as the galvanic faradic and static currents, for that of the high frequency current. Let me indicate briefly what in my judgment is the comparative value of the various currents, and the class of cases suitable for treatment by each, sighting illustrative cases.

I believe the galvanic current to be at least of equal value to any of the others, if we except the diagnostic use of the X-ray. In the diagnosis of nervous diseases, and in the treatment of organic lesions of the spinal cord, all the other currents together do not equal the galvanic in usefulness. There is nothing which will take the place of galvanism in removing superfluous hair. In non-suppurative diseases of the pelvic organs it is of extreme value, especially in derangements of the menstrual function, as is indicated by the following case, which is not an isolated one among electrotherapeutists.

Patient, Mrs. ———, age 32, housewife, patient of Dr. Anna Skinner of Watertown. Is one of eleven children. Has always had a tendency to hemophilia, as has one sister. Menstruation began when 16 years old. Is always very painful, lasting a week or more. Flow profuse. Was married when 21 years old. Has never been pregnant. In March, 1904, had severe pain in abdomen, especially in right ovarian region, with continual flowing. On August 18 appendix was removed and ovaries resected, removal of ovaries and tubes being advised but refused. Since that time has menstruated irregularly, suffering as usual. When first seen by the writer, Nov. 2, 1905, had been flowing continu-

ously for six weeks. Uterus small and freely movable without pain. Bowels regular. Treatment consisted in the use of the galvanic current, positive pole applied to the cervix, negative pole on the abdomen, for ten minutes, with a current as strong as could be borne without discomfort, which was from 12 to 18 milliamperes. Flowing stopped after the first treatment. The next menstruation was the least painful in years, lasting five days. Treatments were continued between menstrual periods, a total of 21 being given in nine months, and five additional at irregular times during the next year, making 26 in all. Menstruation was now normal in length and flow, and without suffering. In the fall of 1907 became pregnant, and in June, 1908, was delivered of a healthy boy. Up to date mother and child are well.

The faradic current is much less valuable than the galvanic, but has merit when used mechanically to produce muscular contraction, and also for the relief of functional pain. The following is an illustrative case:

Patient, Mrs. ———, age 26, patient of Dr. O. R. Chadwell. During childbirth suffered considerable laceration of the cervix and perineum. The uterus did not decrease in size as rapidly as normal, due to endometritis existing previous to pregnancy. On getting up and around had severe pain in the back, with bearing down sensation, and feeling as if everything would come out. Was examined in the M. H. H., operation for repair of the pelvic floor and cervix being advised. Conditions were such at that time that operation was refused. As a palliative measure she was given treatment every other day with the faradic current, one pole in the vagina and the other over the fundus. Under this treatment involution of the uterus took place rapidly. The pain in the back and all the other symptoms disappeared, and the patient remained well four years, with the assistance of about twelve occasional treatments. At this time her circumstances were such that, an operation again being advised, she consented, and repair of the cervix and perineum was successfully done.

Dr. Chadwell has the details of this case, my only connection with it being in consultation.

The high frequency, high potential current appeals to physicians for many reasons aside from the inherent qualities of the current itself.

It is turned on and off by the snap of a button, is easily regulated, easily applied, often without the necessity of disturbing the clothing, and needs little outlay for repairs. It also appeals to patients from the psychical side more powerfully than any other current, by reason of its spectacular effects and the sensations induced by its application. Comparatively little is known of the value of the current standing by itself, for it is not easily

separated from these qualities, which produce benefit through a mental impression. It has been demonstrated, however, that the blood pressure is markedly lowered by its application. It is also established that pain from organic or functional disease of the nerves is markedly relieved by treatment either with the glass vacuum electrode or the wire brush. Either of these methods of application quickly produces an active hyperaemia, the extent of which can be varied by the duration of the treatment and the nature of the spark. Various other claims, including that of increasing the elimination of urea, have been made from time to time for this current, but I do not regard them as proven. It is certain, however, that the current has in itself inherent value. In functional neuroses, a class of patients often uninfluenced by ordinary treatment, the psychical impression produced by its use gives it great value.

In diseases characterized by increased blood pressure, this current is indicated. In the following case I am not sure how it acted, but there is no doubt in my mind that it was the curative factor in the treatment. Patient, Mrs. F., age 33, school teacher, patient of Dr. A. G. Howard. First seen in March, 1904, giving this history: Since June, 1902, has suffered from a severe urticaria, which comes on in the afternoon, is at its worst in the night, and by nine o'clock in the morning is nearly gone. The wheals come on all parts of the body. Walking becomes very painful on account of the swellings on the sole of the feet. The face swells badly. Temperature rises to 102 or more in severe attacks. Examination of the blood shows heamoglobin 80 per cent., red disks 5,500,000, white corpuscles normal in proportion and number, and no malarial organisms present. No errors in diet can be discovered, and a milk diet persisted in for weeks does not influence the eruption. Has had the best consultants available, but can only secure temporary relief by the frequent application of antipruritic solutions containing camphor, carbolic acid, etc.

She was given high frequency treatment twice weekly with glass vacuum tube applied for ten minutes over the spine and back, with a discharge as strong as she could stand. Relief was immediate. Treatment was continued until a total of 22 had been given, during all of which time she was quite comfortable, and on ceasing treatment remained so for two years. At that time she had a slight similar attack, which four treatments relieved. Has remained well since then.

The therapeutic use of the Roentgen ray is too large a subject to be more than touched upon in this paper. In properly selected cases, which are frequently those not responding to other measures, it is and will continue to be widely used. As regards its use in malignant conditions, my conclusions, formulated in a paper on that subject read at Niagara Falls some years

ago, are the same still. In skin diseases it has become indispensable. The quotations following are from the most recent editions of standard authorities of both schools on that subject.

Pusey, Principles of Dermatology, 1907, p. 161, says: "The field of application for X-rays in dermatology is very extensive. It is hardly too much to say that Roentgentherapy is the most widely useful addition to the treatment of skin diseases that has been made."

Dearborn, in Diseases of the Skin, 2d edition, 1906, p. 44, says: "Radiotherapy is probably the most discussed and most widely used method of physical therapy. The following diseases may be mentioned as having responded in some degree to its use: Epithelioma, lupus vulgaris, acne, rosacea, sycosis, ringworm, favus, eczema, psoriasis, hypertrichosis, lupus erythematosus, keloid, sarcoma cutis, and mycosis fungoides."

Stelwagon, in Diseases of the Skin, 7th edition, 1907, p. 120, says: "Continued observation and experience, including my own, though showing that some of the claims were extravagant, nevertheless very properly accord it a most important position in the treatment of certain diseases of the skin; while it should not be allowed to supplant other means and methods, it is to be recognized as a potent and helpful addition to our resources, especially in epithelioma, lupus vulgaris, lupus erythematosus, sycosis, extreme and obstinate types of acne, in limited rebellious cases of eczema, ringworm of the scalp, and some other diseases to be referred to in the course of the test. Its possibilities for evil, both for the patient and operator should rightly limit its use within reasonable bounds and under sufficient precautions. It is true that the dangers, with proper technique and the exercise of care, have been almost reduced to insignificance."

Incidental to the treatment of other conditions, I have removed all hair in exposed areas from both the scalp and beard, in a dozen or more cases, in each instance without apparent effect on the skin. This shows that the Roentgen ray is superior to galvanism when the amount of hair to be removed is large. The following is a fair sample of its usefulness in a properly selected case of skin disease:

Patient, Mr. E., age 44, upholsterer, patient of Dr. E. E. Allen. Twelve years ago an eruption appeared on the left leg just above the insertion of the quadriceps tendon into the tibia. Intense itching accompanied it, which was only relieved by scratching until the part was bathed in blood. Has tried many things without relief.

First seen Sept. 19, 1903, when the patch (chronic eczema) covered an area 9 c.m. in diameter. Was much thickened, dry and scaly. In five months he was given 19 X-ray exposures of 5 to 6 minutes each, at a distance of from 7 to 8 inches. Itching was relieved after the first treatment, and absent after the second. In

conjunction with the X-ray, a preparation of salycilic acid was used after the second treatment. The skin gradually became normal, and as nothing further has been heard from him I think it fair to infer that it has remained so. It would not surprise me, however, to hear that such a persistent trouble had recurred. I see no reason why it would be less likely to do so after X-ray treatment than after equal relief from any other method.

As regards the relative value of the static current I do not feel sufficiently qualified to speak, for my static machine is seldom used, and like many others, is not much good in this sort of weather.

If it were not for the comparatively large amount of attention needed to keep a static machine in working order, I believe they would be considered more valuable than the newer forms of apparatus.

As you may have observed, I have purposely avoided tedious details and technical descriptions of apparatus and so forth. I have tried to make the paper of interest to the profession as a whole. If I have made it interesting to those present this evening I shall be gratified, but whether interesting or not, every statement made is to the best of my knowledge conservative and reliable.

THE DEVELOPED CHRONIC SYMPTOM-PICTURE.*

Maurice Worcester Turner, M.D., Brookline, Mass.

Some chronic diseases tend to ultimate themselves in headache. This ultimation may persist as a chronic cephalalgia or later be modified, and changed to something else, as the disease is still further developed. From the pathologic view-point these cases present various chronic states of concern to us principally because of the poor prognostic outlook suggested; while, on the other hand, therapeutically, such fully developed chronic diseases are much more hopeful as ultimations of this nature give clearer indications upon which to select the appropriate remedy than if the signs were vague and indefinite; the more severe and marked the exacerbation the clearer cut the prescription symptom-picture.

Those physicians who understand the proper handling of chronic diseases need only to be reminded that it is this complete development of a chronic case which is especially to be taken into account and to which a corresponding symptom-group in the pathogenesis of some remedy must be found in order to cure, if cure be possible. The symptoms of the early and interven-

*Read at the meeting of the Hahnemann Round Table, Philadelphia, December 26, 1908.

ing stages are of less value, therapeutically, though these will doubtless correspond either to the remedy called for by the developed case or to other medicines which would have, in sequence, preceded the similimum.

Hering carefully elaborated this, and other important points regarding the treatment of chronic diseases, in his consideration of Hahnemann's "Three Rules," namely, 1st—The value or rank of symptoms; 2d—The mode of development of chronic diseases, and 3d—Evidences of cure. These, and Hering's deductions therefrom, are familiar to you and need not be further quoted.

The following cases, with the exception of the first, illustrate more or less fully the foregoing; the profound action of one of the less frequently exhibited medicines; and also the efficacy of some of the nosodes.

Probably no remedy in the materia medica has been objected to more strongly than Lac caninum—potentized dog's milk. Valuable as it is in throat affections, in headache, in eczema, in rheumatic fever,—and it has done yeoman service in many a severe case,—yet those who do not care to know pass it by all unaware of its existence and value.

The first case in which I witnessed its action was one of diphtheria where the early symptoms, before those of the pharynx developed, required Eupatorium perfoliatum, and the bone pains, general aching, restlessness, and fever without sweat, yielded almost as soon as that was exhibited. The next day a china-white membrane had appeared on the left tonsil, but, as there were no concomitants, except an indefinite sore throat, it was necessary to wait till sufficient data (symptoms) developed upon which to prescribe. Fortunately it was only needful to delay until the next morning, then the membrane had gone completely over to the right tonsil,—that change of location with the sensation of a lump in the throat, aggravation after sleep and on empty swallowing, with pushing pain from throat to left ear, decided for Lac caninum and one dose of the 1 m. cleared up the case at once, prostration persisting for a week.

More recently in headaches I have observed the quick and permanent effect of Lac caninum. About two years ago, in the spring, Mrs. R., who was experiencing the discomforts of the menopause, with flushes, headaches, prostration, and who had been helped by Sepia (2 c., 1 m.) through the winter, developed a series of severe headaches which incapacitated her. Sepia, repeated, did not act. Then a review of the case brought out the following:—The last headache, two days before, was noticed first as a dull pain in the nape of the neck on waking in the morning; it increased after rising, and worked forward to the forehead where it became throbbing and centred at the outer side of the left eye (temple) with relief from pressure. Later it left that side and went to the right. Sewing aggravated; she was

chilly in spite of wraps; vomiting of bile occurred without relief; and there was also pain in the left hypochondrium (spleen). One dose of Lac caninum 1 m. caused the next headache to be very slight and since then there has been no return. All attendant distressing symptoms, including the flushes, disappeared.

Objection may be made here that this is not a chronic disease, i. e., the menopause,—that it is a "physiological change"; to which I reply that being a physiological change it should be free, or at least comparatively free, from discomfort and that those cases which are not so indicate a chronic underlying state which should be cured by medicine. There was nothing in the environment (using that word in the most inclusive sense) of the case to which this condition might be attributed.

The next case, which has come under my care within six months, has a history of chlorosis and evidences exist that she has never been cured. The patient, Miss J., 41 years old, has had what she calls neuralgic attacks with each menstrual nisus. These began in the nape of the neck and were worse if she were tired or if the weather were damp. There was morning aggravation, from 10 to 11 o'clock; pain settled gradually in right or left frontal region, with alternation of sides, and lachrymation with the frontal pain. The upper and lower eyelids were puffed in the morning with the headache, not oedematous. Headache worse from stepping (jar of), stooping, sewing. Lac caninum, 1 m. one dose. The next menstrual period was without headache, the first in more than two years to be free. The following month there being a slight return the remedy was repeated *afterward*, same potency and dose; no headache since.

The alternation of sides, so prominent as an indication for this remedy, is not confined to the throat nor head symptoms. It occurs in eczema, in articular rheumatism, in bruised pains in joints, in swellings, etc., as well, as you know, and is an erratic disposition of symptoms, the pains constantly flying from one part to another, reminding one of Kali bichromicum, Ledum, Pulsatilla, neither of which, however, has distinctly the alternation of sides. In the throat symptoms Lachesis and even Lycopodium stand very close to Lac caninum though the last fills a place peculiar to itself. Its symptom of "sore throats and coughs being apt to begin and end with menstruation" may possibly be extended to include headaches as well, as the third case herewith seems to show. In headaches not only is the alternation of sides suggestive, but also the aggravation from sewing, and the lachrymation with the frontal pain; and we may add the non-oedematous swelling of the eyelids.

Lac caninum in rapidity and depth of action may be classed with Medorrhinum, Psorinum, Syphilinum, and Tuberculinum; each of these nosodes, *under its own conditions*, has served me well in chronic diseases where there was an attendant cephalalgia

which became so prominent that it furnished the key to the remedy not only for the headache but for the chronic symptom-complex as well. I have cured several such cases with both Psorinum and Syphilinum, and one each with Medorrhinum and Tuberculinum. Four of them, condensed, are as follows:

Medorrhinum.—The patient, a man, 46 years old, perhaps sycotic, i. e., a history of suppressed gonorrhea but no condylomata. Headache; frontal, more or less constant, but generally worse in the day; extending over head to neck and sometimes down spine; worse from light and jarring. Legs and feet very restless and latter burn much, must uncover them, the soles being very tender so could hardly walk. There had been dyspnoea with palpitation on slight physical exertion and a little oedema of feet and ankles. The remedy was given only twice, two months apart, a single dose each time in the 1 m. A slight urethral discharge returned and then gradually disappeared; cured.

Psorinum 50 m. was curative in the case of a man of 51 years with marked emaciation, beginning nephritic change (interstitial), and aphasia, associated with severe attacks of headache which usually came on during sleep. For two or three days before the headache felt unusually well, and immediately preceding was ravenously hungry. During the headache very ugly; pains extending to throat, teeth, tongue; courage all gone. The remedy was repeated several times during a year; flesh returned and all morbid signs disappeared.

Syphilinum was efficacious (curative) in the chronic case of a woman, 49 years old, a syphiloid (infection coming from her husband who was in the tertiary stage), where the time of aggravation of the headache was the reverse of the Medorrhinum state, i. e., "at night from sunset to sunrise," though often beginning in the late afternoon (4 o'clock). The pain in the head came on gradually, attacks lasted two or three days with remission each day after sun-up. The patient was intensely restless, walking the floor rapidly and constantly, which gave the only relief, until the acme of the pain when the blood vessels of the head seemed full to bursting with violent beating of the arteries and frequent retching and finally bilious vomiting, when she became mildly delirious and was with difficulty restrained in bed. There was marked emaciation; dirty color of the skin; forehead very wrinkled; washing hands often. This remedy had to be repeated several times (2 c., 1 m., 50 m.) and as improvement went on she became quite stout, all the wrinkles disappearing.

And lastly Tuberculinum, 1 m., was curative in a woman of 34, with whom headache had persisted for years with exacerbations (which fortunately were not oftener than every six weeks) preceded by chilliness down the spine; the pain at those times was so intense that the patient would beat the head with the

hands, tear out the hair and throw herself violently onto the bed or floor or try to beat the head against the wall, reminding of Aurum metallicum, which was indeed given but without effect. In some attacks there was a sensation of a band about the head, in others cutting pain from right forehead to right occiput, though these could hardly be said to alternate; besides there was aggravation from the slightest mental effort. Repetition was necessary.

It should be noted that, in these cases, Medorrhinum, Psorinum, Syphilinum, and Tuberculinum were not given because the patients were suffering from the diseases from which these nosodes are derived—that would be isopathy,—on the contrary they were exhibited for symptom-groups similar to those recorded in their pathogeneses, synthetic though those provings may be, and so in conformity with the homoeopathic law; for such chronic diseases can hardly be *cured* by any other treatment.

It is fortunate that there are clear and concise rules to aid us in the selection of the symptoms that are of the highest prescription "rank of value,"—would that all cases were distinctly developed. After all it depends upon the completeness with which the case is taken; if that be well done, then, as Hahnemann said, "the most difficult part of the labor will have been accomplished."

A POSSIBLE EXPLANATION OF TRAUMATIC APPENDICITIS.

By Charles T. Howard, M.D., Boston, Mass.
Surgeon, Massachusetts Homoeopathic Hospital.

At the meeting of the Massachusetts Surgical and Gynecological Society held Dec. 9th, Dr. W. F. Honan reported a case of appendicitis apparently traumatic in origin, and left open the question as to whether traumatism could really be the cause of such a condition. While such cases do apparently exist I have never seen any explanation offered as to the manner of their development and would offer the following as a possible solution:

Two conditions are necessary. First, an appendix having a fairly narrow lumen, and second, an intestinal canal at least moderately filled with gas. With these conditions present any blow received upon the abdomen would cause a decided sudden increase in the tension under which the gas was held and some of it with fecal matter must inevitably be forced into the appendix, where, due to the narrowed lumen, it would be retained. The rapid multiplication of the bacteria present in the feces, without

the opportunity for free exit would cause a typical attack of appendicitis.

The conditions prescribed are not unusual; in fact, they are probably present in nearly every case of appendicitis. An appendix with a free opening almost never causes trouble because immediately that fecal matter gains an entrance it is forced out by the contractions of the muscular fibres of the appendiceal wall. But with an appendix having a narrow lumen, such a physiological cleansing of the appendiceal cavity cannot occur and the abdominal blow merely forces the infection in where otherwise it would pass over the opening.

I should be pleased to hear from physicians who have had cases of traumatic appendicitis, and learn how nearly this solution coincides with their observation.

OBITUARY.

WILLIAM OSMAN RUGGLES, M.D.

William Osman Ruggles was born in Moline, Illinois, October 8, 1854, died in Boston, January 8, 1909. In his early childhood his parents moved to Worcester, Massachusetts. He was educated in the public schools of the city of his adoption. In 1876 he entered Boston University School of Medicine, graduating in 1880. He early located in Neponset, one of the suburbs of Boston. Dr. Ruggles was a close student of the Materia Medica, and this, combined with his studious habits, keen powers of observation, his ability to read men, gave him knowledge to select his remedies with extreme accuracy. He early established a high standard of integrity for himself and was thereby enabled to detect sham and dishonesty in others. With these traits as a foundation, he early secured a good practice, but the routine of general work becoming monotonous to him, he engaged for a time in real estate business. In February, 1899, he had a severe illness from overwork when not fully recovered from an attack of la grippe. From this illness he never fully recovered. He went South, thinking a warmer climate might be beneficial, but his ambition again became master and he entered deeper than ever into business, with the result that on his return home he was in a worse physical condition than when he went away. From this time on he was able to do but little professional work. His courage and power alone kept him from being a bed-ridden invalid. Dr. Ruggles was a firm believer in the law of similars, and with many others he believed that the higher attenuations exerted a healing influence (especially in chronic diseases) that the lower did not. He spent many of the last weeks of his life in studying the "Dictionary of Materia Medica" by John H. Clark, M.D., in the vain hope of finding some remedy that would cure him. He was for a long time a member of the staff of the dispensary and later of the Out-Patient Department of the Homoeopathic Hospital. In all of this work he was deeply interested, and attended to the duties there at times, when most men would have been in their beds. In 1880 he married Miss Etta M. Warren of Weston. She died in 1894, leaving six children. The oldest, Warren, is a graduate of the New York Homoeopathic Medical College, and is located in New York City. In the death of Dr. Ruggles, Homoeopathy has lost a staunch supporter and many people, especially the poor, will mourn the loss. The interment was at Cedar Grove Cemetery, where he was laid beside his wife and infant son.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only, and preferably to be type written—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.

ASSOCIATE EDITORS:
F. W. COLBURN, M.D. C. T. HOWARD, 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, if possible.

A MID-WINTER HOLIDAY.

A mid-winter holiday is beginning to be looked upon as a necessity by the overworked members of the medical profession. The endless round of duties performed uninterruptedly for several months is wearing to even the strongest organism, and the "all work and no play" method indulged in by so many physicians tends to more than physical fatigue. A mind that is unable to see, think, decide, and act quickly, wisely and certainly, is not a mind to which should be entrusted the relief of suffering, the restoration to health, the preservation of human life and happiness. And such a condition of the mind is not unknown as a personal experience to the physician who is wearied by carrying the responsibilities connected with his life work. A break of a few days in the middle of the season, the stimulation of new sights such as may be found in a change of environment, and a transient deflection of thoughts into novel channels will result in renewed courage, heightened zeal, and freshened vigor with which to take up the familiar burdens temporarily laid aside. And such a break may be looked upon in the double light of a duty to one's self and one's patients, and also as an investment which is certain to return a rich dividend.

An opportunity to take such a mid-winter holiday offers itself to the members of the Homoeopathic profession here in New England during the month of February; for a meeting of unusual attractiveness and interest has been arranged for by the Southern Homoeopathic Medical Association. This meeting is to be held in New Orleans during the last week of the month. It is unnecessary to give the program of the meeting; but the following quotations from an advance announcement by the officers of the Association give some evidence of the spirit which will animate the meeting.

"Judging from the letters of encouragement, the applications

for membership, and the assurances of attendance that are coming from all over the South; from the editorial comments in the journals and the assurances of attendance from many prominent American Institute workers, already in the hands of the secretary, and the probability that the Executive Committee of American Institute of Homoeopathy will meet here at that time, this will be the largest and best attended meeting ever held by this Association. From the titles of papers already received and the contributors that have promised papers to the various chairmen, this meeting will be one of most intense interest to every live medical man of the Homoeopathic School, be he located North, South, East, or West.

"Success is already assured, but we want more than this; we want every Homoeopathic physician, especially in the South, who has the interest of his school at heart, to join in with us and attend this meeting, and aid us in the propaganda to spread Homoeopathy all over the South and carry on the spirit of propagandism commenced at the last meeting of the American Institute of Homoeopathy.

"To you of the North, who are interested and willing to join in and aid us in this work, we extend a hearty welcome; we need you one and all. In recent years the sessions have occupied two days only, but the work promised for this session is so voluminous and important that it has become necessary to provide for a session of three days, which will be Feb. 24, 25 and 26. This will give all visitors a chance to see and enjoy the carnival festivities before the meeting convenes.

"It is to be remembered that those who are limited to a few days should arrive here not later than February 23, Mardi Gras day; those having more time, as much earlier as they desire.

"Monday, February 22, at 2 P. M., King Rex will arrive at the foot of Canal Street, and the keys of the city will be turned over to him; at 7:30 P. M., Proteus and his crew will appear on the streets. Tuesday, February 23, Mardi Gras day, at high noon, King Rex parades the streets, and last but not least, comes the pageant of Comus, at 7:30 P. M.

"Cheap Mardi Gras rates can be secured from all sections, both North and South. The exact fare can be obtained by members, delegates and visitors at their home stations. Dates of sale will differ in the territories of the various passenger associations. All tickets will be good to arrive in New Orleans on or before Feb. 23, and return tickets will be good up to and including March 1, 1909, with the privilege of an extension up to and including March 13, if the ticket is deposited by the original purchaser with Mr. James Richardson, special agent, not later than March 1, 1909, upon the payment of a fee of $1.00 to be paid at the time of deposit.

"The St. Charles Hotel will be the official headquarters during the session. Special rates have been secured. However, on account of the crush at carnival season, all those expecting to attend

the session should make advance reservations, through the secretary, No. 718 Macheca Building, New Orleans, La., to be sure of securing accommodations. The earlier the reservations are made, the better.

"V. H. Hallman, M.D., President,
"Hot Springs, Ark.
"Edward Harper, M.D., Secretary,
"New Orleans, La."

As to the city of New Orleans itself, it is known to be one of the most picturesque in the country, and to offer attractions not to be found elsewhere. Especially is this true when it is found in its best spirits and attire during its annual carnival. The festivities of Mardi Gras are unique and of a sort not to be met with in New England. Those who speak with authority claim that "the carnival is New Orleans' most distinctive social feature, so magnificent in its conception, so gorgeous in its pageantry, so thorough in the perfection of the most minute detail of its marvelous scope, that competent historians and critics have declared that the famous spectacular triumphs of Rome, with all their barbaric wealth and splendor, never surpassed in beauty the wonderful parades of New Orleans."

Surely such possibilities of pleasure and recreation as are here suggested are enticing, and must be tempting to New Englanders who are just at the present time in the frigid grip of the hardest month of the year, and who, therefore, are in a condition to appreciate a mid-winter holiday in the genial and seductive Sunny South.

ALUMNI ASSOCIATION OF THE NEW YORK HOMOEOPATHIC MEDICAL COLLEGE.

The Alumni Association of the New York Homoeopathic Medical College and Flower Hospital has reason to congratulate itself upon having planned and carried to completion one of the most brilliant events that has occurred in the annals of Homoeopathy in this country. The event here referred to was the complimentary dinner tendered by the Association to Royal S. Copeland, A.M., M.D., the new Dean of the New York Homoeopathic Medical College. The banquet was held at the Hotel Astor on the evening of Friday, December 4th, 1908, and was attended by a large number of the most prominent members of the Association. It would be useless to attempt to enumerate the names of the more prominent members who were present, for in the well-known dramatic phrase, it was a "star cast." Physicians who are known the length and breadth of the land, who are influential in educational circles and in the work of the American Institute of Homoeopathy, who occupy official positions of dignity and responsibility, for the time being laid aside the serious responsibilities of pro-

fessional life and gave themselves up without restraint to the pleasures of the evening.

High above the crowds of Broadway, with all the quiet and privacy of a surburban residence, a commodious hall had been reserved for the banquet which was served at small tables which were tastefully and charmingly decorated. The hall, when filled with its guests, presented a brilliant spectacle, and the prevalent atmosphere was one of unfettered enjoyment.

The meeting was presided over by Dr. John Prentice Rand of Worcester, President of the Association, who, in his introduction of speakers, was never more effective in the judicious mingling of seriousness and humor. His remarks were in themselves, clever, appropriate, amusing, and effective. On either side of him at the speakers' table there were ranged: Hon. Melbert B. Cary, President of the College Corporation; Dr. Henry C. Allen, Dean of the Hering Medical College and Hospital, Chicago; Dr. Clarence Bartlett, Professor of Practice, Hahnemann Medical College of Philadelphia; Dr. Howard R. Chislett, Dean of the Hahnemann Medical College and Hospital of Chicago; Dr. Helen Cooley Palmer, Dean of the New York Medical College and Hospital for Women; Dr. John P. Sutherland, Dean of Boston University School of Medicine; Dr. George Royal, '82, Dean of the College of Homoeopathic Medicine of the State University of Iowa; Dr. Wilbert R. Hinsdale, A.M., Dean of the Homoeopathic College of the University of Michigan; Dr. Charles E. Walton, A.M., LL.D., Dean of Pulte Medical College, Cincinnati; Dr. Hamilton Fiske Biggar, L.L.D., Honorary President of the American Institute of Homoeopathy, and Dr. Royal S. Copeland, A.M., Dean of the New York Homoeopathic Medical College and Flower Hospital, guest of honor.

The speeches in the main were congratulatory as befitted the occasion, but there was no lack of discussion of the difficult and important points connected with medical education and the status of our Homoeopathic schools. The general tenor of the remarks was decidedly encouraging, and while showing an appreciation of the difficulties to be overcome, gave evidence of a determination and ability to overcome them.

The *esprit de corps* manifested by the Alumni Association of the New York Homoeopathic Medical College, in originating and carrying to successful issue such a meeting demonstrates its possession of power, activity and vitality which promises well for the future of its Alma Mater. It is not only the Alumni Association and the new Dean who are to be congratulated, but it is a matter for rejoicing to every Homoeopathic physician in the country that so much enthusiasm and unity of effort exists in our midst. Where such hearty coöperation is present, success in the advancement of the cause of Homoeopathy is certain.

In addition to the banquet it might be noted that the program of the celebration extended over two or three days, and included

medical and surgical clinics, addresses, lunch, and a visit to the Metropolitan Hospital, which is not only the largest Homoeopathic, but the largest general, hospital in the United States.

MILK AND TUBERCULOSIS.

The somewhat heated discussion concerning the relationship of bovine and human tuberculosis which took place at the recent International Tuberculosis Congress in Washington, is so fresh in the minds of our readers that the report which has just been made from the Government Experiment Station at Bethesda, Maryland, concerning the death of several children from tuberculosis, unquestionably originating from the use of milk obtained from tuberculous cattle, will prove particularly interesting. According to the report:

"Several children of the employees of the experiment station died and under such circumstances that autopsies were deemed advisable. These developed that the cause of death was tuberculosis of the glands of the neck and the intestines. *The children had been fed on the milk of cows kept upon the Government farm.* The cows were killed, and the autopsies upon their carcasses and the bodies of the children revealed absolutely the identity of the disease from which each suffered."

Naturally, perhaps, in the case of the children, the tuberculous process involved the intestinal tract and the lymphatic glands rather than the lungs. The report of the cases was made by a sub-committee of the Committee on Agriculture, and it will doubtless greatly increase the strenuous efforts already being made to stamp out tuberculosis in cattle. These unfortunate cases will doubtless help to emphasize the correctness of the prevalent American opinion that bovine tuberculosis is communicable to the human race.

MEDICAL LEGISLATION IN 1909.

During the next few months matters of great importance to the laity and to the medical profession are to come before the State Legislature for discussion and decision, and it behooves the profession, as a whole, to keep closely in touch with the legislative proceedings if it would have full justice done to all concerned. It is not and will not be sufficient to have a few members of committees of State and local societies attend hearings and do the work necessary in connection therewith. These committee members must have the support of the entire profession, and this support must be more than an approving "moral" one. It must be sympathetic, active, and practical, energetic and unceasing. If it be otherwise, and as a result injustice be done professional interests, the profession will have none to blame but itself.

Among the matters to be discussed is the recommendation made

by the Board of Registration in Medicine in its report for the year ending December 31, 1908. This report contains much that is interesting, but the recommendation here referred to has to do with the modification of Section 9, of the present medical laws, whereby certain so-called "irregular practitioners" are now unrestricted in the practice of their various arts. The law as it stands is as follows:—

"Section 9. The provisions of the eight preceding sections shall not be held to discriminate against any particular school or system of medicine, to prohibit medical or surgical service in a case of emergency, or to prohibit the domestic administration of family remedies. They shall not apply to a commissioned medical officer of the United States Army, Navy, or Marine Hospital service in the performance of his official duty; to a physician or surgeon from another State who is a legal practitioner in the State in which he resides, when in actual consultation with a legal practitioner of this Commonwealth; to a physician or surgeon residing in another State and legally qualified to practice therein, whose general practice extends into the border towns of this Commonwealth, if such physician does not open an office or designate a place in such towns where he may meet patients or receive calls; to a physician authorized to practice medicine in another State, when he is called as the family physician to attend a person temporarily abiding in this Commonwealth; nor to registered pharmacists in prescribing gratuitously, osteopathists, pharmacists, clairvoyants, or persons practicing hypnotism, magnetic healing, mind cure, massage, Christian Science, or cosmopathic method of healing, if they do not violate any of the provisions of Section 8."

The proposed substitute is as follows:—

"Section 9. The provisions of the eight preceding sections shall not be held to discriminate against any particular school or system of medicine, or to prohibit medical service in a case of emergency. They shall not apply to physicians from other States or countries who are legal practitioners therein, when in actual consultation with legal practitioners of this Commonwealth; nor to physicians residing in other States and legally qualified to practice therein, whose general practice extends into the border towns of this Commonwealth, if they do not open an office or designate a place in such towns where they may meet patients or receive calls."

The Board also urges the enactment of an amendment to the Registration act which shall require "applicants for a license to practice to furnish, as a prerequisite of admission to an examination, satisfactory evidence of having graduated from a school of medicine equipped with modern facilities and employing modern methods of instruction."

But perhaps the most important recommendation of the Board is the adoption of a definition of the Practice of Medicine. The Board offers the following:—

"Persons shall be considered, irrespective of methods of practice, as practicing medicine within the meaning of Chapter 76 of the Revised Laws, who shall assume or offer to assume the responsibility of determining the nature of diseases, deformities or injuries of the human body, having in view the treatment of the same for the purposes of cure or alleviation."

We make no comments on this proposed definition, although we think it might be simplified and made more direct, but at this time would simply urge the necessity of formulating a definition as the prerequisite of any medical legislation whatever.

Another matter, and one which it is needless to say will cause tempestuous commotion, is contained in a bill which, according to the daily press, has already been presented to the Legislature. It provides:—

"That all persons holding themselves out by sign, business card, or otherwise, as practitioners in this Commonwealth of Christian Science, mental healing, hypnotism; and doctors of divinity or ministers of the gospel conducting clinics for psychological or divine healing, and all kinds of healers or preventers of human diseases, shall register their names with the State Board of Health and state their place of business and the manner in which they heal disease and the nature of the cases that they intend to treat and practice upon in their profession on or before April 1, in each year, and shall be subject to the management and control of the said board.

"All persons who register in accordance with the provisions of this act shall receive a license to practice their profession of healing disease or of preventing the same, and to sign death certificates upon the payment of a fee of $1 to the State Board of Health, which shall have the authority to revoke any license granted hereunder in its discretion.

"Any person who not being licensed as aforesaid, practices or holds himself out to practice as aforesaid and accepts a fee of any sort for his or her services, shall, upon a first conviction, be fined $25, and upon a subsequent conviction be punished by fine or imprisonment at the discretion of the court.

"All inconsistent acts are hereby repealed."

Grand opportunity is here furnished for a battle royal, and it would be the part of wisdom to make early and careful preparation for the fray.

One other matter remains to be referred to, and that is the petition of the self-styled optometrists for legal recognition. Said optometrists are awake and in the field at work. The alertness and the activity should not be all on that side of the question if protection is to be secured for the laity and justice done to the profession of medicine.

SOCIETIES.

The annual meeting of the Boston Homoeopathic Medical Society was held in Jacob Sleeper Hall of Boston University College of Liberal Arts January 7, 1909, the meeting being called to order by the President, Dr. J. Arnold Rockwell.

The minutes of the last meeting were read and approved.

Denny W. Livermore, M.D., was proposed for membership.

The following were elected to membership: Florilla M. White, M.D.; Winifred M. Woolls, M.D.; Howard Lewis Cushman, M.D.; John A. Hayward, M.D.

Resolutions on the death of the wife of Dr. J. P. Sutherland, read by Dr. H. C. Clapp, and on the death of the wife of Dr. James Bell, read by Dr. J. Emmons Briggs, were accepted and will be sent to the respective families.

It was voted that the meetings continue to be held without any sectional division, under suspension of by-law VIII.

It was voted that the Year Book be published this year and that its contents should be left to the discretion of the Executive Committee.

Illustrated lecture by William Lyman Underwood, M. I. T., "Hunting Big Game With Camera and Canoe in New Brunswick." The lecture was frequently applauded and the pictures were much enjoyed.

The report of the treasurer, Alonzo G. Howard, M.D., was read and accepted.

The report of the auditor, Conrad Smith, M. D., was read and accepted.

The report of the secretary, Orville R. Chadwell, M.D., was read and accepted.

The nominating committee, S. H. Calderwood, M.D., chairman, reported the election of the following officers for 1909: President, Nelson M. Wood, M. D.; Vice-Presidents, Eliza Taylor Ransom, M.D.; Conrad Smith, M.D.; General Secretary, Orville R. Chadwell, M.D.; Associate Secretary, William A. Ham, M.D.; Treasurer, Alonzo G. Howard, M.D.; Auditor, Edward S. Calderwood, M.D.; Censors, J. Arnold Rockwell, M.D.; Edward E. Allen, M.D.; George D. Bliss, M.D.

On motion of Dr. Geo. H. Earl, it was voted that Dr. Wood be unanimously elected as president. The president-elect was then presented by Dr. Rockwell.

President's annual address, by J. Arnold Rockwell, M.D.; "Hahnemann's Organon in the Light of Recent Scientific Discoveries and Current Medical Practice."

Adjournment.

O. R. CHADWELL, Gen'l Secretary.

The regular meeting of the Twentieth Century Medical Club was held January 20th at Dr. Swain's home, 222 Huntington Avenue, Dr. Mary E. Mosher presiding.

Scientific Session.

Paper on "Modern Metaphysical Movement," by Dr. Lydia Ross.

Paper on "Sanotherapy," by Dr. Eloise A. Sears.

The Newton Nervine and the Newton Sanatorium has recently issued a very attractive little folder, illustrative of the development of the Institution from 1892 to the present date, and from one small building to the five that now comprise the Institution.

The man of one book is dangerous, especially if he be a physician; the man of a hundred books may be useful; but the medical man becomes better the more medical journals he reads.—American Journal of Dermatology.

BOOK REVIEWS.

THE MONTH'S BEST BOOKS.

Modern Medicine. Vol. V. Osler. Lea & Febiger.
Physical Diagnosis. Da Costa. $3.50. W. B. Saunders Co.
Operative Surgery. Buckham. $6.50. W. B. Saunders Co.
Pulmonary Tuberculosis. Bonney. $7.00. W. B. Saunders Co.
Surgery. Keen. $7.00. W. B. Saunders Co.
Nervous and Mental Diseases. Church. $5.00. W. B. Saunders Co.
Diseases of the Genito-Urinary Organs and Kidney. Greene. $5.00. W. B. Saunders Co.
Disorders of Respiration and Circulation. Von Neusser. Parts I. and II. $1.25 each. E. B. Treat & Co.
The Blues. Abrams. $1.50. E. B. Treat & Co.
Homoeopathic Materia Medica. Dewey. $1.75. Boericke & Tafel.
Mind and Its Disorders. Stoddart. $4.00. P. Blakiston's Son & Co.
Atlas of Clinical Surgery. Bockenheimer. 3 vols. $24.00. Rebman Company.
Obstetrical Technique. Cooke. J. B. Lippincott Co.
Clinical Diagnosis. Emerson. J. B. Lippincott Co.
Diseases of Women. Penrose. $3.75. W. B. Saunders.
Refraction of the Eye. $1.25. Parker. W. B. Saunders.

Progressive Medicine, Vol. IV, December, 1908. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D. Lea & Febiger. Philadelphia and New York.

In this issue is treated the year's progress in the diseases of the alimentary tract, liver and pancreas, by Edsall; in renal diseases, by Bradford; in surgery of the extremities and joints, shock, anaesthesia and tumors, by Bloodgood; and in genito-urinary disturbances by Belfield. A practical referendum, by Landis, completes the number.

Of the large number of topics ably discussed, possibly those that stand out most prominently are the sections on gastric ulcer, renal tuberculosis, surgery of the blood vessels, cancer, and the vaccine treatment of gonorrhoea.

This quarterly seems to unite the advantages of the medical periodical with those of the more extensive text-book, and at the same time to escape all the principal disadvantages of each. It always comes as a welcome visitor.

Gonorrhoea in Women. By Palmer Findley, M.D. Professor of Gynecology of the University of Nebraska, Omaha, Gynecologist to the Clarkson Memorial Hospital and Wise Memorial Hospital; Fellow of the American Gynecological Society. Price, $2.00. C. V. Mosby Co., St. Louis, Mo. 1908.

It seems safe to assert that the subject of this little book is one that receives but relatively scant attention from the hands of the majority of writers. It is, nevertheless, one that is becoming more and more considered as our knowledge of the peculiarities of the infecting organism increases.

The book opens with an historical sketch tracing the disease back to almost the beginning of the human race. A chapter on etiology, one on pathogenesis and one on the pathology serve as a suitable introduction to the more practical and important ones on the course of infection, diagnosis, treatment and sociological questions. A quite complete biblio-

graphical list is appended for the convenience of those who wish to follow the subject more fully than it is here covered. A large number of quotations are used in order to supply the exact meaning of the writers being referred to, better than by merely abstracting their opinions.

The book covers in a very satisfactory manner this subject that so often comes to every practitioner, and will, by careful perusal, bring to all such, increased ability to cope with a common infection.

Diseases of the Nervous System. For the General Practitioner and Student. By Alfred Gordon, A.M., M.D. (Paris). Associate in Nervous and Mental Diseases, Jefferson Medical College; Neurologist to Mount Sinai Hospital, to Northwestern General Hospital, and to the Douglass Memorial Hospital, etc. With 136 Illustrations. Price, $2.50, net. P. Blakiston's Son & Co., Philadelphia. 1908.

It is an undisputed fact that to the average undergraduate medical student, and perhaps to not a few post-graduate ones now in general practice, the subject of neurology is one that conjures up most discouraging ideas concerning a most abstruse topic. While this is due partly to the very difficult subject, it is also doubtless due in part to the very technical nature of most of the texts that have been written; books apparently intended primarily for the neurologist. In order to obviate this difficulty the book under discussion was written in hopes that a more distinct idea of the subject would be thereby easily available. As the author puts it: "It is a plain and practical account of diseases of the nervous system." Anatomy, methods of examination, localization and enciphalitis are followed by diseases of the basal ganglia, cerebrum, cerebellum, medulla and pons, spinal cord, peripheral nervous system, etc. Among diseases of the sympathetic system are found exophthalmic goitre, myxoedema, acromegaly, achondroplasia, etc., etc.

The entire arrangement of the volume is neat and satisfactory. It should give to every reader just what it claims to do: a clear, simple idea of the various forms of nervous diseases, with something of their cause, symptoms, pathology, diagnosis and treatment.

High-Frequency Currents. By Frederick Finch Strong, M.D., Instructor in Electro-Therapeutics at Tuft's College Medical School, Boston. With 183 Illustrations in the Text. Rebman Company. New York. 1908.

Without doubt the majority of the readers of the Gazette are already familiar with this author, either personally or by reputation. To such, any book that he writes needs no recommendation. Dr. Strong, is, if not a pioneer, one of the foremost exponents of high-frequency currents in America. Whatever he writes, therefore, may be considered to contain the very latest knowledge. And so in this book the statements made cover the various phases of the subject in its many details. While to some it may appear that too great claims are made, it must be remembered that electricity is full of future possibilities, as well as that any person exclusively devoting his attention to one subject can scarcely fail to be more or less biased in its favor. Elections and the election theory receive an entire chapter, as they fully deserve. Very full and freely illustrated chapters described the European and the American types of high-frequency apparatus. To therapeutic technic is devoted ample space to fully describe the many forms of disease for which this treatment is desirable.

As would be expected, the book is in the fullest sense original, a large proportion of the therapeutic measures and methods being of the author's own device. It is a publication of which Boston and New England may well be proud.

PERSONAL AND GENERAL ITEMS.

Dr. Andrew N. Bruckshaw, class of 1907 B.U.S.M., has opened an office in Fairhaven, Mass., at the corner of Union and Walnut Sts.

Dr. Halbert C. Hubbard, class of 1906, B.U.S.M., has removed from Hudson, Mass., to Auburn, Mass.

Dr. Adalieta Shaw, class of 1908 B.U.S.M., has begun practice at 115 West Emerson St., Melrose, Mass., in the office formerly occupied by Dr. Annie M. Selee.

NOTICE.—A vacancy exists upon the House Staff of the Cumberland Street Hospital, Brooklyn, N. Y. The Hospital has two hundred beds; service, emergency, general medicine, surgery, gynaecology, obstetrics and pediatrics, active emergency, ambulance and large out-patient department. For other information apply to Chas. B. Bacon, M.D., Supt., Cumberland St. Hospital, Brooklyn, N. Y.

Dr. Mildred F. Babcock, class of 1907 B.U.S.M., has located in Dedham, Massachusetts.

Trull Hospital, Biddeford, Maine, was destroyed by fire on January 17th, and but for the bravery of the superintendent, Dr. R. N. Randall (class of 1906, B.U.S.M.), and the nurses, some of the patients would undoubtedly have lost their lives. This was the second disastrous fire in the Hospital within three years. The Gazette extends its sympathy to Dr. J. Frank Trull in this second catastrophe.

The staff of the National Homoeopathic Hospital, Washington, D.C., will consider applications to fill positions of Senior and Junior House Physicians, vacant June 1st, 1909. Communications should be addressed to G. C. Birdsall, M.D., Secretary, 1330 Massachusetts Avenue, Washington, D. C.

Dr. Ray C. Hart, class of 1907 B.U.S.M., who last summer received an appointment in the Melbourne (Australia) Homoeopathic Hospital, has been promoted to the position of Senior Resident Medical Officer, with increase of salary.

Dr. Royal S. Copeland, the new Dean of New York Homoeopathic Medical School and formerly of Ann Arbor, Michigan, will address the Boston Homoeopathic Medical Society on the evening of March 4th, on the subject, "The Scientific Reasonableness of Homoeopathy." The speaker and the subject should insure a large attendance.

Dr. Frank L. Newton has removed his Boston office from 851 Boylston to 283 Newbury Street, and would like to share his office with another physician.

Dr. Daniel James Hanlon, of Hyde Park, Massachusetts, died very suddenly of apoplexy on January 24th, at the bedside of a patient. He had practised in Hyde Park since his graduation from Boston University School of Medicine in 1891, and was a prominent citizen of that city.

Dr. Henry C. Allen of Chicago, Dean of Hering Medical College and Editor of the Medical Advance, died very suddenly on January 22nd. Appropriate obituary notice will be made in a later number of the Gazette.

LOSS AT HAHNEMANN. Hahnemann College of Philadelphia and Pennsylvania homoeopathy in general have suffered a severe loss recently in the death of two well-known homoeopathic physicians.

Dr. Edward R. Snader of 1919 Arch Street, Philadelphia, while passing through Fairmount Park in his automobile, lost control of the machine and was carried over a high embankment. Death was practically instantaneous.

Dr. B. Frank Betts of Gerard Avenue, Philadelphia, was found dead in his bed. Further information is at present not at hand.

Prospects for the coming meeting of the Southern Association, like wine, "improve with age." Official notice has just been received from Dr. Horner, Secretary of the Institute, calling a meeting of the Executive Committee February 23, 1909, at the St. Charles Hotel, New Orleans, La. This will leave them free to attend the session of the Southern the following three days.

Dr. A. W. Horr announces a change in his office hours as follows: Mornings, by appointment; afternoons, 1 to 4.

AMERICAN INSTITUTE TRANSACTIONS WANTED. A request has been received by the Gazette for the 1877 and 1879 volumes of the Transactions of the American Institute of Homoeopathy. These are desired in order to make up a full set for a medical library. Anybody having such that they may be willing to dispose of will confer a favor upon the Gazette and upon Homoeopathy by informing the editors.

Applications will be received for Resident Physician to the Hahnemann Hospital of Scranton, Penna., for the year 1909. For information address Dr. H. F. Heilner, Burr Building, Scranton, Penn.

SURGICAL SERVICES MASSACHUSETTS HOMOEOPATHIC HOSPITAL. The following surgical services for the year have recently been posted:

January to March.
Surgeons: W. Smith and J. E. Briggs.
1st Assts.: C. Crane and A. S. Briggs.
2d Assts.: H. J. Lee and R. F. Souther.

April to June.
Surgeons: J. B. Bell and W. F. Wesselhoeft.
1st Assts.: H. D. Boyd and R. C. Wiggin.
2d Assts.: F. R. Sedgley and W. K. Thomas.

July to September.
Surgeons: C. T. Howard and T. E. Chandler.
1st Assts.: H. D. Boyd and A. S. Briggs.
2d Assts.: R. F. Souther and H. J. Lee.

October to December.
Surgeons: Horace Packard and J. E. Briggs.
1st Assts.: R. C. Wiggin and C. Crane.
2d Assts.: W. K. S. Thomas and F. R. Sedgley.

REPLY TO "AN OPEN LETTER."

Editor of the New England Gazette:

In the "open letter" published on page 576 of your December number, the writer says: "We have no inclination to enter into a discussion in regard to the statements which have been made in certain trade journals controlled by a competing house," etc. This to one not familiar with the facts is a little obscure. The facts of the case are that the writer of the "open letter" had procured a snake of the Lachesis family (there are twenty-one varieties), a Bothrops lanceolatus, and was offering its venom as being the same as that proved by Hering. We made known the error in very mild terms, as Lachesis is a great remedy peculiar to homoeopathy. Such are the "statements" referred to in the above quotation. In justice to the homoeopathic profession, we trust you will give this equal prominence.

Very truly yours,
BOERICKE & TAFEL, Inc.

Philadelphia, Pa., December 12, 1908.

THE NEW ENGLAND
MEDICAL GAZETTE

Vol. XLIV MARCH, 1909 No. 3

ORIGINAL COMMUNICATIONS.

SOME OF THE VAGARIES OF ABDOMINAL HERNIA.*

By William B. Van Lennep, A.M., M.D., Philadelphia.

The subject of abdominal hernia has been much on my mind since my return to work this fall, on account of an unusual number of cases, both in hospital and private practice. I have made a study of several hundred of my records, and although there are many more that are inaccessible, because, being operated in clinic, the patient's name has been omitted in my chronological operation list, I have found examples of almost every phase and form of hernia.

It is not my intention to present a systematic or statistical report, but rather to briefly narrate, more or less at random perhaps, some of those I recall as having been of especial interest to me. To the experienced surgeon I shall probably not relate anything new, but some of these vagaries, that have puzzled and instructed me, may be helpful to the younger surgeon or to the practitioner who must after all decide the question of surgical summons.

Permit me to begin with some instances of femoral hernia, digressing to cite other examples as they are suggested by the conditions met with.

Case 8845. (Dr. Belville.) Emaciated female, 91 years old, with the five cardinal symptoms of acute bowel obstruction for about eight hours. Instead of tumor, perhaps a slight, suggestive fulness below the right ligament of Poupart, which was tender and painful, gave a doughy feel, but no cough impulse. Incision at once exposed dark, gangrenous looking fat, closely resembling omentum, and when carried through this, came upon a teat of small gut, the size of a little finger tip, tightly nipped by Gimbernat's ligament—a partial enterocele, or the hernia of Richter. The gut was black, but glistening and elastic, and was readily revived and replaced, the sac tied off and transplanted and the wound packed on account of imperfect asepsis (the operation was

*Read before the Washington Homoeopathic Medical Society, December 12, 1908.

completed by candle light), a truss being therefore necessary after recovery.

These praeperitoneal fat hypertrophies are notably common in femoral hernia and are often hard to distinguish from omentum. The opposite condition, attenuated coverings, is also frequently met with, as in the umbilical form.

Next to the mid-line of the abdomen, the femoral canal seems to be a favorite location for the true hernial lipoma, developing in the praeperitoneal fat, growing into canal or defect, dragging on the peritoneum until a dimple is formed, into which the gut pushes and hernia results.

The following case is in point: Case 7769. (Dr. Merriman.) A partially reducible, right femoral hernia, with a distinct, somewhat pedunculated lipoma, about the size of a plum, under the skin, attached to and plainly drawing down the sac. Within the latter was adherent omentum, and to its inner side, a fluctuating bulge which was recognized as the bladder by introducing a metal catheter. This was pushed back, the sac freed, tied off and transplanted, and the defect closed by the combined Bassini and Cushing suture, to canal and saphenous opening respectively.

I can find but one similar example among the inguinal class. Case 8657, Hahnemann Hospital Clinic, presenting a hard, irreducible bubonocele which consisted of a firm lipoma, just outside the external ring, attached to and dragging out a peritoneal pouch containing intestine.

Lipoma inducing hernia in the mid-line of the abdomen is so common that I am as much on my guard with them as with a strawberry tumor on either side of the root of the nose, or with a median, hairy mole, or a fatty tumor along the spine. When of congenital origin, from defective decussation in the linea alba, they are above the umbilicus and when acquired and growing through separated recti or stretched fascia, between this point and the pubes.

The following cases will illustrate the two varieties:

Case 8026. (Dr. Haines.) A lad with a long train of gastric symptoms which could subsequently be briefly translated into impaired motility and dragging. An inch or more above the umbilicus was a small protrusion, lobular and doughy to the feel, partly reducible and giving a cough impulse. The same *horse and cart* relationship was found between a pear-shaped lipoma and a peritoneal pouch. The tumor and sac were excised and the defect closed by the side-to-side over-lapping method of Blake and Piccoli.

Case 8792. (Dr. Carter.) A middle-aged woman, with a partially reducible, mid-line protrusion, half-way between the umbilicus and pubes, which pushed out like a huge finger and could not be controlled by truss or belt. It was of comparatively recent origin, following a tendency to obesity and then loss of flesh. Incision showed a sessile, *sentinel* lipoma with adherent epiplocele

within the sac. The treatment was the same as in the last case, except that as the defect came together more readily from above downward, Mayo's transverse, over-lapping method was used.

Returning to the cystocele aspect of the case which suggested hernial lipoma, I should say that this is the only femoral hernia in which I have found the bladder. Cystocele is usually met with in inguinal hernia and is often opened by mistake. This has been my own experience once (Case 1640, Hahnemann Hospital Clinic), the attenuated, empty sacculation so closely resembling peritoneum that my finger made out the prostate and internal urethral orifice before I realized that I was in the bladder. The diverticulum was turned in and sutured and the wound packed, precluding a radical cure, but he has since been able to wear a truss with comfort and complete support. Discomfort and pain rendering mechanical treatment unbearable have been, in my experience, constant, prae-operative symptoms in these cases. In no instance have I observed any suggestive urinary distress.

As a typical example may be cited Case 5738 (Hahnemann Hospital Clinic), operated for reducible, direct, right inguinal bubonocele, truss treatment having proved impossible. The cord was on the sac and to its outer side, the latter being very vascular and thick, and covered with an unusual amount of fat. It gave a suspicion of fluctuation, and when invaginated on the finger the beak of a sound could be felt behind the pubes. Halstead's operation was carried out to fortify the weak conjoined tendon with the external oblique aponeurosis, the cord being transplanted as far out as possible.

Analogous and yet in marked contrast is Case 8973, also operated in my clinic, in which the sac, when examined before and after excision, could not be distinguished from mucosa, with its rugae, its velvety feel and its rosy congestion. Besides, the wall was very thick, suggesting involuntary muscle and was covered with a quantity of adipose and a number of veins. In fact, it was not until a loop of gut was fished out, that operator and assistants were satisfied that the sac was peritoneal. On the other hand, it was opened because the hernia was evidently oblique, as it was complete and the cord beneath and behind; the sac was congenital or praeformed and the funicular portion; a badly fitting truss had been worn for years, the hernia slipping out under it habitually: these repeated traumatisms producing the changes in the sac and the discomfort which led the patient to demand operation,

Case 8608 (Dr. Carter) is in line with the hernia of Richter first cited: A woman of 50, suffering from epigastric pain, distention with visible coils, absolute constipation, active stercoral vomit, pronounced collapse, and a large fluctuating, translucent tumor without cough impulse, curling up from the right saphenous opening, so as to accurately simulate a hydrocele of the canal of Nuck. Incision evacuated nearly a pint of clear serum and showed protruding from the inner end of the femoral canal a black, ugly

looking *terminal*, not a loop or teat, of small intestine. The constriction was nicked, a diverticulum of Meckel about four inches long drawn out, revived by moist heat and replaced. Radical cure was carried out by the method of Bassini.

I have met with Meckel's diverticulum a number of times, while operating for other conditions, and have usually left it alone, now and then excising it and suturing the inturned edges, for it has been shown to be an occasional cause of intussusception and obstruction.

This is my only experience with the hernia of Littrè, pure and simple, although in a case of Dr. Cooper's (Case 2496), the diverticulum was attached to a loop of strangulated, gangrenous ileum which required resection, a coincident acute appendicitis. strange to say, being found just inside. In one reported years ago (Hahnemannian Monthly, October, 1890), the diverticulum induced an acute bowel obstruction by adhesion and kinking. It was freed, turned in and sutured. In another (Case 8133), this omphalo-mesenteric remnant appeared as an umbilical, faecal fistula and had to be excised throughout.

The following cases presented the same lesion, partial enterocele, but were more difficult of recognition:

Case 3363 (Dr. Gessler), a female, 73 years old, with the usual symptoms of acute bowel obstruction and a tense, doughy, non-reducible tumor, without cough impulse, below Poupart's ligament on the *left* side. Both inguinal and the right femoral rings were empty and not tender, and the umbilicus intact. The protrusion contained adherent omentum which was freed and reduced, the abdomen opened above and the most distended loop of gut followed to the *opposite* femoral canal. Here a partial enterocele was teased out and removed, peristalsis being immediately re-established and bowel movements following soon afterward.

Case 4225 (Dr. Norton) is almost identical clinically: A female, 74 years old, the same symptoms of acute bowel obstruction and an irreducible, right inguinal hernia. Incision exposed an adherent entero-epiplocele, the gut, however, being collapsed. The abdomen was opened and a distended loop followed to the right obturator foramen, from which a teat about as large as a dime was freed, after nicking the sharp, constricting edge with a scissor blade. The pinched portion was completely gangrenous, in fact tore off, and was turned in, without encroaching seriously upon the lumen of the gut.

Case 8833. (Dr. Culin.) Another female, of 58 years, who for a day or more had been suffering from waves of pain with visible peristalsis, accompanied by enormous faecal vomit, the same recurring at decreasing intervals and the patient being in fairly good condition in the interim. Collapse was absent and the constipation absolute. She had been operated for a similar condition, three and six months previously, by a careful surgeon, the incisions being in the median line, below and above the umbilicus

respectively. Nothing was found at either operation, but the intestines were freely manipulated in the search for a lesion, and the symptoms disappeared in each instance. A small, fluctuating tumor, with moderate cough impulse, was present at the right, external inguinal ring, which contained turbid serum and an incarcerated knuckle of intestine at the inner end of the canal. The gut was of good color and readily reduced after stretching the constriction, taxis having previously failed. A large quantity of the same turbid fluid was milked out of the abdomen and the miliary nodules on the intestinal coils settled the diagnosis of tubercular peritonitis and explained her hectic for some months past. The presence of fluid in front of the incarcerated hernia of Richter prevented an error in this, her third operation.

These internal herniae are most puzzling, the incision, as in these cases, being often wrongly placed and requiring a second one. Fortunately, the condition calls for prompt intervention, and if the operator systematically palpates all the hernial openings the lesion is quickly located. Failing in this, if the most distended loop, the one usually presenting first, is followed downward and from left to right, it will lead to collapsed gut and the obstruction.

I have met with several examples which seem worthy of mention, as rarities to say the least.

Case 7942. (Dr. Cornish.) A middle-aged man who was suddenly taken, after a violent fit of sneezing, with agonizing pain, high up and to the left of the median line; furious, foul-smelling vomit which appeared to subside for want of ammunition, and a profound collapse which persisted after morphia had made him so comfortable that he objected to operation. The abdomen was perfectly flat and silent, and the question naturally arose as to whether we were dealing with an acute pancreatitis, or other intra-abdominal necrosis or haemorrhage, a gastric extravasation, or a high strangulation. Fortunately the remedy was clear, and the entire intestine, large and small, was found absolutely collapsed. Raising the transverse colon and omentum, a kinked angle of gut was teased out of the duodeno-jejunal fossa. Peristalsis was re-established at once, the wave passing down the small intestine even while we were closing the wound.

An almost identical picture was met with in Case 5066 (Dr. Carmichael), the pain being more central, epigastric; the collapse less profound; while morphia gave entire relief, during which the colon was freely unloaded by enema. The symptoms recurred with renewed vigor the following morning, and on incision, a tight stricture was found in the upper jejunum. The distended gut above it was covered with some flakes of recent lymph and bathed with a little serum, but after gentle manipulation the spasmodic constriction relaxed, onward peristalsis began at once and the patient made an uninterrupted recovery.

I cannot refrain from a passing mention of a partial enter-

ocele through the diaphragm anteriorly (Case 4691, operated in by clinic), although, lacking the patient's name in my operation list, I cannot get the details from the hospital records. As I recall them, the symptoms were those of the duodeno-jejunal hernia described, except that the vomiting was more distinctly stercoral. Most of these cases are recognized at operation or post mortem and the protrusion is much more extensive.

The above-mentioned duodeno-jejunal hernia is the only one I have met with, but of those into the ileo-colic and ileo-caecal fossae, and of the appendix, of course, into the subcaecal fossa, I have seen a number.

My most *extensive* experience with this retroperitoneal hernia of Sir Astley Cooper was in Case 2638 (Dr. Lukens), a man who had developed the symptoms of progressive, chronic obstruction until they had become superveningly acute. The peritoneal cavity presented a remarkable appearance, seemingly containing only colon, stomach and a distended coil of jejunum from the duodenum to the right iliac fossa. Centrally, underneath the dorsal peritoneum, could be faintly seen the entire, collapsed, small intestine, which must have gradually telescoped under the ileo-caecal fold, narrowing the faecal current until it was entirely occluded.

There are two points to which I would call attention before leaving the cases just narrated.

First, the abundant, long-lasting, but infrequently recurring, stercoral vomiting, without the profound collapse of acute strangulation, especially if a cough impulse can be made out. This gives presumptive evidence of an obstructed faecal stream alone. *incarceration*, a good prognosis as to the condition of the intestine involved and permits of moderate delay for preparation, transfer, etc.

One example will suffice, although every surgeon must be able to help me multiply them indefinitely.

Case 7447, an enormously stout man, operated while on a pleasure trip in Newfoundland, on a cot in a country inn, with a pocket case and hypodermic kit. The amount of vomited faecal matter was almost incredible, but the crises which were accompanied by waves of pain were distinctly interrupted, and while exhausted, he was not collapsed. The case had been variously diagnosed appendicitis and gall-stone colic, although an umbilical hernia was self-evident. This could be pushed in through the opening, but came out at once when released and never completely escaped from the examining finger-tip. Incision exposed viable gut, caught in the sac neck, which was reduced with complete success, the wound being packed on account of the aseptic shortcomings.

Second, the question of tubercular peritonitis. Twenty years ago I operated a strangulated hernia (Hahnemannian Monthly, July, 1889,) with tubercular ascites (serous, with caseous flakes and miliary visceral nodules), a complete cure resulting. This

was at the very inception of the surgical treatment of this condition and every one of us can attest to the curative results of mere evacuation, exposure to the air, flushing, or drainage. We have all learned to fear the dry, adhesive form, the abundant caseous exudates and even the encysted sero-fibrinous variety. In most instances the diagnosis is self-evident as soon as the abdomen is opened, but I would cite one example of an analogous cancerous condition as a warning.

Case 3996. (Dr. Streets.) Operated at the West Jersey Homoeopathic Hospital. The intestines were covered everywhere with pin-head, miliary nodules, the ascites was clear and there were no adhesions. The diagnosis would naturally have been tuberculosis and the prognosis hopeful, but for the detection of a small, retracting scirrhus of the left ovary, corroborated by classical, microscopic findings in the primary and secondary lesions by Dr. Hall.

Turning to inguinal hernia, a glance at my list shows a bewildering variety, and this is readily understood when we recall the huge numerical preponderance, the developmental possibilities of the peritoneal pouch with its various herniae and hydroceles, ectopy and its results, overdescent of the caecum, etc.

We have long been of the opinion in my clinic that practically all oblique, inguinal herniae are of congenital origin and that the sac is praeformed. I quite agree with R. H. Russell, who has made some valuable contributions on this subject (London Lancet, March 12th, 1904, and previously), but I have not had sufficient opportunity to study femoral and direct inguinal hernia, with this end in view, to be ready to apply the same broad statement to them. In the latter forms there seems little doubt that a congenitally deep fossa, outside the hypogastric artery remnant, will predispose to the external variety, while an attenuated conjoined tendon will invite the internal which is in reality a ventral rupture.

Case 8801. (Dr. Bartlett.) A young man, who when doing some heavy lifting developed a left, oblique, inguinal hernia which was comfortably controlled by an accurately fitting truss. He demanded operation, and incision showed an empty sac with a minute opening at its upper end, barely admitting a probe. This led into another one, which contained intestine and omentum. Both were dissected out, the upper one tied off, the stump transplanted and the radical cure carried out by the Bassini method.

Here was a congenitally praeformed sac, with an opening too small to admit intestine or omentum, but weakening the outlet sufficiently to permit of an acquired hernia behind it. Furthermore, this funicular sac was not large enough to allow the invagination of the acquired sac into it, as in the more common infantile form, but was simply pushed ahead of it.

Some weeks ago we operated in clinic (Case 8811, Dr. Bickley), a little girl, for a diffuse hydrocele of the canal of Nuck of recent and rather rapid appearance. She was the subject of a

tubercular ascites to which she had a divine right, her mother being at death's door from pulmonary tuberculosis and her father having since been operated for tubercular empyema. At the upper end of the sac was a minute opening through which a fine probe could with difficulty be pushed. As the ascites developed the fluid had evidently been pumped into the praeformed sac, the inflammatory congestion and thickening preventing reduction. The primary result has been most encouraging.

Case 7875. (Hahnemann Hospital Clinic.) A study of the record of this young man is rather unsatisfactory, but combined with lecture notes and the operative findings, the history can be summed up as follows: A moderate, slowly progressing, inguinal hernia for some years; a gonorrhoea, complicated by an epididymitis on the same side; a recent traumatism, followed by rapid scrotal enlargement; and, finally, the local signs of inflammation. The swelling extended into the inguinal canal, cough impulse could be elicited, but even partial reduction was impossible. Incision evacuated a quantity of bloody serum, broken down clots and pus, the epididymis being riddled with cheesy abscesses spreading to the testicle proper. Pushing down into this cavity and firmly fixed by a number of adhesions was another sac which was readily traced into the inguinal canal. The infected region was carefully dissected out, with the testicle, and everything scrupulously disinfected. The second sac was then opened, the adherent omentum freed and replaced, together with the contained loop of gut, and a radical cure carried out.

Besides the infantile or encysted hernia, telescoping into a diffuse peritoneal pouch, we had here another familiar sequence, gonorrhoeal epididymitis on which was grafted tubercular disease, the subject being a fit one by heredity and in appearance. The traumatism caused the hydrocele and haematocele and probably invited the third or pyogenic element in the mixed infection.

Case 6059. (Hahnemann Hospital.) An elderly man who had for a long time presented a right scrotal swelling which caused him no special inconvenience. Shortly before admission, when doing some heavy lifting, he was taken with severe pain on this side, became collapsed and vomited quite profusely. The scrotum and right inguinal canal were enormously distended and while a general cough impulse was perceptible, the swelling extended into the abdomen nearly to the rib border, where it was clearly limited and definable. Palpation gave a sense of tense fluctuation, but the light test was negative. On incision, quarts of bloody serum, mixed with clots, poured out (haemato-hydrocele), the sac starting from the very bottom of the scrotum, covering the testicle, and extending up through the inguinal canal. In fact, the hand and arm were readily introduced, and using the sac as a glove, so to speak, every portion of the abdomen could be readily palpated. It was necessary not only to draw down and dissect out the sac, but also to unite the defect in the abdominal wall to antici-

pate what might be termed a *potential* hernia, which must otherwise have broken out.

In this case the order was the reverse of the two previous ones, the same weakness which permitted a developing hernia to push out a nearly closed funicular portion, or to telescope into the combined funicular and vaginal portions, allowed the "diffuse hydrocele" and the more rapidly supervening haematocele to open up the inguinal canal and *herniate into* the abdomen.

Case 8656. (Hahnemann Hospital Clinic.) This man had been frequently tapped for left-sided hydrocele and was finally incised for a radical cure. The tumor seemed to extend into the external ring, but cough impulse was absent. On laying open the tunica vaginalis and evacuating the fluid, a teat of omentum was found plugging a minute opening at its upper end. The second, funicular sac was then incised and found moderately filled with epiplocele, which was again adherent to and completely plugged another constriction near the internal ring. The vaginal sac was dissected out and the visceral layer scarified, the operation we credit to Bergmann; the funicular sac was tied off and Bassini's radical cure carried out.

The sequence here is unique—imperfect closure above both the vaginal and funicular portions; plugging of the former orifice by an epiplocele, permitting the ordinary hydrocele to develop; plugging of the latter in the same way, preventing a hernia from descending. This is Nature's truss, and years ago Warren, I think, proposed to use the omentum to fill these hernial defects; but like many other of her cures, and this is said without any disrespect to the Dame, for she is certainly good to the profession, it is often clumsy and imperfect, serving rather as a guide alongside of which the intestine may slip out.

Case 2640 (Dr. Still) is in many respects an analogue of the one just described. The patient, an old man, had been the subject of right, inguinal hernia for years, so long that the canal had lost its obliquity, resembling the direct form, or, more correctly, presenting merely a hole in the abdominal wall. It had come down three days previously and had been partially reduced by taxis, the vomiting being relieved. The protrusion was exquisitely tender and very painful and was accordingly incised. Again the sac was funicular and from a small opening at its upper end there protruded a good-sized, pear-shaped lipoma which was completely gangrenous. There was also present a considerable amount of odorless, clear serum. The second, acquired sac was then opened and found to contain a loop of large intestine to which the pedicle of the lipoma was attached, together with some adherent omentum, and another, moderate, fibrous constriction outside its inner end. After the lipoma and both sacs had been excised, the opening was drawn together with sutures.

Here was a condition not unlike the praeperitoneal lipomata previously referred to. An appendix epiploica had slipped through

the minute aperture in the funicular pouch, where it had grown until too large to be reduced. It then dragged down the colon, inducing an acquired hernia to push through the weakened outlet; omentum followed as usual and became attached from truss and manipulative traumatism; more gut came down three days previously, but was reduced, relieving the obstruction; the increased pressure strangled the lipoma and the serum was odorless owing to the absence of the colon bacillus.

Case 3375. (Dr. Frishmuth.) A man of 73, who for 36 hours had been suffering from all the symptoms of acute bowel obstruction. An old, right, inguinal hernia had come down and was finally reduced after prolonged, energetic taxis under an anaesthetic. The symptoms persisted, however, and when seen, a large ring, as in the last case, readily admitted several fingers, but nothing could be felt of the hernia. The abdomen was at once opened and a classical example found of reduction *en bloc;* intestine and sac, with the constriction at the neck of the latter, having been pushed through the capacious opening. The gut was freed and revived, the sac and abdominal wound closed and the defect drawn together.

Less typical and far more misleading was Case 3339 (Dr. McLeod). Another elderly man and another ancient, right, inguinal hernia which had a habit of coming down, but had always been readily put back by the patient. This time his efforts failed and the symptoms of strangulation quickly supervened. After four hours in the Trendelenburg position, with an ice-bag locally, we were able to reduce the tumor in greater part, with the satisfactory accompanying gurgles, the portion remaining out being evidently adherent epiplocele. The symptoms were not relieved, however, and operation showed a mass of adherent omentum which was freed and reduced, clearing the sac from the scrotum into the abdomen. Reaching in, I was able to hook out a distended and a collapsed loop of ileum, and making them tense, to find a constriction leading into a cavity between the muscle and the parietal peritoneum, the true, *properitoneal* hernia. The gut was freed and revived, the sac mouth sutured and the usual radical cure applied to the inguinal canal.

Properitoneal hernia generally presupposes badly placed prevention of the descent, side-tracking the rupture under the parietal peritoneum, as in this case; or between the muscular planes of the abdominal wall, aptly termed interstitial, and even outside the external oblique aponeurosis, the superficial form. The obstructive causes are well known: ectopic testes, hydroceles of the cord or of the canal of Nuck, wrongly applied truss pads and adherent hernial contents. The last-named was probably the causative factor in this case, aided perhaps by the repeated repositions by the patient.

The other two varieties of properitoneal hernia are well exemplified in the following case.

Case 7861. (Hahnemann Hospital Clinic.) A young man who was at first sight a cryptorchid, but after walking about, straining and coughing, presented the following conditions:

On the *left* side, a small, tender body, coming part way down into the scrotum, causing the characteristic, sickening sensation when pinched and evidently a partially descended, atrophic testicle. Immediately behind it, an "impulsive" bulge, the wave spreading upward from the external ring; presumably the usual, following rupture, and a superficial side-track extending above the groin. The operative findings corroborated these observations. The testicle was readily drawn down and fastened in the scrotum, a vaginal sac being cut across and sutured around it. The patent pouch was freed from the cord and vas deferens throughout, including a pocket which curled up *outside* the external inguinal ring and dissected its way under the subcutaneous fat. The subsequent steps of the radical cure were those of Bassini.

On the *right* side the scrotum was also empty, but the inguinal ring was absolutely closed. Above and to the outer side of the latter was another, diffuse and extensive bulge, progressively enlarged by coughing, with the sickening tenderness at its upper margin, almost on a level with the umbilicus. On splitting the aponeurosis, a hernial sac was found, curling upward from under the arching fibres of the internal oblique and spreading out on the outer surface of the muscle, underneath the external oblique. It was filled with coils of small intestine, which pushed up the testicle to its very end. The stretched cord permitted ready anchorage of the testicle in a bed fashioned for it in the scrotum; the sac was excised and the canal closed as on the left side.

These ectopic testes are subject to and produce other ills besides the properitoneal herniae just referred to.

Case 649. (Dr. McLeod.) A young man, with right-sided cryptorchidism, when doing some heavy lifting the day before admission to the hospital, was suddenly taken with severe local and epigastric pain, projectile, stercoral vomiting and profound collapse, associated with distention and constipation. A bubonocele had been found outside the ring, which was reduced after repeated and persistent taxis. There was no change in his symptoms, and operation exposed a twisted, completely gangrenous testicle, surrounded by a considerable amount of bloody serum and lying in an otherwise empty sac, somewhat constricted at its abdominal end. Castration and radical operation relieved all the symptoms. While intestine may have been reduced, all the symptoms were probably dependent upon the strangulated testis, as is often the case. Taxis had simply pushed the twisted and swollen organ through the external ring into the inguinal canal.

Case 8524 (Dr. Wilford) is a kindred one. The young man had suffered from two attacks simulating obstruction, which had been controlled, but with some difficulty, by enema, stimulation, etc., because his physician recognized the ectopy and associated

the seizures with a coincident gonorrhoea. On opening the inguinal canal, the epididymitis was self-evident, the testicle being encysted by inflammatory adhesions in a small hydrocele. It could not be drawn down into the scrotum and was removed, the radical cure being satisfactorily carried out.

Case 5663 (Dr. Bigler) presented a very good picture of appendicitis, following a kick on the right side of the abdomen. The tenderness and rigidity seemed rather low and the testicle being absent, the inguinal canal was opened, even though the ring was closed. The cord lay duplicated in a short sac and led to an acutely inflamed testis (orchitis) just within the abdomen. Considerable free serum was squeezed out and castration with radical cure performed. Strange to say, I again operated this young man, for an appendicitis, within eighteen months.

Case 4337. (Dr. Norton.) A middle-aged woman with an exquisitely tender, slightly fluctuating, right bubonocele, said by her to be of about twenty-four hours standing (probably only noticed for this time). The symptoms were hardly those of obstruction: rise of temperature, rapid, weak pulse, moderate distention, constipation yielding to purgative enemata and an initial vomiting which soon subsided. Incision evacuated a quantity of offensive sero-pus and exposed a gangrenous appendix, the infected area being, fortunately, shut off from the general peritoneal cavity by a few recent adhesions. The appendix was tied off, the stump cauterized and buried and the cavity thoroughly disinfected. When I came to dissect out the sac, I found that the caecum in reality formed its upper and posterior half; it was accordingly cut across below the caput coli, the opening sutured and transplanted, the distal portion dissected out and the abdominal defect ideally closed by suture.

It is not at all uncommon to find the caecum and appendix, like omentum or any other intestine, in such a hernia. I have several times met with an acute or chronic appendicitis and even an appendiceal abscess with such an *acquired* caecocele; I have also found the appendix alone protruding, inflamed or normal, adherent or free; but this is the only case in which it has been acutely inflamed with a congenital caecocele.

One more example of this congenital hernia of the large intestine and I am done.

Case 7810. (Hahnemann Hospital Clinic.) A flabby, fat, asthmatic, old man, with an enormous, ancient, left scrotal hernia which had become obstructed shortly before admission; balloon-like distention, belching and nausea, absolute constipation, wave-like cramps, but distinct cough impulse, gurgles in the tumor and a fairly good pulse. Operation was performed with the patient in the exaggerated Trendelenburg position, a wonderful aid, and after reducing coil after coil of ileum and a lot of inordinately fat omentum, the sac presented the appearance of everted serosa behind or inside of which was a huge, protruding loop of large

intestine, a congenital sigmoidocele and the largest one I have ever seen. The sac was dissected out as close to the colon as possible, the gut pushed in, the huge opening carefully closed and the edges of the abdominal wall defect over-lapped by heavy mattress sutures. Peristalsis was fully under way before the operation was completed and throughout the wound healing the patient was kept inverted by elevation of the foot of the bed.

INFLUENCE OF ALCOHOL UPON THE BLOOD.—Stewart in an article upon the effect of alcohol upon the opsonic power of the blood reports as follows:

In summarizing the results of these experiments, we find that in the four cases where alcohol was taken internally in the form of port wine, the opsonic power of the blood was greatly lowered, as is evidenced by a comparison of the normal indices obtained with the bacillus tuberculosis and streptococci as compared with the indices obtained after the ingestion of the wine. The average index for the bacillus tuberculosis in the four cases cited is 1.17, for streptococci 1.12. The average of these same cases after the administration of the two ounces of port wine is .73 and .655 respectively, showing a drop in the opsonic power of 37 per cent. in the former and 42 per cent. in the latter.

In the three cases in which Peruna was used the average normal index for bacillus tuberculosis was 1.12, for streptococci 1.09; four hours after the ingestion of two ounces of Peruna, the average index in the former was .133, in the latter .68, showing in the former a drop of over 88 per cent. in the opsonic power, and in the latter a drop of 36 per cent.

We realize that there are a great many factors which influence the opsonic power of the blood and that of necessity there must be a considerable variation in even what might be considered normal cases, but, notwithstanding these variations, there is a sufficient uniformity to enable us to make some very valuable deductions. From our investigations, as will be seen from a study of the tables, there was in almost every case after the administration of a comparatively small quantity of alcohol, both internally and in vitro, a very marked reduction in the opsonic power. So we feel justified in concluding that alcohol has a marked influence in reducing the vital forces of the body, thereby greatly interfering with the vis medicatrix naturae. Since, according to Wright, "out of all comparison the most valuable asset in medicine lies in raising the anti-bacterial power of the blood," the administration of alcohol, which, according to our investigation, is pro-bacterial, and as such is a strong liability instead of an asset, should consequently be eliminated from our therapeutic armamentarium, at least as far as internal administration is concerned in infectious diseases.

For Sale.—At very favorable terms, an homoeopathic practice of from $2500 to $3000 yearly, in a manufacturing town within fifty miles of Boston. Office furnishings of the latest, and no bonus will be charged for the practice. An exceptional opportunity. Apply to "A. B. C.," care N. E. Medical Gazette, 422 Columbia Road, Boston, Mass.

RECENT PROGRESS IN THE SCIENCE AND ART OF SURGERY.

By Horace Packard, M.D.,
Professor of Surgery, Boston University.

No startling departures in surgery have occurred in the recent past. In fact we must contemplate that in the years since the discovery of anæsthesia and asepsis the field of surgery has been worked almost to exhaustion, and therefore no epoch-making discoveries are likely in the future to be forthcoming at all comparable to the great achievements of the past which have made famous the names of McDowell, Sims, Bigelow, Morton, Spencer Wells, Bilroth, Martin, Kocher, and a host of others.

Signs of the times point unmistakably to the fact that there will be a lessening of the volume of surgery in the future. In fact, it is already obvious in the wide and successful employment of electricity and radium in various skin lesions where excision and skin grafting used to be employed. Tracheotomy and intubation are now rare operations. Local tubercular lesions now melt away under bacterial vaccine treatment.

The field of the specialist in surgery is also becoming more circumscribed through the surgical exploitation of the general practitioner. The physician in general practice must do some surgery. He can not avoid responsibilities in meeting emergencies as best he may and performing minor surgical operations, but to deliberately plan for the performance of capital operations which often require the highest degree of technical skill and experience and judgment is subjecting the confiding patient to a heartless and cruel danger.

No operator knows beforehand what complication he may meet on opening the abdominal cavity. If it prove to be an uncomplicated appendectomy all may go well, but suppose the conditions indicate that the patient's best interest urgently call for a resection of the intestine, a gastroenterostomy or a cholecystectomy, the chances are that the price of the operator's zeal may be paid for by the patient's life.

It is a question, therefore, whether the prevailing practice can be recorded as "progress in surgery."

It is a matter of extreme difficulty to produce a readable essay upon progress in surgery without introducing a large amount of matter which is ancient history.

There are but three departments of surgery in which signal progress has been made in a recent time. They are:

1. Surgery of the blood vessels.
2. The vaccine treatment of certain diseases heretofore considered wholly surgical.

3. Clearer definition of the limitations of stomach surgery.

In the first of these groups, viz., the surgery of the blood vessels, the new facts of practical value which have been demonstrated are:

First, that suture and repair of blood vessels by end to end union, longitudinal suturing, and lateral anastomosis is as practical and safe as similar operations on the intestines.

Second, that direct transfusion by application of the artery of the donor to the vein of the recipient, intima to intima is possible and practicable.

Third, that a whole segment of a large blood vessel like the aorta may be removed and a new segment from another animal implanted with immediate resumption of circulation and recovery.

This new chapter in surgical history has been the outcome of a long series of laboratory experiments on animals. It is the contribution of vivisection to the progress of medical science and should silence the protests of anti-vivisectionists in their efforts to limit scientific investigations.

The work of Carrell reads like a romance. The end to end union of severed arteries and veins is in his hands a simple and commonplace operation. The only essentials to success being strict asepsis, careful and painstaking preservation of the intima—no wounding through grasping with toothed forceps nor crushing with scissors or pressure clamps—and suturing the circumference with the finest needle and the finest vaselined silk. All this refinement of technic is essential to avoid thrombosis. Experiments show that silk sutures if previously treated with sterile vaseline may penetrate the intima and be exposed to the blood current on the inner surface of the vessel without producing thrombi. A desirable combination also is that silk and needle should be so related in size that the silk shall perfectly and completely fill the needle hole.

Carrel shows a healthy and active cat from which he excised three inches of the aorta and in its place implanted a similar piece previously removed from another cat, the newly implanted piece having in the meantime been kept in cold storage for twenty days. He also exhibits a dog from which both kidneys were removed, one of which was immediately restored by carefully suturing together the renal arteries and veins in their normal relation, and also suturing the cut segment of the ureter. The restored kidney immediately resumed its function and the animal has lived on indefinitely, and seems a well and happy dog.

Crile has done exceedingly interesting work in the matter of direct transfusion by effecting immediate union of the artery of the donor with the vein of the recipient intima to intima. For years direct transfusion has been looked upon as a desirable but hopeless procedure, and with the ease of accomplishment and usually satisfactory results of a saline infusion it has been almost forgotten. The radial artery of the donor is dissected out for a distance of two

to three inches and any lateral branches are tied. A very delicate clamp is applied to it for haemostasis, while a vein of the recipient is being prepared. Any accessible superficial vein of the recipient's arm of sufficient diameter to match the radial artery is selected and dissected out for a distance of two or three inches. It is ligated distally and severed. Delicate silk threads are carried through its circumference at three points equidistant, and then the threads are carried through a tiny silver tube of a size selected to correspond to about the diameter of the vein. The tube is thus slipped over the vein far enough to permit a cuff to be turned back over it and fastened there by a fine silk thread. The arm of the donor is now brought close to that of the recipient in such attitude that the axes of the artery and vein will be about in alignment. The artery is now slid over the end of the tube which has the cuff of vein reflected on it and is fastened with a fine thread. The slipping of the artery on to the tube is facilitated by three equidistant threads in its circumference, or three delicate forceps grasping it at equidistant points will suffice. If this has all been well planned and executed, blood will now flow, on removal of the clamp, directly from the arterial system of the donor to the venous system of the recipient and can be seen to fill out the vein. In laboratory experiments animals which have been completely exsanguinated and are to all appearances dead are quickly returned to life and vigor. Still later experiments indicate that direct transfusion may be made in a simpler way by pushing the free end of the artery directly into the free end of the vein first having smeared the freshened surface thoroughly with sterile vaseline. To accomplish this easily the lumen of the vein must be held open by the aid of fine threads at three equidistant points about the circumference and the vein selected must be of a diameter to easily receive the artery.

Attempts have been made to unite arteries and veins by lateral anastomosis, and while mechanically it has been successfully done, yet it thus far does not promise to be of practical value. For example, the femoral artery and the vein lie closely together and invite such an anastomosis. Experimentally on animals the anastomotic opening spontaneously closes after the lapse of varying time. If the artery be ligated beyond the anastomosis the whole volume of arterial blood passes into the vein and returns to the heart. The thought has occurred that in gangrene of the foot from arterial thrombosis the vitality might be restored, or at least less extensive amputation suffice, by turning the arterial blood of the femoral artery into the vein, but the anatomical conditions are hardly favorable to such an arrangement. The valves in the vein interpose a barrier to such reversal of circulation.

Still further investigation in the line of blood vessel surgery has established the technic of aneurysm on new lines. Endoaneurysmorrhaphy is the term given by Matas to obliteration of the aneurysmal sack, by first controlling the flow of blood in the vessel involved by compression, then laying the aneurism open and clean-

ing out all clots and laminated layers until the intima is exposed, then obliterating by sutures the vascular openings into it, then infolding and massing together the walls of the sack by mattress sutures. It is found that the intima of the aneurismal sack adheres when opposing surfaces are brought into a position as readily as peritoneum.

How profound an influence does all this new knowledge regarding blood vessel surgery have upon the art and practice of surgery? Even though it is now demonstrated that direct transfusion is possible and practicable it is not likely to supplant saline infusion for the lesser degrees of exsanguination. It does offer, however, a last resort in the rare cases of internal hemorrhage from ruptured tubal pregnancy when the saline is powerless to resuscitate and similar conditions of extreme exsanguination from accidental wounds, post-operative hemorrhage, and post-partum hemorrhage. The writer can recall at least two cases in his experience when direct transfusion might have saved life; one, a ruptured tubal pregnancy, and the other a bullet wound of the renal artery. Surgeons will now proceed with greater confidence to the suture of accidental wounds of great arterial and venous trunks than ever before, although it would appear that the field here is not a great one, for it is likely that wounded blood vessels in areas where collateral anastomoses are abundant will still be ligated in the good old simple way in preference to the delicate and difficult operation of vessel suture. In accidental wounds of the common carotid, the jugular, the external iliac, the abdominal aorta, the portal vein and possibly some of the main supply vessels to vital organs, this new knowledge of the possibilities of vessel surgery may occasionally save to a patient an organ or a limb which otherwise might have to be sacrificed.

It marks a distinct advance in surgery, but obviously one of very limited range.

Bacterial Vaccine Treatment of Some Surgical Diseases.

Progress has been made in eliminating from the field of surgery certain diseases by what is known as treatment by bacterial vaccines. How large a furrow this is likely to plough in the domain of surgery is at the present time difficult to say, but it appears to the writer probable that the method will finally work out as an adjunct to surgery rather than taking bodily away from surgery the class of diseases to which it is adapted.

The group of surgical diseases to which this method is applicable, viz., localized tubercular infections of bones, joints, glands, etc., and pyogenic fistulae sinuses, abscess and boils not infrequently resist all efforts at cure through surgical means. In these desperate cases the bacterial vaccines offer a new hope to the despairing patient. Nothing could impress one more profoundly with the possibilities in this line than observation of the work in Sir Almoth Wright's clinic in the St. Mary's Hospital, London.

In reality this opens a new specialty, for neither the physician nor the surgeon can hope to carry out bacterial vaccine treatment

to the best advantage without the facilities and environment of a well-equipped laboratory and the assistance of an expert bacteriologist. There are possible exceptions to this rule in such well marked cases of local tuberculosis that diagnosis is fairly certain, and in cases of furunculosis which experience has shown are almost always staphyloccus infections.

Later experience seems to indicate that administration of the bacterial vaccines per mouth is just as effective as hypodermically.

During the past year several cases have come to the writer's attention which in earlier times would have been immediately urged to operation, but under bacterial vaccine treatment the local manifestations have melted away.

Early in 1907 a case of tuberculosis testicle was referred to me. The fourth decimal dilution of tuberculin (Koch) was administered once daily over a period of three months, with complete recovery.

A case of cervical adenitis upon which I had repeatedly operated only to be followed in a few weeks or months by the appearance of other glandular enlargements took a turn for the better after the administration of tuberculin in the sixth decimal dilution and has needed no further surgery.

Similar good results have seemed to follow the administration of staphylococcus vaccine in cases of boils and diplococcus vaccine in gonorrheal joints.

Much experience has accumulated as to the use of bacterial vaccines in acute localized infections such as follow acidental wounds and suppurations in operative wounds, which goes to show that in some cases the treatment exhibits a distinct retarding influence upon the progress of such infetions and promotes repair.

Stomach Surgery.

Probably no more startling evolution has marked the progress of surgery than that now relating to benign diseases of the stomach.

Little by little it has come to be recognized that many cases of ulcer of the stomach must be treated surgically.

This does not mean that ulcer of the stomach should be or has been totally handed over from the internist to the surgeon.

It must never be forgotten that this patholigical condition is probably a local manifestation of some faulty metabolism or unhygienic dietetic habit. It is probable that more cases of gastric ulcer recover and are completely restored by regulation of diet, education in proper habits of mastication and correction of faulty metabolism by medical treatment than drift into a state demanding surgical aid.

By common consent it is now recognized that certain conditions caused by or accompanying ulcer of the stomach must be promptly and boldly met by surgery. These are: perforation, hemorrhage, stenosis of the pylorus.

It is now widely recognized also that carcinoma of the stomach

is a sequel of chronic ulcer. So much evidence has accumulated in this direction that it is now rather generally accepted that cancer of the stomach rarely if ever occurs except the way has been prepared for it by a long continued irritation and deterioration of the stomach tissue by chronic ulcer as well as by a general debilitated condition of the patient.

Therefore the case with chronic gastric ulcer which has resisted all efforts at cure by treatment may be urged with all vehemence to submit to surgery not only for the hope which such affords of relief from pain and restoration of normal function but as a prophylaxis against carcinoma.

Irrespective of the cancer menace the patient with chronic gastric ulcer may welcome operative treatment because of the sanguine hope it gives of relief from pain, restoration of normal digestion; and in skilful hands the remote danger of fatality from the operation itself. Moynihan reports a total of 247 operations of all kinds and degrees with a mortality as a direct result of the operation of only 7 per cent. and 85 per cent. cured.

William J. Mayo reports 379 cases of gastric and duodenal ulcer operated prior to 1906 with an operative mortality of 4.8 per cent. He has been able to trace 234 cases of which 80.7 per cent. are cured.

These are the largest figures available up to date showing operative mortality and "end results," and it must be conceded that they bear eloquent testimony to the magnificent attainments of stomach surgery.

In the flush of novelty, doubtless, numberless stomach operations have been performed by operators poorly equipped both in technic and knowledge, and upon illy chosen cases.

Gastro-enterostomy under the guise of stomach drainage and in the absence of real pathological lesion is meddlesome surgery, since laboratory experiments have shown that so long as the pylorus is still free, food in the process of digestion continues to discharge through the pylorus, and the artificial opening after a time spontaneously closes.

It is illuminating to peruse the conclusions which Moynihan draws from analysis of 247 operations. They are as follows:

"The operative treatment of stomach disorders should be confined exclusively to those cases in which an organic lesion is present. Unless there is a palpable and demonstrable ulcer in the stomach or in the duodenum or some condition which hampers the proper action of the stomach the symptoms are not due to any pathological cause capable of being relieved by surgical interference. However careful our preliminary investigations may be we shall from time to time display upon the operation table a perfectly normal stomach. We must not then endeavor to cover our diagnostic disaster by the performance of an unnecessary operation upon the stomach, but rather must we candidly confess that our exploration has proved negative. To perform gastro-enterostomy in such cases

has, I think, been proved to lead to unsatisfactory results, whereby the operation is discredited."

"In cases of acute perforating ulcer, the perforation should be closed or the ulcer excised. When the ulcer lies upon the lesser curvature nothing more is necessary than this. The after history of such cases shows that they are relieved from all disabilities referable to the stomach. When the ulcer is prepyloric, pyloric or duodenal, gastro-enterostomy also should be performed. It doubtless hastens the immediate recovery of the patient by affording an easier exit from the stomach than that impeded by the ulcer, and it forestalls the almost certain onset of symptoms which only a short-circuiting operation can relieve."

"When a non-malignant lesion is discovered the treatment appropriate to it depends upon its position in the stomach. If an ulcer be placed on the lesser curvature at some distance from the pylorus, in such a position that no obstruction is offered to the onward passage of the food, excision should be performed. In such cases the relief from gastro-enterostomy may be incomplete, and it is probable that the later onset of malignant disease occurs in a large proportion of cases. In some cases, however, when the ulcer is on the curvature or on the posterior surface of it adherent to the pancreas, relief follows if gastro-enterostomy is performed on the cardiac side of the lesion. It may be that the ulcer when anchored impedes the proper movements of the stomach, or that the nerve supply being interfered with some local paresis of the gastric wall results."

"If the ulcer be prepyloric, pyloric or duodenal, gastro-enterostomy should be performed. It is desirable also to infold an ulcer whenever possible, for both hemorrhage and perforation have occurred from ulcers for which gastro-enterostomy have been performed months or years before. The local treatment of the ulcer is always desirable, and is generally easily performed."

"The most satisfactory method of gastro-enterostomy is the posterior no-loop operation, with the almost vertical application of the bowel to the stomach. The vertical position is that into which the jejunum falls most easily in the normal (that is the erect) position of the body. A deviation to one or the other side if slight is of no importance, and entails no untoward consequences."

"Regurgitant vomiting occurs as a result of the 'loop' operation, whether anterior or posterior. It is relieved almost certainly by an entero-anastomosis. Patients who suffer from it may be relieved of all symptoms for which they originally sought relief. An operation that is mechanically imperfect relieves the original disorder though it leaves serious disabilities behind it. The vomiting of bile may be relieved by lavage and in some patients disappears entirely after the lapse of weeks or months or even years."

"In cases of hour-glass stomach the surgical treatment necessary presents special difficulties on account of the frequency of two lesions—one in the body of the stomach and one at the pylorus, and double operations have consequently to be frequently performed."

It is doubtful if further material improvement occurs in stomach surgery. Apparently its widest field is and will continue to be in the treatment of gastric ulcers and the sequellae following them, viz.: perforation, hemorrhage cicatricial contraction and pyloric stenosis.

Subacromial or Subdeltoid Bursitis.

Probably every mature physician has had cases of mysterious disability of the shoulder joint interfering very profoundly with the free use of the arm, but without indications or history of dislocation or fracture, and often without record of traumatism or at most scarcely more than a slight strain or sprain and wholly incommensurate with the long continued and annoying disability.

Recent investigations have led to the discovery that inflammation of the subacromial brusa is a common cause of this difficulty. This bursa seems to be a somewhat neglected structure, for I can find no mention of it in some of the standard text books of anatomy, and but brief reference in others. For example, Gray and Morris do not mention it at all. McClellan's Regional Anatomy says "There is no anatomical communication between the capsule and the bursa under the deltoid muscle which is interesting because the subdeltoid bursa is peculiarly liable to independent disease." In Peirsol's Anatomy we find "When the muscle (the deltoid) passes over the greater tubuosity of the humerus a mucous bursa (bursa subdeltoidae) is interposed between it and that prominence."

It lies immediately beneath the deltoid muscle at the very apex of the shoulder, and extends somewhat under the acromian process. Its under surface is in close contact with the capsule of the shoulder joint and its function is prabably to facilitate abduction and rotation of the arm by permitting the tuberosity of the humerus to slide smoothly under the acromian.

The symptoms of bursitis are restricted motion, pain and tenderness over the location of the bursa at the very apex of the shoulder, difficulty in finding a comfortable posture in bed, impossibility of lying on the affected side, an achy and draggy feeling about the shoulder.

Recent cases recover by rest and fixation of the arm in abduction.

In chronic cases when thickening of the walls of the bursa has occurred with adhesions, operation by incision directly over the bursa separation of the fibres of the deltoid, exposure of the bursa and removal gives immediate relief from the pain and tenderness and usually results in cure or at least a greatly improved condition.

Cancer. Fulguration.

There is at the present time probably more mental energy being expended on the cancer problem than upon any other question in medicine. It still remains, however, a sphinx as far as knowledge of its cause is concerned.

Many well known methods, surgical and otherwise, are available and usually efficient in the treatment of superficially located

carcinoma, but in the management of internal cancer there is not the slightest progress to record.

Something new in the application of electricity to superficial cancer has recently been exploited by Juge, Keeting, Hart, Czerny and others. It consists in the directing of high frequency electrical spark discharges directly upon or into the cancerous mass for from five to forty minutes. It appears from the descriptions that actual destruction to tissue takes place. It is thought to stimulate rapid cicatrization and granulation, and to be more efficacious than the X-ray or radium.

Transperitoneal Bladder Operations. (Harrington's Operation.)

The cardinal rule has existed among surgeons in the past in suprapubic operations on the bladder to avoid wounding or opening the peritoneum, and if it were accidentally wounded to immediately suture it before proceeding further with the operation.

As far back as 1893 Harrington reported experience going to show that free abdominal incision, walling off the peritoneal cavity with gauze packing and splitting open the fundus of the bladder sufficiently to gain free access to its cavity for removal of tumors or other purposes could be done with a great degree of safety and with far greater efficiency as far as removal of the morbid growth was concerned, than by the restricted method of suprapubic cystotomy then in vogue.

Apparently this idea did not make much impression for there has been little if any reference in the intervening time (15 years) to bladder surgery by this method, until during the past year, Chas. H. Mayo and Scudder have both reported gratifying results.

It appears that with care the peritoneum may be so efficiently protected that there is no more danger if as much as in abdominal operation for septic conditions in the female pelvis. Furthermore, suture of the bladder wound may be done on practically the same plan as has long been practised upon the intestines and with equal certainty of repair without leakage. Experience shows that large segments of the bladder wall may be resected and ureters transplanted with restoration of function, excepting that the reservorial capacity of the bladder will be diminished just in proportion to the extent of resection of its walls.

Bismuth Paste Treatment of Fistulae and Sinuses.

Rather glowing accounts have occurred in the past year of the prompt healing of fistulae and sinuses both of tubercular and pyogenic origin by injecting the same with a paste made of bismuth and vaseline or paraffin.

The mode of procedure is to dry the fistula or sinus as thoroughly as possible and then with a suitable injector fill the track or cavity with the paste and await results.

A note of warning has been sounded against the indiscriminate use of bismuth subnitrate in this way because of its poisonous properties which in susceptible persons may prove fatal. This caution

applies to deep sinuses of large capacity. The method can undoubtedly be used with perfect safety in small sinuses and fistulae such as are common about the anus and rectum.

The bismuth paste is composed of bismuth one part, vaseline two parts. If it be desired to give the paste greater consistency seventy-five grains each of white wax and soft paraffin are added to each two ounces of vaseline.

Anaesthesia.

That anaesthesia is still a subject of profound interest is evident from the abundant literature which annually appears. In looking thru the index of the Medical Review of Reviews for the past year no less than 129 articles are listed. There are, however, in all this mass of literature only two or three points worthy of note.

Ether anaesthesia per rectum has been resuscitated with claims that it should have a permanent place in surgery for face, mouth, nose, and throat operations. It will be recalled that rectal anaesthesia was exploited twenty years ago and because of its uncertainty in effecting relaxation and because of unpleasant rectal and intestinal sequelae it was abandoned. At that time the ether was vaporized by heat and passed through a tube into the rectum. It is now claimed that air pumped through a reservoir of ether with a hand bulb and then conducted into the rectum produces general anaesthesia without rectal irritation. It is proposed to precede the rectal administration by morphia and supplement it if necessary by a minimum inhalation of chloroform.

The advantages claimed are absence of all the bronchial irritaiton and a free field for operation about the face.

In the matter of general anaesthesia there is apparently a wholesome sentiment prevailing regarding the limitation of the amount of anaesthesia administered to the smallest possible quantity. Serious consideration may well be given to the question as to whether administration shall be begun much if any before the preparations are complete for the operator to begin. It has been and often now is a half hour or more from the beginning of induction of anaesthesia to the actual commencement of the operation. A long series of observations have proven conclusively that ether anaesthesia is always followed by acetonuria—the more ether the more acetone, the more acetone the more vomiting and general systemic disturbance.

Morphine-hyoscine narcosis seems to fill an important niche in the quiet sleep which it induces during which all the preliminaries of scrubbing the field of operation etc., may be gone through with and such additional anaesthesia as may be necessary is commenced just as all is ready for the surgeon to begin. In a series of cases tested less acetone showed up in the urine than after the traditional method of ether anaesthesia.

The drop wide open method of ether anaesthesia has received much attention of late and is highly recommended both in simplicity of apparatus employed, ease and comfort to the patient, and economy

in quantity of anaesthetic. The ether container may be a bottle, or the original can in which the ether is dispensed, commercially, fitted with a cork which has been notched on one side deeply enough to accommodate a small gauze wick. Over the patient's mouth and nose is laid a compress of six layers of ordinary surgical gauze long enough to hang down four or five inches on each side. Upon this the ether is dropped slowly at first until the patient has become accustomed to it then as unconsciousness becomes apparent and deep rythmic respiration is established, six more layers of gauze are added and the ether dropped faster until anaesthesia is complete.

Rectal Lavage After Abdominal Operation. (Murphy's Proctoclysis.)

Patients almost always crave water after operation but it often becomes necessary to withhold everything per mouth until the stomach no longer rebels. It appears that under favorable conditions the rectum will absorb an astonishingly large quantity of water, relieving thirst and in a measure doing what intra-venous saline infusion does.

The apparatus is simple—a thermos bottle is fitted with a cork and glass syphon tube, from which a rubber tube fitted with a suitable nozzle leads to the rectum. The flow is regulated by adjusting the reservoir six to fourteen inches above the level of the rectum. The delivery must be slow and the tube and nozzle large. Thus arranged the inflow will be about as fast as the fluid is absorbed and no faster and there will be no overflow. Two to three gallons of saline solution have been absorbed by this plan in twenty-four hours. After abdominal operations this is sometimes continued with intervals of rest for two or three days with great relief and comfort to the patient. If the patient be in the Fowler posture the rectal tube must be bent at nearly a right angle three inches from the tip, and strapped to the patient's thigh.

Rectal saline administered in this way "restores blood pressure, improves capillary circulation, quenches thirst, eliminates septic products, and increases the secretion." (Murphy.)

Acute Infectious Nephritis.

An interesting and valuable sidelight upon kidney surgery has come in the past year from the work, both laboratory and clinical, of Brewer.

Acute infectious nephritis is a very fatal disease ushered in by high temperature, pain, and tenderness in the side affected, diminished urine frou the infected kidney and at the outset it is unilateral. Incision and drainage does not stop the disease. Every case so treated died through extension of the infection to other organs and the opposite kidney.

Extirpation of the infected kidney was promptly followed by fall of temperature and recovery.

Thoracic Surgery. Negative Pressure Operation.

Recent interest has been awakened in the future possibilities of

surgery of the thorax through experiments by Sauerbruck and others in the use of a pneumatic cabinet and respiration by negative pressure. It has long been known that under ordinary atmospheric pressure, on opening the thorax the lung collapses and respiration on that side ceases. The plan is to place the patient's body in the cabinet, the head outside and then reduce the air pressure inside to a little less than that outside. This condition established, the chest wall may be opened, the pleural cavity and lung exposed, tumors of the lung removed or any other indicated operation performed, and the wound in the chest wall closed without collapse of the lung.

It is too early to comment upon the value of this method. In laboratory experimentation lung surgery has not been an unqualified success. There is the further thought that in acute empyema there is no hesitation in resecting a rib to establish drainage, and it is every surgeon's experience that if done sufficiently early, the lung subsequently expands and fills the thoracic cavity, without negative pressure.

REFERENCES.

Late Results after Operation for Benign Diseases of the Stomach and Duodenum. Moynihan. Annals of Surgery. June, 1908.

A Study of Gastric and Duodenal Ulcers. W. J. Mayo. Annals of Surgery. June, 1908.

End Results following Operations for Benign Diseases of the Stomach and Duodenum. Deaver. Annals of Surgery. June, 1908.

Transfusion and Arterial Anastomosis. Ottenberg. Annals of Surgery. April, 1908.

The Technique of Direct Transfusion of Blood. Crile. Annals of Surgery. September, 1908.

Technique of Bloodvessel Suture. Sweat. Annals of Surgery. September, 1908.

Endo-Aneurismorrhaphy. (Matas) Frazier. Annals of Surgery. September, 1908.

Endo-Aneurismorrhaphy. (Matas) Gibson. Annals of Surgery. September, 1908.

The Suture of Bloodvessels, Implantation and Transplantation of Vessels and Organs. Watts. Annals of Surgery. September, 1908.

Aneurismorrhaphy. Treatment of Poplitial Aneurysm by the Reconstructive Method. Binnie. Annals of Surgery. July, 1908.

Aneurismorrhaphy. Personal Experience with the Modern Method of Treating Aneurysm. Abbe. Annals of Surgery. July, 1908.

Aneurismorrhaphy. A Case of Popliteal Aneurysm Presenting Unusual Difficulties in the Application of the Matas Method. Blake. Annals of Surgery. July, 1908.

The Serous Coat of Bloodvessels Compared with the Peritoneum. Morris. Annals of Surgery. July, 1908.

Symposium on Bacterial Vaccine Therapy, etc. N. E. Med. Gazette, January, 1909.

Some Clinical Conclusions as to the Value of Vaccine Therapy in Surgical Infections. Hollister. Surg. Gyn. & Obs. December, 1908.

Subdeltoid Bursitis. Painter. Boston M. & S. Jul. March 21, 1907.

Stiff and Painful Shoulders. Codman. Boston M. & S. Jul. May 31, 1906.

Bursitis Subacromalis or Periarthritis of the Shoulder Joint. Codman. Boston Med. & Surg. Jul. October 22, 1908.

Transperitoneal Cystotomy. Harrington. Annals of Surgery. October, 1893.

Harrington's Operation of Transperitoneal Cystotomy. Scudder & Davis. Annals of Surgery. December, 1908.

Transperitoneal Removal of Tumors of the Bladder. C. H. Mayo. Annals of Surgery. July, 1908.

Fistulous Tracts, Tuberculous Sinuses and Abscess Cavities. A New Method of Treatment by Bismuth Paste. Beck. Jul. Am. Med. Asso. March 14, 1908.

Rectal Anaesthesia with Ether. Breton. N. Y. Med. Record. February 1, 1908.

Acute Unilateral Hematoginous Infection of the Kidney. Brewer. Gynae. & Obs. June, 1908.

Fulguration in the Treatment of Cancer. Juge. Archives Provincides de Chiriunge, September, 1908. Med. Record, Jan. 23, 1909. Annals of Surgery. November,1908.

Fulguration Discharges in Medicine and Surgery. King. North American Jnl. of Homoeopathy. February, 1909.

Present Status of Surgery of the Thorax, etc. Sauerbruck. Jnl. Am. Med. Asso. September 5, 1908.

Some Complications of Appendicitis. Honan. N. E. Med. Gazette. March, 1909.

PROTECTION AGAINST X-RAY.—Kassabian in the Journal of Advanced Therapeutics, gives his preventive methods used in connection with X-ray therapeutics:

Preventive methods for the patient. For this purpose we may inclose the Crookes tubes in an opaque shield, this may be of rubber which is impregnated with bismuth, or may be a box lined with a very thin sheet of lead, or a box painted with lead preparations. These devices will partially exclude the most dangerous rays that come out from the tube. Different sizes of diaphragms are attached to the opening in this opaque cover.

Protection of the operator. For his own protection, the operator should never hold his hand to test the intensity of the rays. The Crookes tube should be inclosed in an opaque shield, and the operator, if possible, should stay behind a lead screen or in a sentry box arrangement, and watch the fluorescence of the tube through the lead glass. He should never stay in the same room if possible, and must wear an opaque apron, gloves, and spectacles of lead glasses to protect the eyes. Always arrange your place in behind the anode, viz., the inactive hemisphere of the tube.

I believe that the method that I have been using for the last five years in the Philadelphia General Hospital and in my own consulting office is the best protective device, as shown by the improvement you notice in my hands. This device is as follows: While the patient is undergoing treatment or examination, the operator should be in a communicating room, where he can observe the fluorescence of the tube from a mirror suspended at a convenient angle from the ceiling. A wall, lined with half an inch thick of lead, will separate the tube and operator, the penetration of which can be tested by a photographic plate or electroscope. The current can be turned on and off and regulated by a rheostat in this room. When this method of treatment is used, it is not necessary for the operator to wear any other protecting devices.

UNUSUAL CONDITIONS FOR AMPUTATION.—It is reported that certain surgeons of the Cook County Hospital of Chicago, obtained from the court an order directing the amputation of the arm of a fourteen-year-old-boy. This order was requisite as, following a fracture, gangrene appeared, in spite of which the parents refused to give their consent to the operation.

UTERINE HEMORRHAGE WITHOUT GROSS PATHOLOGICAL CHANGE.*

By W. F. Wesselhoeft, M.D., Boston.
Surgeon, Massachusetts Homoeopathic Hospital.

Under normal conditions the only escape of blood from the vascular system is the menstrual flow of woman from her age of puberty to her menopause. During this period the normal discharge of blood at each menstruation varies with each woman, within rather indefinite limits, ordinarily from two to ten ounces are lost. Some women who are well and capable of bearing children menstruate but rarely during a year or years, and others menstruate as often as every two or three weeks. This menstrual flow of blood, unless excessive, does not coagulate, owing to the admixture of mucus, and is ordinarily dark like venous blood. Although the menopause is normally characterized by a decrease of the flow and an increase of the interval until cessation occurs, we all know of some women who have ceased their menstrual life abruptly, and of others who have during this period had times of increased and prolonged flow, without in either case there being evidence of disease.

Menorrhagia or Metrorrhagia at all times ought to be considered as important, and its cause carefully sought. It is important for the general practitioner, as well as for the surgeon, to have in mind the limited number of conditions that are likely to give rise to uterine hemorrhage, and the methods of diagnosing them, in order that the proper measures may be promptly applied for their cure. A woman normally feels the loss of menstrual blood but little, or not at all, as she makes up what was lost rapidly and long before the next flow.

When during the last, however, the flow at the period or between the periods, is so great that she cannot make it up, she becomes rapidly or slowly anaemic and weakened whether the disturbance or disease giving rise to this flow is otherwise of a serious nature or not.

The necessity of an accurate diagnosis is obvious, and what I mean by a diagnosis is a demonstration of the actual condition present, and not the opinion of one or another mind. This was rather strikingly borne upon me by an experience some years ago. A young unmarried woman who had always borne an undoubted good character, happened to come under my care with a rather alarming hemorrhage from the uterus. My interne at the hospital, a very capable and intelligent woman, asked me before I had examined the case, to what I thought the bleeding was due. I enumerated the common causes of uterine hemorrhage and mentioned last "mis-

*Read before the Massachusetts Surgical and Gynaecological Society.

carriage." The doctor was much shocked at my suggesting such a possibility, and upbraided me for holding such a suspicion in such a case. I maintained that it was essential in every case to consider all possibilities. On examining I felt a mass protruding from the cervical canal, and under ether removed the secundines of a three-months' miscarriage.

Abnormal uterine hemorrhage may be caused by constitutional diseases, and here it is not often difficult to recognize the hemorrhage as merely an accompanying condition. The hemorrhages that present themselves for consideration to the surgeon are almost invariably due to abnormal conditions of the uterus or its adnexa. During the child-bearing period perhaps the most common are those connected with pregnancy, including pregnancy extrauterine. Another cause is an abnormal condition of the endometrium in which the uterus itself always takes on some changes, such as endometritis of one form or another, often increased by abnormal positions of the uterus.

Polypoid growths are also frequent. Fibroid tumors submucous and of the wall of the uterus, and the malignant growths, cancer and sarcoma, are frequent causes. In all of these conditions the hemorrhage may or may not be the principal feature. With a carefully taken history and a careful examination, under ether if necessary, it is rare not to arrive at a satisfactory diagnosis. An examination of the interior of the uterus can often only be satisfactorily made by dilating and curetting, and this seems to me often to be as necessary for the diagnosis as it is for the cure of disease of the endometrium.

There is a condition with uterine hemorrhage when careful searching, even with the curette, fails to find gross pathological change, and yet the persistent hemorrhage causes such anaemia and weakness that relief from bleeding is urgent. During the past few years I have had six such cases. These patients have come to me to have something radical done because they had become so reduced physically in spite of curetting, tamponing, and other measures to control hemorrhage. Hysterectomy was done for the purpose of stopping the hemorrhage by definitely tying off the blood supply. All of these patients made good recoveries and most of them I know to be alive and well today.

I will not weary you with reading the stories of these women. Some of them were married and had had children; others were virgins. In all the uterus was not abnormal to touch; was in position, and movable, without disease of the adnexa. In all the uterine canal was a little larger (1-2 or 1 inch) than what is called normal. The uterine mucous membrane in them recovered by the curette was not grossly abnormal. Little could be removed. The uterus on section always seemed firmer than usual, but showed no other abnormality. These specimens were submitted to Dr. Watters, who found no other lesion than greater density of uterine tissue, and for want of a better name we designated them hyperplastic endome-

tritis. In hyperplastic endometritis, however, the endometrium in hemorrhagic cases is usually soft and thick, while in these cases it was not.

The ages of the six women from whom I have removed the uterus for this condition were 37, 38, 46, 43, 47 and 38, or the average 41.

Unless the general condition demands an immediate and permanent cessation of the hemorrhage to save life, I should always try what a curetting will do, for I remember well a similar case in which almost nothing was removed by the curette, and where I wished to do hysterectomy. The patient's physician, however, urged against it and advised merely curetting and washing out with 1-2 per cent. formalin. This I did, and the condition was relieved. The curette could not have been the means of cure, for nothing was curetted away, and I do not know formalin to be a hemostatic of that power. In such cases as in bleeding elsewhere, to stop the flow becomes the main object of treatment, and the loss of the uterus is less than the loss of life, or the loss of living a life a weakened invalid.

To the surgeon there was no really gross pathological change evident, either from the appearance of the removed scanty endometrium or from what he could find on bimanual examination. Why such uteri bleed is to me not satisfactorily explained, and Dr. Watters tells me the changes in the uterine tissue are really very slight.

Hirst, who has the best article I have come across on this subject, says: "Chronic hyperplastic endometritis does not depend upon microbic infection though the ultimate stage of an infectious endometritis may be chronic congestion and hyperplasia, so that infection may possibly be the starting point of the chronic disease. Much more frequently the cause is found in a condition determining an oversupply of blood to the uterus. These conditions are so numerous that hyperplastic endometritis is by far the commonest disease of women. The hyperplasia may affect the glandular or interstitial structures or both. In hypertrophic glandular endometritis the glands are increased in number, acquire a corkscrew form and display a dilatation of the glandular spaces with excrescences of epithelium in their lumen. There is also a proliferation of epithelium upon the surface of the endometrium, but nowhere a duplication of the single epithelial layer in the glands or on the surface, except in elderly women. In the interstitial form there is at first a round-cell infiltration of the interglandular connective tissue. The glands are widely separated and compressed; there may be exfoliation of the surface epithelium; in the later or chronic stage, the round cells are converted into spindle cells; scar tissue is formed; the glands are so compressed that they atrophy and disappear; the uterine mucous membrane is reduced to a single layer of epithelial cells on the surface of the uterine cavity. There is frequently a mixed form of interstitial and glandular endometritis; and varying gradations may be observed between the purely glandular and the interstitial hypertrophy."

GLANDULAR FEVER.*

By E. W. Capen, M.D., Monson, Mass.

Glandular fever was first described in 1899 by Pfeiffer, though some few cases had been noted prior to that time. So thoroughly did he do his work in this connection that little of value has been added since that time. Park West studied the largest epidemic recorded, having to do with 96 cases.

Glandular fever, or acute cervical adenitis, is a disease of children which has until recently been very little noticed, or placed in some other than its own class. Text book literature has accorded it scant courtesy, and the practitioner confronted with a case has hedged or called it infected glands, which, to anything but lay minds, is also hedging.

Glandular fever, as it is more commonly known, is characterized by an acute onset with fever, slight congestion of the tonsils and pharynx, accompanied by swelling, tenderness, and more rarely suppuration of the lymph glands about the neck, especially those behind the sterno-mastoid muscle immediately underneath the external ear. Later the axillary and inguinal glands may be affected.

The temperature elevation is moderate, usually ranging from 101° F. to 103° F. It is commonly remittent. Nausea and vomiting frequently mark the onset, and constipation is the rule. In those cases which have also the abdominal glands infected to any degree there may be diarrhoea. Within two or three days of the incidence the swelling of the glands appears, and it is at this time that the physician is generally consulted. The swollen glands are discreet, firm, exquisitely tender, and vary in size up to that of a pigeon's egg. There is no redness in the non-suppurative cases. Accompanying all these symptoms there is torticollis and an extreme "touchiness" such as I have noticed in few other diseases. Bilateral involvement is more common, but unilateral is frequent. The fever declines by crisis with acute discharge from the bowels or by lysis through many days.

Of my cases three have been unilateral, five have been bilateral, and only one suppurative. I have had one more case in males than in females, though on account of the small comparative number no importance attaches to this. In every instance where there were two or more children in a family all were affected. None of my cases have been above twelve years of age and only one over ten.

Often there is a recrudescence with the infection of additional glands and at such times the glands first affected again increase in size. Enlargement of the liver and spleen are com-

*Read before the Homoeopathic Medical Society of Western Massachusetts.

mon, though not universal. The respiratory system is not infected, though from pressure of the mediastinal or peri-bronchial glands there may be slight cough.

Nephritis is the most important complication, though rare, and cases of otitis media and parotitis have been recorded.

In making a diagnosis of glandular fever a rigid exclusion of local causative agents must be obtained. Caries or abscesses of the teeth, thrush, follicular tonsilitis, pharyngitis, otitis media, etc., may cause swelling of the cervical glands.

The slow development, persistence, and often painless character of tubercular adenitis, serve ordinarily to distinguish it; if not, time and tuberculin will.

The wry neck and pain on motion, with the fever and the slight initial glandular enlargement, may lead to a tentative diagnosis of meningitis, which time again will correct.

This is a distinctly infectious disease, having an incubation period of from four to six days. The infecting organism, though diligently sought by many investigators, has as yet eluded detection.

Streptococci, pneumococci, staphylococci, and the bacillus of influenza, have been found in the pus from suppurative cases and the results of throat cultures are equally diverse. One attack does not always confer immunity.

In no other affection have I seen such acute tenderness of enlarged glands without the pronounced inflammatory redness accompanying as in this.

Treatment:

Isolation first, then rest in bed until the temperature returns to normal, and it is proven that no nephritis complicates; a clean intestinal tract, a nourishing, easily digestible diet, and locally hot or cold compresses or a plastic dressing. Antiseptic throat sprays or gargles may be used on the supposition that the tonsils furnish the port of entry, and to clean (bacterially speaking) these reduces the intensity of the infection.

Medicinally, I have had more rapid and more satisfactory results with the brown iodide of lime, freely administered, than with any other drug.

The iodides in some form certainly are indicated and we may have recourse to any one of the group. The biniodide of Mercury, iodide of Arsenic, or Baryta iodide, might any one be useful as often would Phytolacca, Echinacea, or Strychnia, Chininum arsenate, or Pulsatilla.

In the beginning of the case, which, by the way, I have never seen, and you will seldom see, Belladonna will almost surely be indicated.

Iodine tr. eterxnally, or any one of half a dozen other things, may be useful even if only in some instances for the psychical effect.

The course of the disease covers about two weeks, and ultimate recovery is the almost universal rule.

THE INFLUENCE OF HEREDITY ON PSYCHOSES.

By A. Reginald Heupt, M.D., Melbourne, Australia.

The old German maxim, "the apple does not fall far from the tree," is shown in the well-known clinical pictures of the various Psychoses. The parental cell is transmitted to the offspring, with all its strength and *all its weakness.* This weakness sooner or later manifests itself in the complete destruction of the apparently perfect work of nature, bearing out that a chain is only as strong as its weakest link; with care, of course, this break may be deferred for many years or may never come at all; circumstances undoubtedly govern the "sane" existence of many persons. In the foetal cell we find the vitalized atoms which have been influenced by the various toxins or indirectly by the nervous system of the parents, it being shown that the mind as well as the physical condition of the parent strongly influences the production and completion of the developing cell. It is easy to understand that the cell protoplasm and its finely charged atoms do not require very much interference by either external or internal influences to damage its delicate formation. With this transmitted weakness, we, of course, have also the influence of many other things, such as cold, heat, fevers, shocks, and even prolonged transmitted distorted thoughts, which may bring about various irregular changes in the formation of the protoplasm of cells and in many instances lower their nutrition value, which assists to further on their ultimate disorganization or destruction. The predisposing conditions are mainly, of course, the results of the actions of the toxins of Syphilis, Tuberculosis and Alcoholism; there is no doubt that the first and last named are the chief fillers of our insane hospitals, and far more by their indirect hereditary influences than by any direct action. We will not find any person developing a Psychosis due only to such causes as mental shock, excitement, fright, etc., without the chain of production is weak at some point; the brain cells are like our arteries, as long as they are sound they will stand any pressure, but should they be degenerated at all,—a little extra strain,—and away they go. We must remember that Psychoses are only the visible manifestations of an altered and deranged balance of the atomic forces constituting our brain and its regular actions; in many cases the correct atomic balance has been suddenly lost and afterwards restored just as suddenly by exactly the same factor that produced it, which plainly shows that the various manifestations called disease are only the outward signs of a malarrangement of the vital forces or the atoms constituting the cells of the body. The guardian of this regular formation lies in the general nervous system, and, secondarily, in the trophic centres, and any interference with either of these where the point of least resistance lies in the brain cells will give in some degree a Psychosis.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only, and preferably to be type written—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.

ASSOCIATE EDITORS:
F. W. COLBURN, M.D. C. T. HOWARD, 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, if possible.

CONFIRMATION OF THE VALUE OF OPSONIC THERAPY.

By the mouths of many witnesses is the truth established, and if perchance the witnesses have been independent observers and experimenters so much the more value attaches to their testimony. Among the medical subjects which at the present time are attracting wide-spread attention and searching investigation none is more prominent or of greater importance to humanity than the question of the value of the Opsonic Theory. This theory offers a logical and conclusive explanation of the *modus operandi* of the homoeopathically administered remedy; it promises to add a very effective agent to our means for combatting and curing certain very serious diseases; it promises to cure certain obstinate conditions which if not dangerous to life are capable of causing much suffering. Its practical application or its "technique" is not yet so simplified as to make it available to the average practitioner. Any testimony therefore which tends to illuminate any of these features of Opsonic Theory, which aids in deciding its peculiar field of usefulness, which helps to define its possibilities, which points out its limitations, should be looked upon as a welcome contribution to the sum of our medical knowledge, should be received with rejoicing by those whose duty it is to relieve suffering and save life. Such a contribution to our knowledge, and such testimony to the practical utility of the Opsonic Theory come to us from an unexpected quarter, but are none the less welcome and no less convincing for that reason. The testimony referred to is found in an article contributed to *"Country Life"* by H. H. Saylor, who tells graphically and interestingly how Dr. G. A. Moore of Palmer, Mass., carried on a series of painstaking investigations into the cause of the fatal "Distemper" in dogs, and finally, following in the footsteps of Sir Almroth Wright, prepared an opsonogen which proved curative in a large number of cases. The article is written in a popular style by a

layman, but it contains an excellent idea of what "Opsonic Theory" means, and a sufficiently comprehensive description of the allied technique to acquaint the lay mind with the methods involved.

The concluding paragraphs of the article are sufficiently interesting to justify their quotation in full and they are herewith presented to our readers:

"So, in effect, we cure a disease by means of the dead germs of that same disease—not so very far afield from that preliminary to our forefathers' treatment for hydrophobia: 'Take one haire from ye dogge that now had bitte ye personne. . . .'

"Of course, if infection is not overwhelming, and the germ-eating disposition of the white corpuscles is already alert, disease hasn't much of a show. If not, however, there still remains the alternative of injecting the toxin. And, parenthetically, let me caution you against confusing this toxin with the more common anti-toxin we hear so much about. Anti-toxin is a passive immunizing agent taken from the serum of an immune; it neutralizes poisons. The toxin, on the other hand, is a form of poison—in this case one which stimulates defensive action.

"Moore's toxin is simply the devitalized germs of distemper in a salt solution. To try it out, white corpuscles from over 100 dogs that had never had the disease were opposed against the disease germs. All of them were found weak in germ-devouring capacity, yet when the toxin was added they developed an amazing appetite for germs. Tests were made to determine the proper dose under varying conditions, resulting in a table of average doses for different weights and breeds of dogs. In 104 tests an average of three and a half days sufficed to stimulate the corpuscles from a state of lethargy to a capacity for devouring from four to seven germs apiece. When you consider the fact that a drop of good blood contains 10,000 white corpuscles it looks rather bad for the germs.

"After the distemper germ had been discovered and labeled for future reference, and the Opsonic Theory found to work to a nicety, Dr. Moore and his colleagues redoubled their efforts to find cases for treatment. In about two and a half years they have treated hundreds of cases without a failure. A few cases were so bad when discovered that no attempt was made to save them, yet pity often led them into apparently hopeless cases with success.

"The procedure for treatment is absolutely simple. The dog is kept on a bread-and-milk diet for a few days after an injection of the toxin through a hypodermic syringe. At the end of three or four days he will be on the road to recovery."

A not insignificant value of such an article as is here referred to is the fact that it educates the lay mind to the idea of treatment by vaccines, or opsonogens, and thus paves the way for the use of such treatment.

THE ETHICS OF BOOK REVIEWS.

The subject of book reviews is always liable to be one that will arouse the active interest of many of the editors of medical journals. This is particularly true in the case of the smaller journals where the emoluments of the office are few, and the returns, other than honorary ones, are scanty.

There are two purposes to be fulfilled by book reviews, both of which are legitimate. One, that of the editor, is to make known to the medical profession the new books as they appear with their relative value as estimated by some one fitted to judge. The other, that of the publisher, is to have his own particular publications advertised in an ethical and proper manner.

As an added inducement to favorable notice the publisher presents a complimentary copy to the editor. By him it is either reviewed personally or turned over to some one else for an opinion. The editor, therefore, has a double duty to perform: to give his readers an adequate idea of the book, and at the same time to be fair to the publisher. This double duty is often overlooked in one or the other part.

In a not inconsiderable number of the less important journals coming as exchanges to the *Gazette* one part of the duty, that to the profession, is notoriously overlooked. Apparently, in their eagerness to get into the good graces of the publishers, those having charge of the reviews do not dare to express any real adverse criticisms, however just they may be, but confine themselves to empty or fulsome praise of everything contained in the book under consideration. Surely they have their reward in the estimation of their readers, as it is not usually difficult to differentiate between such a valueless review and one written carefully after due consideration of the facts. This fault is one about which the subscribers are justified in complaining most strenuously.

A less common one has recently been brought to our attention, involving not only the subscribers but the publishers as well: This consists in the undue delay in the appearance of a review after the book has been received. Anyone with experience in this department can understand how two, three or four months may intervene between the receipt of the volume and the publication of its review, although in these times of rapid progress and change, even this is too long. Judging from what is seen, however, it seems that in the minds of some editors, all interest in the matter is lost with the receipt of the book, which, once in hand, can be reviewed any time in the future when there is nothing else to do.

To illustrate: In the December number of a well-known medical periodical, of fourteen reviews only three are of books published in 1908, while nine are of those of 1907, and two of those of 1906. The average time of these all would probably be eighteen months after their publication, an interval sufficiently long to materially

decrease the value of the books as giving the results of the latest research.

We hold that this is unfair, both to the publisher and to the reader and if lack of space is the reason for the delay, that the books should not be accepted for review. In fact, we have just learned from one house that a reputable medical journal printed its review of one book so late that when it did finally appear, a new revised edition had been made and the copies sent out.

We enter a plea, therefore, for honesty on all sides in this matter. Let the reviewer give his true opinion, praising where praise is due, and likewise criticising where criticism is due, remembering that others are going to largely trust to his opinion in deciding whether or not to buy the book. In this way the journals may help to guide their readers by giving the results of their own study rather than be merely sycophants following with praise all those who send them books, irrespective of whether they are good, bad or indifferent. And at the same time let it be remembered that honesty also demands just returns from them. Let their opinions be prepared fairly and honestly, and let these appear before the passage of months has destroyed the greater part of their value and all use for them is over. This being done, they will not simulate the torpor of those human parasites who, when they are paid before they work, almost refuse to make any effort in return for what they have already received.

In short, the old byword that "honesty is the best policy" still holds, whether it be in connection with individuals, with communities or with medical journals; honesty to the publishers, honesty to the patrons and honesty to themselves.

A NEW USE FOR PIGS.

According to a recent announcement from Chicago, a new and exalted use has been found for pigs, or rather for pigs' blood. The announcement claims that pigs' blood is of the highest value in the cure of incipient tuberculosis. No statistics in support of the assertion are obtainable, but the announcement is made with a flourish of trumpets that will surely attract attention. The usefulness of pigs' blood, we are told, lies in the fact that it contains a large amount of hæmoglobin, larger than that found in cows' blood, for instance. If the announcement contains even a shadow of truth, Chicago will be looked upon as a particularly fortunate city on account of the ease with which this new remedy can be obtained there. In fact, Chicago might become a mecca for consumptives if this latest medical discovery were to prove anything more than a bubble.

THE REVENGE OF HOMOEOPATHY.

The Gazette has received a translation from the Bruxelles Illustré of Juilet 21, 1907, of an article that will be of interest to its readers.

Our physicians have usually only a disdainful shrug of the shoulders when one dares to speak to them of homoeopathy.

Homoeopathy, which sees itself so often vilified, even denied by allopathy. The official doctrine of the faculty has been covered with eulogy by one of the most distinguished members of the Acedamy of Medicine, by one of the most learned physicians of the Paris hospitals, Dr. Huchard. This excellent practitioner terminated his series of six conferences, to which from all parts of Paris crowded the doctors, anxious always to be instructed.

Before an enormous audience Dr. Huchard covered with flowers the homoeopathic doctrine, saying impressively:

Gentlemen:—We give too much medicine! And by it we are often injurious (nuisibles) to our patients. The same medicine has entirely contrary effects, according to the strength or weakness of the dose. Thus, a large dose of strychnine administered to a dog paralyzes him. Whereas, a moderate dose augments the contraction of the muscles (et le tetanise).

You heard me recommend one to give in certain of our cardiac cases one or two drops in water, per day, of the 1000th solution of digitalis (au millième), and I saw you were astonished at the administration of such infinitesimal doses. It is important for you to know that the organism profits and derives much advantage from this—our cells are more sensitive than we can imagine to small doses of medicements, and they are more easily impregnated by them. Thus, Trinitrine works marvelously in doses of one drop of an alcoholic solution 1-100 in water. The more I advance in the practice of medicine the less medicine I give.

Look at my friend, Albert Robin, who administers to his patients a 500th milligram of gold or silver (ferment metallique), and obtains great results.

And our grand Pasteur—what has he done in injecting imponderable doses of his virus, of his toxins against the ravages of diphtheria according to homoeopathy. And the illustrious Trousseau, and so many others. What have they so often practised, if it is not homoeopathy?

But the very word seems to make one afraid, and is not pronounced. Very well—I—I then pronounce it and I render it homage. Let us have the courage of our opinions. Do not be sectarian. Let us take the good wherever we find it.

This lecture, which was a review of his six admirable conferences, has recalled the thesis of Van Zype in his beautiful comedy of Les Etapes: "Those who dispise the pest must sooner or later render it justice."

SIGNIFICANT!

Truly the tide is moving not only toward the Law of Similars but toward infinitesimals. In an editorial comment on an article by Dr. Spengler, of Davos, the Lancet (without apparently an editorial tremor) quotes the statement that the antioxic body described by the Doctor can be recognized in a dilution of 1 in 100,000,000,000. Further, we are told that action in such a dilution is something apart from ordinary chemical action and that Dr. Spengler speaks of an "atomic dissociation" which liberates "specific electrons." Marvellous!—Homoeopathic World.

SOCIETIES.

The regular meeting of the Boston Homoeopathic Medical Society was held in the Natural History Rooms, February 4, 1909, the meeting being called to order by the president, Nelson M. Wood, M.D.

The minutes of the last meeting were read and approved.

Denny W. Livermore, M.D., was elected to membership.

On motion of Dr. N. R. Perkins, Dr. E. B. Coleman of Nantucket was elected to the membership in the society, under suspension of the rules.

George H. Earl, M.D., was appointed to take the place of Dr. David W. Wells on the Legislative Committeee.

Dr. Perkins informed the members of certain bills before the Legislature, and their present status.

Upon motion of Dr. Wells it was voted that this society sustain the Legislative Committee and put itself on record as opposing House Bill No. 163 and Senate Bill No. 79.

It was voted that the society ratify the action of the Legislative Committee in regard to the bill on optometry.

It was voted that the society endorse House Bill No. 679.

Scientific Session.

Dr. David W. Wells exhibited a patient whom he said had been under his care for twelve years. When first seen there was a tendency of the eyes to turn outward equal to five degrees, no real strabismus but simply a slight tendency outward. This necessitated the use of glasses with prisms to give the patient relief.

This outward tendency increased as the years went on and stronger prisms were required, but finally no prisms would relieve the symptoms of discomfort from the use of the eyes. The error last July amounted to twenty-five degrees and a complete tenotomy was done of the external rectus of the right eye, followed in a few weeks by a complete tenotomy of the external rectus of the left eye. Although some temporary relief was gained, in a few months the trouble began to develop again until it amounted to eighteen degrees.

Two weeks ago Dr. Wells did an advancement of the internal rectus of the right eye by the Worth method, without excising any of the tendon. The result is an almost perfect balance, so that there is no tendency either inward or outward, and the patient is using the eyes with comfort.

This case is of interest because the tendency to turn has beeen observed during its development, because it became so excessive, and because it required for the cure an operation which is usually employed only for cases where the eyes are visibly turned.

"MODERN METHODS OF SEWAGE DISPOSAL."

Illustrated by Stereopticon.

Prof. Earle B. Phelps,

Sanitary Research Laboratory, Massachusetts Institute of Technology.

After a general discussion a rising vote of thanks was extended to Prof. Phelps for his very instructive address.

Attendance, 46: Men, 34; women, 12.

BOOK REVIEWS.

Modern Medicine. Its Theory and Practice. In Original Contributions by American and Foreign Authors. Edited by William Osler, M.D., Regius Professor of Medicine in Oxford University, England; Honorary Professor of Medicine in the Johns Hopkins University, Baltimore; formerly Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia, and of the Institutes of Medicine in McGill University, Montreal, Canada. Assisted by Thomas McCrae, M.D., Associate Professor of Medicine and Clinical Therapeutics in the Johns Hopkins University, Baltimore; Fellow of the Royal College of Physicians, London. Volume V. Diseases of the Alimentary Tract. Illustrated. Lea & Febiger. Philadelphia and New York. 1908.

The time has now come in the appearance of this series when it is perfectly safe to say with all assurance that Osler's "Practice" will mark an epoch in the publication of medical books. From the strictly financial view-point there are but few publishing firms that could not hesitate long before bringing out such a truly immense work within the next few years. And again, few, if any, persons could be selected who would be so well fitted to adit the undertaking as the one finally chosen. Standing among the most eminent of modern physicians he can ask, with much assurance of success, those most fitted to cover certain subjects, to co-operate with him in the work. In his selection of authorities he has been, for the most part, most happy.

The present volume covers in a very full manner the diseases of the alimentary tract, including those of the liver and pancreas. In view of the modern advances in gastric analysis and treatment we first look up gastric ulcer and carcinoma. Under these headings we find a section of nearly a hundred pages ably and clearly written by Martin of Montreal, all phases being fully and carefully described. A little further along, Stengel, of Philadelphia, has a full dissertation on appendicitis. Especially happy was the choice of Opie to cover diseases of the pancreas, for who is better able to do so? The results justify the choice. A. O. J. Kelly, of Philadelphia, has prepared the chapter on the liver and its diseases, and an interesting one it proves to be. Cirrhosis and cholelithiasis receive their due amount of attention and so become the most prominent features.

Concerning the general arrangement nothing need be said. Wherever illustrations, either black and white or in colors, will be of benefit, there they are found.

Osler's "Practice" is bound to be a classic for years, the most complete, the most exhaustive and the most modern of any large system of practice now in print among English-speaking peoples.

Therapeutics of the Circulation. Eight Lectures Delivered in the Spring of 1905, in the Physiological Laboratory of the University of London. By Lauder Brunton, Kt., M.D., D.Sc., LL.D. (Edin.), LL.D. (Aberd.), F.R.C.P., F.R.S., Consulting Physician to St. Bartholomew's Hospital. Published under the auspices of the University of London. With 240 Illustrations. Price, $1.50, net. P. Blakiston's Son & Co. Philadelphia. 1908.

In the preface we learn that this book consists of eight lectures given in 1905 in the Physiological Laboratory of the University of London. These were taken down by a stenographer-student and have recently been revised for publication. In these lectures the object was to present the results of recent investigations, demonstrating the same as far as possible by experiments.

On this account a lack of order and sequence is noted that under other conditions would be expected to be present.

Blood pressure and the instruments used for measuring it is particularly well covered, both in the text and in a special appendix recently prepared.

The most valuable part is that concerning treatment of cardiac disease. Rest, massage, diet and drugs are taken up seriatim, their value noted and their border lines defined. Numerous good illustrations are present. The status of the author in the medical profession is such as to preclude the necessity of saying anything concerning the authenticity of the statements, as well as to render favorable comments a matter of supererogation.

Emergency Surgery. For the General Practitioner. By John W. Sluss, A.M., M.D., Professor of Anatomy, Indiana University School of Medicine, formerly Professor of Anatomy and Clinical Surgery, Medical College of Indiana; Surgeon to the Indianapolis City Hospital; Surgeon to the City Dispensary; Member of the National Association of Military Surgeons. With 584 Illustrations, some of which are printed in colors. Price, $3.50, net. P. Blakiston's Son & Co., Philadelphia. 1908.

After a careful examination of this book we do not hesitate to express our belief that much benefit would result if it could be placed in the hands of every general practitioner in the country. It is a brief, well-written, and for the most part accurate guide, serving to bring together in a small space just those facts that will be most needed when the emergency arises.

Full consideration of its many features is here impossible, as practically every department of emergency surgery is treated at a length commensurate with its importance and the size of the book.

Beginning with fundamentals of antisepsis, anaethesia, sutures, drainage, etc., it steadily progresses to appendicitis, herniotomy and caesarian section, giving just as satisfactory treatment of the minor as of the major work, a feature somewhat uncommon in certain other works. A few typographical errors by no means injure an otherwise most satisfactory book. Numerous illustrations lend added value.

Surgical Memoirs and Other Essays. By James G. Mumford, M.D., Instructor in Surgery, Harvard Medical School; Visiting Surgeon to the Massachusetts General Hospital, Fellow of the American Surgical Association, etc. Illustrated. Price, $2.50, net. Moffat, Yard & Co. New York. 1908.

While a knowledge of the early history of medicine and surgery as depicted by the lives of those pre-eminent in the past is by no means essential to any physician, yet such familiarity cannot fail to be of distinct benefit to every one. It helps to make the man rather than the medical machine with its one single object in life. The author has given to us what he calls the narrative of surgery, and an interesting one it proves. Possibly his choice of those considered as the greatest may be open to some criticism, but his descriptions of those selected, men such as Hippocrates, Galen, Vesalius, Hunter, Lister, etc., are decidedly satisfactory.

In addition are appended other essays, such as Boston medicine one hundred years ago, ethics, the nurse's vocation, and studies in aneurism. As a book for the leisure hour of either layman or physician this can be sincerely recommended.

Nervous and Mental Diseases. For Students and Practitioners. By Charles S. Potts, M. D., Professor of Neurology in the Medico-Chirurgical College of Philadelphia. New (second) edition, thoroughly revised and greatly enlarged. In one 12mo. volume of 570 pages, with 133 engravings and 9 full-page plates. Price, cloth, $2.50 *net*. Lea & Febiger, Publishers, Philadelphia and New York.

In these days of crowded curricula and high pressure even in medical schools a comprehensive treatise on any subject is too much for a student. The schools can give instruction in the fundamental sciences, and can give sound introductions in the specialties, can give thorough training in laboratory and clinical technique, can give in fact an all around, practical education, but cannot pretend to make specialists of graduates. The filling in of details, and the completion of any one subject must be left for post graduate work. Prof. Potts' book is essentially one for the undergraduate, for in brief paragraphs—one might say sentences—he presents the fundamentals of his subject in an impressive way. Clear cut pictures of nervous and mental diseases are offered and there is nothing extraneous from cover to cover. Dr. Potts has gleaned with artistic skill from all available sources and given simply the best on the subject, and, realizing the limitations of his book, has given exceptionally numerous references to other works and monographs where detailed discussion of disputed points may be found. In reading this book one realizes the absolute necessity of anatomical knowledge of the cerebro spinal system in the diagnosis of nervous diseases. The illustrations are selected with excellent judgment.

Only sixty-three pages are devoted to Insanity (mental diseases), which shows the necessity of condensation.

That the author has succeeded in getting so very much into so few pages is a matter for really sincere congratulation.

Pharmacology. The Action and Uses of Drugs. By Maurice Vejux Tyrode, M.D., Instructor of Pharmacology in the Medical School of Harvard University. Price, $1.50, net. P. Blakiston's Son & Co. Philadelphia. 1908.

This is a small consie text on pharmacology intended particularly for the medical student. It purposely omits all abstract theorizations and uncertain deductions, giving merely the essential facts. Four sub-divisions are made: drugs of predominant constitutional action, drugs of predominant local action, extracts, etc., of animal organs and inorganic drugs. In each the members of every group are brought together into one chapter. Here a general description of the common attributes is given, followed by more detailed notes concerning the individual members of the group.

In this age of therapeutic nihilism it seems probable that a less enthusiastic reception will be given than would have been the case of a similar excellent book ten or fifteen years ago.

The Homoeopath will find much of interest and perhaps a little of service, but it will certainly be far less useful to him than to his brother of the dominant school. It does, however, admirably fulfill the purpose for which it was written.

The Surgery of the Ear. By Samuel J. Kopetzky, M.D. Attending Otologist, New York City Children's Hospitals and Schools; Attending Otologist to the New York Red Cross Hospital; Assistant Surgeon and Instructor in Operative Surgery of the Ear, Manhattan Eye, Ear and Throat Hospital; Pathologist and Surgeon, New York Throat, Nose and Lung Hospital; etc., etc. Illustrated with sixty-five half-tone and line drawings, eight charts and four colored plates. Rebman Company, New York, 1908.

As the title implies, this book considers exclusively the surgery of the ear. It comprises fourteen chapters, giving in each an historical

sketch of the procedure under conisderation; the surgical anatomy of the part; indications for operation, and description of the same with the after treatment.

The author draws very liberally from the works and writings of others, both in this country and abroad, as is shown by the extended bibliography at the end of each chapter.

The work is well illustrated by clear half-tones and four colored plates. The index is very complete, an essential if a book is to be available for ready reference. The book should meet with a ready sale.

Diseases of the Nervous System. By John Eastman Wilson, A.B., M.D., Professor of Diseases of the Nervous System in the New York Homoeopathic College and Hospital; Professor of Nervous Diseases in the New York Medical College and Hospital for Women; Consulting Neurologist to the Middletown State Homoeopathic Hospital, Middletown, N. Y., etc. 500 pages. Price in cloth, $3.50. Boericke & Runyon. New York and Philadelphia. 1908.

It is well said that books on neurology all fall into one of two groups: ponderous tomes filled with most erudite and technical information from which it is with the greatest difficulty that one can glean the information desired, or small handbooks of the nature almost of quiz compends. The intention of this author has been to avoid either extreme by preparing a medium-size book suitable both for the student and for the practitioner who is not a neurologist.

While many of the diseases of the nervous system are notoriously hopeless and unaffected by drugs, nevertheless in certain instances some such agents are of great assistance. This seems to be particularly so of Homoeopathic drugs. We find, therefore, in connection with each disease, that those drugs are all mentioned, accompanied by a brief summary of the indications for each. The following subjects are taken in order: Structure of the nervous system with the spinal nerves, diseases of the spinal cord, diseases of the brain and its envelopes, and diseases without assignable lesion. This book is well worthy of making for itself a place among its rather rapidly-increasing family of homoeopathic texts and of being used by any one as a responsible guide.

A Text-Book of Human Physiology. Including a Section on Physiologic Apparatus. By Albert P. Brubaker, A.M., M.D., Professor of Physiology and Hygiene in the Jefferson Medical College; Professor of Physiology in the Pennsylvania College of Dental Surgery, etc. Third Edition, Revised and Enlarged. With Colored Plates and 383 Illustrations. Price, $3.00, net. P. Blakiston's Son & Co. Philadelphia. 1908.

This edition is larger than its predecessor by upwards of fifty pages. In addition to a complete revision of the entire text, additions to a considerable extent have been made in certain chapters in order to incorporate the results of the latest investigations. Such additions are most noted in those sections treating of the nervous system, the phenomena of vision, chemistry of proteids, the circulatory apparatus and absorption.

It is very appropriate to devote to the nervous and to the circulatory systems the major proportion of space. So much is now being done with blood pressure and its significance that this topic will be of particular value, as it is well covered. No attempt has been made to prepare an exhaustive treatise on physiology; rather has the author made as his aim the production of a clear, readable book, alike of value to the medical student and to the medical practitioner. The illustrations, comparatively few of which are original, are well chosen and serve to explain most satisfactorily much of the text.

Clinical Treatises on the Symptomatology and Diagnosis of Disorders of Respiration and Circulation. By Prof. Edmund von Neusser, M.D., Professor of the Second Medical Clinic, Vienna; Associate Editor Nothnagle's Practice of Medicine. Authorized English Translation by Andrew McFarlane, M.D., Professor of Medical Jurisprudence and Physical Diagnosis, Albany Medical College; Attending Physician to St. Peter's and Child's Hospital and Albany Hospital for Incurables. Part II.; Bradycardia and Tachycardia, with Bibliography. E. B. Treat and Company. New York. 1908.

The second of this series of monographs upon disorders of circulation and respiration is devoted entirely to one phase of the former disorder, namely, to the contractile frequency and rhythm of the heart. The text is about equally divided into three sections; the first Bradycardia, the second, Tachycardia; and the third, an appendix containing abstracts on allied subjects from recent articles in American and in foreign literature.

After first briefly describing those conditions under which each of these pathologic states may occur, the author proceeds to deal with the various clinical pictures that may act as etiologic agents. The reader must not mistake the fact that this is merely a comparatively brief paper on a subject that is large when viewed from all sides, and is not intended to usurp the place of a complete text-book. If this be borne in mind he cannot do else than derive profit from its perusal, obtaining thereby a good knowledge of a common abnormality. Although a translation, it is excellently written with few of the cumbersome phrases so commonly encountered in many translations from the German. For this somewhat unusual achievement the translator merits praise.

Repertory of the Homoeopathic Materia Medica. By J. T. Kent, A.M., M.D. Professor of Materia Medica, Hahnemann Medical College and Hospital, Chicago. Second Revised Edition. Boericke & Tafel. Philadelphia. 1908.

The entire homoeopathic profession is roughly divided in two parts: the "high potentists" or "true homoeopaths" and the "low potentists" or "rationals." To the former class a new edition of Kent's Repertory will come as an inestimable boon, to the latter it will be of relatively little use.

The fact that the publishers have undertaken such a massive task indicates fully their confidence in their patrons as well as shows that the number in this class is not as small as some suppose and that it is probably increasing.

It is difficult to properly review this book as it is scarcely conceivable that any one making use of the repertory at all will not be already very familiar with the earlier edition. So familiar has it become to such that the very mention of the word "repertory" will cause many to instinctively think of Kent. Covering nearly fourteen hundred pages, with much fine print, it is only adapted (as is intended) for home study and investigation. The author has, as far as possible, omitted all unverified symptoms and has added a considerable amount of clinical material. In arrangement the plan followed is to proceed from generals to particulars, thus working out the cases more accurately than could be done by studying particulars directly. This follows Boenninghausen's well-known method that the test of time has proven so satisfactory.

Among repertories, therefore, Kent's will always have a high and almost unrivalled place, and as such can be consulted as a high authority by all who make use of it.

Essentials of Homoeopathic Materia Medica and Homoeopathic Pharmacy. Being a Quiz Compend upon the Principles of Homoeopathy, Homoeopathic Pharmacy and Homoeopathic Material Medica, arranged and compiled for the use of students of medicine by W. A. Dewey, M.D. Fourth revised edition. 372 pages. Cloth, $1.75, net. Philadelphia. Boericke & Tafel. 1908.

So familiar is this little book to the homoeopathic profession, particularly the younger part of it, that a review even of a new edition is almost superfluous. "We all know it from our student days," says almost any graduate of the last decade. It is a small manual of materia medica arranged as questions and answers, covering the more essential features of the best-known drugs. The introductory chapter on the principles of homoeopathy is particularly appropriate as the book is usually placed in the hands of beginners, many of whom scarcely know why they are homoeopaths and much need instruction.

This latest edition differs but slightly from its predecessor, a few drugs only having been added. We trust that it may, like its fellows, be given a warm reception as it is a "safe and sane" exposition of the practical application of homoeopathy.

Materia Medica and Therapeutics. With Reference to the Most Direct Action of Drugs. By Finley Ellingwood, M.D., formerly Professor of Materia Medica in Bennett Medical College, Chicago, etc. With a Condensed Consideration of Pharmacy and Pharmacognosy by Prof. John Uri Lloyd, Ph.M., Ph.D. Sixth Edition. Thoroughly Revised and greatly enlarged. The Ellingwood's Therapeutist Co., Chicago, 1907.

Both the author, Dr. Ellingwood, and the collaborator, Prof. John Uri Lloyd, are so favorably known to the medical profession of America that anything coming from their pens is sure of at least respectful consideration. Certainly no one is better able than the latter to speak for pharmacy and pharmacognosy, while the unusual degree of success already received by the five prior editions amply testifies to the quality of the bulk of the book. The author has an unique and, to the homoeopath at least, a vague and indefinite method of classifying his drugs. By it we find one group of agents acting upon the respiratory tract, another upon the stomach, another upon the blood and so on. If all drugs could be thus readily placed, each in its own collection, without ever danger of confusion, much would be gained, but at the present time we feel this to be impossible. However, the attempt is praiseworthy, there being a very fair degree of success. Of the treatment of individual drugs much more can be said in commendation. Here the synonyms, parts employed, botanical or other description, physiological action, specific symptomatology and general therapeutic sphere of action are all carefully but briefly given. It is an unquestioned fact that to any student of drugs of whatever school he may be, this book will be found not only well worthy of perusal but also fully deserving most careful attention and study.

The Gazette has recently received the latest portrait list of the medical works of Lea & Febiger. As has been the case in preceding lists, the collection is most attractively arranged; the addition of photographs of the various authors serves to bring the personal element well to the front, a factor of not insignificant importance. The work that this publishing house has done in the past is known wherever English-speaking physicians congregate, it being now in its 124th year. The present collection of eminent writers can probably not be surpassed in the country, and the debt of the medical profession to this publishing house is great.

PERSONAL AND GENERAL ITEMS.

Dr. Herbert W. Hoyt, class of 1891, B. U. S. M., has removed his office from 33 Clinton Avenue South to 84 East Avenue, Rochester, N. Y. Practice limited to diseases of the ear, nose and throat.

Drs. Benjamin S. and Nellie W. Stephenson, class of 1892, B. U. S. M., have located in San Juan, Porto Rico, and the latter's health is much benefitted by the climate.

Prof. James Geddes, Jr., of the faculty of Boston University, has been knighted by King Victor Emmanuel of Italy, in recognition of his efforts as teacher, writer and social worker in the promotion of Italian interests in America.

Dr. Robert Lovett Emery of Rockport, Massachusetts, class of 1908, B. U. S. M., was married to Miss Emma A. Gibson of Boston on the ninth of February.

On the evening of February third Dr. J. Arnold Rockwell addressed the Wyman Club of Cambridge, Massachusetts, an "old school" organization, on The Homeopathic Prescription and Current Views on Homoeopathy. He also included a brief biography of Hahnemann and his Organon.

Dr. E. A. Darby of Florence, Colorado, president of the Colorado Homoeopathic Society, writes that he knows of several good openings in Colorado, all outside of the larger cities, but in rapidly growing places. A stamped self-addressed envelope will bring information concerning these openings.

Dr. Cora Smith Eaton of Seattle, Washington, class of '92, B. U. S. M., has removed her office from the Arcade Building to 1629 14th Avenue.

At the annual meeting of the Board of Directors and Board of Physicians and Surgeons of Grace Hospital, New Haven, Conn., Dr. G. J. Jackowitz, B. U. S. M., 1907, was appointed to the staff of the institution as assistant surgeon.

PHILADELPHIA TUBERCULOSIS EXHIBIT.—Under the auspices of the Board of Health of Philadelphia, the tuberculosis exhibit that has recently been held in New York City has been transferred in toto to Philadelphia, where it was opened to the public February 15th. It will be of interest to the readers of the Gazette to note that in the pathological department the only medical school to be represented was Boston University, and the only hospitals represented were Massachusetts Homoeopathic Hospital and the Metropolitan of New York. The government exhibit is extensive as is that from the Phipps Institute for Tuberculosis. A number of smaller collections are present. Homoeopaths who have been said to take but little interest in pathology, have provided nearly one-quarter of the entire pathologic exhibit.

NEW YORK TUBERCULOSIS EXHIBIT.—During the seven weeks in which the tuberculosis exhibit was open in New York, the total attendance of 753,000 was recorded. This is an average daily number of 15,000, which is even greater than was expected.

CHANGE OF EDITORS.—The Cleveland Medical & Surgical Journal that has, under the guidance of Drs. H. D. Bishop and W. H. Phillips, attained such a satisfactory standing among medical periodicals, announces a complete change in management. The new editor will be Dr. M. T. B. Nobles; the new business manager Miss R. E. Tompkin.

The Gazette feels that it will be hard for the new workers to surpass the standard established by the older ones, as this proved so satisfactory. To them, however, it extends its most cordial best wishes in all ways.

HOMOEOPATHY WINS IN DENVER.—The Homoeopathic profession of Denver is certainly to be congratulated upon the success of its contention for representation at the Denver City and County Hospital. After much opposition and through the influence of several loyal laymen, Dr. Joseph B. Kinley has been elected a member of the supervising board of that institution, and eleven other homoeopathic physicians have received positions on the general staff.

The graduating exercises of the Training School for Nurses of the Massachusetts General Hospital were held in the Out-Patient Department February 16th. The principal address was delivered by Dr. Maurice H. Richardson. Following the exercises was a reception to the guests and their friends.

GRACE HOSITAL.—The formal opening of the Mary S. Munsill Maternity Ward of Grace Hospital occurred on Tuesday, February 9, 1909, when the members of the Women's Board of the Hospital and the nurses received during the afternoon and evening.

A general invitation had been extended to all interested in the new ward, and there were many who were shown over the building. The house adjoining the hospital proper, it will be remembered, valued at thirty thousand dollars, has been the former residence of its donor, Mrs. Mary S. Munsill of Hartford, was given to the hospital last fall. Since then, through the efforts of those interested and under the direction of the superintendent, Miss M. J. Putts, it has been remodeled to a certain extent, and has been furnished throughout, through the munificence of its friends, thereby making it one of the most up-to-date equipped, elegantly furnished and most homelike buildings of its kind in the country. By the addition of this ward the capacity of the hospital has been increased to 105 beds, thus making it rank with the larger homoeopathic institutions in New England.

DINNER TO DR. DEAVER.—A unique complimentary dinner has been tendered to Dr. John B. Deaver of the German Hospital, Philadelphia. The hosts consisted of 125 physicians who had been operated upon by him for appendicitis and 40 others operated upon for various other maladies.

RECOGNITION OF BOSTON UNIVERSITY IN AUSTRALIA.—The Gazette is informed that the degree of Boston University is now recognized by special act of Parliament in Tasmania, Australia. Those of our readers who have been following the active contest in progress in this commonwealth for and against homoeopathy will learn of this act with pleasure. Dr. Eben C. Gould, a graduate of Boston University School of Medicine, is the first to be registered under the act.

It is also gratifying to note that the opposition started against registration of Boston University graduates in Victoria has been removed and that all such complying with the regulations are eligible to locate in that state.

The success met with by Dr. DeWitt G. Wilcox in the Massachusetts Board of Registration in Medicine examinations recently held must be gratifying to the Doctor himself, as it certainly will be to his friends when informed of the facts. Dr. Wilcox, a graduate from an homeopathic school, has been in practice twenty-nine years, and in theoretical matters would hardly be expected to prove superior to recent graduates fresh from the schools; but as a matter of fact, in a total of seventy-seven who took the examinations Dr. Wilcox ranked second, the first man's record leading his by but one-tenth of one per cent. Of course, those who know Dr. Wilcox will not be surprised and will simply congratulate themselves that they know him, and extend their congratulations to him.

If one may judge from the very attractive program received of the Southern Homoeopathic Medical Association the meeting that was recently held in New Orleans was a great success. Full reports have not yet been received from it, but we certainly judge that this association is far from being dead. Much credit is due to Drs. Hallman and Harper for bringing to such a happy culmination the project which at first seemed almost hopeless.

The graduating exercises of the Training School for Nurses of the Massachusetts Homoeopathic Hospital will be held at the hospital on Wednesday, March 3d. The formal exercises will be followed by a reception in the Out-Patient Department.

HOMOEOPATHIC PROPAGANDISM IN GREAT BRITAIN.—Homoeopathy in Great Britain is by no means dead. Indeed, if we may judge from the most enthusiastic reports received, the cause is more active and the outlook more hopeful than has been the case for many years. The latest and probably the greatest move in its favor will be the public meeting to be held on March 17th at the Mansion House, the official residence of the Lord Mayor, and under the direct patronage of that official, who is himself an enthusiastic homoeopathist. The position of Lord Mayor of London is probably the highest elective civic office in the kingdom. The advocacy of any cause by such an encumbent must, therefore, carry much weight. In addition to the great public assmbly to be held, the Lord Mayor has also consented to preside at a festival dinner of the Homoeopaths, also to be held in London, on June 14th. At this the Lady Mayoress, the Earl Donoughmore, Earl Cawdor, and a number of other dignitaries have already expressed their intention of being present. The purpose of these meetings is to advance the homoeopathic cause by having homoeopathy receive national recognition and by the furtherance of the interests of all homoeopathic institutions along financial lines.

NEW YORK HOMOEOPATHIC ALUMNI.—In response to an invitation sent to the graduates of the New York Homoeopathic Medical College residing in Maine, New Hampshire, Vermont, Rhode Island and Massachusetts, nineteen of the alumni gathered for a dinner at the Copley Square Hotel on the evening of Jannary 22nd, and organized the New England Auxiliary of the Alumni Association.

The object of the auxiliary is "to promote a closer fraternal relation among the alumni and to keep them in touch with the work of the college."

The following officers were elected: President, Dr. H. E. Spalding, Boston, class of '66; secretary and treasurer, Dr. G. H. Wilkins, Newtonville, class of '83.

The newly installed dean, Dr. Royal S. Copeland, was guest of honor at the dinner and received a "royal" welcome when presented by the

president. He gave an earnest talk on the work of the college—what it has been, what it is and what it is to be.

Dr. H. D. Schenck of New York, class of '84, gave interesting details of the work the Alumni Association is doing for the upbuilding of the college.

The president, Dr. Spalding, gave interesting reminiscences of the college in its early days, picturing its meagre equipment on the one hand and its grand faculty of staunch homoeopathists on the other.

Dr. Rand, president of the Alumni Association, by request, recited a poem recalling familiar scenes of student days. It was rendered in Dr. Rand's inimitable style.

The past, present and future of the college were further discussed by Drs. Warren, '70; Moore, '84; Martin, '90, and Croissant, '05.

Credit is due to Dr. T. M. Strong, '71, for good work preliminary to the meeting.

The auxiliary will meet annually on the fourth Friday in January.

G. W. WILKINS, Sec'y.

AMERICAN PROCTOLOGIC SOCIETY.

The tenth annual meeting of this Society was held in Chicago early in June, under the presidency of Dr. A. Bennett Cooke. The officers elected for the ensuing year are as follows:

President, George B. Evans, Ohio; vice-president, John L. Jelks, Tennesee; secretary-treasurer, Lewis H. Adler, Pennsylvania.

The next meeting will be held at Atlantic City, May 31, and June 1, 1909.

CERTIFIED MILK IN WORCESTER.—The Worcester District Medical Society in October invited the Homoeopathic Medical Society and the milk dealers of the city to be its guests at a meeting to discuss milk problems. After a number of papers upon the subject it was voted to establish a milk commission, and to this were appointed the following: Chairman, Dr. Charles L. Nichols; secretary-treasurer, Dr. Roy J. Ward; members, Dr. George E. Emery, Dr. Merick Lincoln, Dr. Lester C. Miller, Dr. Edwin R. Leib,, Prof. L. Kinnicutt, T. H. Gage, Jr. This commission hopes to soon have supplies of certified and inspected milk for the profession.

A NEW IDEA FOR A MEDICAL LIBRARY. The medical men of Newark, New Jersey, have introduced and for several years successfully carried through a project that should be of interest in other small cities and towns, and one that is deserving of wide adoption. Under the leadership of the county society the co-operation of the free public library of Newark was secured. A subscription list was circulated quietly among the physicians, each subscriber being asked to pay the same amount, $3.00 a year. This fund, which now amounts to nearly $500 annually, has been wisely expended in the purchase of the latest medical books, title to which remains with the association. By the arrangements with the public library this institution agrees to house and care for the association's books and promote their use and to furnish a good line of medical journals each year. The collection, which now comprises about five hundred volumes of books and several hundred volumes of medical journals, is kept thoroughly up to date in all respects. Those physicians who have fostered the scheme claim that the membership is maintained, that the use of the books has steadily increased and that the venture may now be pronounced a decided success. It would seem as though some such scheme might be adopted with much benefit in various parts of the country, thereby giving material assistance to the subscribers and rendering them better able to meet the many problems of professional life.

THE NEW ENGLAND
MEDICAL GAZETTE

Vol. XLIV APRIL, 1909 No. 4

ORIGINAL COMMUNICATIONS.

THE TREATMENT OF ACUTE SUPPURATIVE INFLAMMATION OF THE MIDDLE EAR.

By George W. McDowell, A.M., M.D., New York, N. Y.

The treatment of inflammation of the middle ear is of interest to every practitioner of medicine because of its great frequency. It is found in all periods of life from infancy to old age, but most commonly during childhood. Less than a generation ago its importance was greatly underestimated, and the attention given to it correspondingly inadequate. Even at the present time when the pathology of the condition is much better understood and the instruments for diagnosis so simple that any physician can easily become skilled in their use, while cases of chronic suppuration are probably not so numerous as they were twenty-five years ago, the frequency of the disease is still a standing reproach to the medical profession.

What has been done by prophylactic treatment in practically eliminating ophthalmia neonatorum from the list of diseases causing blindness, might be done in perhaps only a lesser degree for suppuration of the middle ear. The aim of medical science today is the prevention of disease, or its cure in its early stages before grave destruction of tissue has resulted. In no disease may prevention play a more important part, nor in any is prompt and efficient treatment of the first stage more successful than in aural suppuration.

The principal causes of suppuration are scarlet fever, measles, diphtheria, typhoid fever, catarrhal colds and grippe, with occasional cases as the result of pneumonia. These are now generally recognized as germ diseases, and this recognition points the way by which, in part at least, the entrance of bacteria into the Eustachian tube and tympanic cavity may be prevented. As these germs may reach the tympanum by way of the lymph stream and the blood current, we are as yet unable to stay their progress through these channels, unless this can be effected by the serum therapy as proposed by Wright in his study of the opsonins.

The bacteria which gain admission to the cavity of the ear by being borne on the air or in particles of mucus, and they are probably the most frequent causes of inflammation, may be largely removed or rendered inert by careful attention to the thorough cleansing of the mucous membrane of the mouth, tongue, teeth, nose, throat and naso-pharynx in all of those diseases usually associated with middle ear suppuration, before suppuration begins.

It has been suggested by investigators that the general toxemia from which the patient suffers in diseases like scarlet fever, measles and diphtheria, impairs the vitality of the ciliated epithelia lining the Eustachian tube so that their fan-like movement toward the pharynx, which tends to prevent the entrance of bacteria into the tympanum, is reduced or abolished, thus leaving the cavity open to infection. Be this as it may, we know that the germs of these diseases are found in the pus formed in the tympanum, and that sneezing and violent coughing can easily carry them thither when the membrane of the nose and throat is covered with mucus containing them.

To detect the first sign of involvement of the ear in the class of cases mentioned the ears must be frequently examined during the whole course of the disease, as infection may occur at any time, and in some cases the symptoms of ear involvement are not well marked or may be so masked by the general symptoms as to be misinterpreted, unless by an examination of the drum-head by means of the head-mirror and speculum the existence of otitis is demonstrated.

The first sign of congestion of the middle ear is indicated by a slight pinkness in Shrapnell's membrane and the injection of the artery along the posterior border of the handle of the malleus. Belladonna, Ferrum phos., Bryonia, Gelsemium, and Pulsatilla are the remedies likely to be of use in this first stage of congestion, the patient's general symptoms in addition to those referable to the ear being relied upon to indicate the remedy appropriate for the case under consideration.

If the ear trouble develops as a primary condition in a patient in previous good health or in the stage of convalescence of some of the causative diseases before mentioned, he should be at once put to bed. Earache has been so long considered a trouble of slight importance that confinement to bed is rarely considered necessary either by the physician or the patient in the first stage. It is my belief, however, based on observation of patients in the hospital, that patients in bed do better than ambulatory cases.

The first indication in these cases is to relieve the pain which at times becomes most intense. Dry heat in the form of a hot water bag will often afford relief in the milder forms of inflammation. Many sedative solutions have been used to drop in the canal heated, but as the relief they sometimes afford is

due in large measure to the heat which reaches the drum-head, this may be better attained by the frequent use of a hot douche of sterile water at a temperature of 110 degrees. Cocaine in an aqueous or oily solution has very little effect in relieving pain as it does not penetrate the outer layer of the drum-head which is a modified skin. In combination with anilin oil and alcohol as will be mentioned later, it produces a sedative effect because this solution is one that passes through the membrane, to a degree, by osmosis. Its use is not advised for the relief of pain because of the symptoms of anilin poisoning which develop when the drops are frequently instilled in the ear. The preparation which has given me most satisfaction in the relief of pain in acute inflammation of the middle ear is a 5 per cent. solution of carbolic acid in olive oil or glycerine. This is warmed and two or three drops are placed in the canal, the patient lying with the affected ear uppermost to allow the solution to remain in contact with the drum-head. This may be repeated in one or two hours, if the pain, which was at first relieved, returns.

The pain in this stage is partly due to the closure of the Eustachian tube with the formation of a partial vacuum in the tympanic cavity. The Politzer bag may be used once or twice daily to open the tube and restore the normal air pressure, but only after the nose and naso-pharynx have been thoroughly cleansed. Inflation causes momentary increase of pain which later is rather less than at first. Some cases there are of great severity in which no internal or local medication can do more than slightly dull the savage intensity of the agony, which the Egyptians likened to a fire burning in the ear. The increasing pain robs the patient of sleep and in forty-eight hours will often render the face of a strong man wan and haggard as if from weeks of illness.

If unchecked in the first stage, the congestion in the ear increases, the drum-head will become uniformly and deeply reddened, the Eustachian tube remains closed and the vacuum in the tympanum favors an increased flow of blood to the tissues of the cavity already engorged. An exudate begins to form which soon fills the little cavity of the middle ear and with each succeeding hour causes increasing pressure on the drum-head. The history of the case from this point onward varies greatly in different individuals and in accordance with the virulence of the infection. In small children and in adults in whom the drum-head has been weakened by some previous inflammation, the drum-head is liable to rupture early. In some children and in most adult patients the drum membrane is more resistant, and if Nature is allowed to take her course rupture may not occur for days or even weeks. A most remarkable case showing the resisting power of the membrane in rare instances, is that reported by Dr. Robert T. Cooper, as having occurred in a two-year-old child of a physician, forty years ago in England. For a

month the child was feverish, restless, tossing its head to and for, throwing its arms and legs about, and constantly screaming as if in intense pain. After a month of treatment directed to everything but its ears and when the patient was worn to a mere shadow of himself, a discharge of pus appeared first from one ear and then from the other with prompt relief of all symptoms. The torture endured by that child for a month can only be faintly appreciated by one who has had an earache for a day or two.

When the increasing exudate in the middle ear has reached the point where the bulging of the drum-head is well marked, or even earlier if the pain is very severe and beyond control, rupture of the membrane should be anticipated by making a free incision through the most bulging portion, or in the posterior half of the drum-head. The time for making the incision must be governed by the appearance of the membrane and the suffering of the patient.

The intensity of the pain will often be the governing indication as we well know that prompt relief follows a free incison, except in those cases where the mastoid cells are already extensively involved, and even here the suffering is much lessened. With the incision of the drum-head the case becomes a surgical one and must be treated along surgical lines. This presupposes in the treatment of an abscess cavity continuous free drainage as long as pus is formed. This condition can only be satisfied by making a free incision in the drum-head and keeping it open so long as suppuration continues. The older otologists advised a small puncture of the membrane, but this is entirely inadequate to afford efficient drainage, and in many cases only gives slight relief from pain.

As the incision of the membrana tympani is a painful operation, either the part must be anesthatized or a general anesthetic given. Up to the present it has been impossible to produce complete local anesthesia with the means at our command. Cocaine in a watery or oily solution produces but slight effect on the drum-head, because its outer layer is a modified skin and as such is not responsive to the influence of cocaine in that form.

A solution which has a greater anesthetic effect is as follows:

Cocaine hydrochlorate grs.xxiv.
Anilin oil.
Alcohol 50% āā drachms ii Misce.

This forms a deep red solution. The canal may be filled with this solution which is allowed to remain in contact with the drum-head for ten minutes, at the end of which time its sensitiveness is considerably lessened but not to such an extent as to render an incision painless. It is useful in vigorous patients who are willing to endure a certain amount of pain, or under conditions which would render the use of a general anes-

thetic unadvisable. Children should always be given a general anesthetic, a few inhalations of chloroform, nitrous oxide or ethyl-chloride being sufficient to render the child perfectly quiet and permit the operation to be performed properly and without pain.

Before incising the drum-head the external auditory canal must be rendered as aseptic as possible by douching with a warm sterile salt solution, a bichloride solution of 1 to 5000, or any similar preparation. After the incision has been made the canal is again douched and dried. A narrow strip of gauze is now carried to the bottom of the canal to act as a drain, a large pad of gauze with an outside layer of cotton is placed over the ear, the whole being held in position by a firmly applied bandage. This dressing is removed in 24 to 48 hours. If the case is being treated at home, as most of them are, the ear must be douched as often as may be necessary to keep the discharge from accumulating in the canal. The ear should be examined daily by the physician and thoroughly cleaned with cotton on an applicator.

That the early incision of the drum-head materially shortens the duration of the after suppuration, as compared with these cases in which the drum-head is allowed to rupture, is shown by the following table, taken from the "Lehrbuch der Ohrenheilkunde" by Dr. Otto Koerner of Rostock.

Drumhead was incised on the							
1st day in	11 cases.	Discharged cured with drumhead healed in				7	days.
2nd day in	13 cases.	"	"	"	"	9	"
3rd day in	8 cases.	"	"	"	"	14	"
4th day in	9 cases.	"	"	"	"	15	"
5th day in	13 cases.	"	"	"	"	16	"
6th day in	4 cases.	"	"	"	"	24	"
Spontaneous rupture of the drumhead occurred on the							
1st day in	14 cases.	Discharged cured with drumhead healed in				14	days.
2nd day in	10 cases.	"	"	"	"	17	"
3rd day in	9 cases.	"	"	"	"	26	"

These statistics clearly show not only that cases in which the membrane has been incised heal in about half the time that is required for a case in which spontaneous rupture has occurred, but also that an early incision very materially shortens the time of healing as compared with cases in which the operation was deferred. As the cases that were incised on the first day were healed on the seventh day while the cases operated on the sixth day were not healed till the twenty-fourth day, the question naturally arises why not operate all cases on the first sign of trouble. This would seem to be a rational method of procedure were it not for the fact that quite a large percentage of the cases of catarrhal inflammation of the middle ear neither rupture nor require incision, and that in the first stage the symptoms of both the catarrhal and suppurative inflammation are practically identical.

After the drum-head has been incised the ear must be

watched as carefully as before, if we expect to obtain the best results. Not infrequently a free incision will close almost entirely in forty-eight hours, leaving a pin-point opening which will be insufficient to afford free drainage, without which healing will be greatly delayed. In cases where the incision tends to close it should be enlarged and its edges touched with carbolic acid to prevent healing. If a perforation thus made remains patulous after the discharge has ceased, which is rare in case of a clean cut incision, although often found in spontaneous rupture, the edges of the opening should be freshened with a sharp curette which will tend to induce closure.

The remedies for use when the discharge is established, whether as the result of an incision or a spontaneous rupture, may cover a very wide range. Only a few of those most often used in every-day practice will be here mentioned.

Usually the stage for Belladonna, Ferrum phos., Bryonia, and Gelsemium is that which characterizes the condition before pus has formed, or at least before the drum-head has ruptured. After the drum-head has ruptured or been incised, the symptoms are of a different character and another class of remedies comes to the front.

Chammomilla is valuable both before and after suppuration appears, especially in teething children, and in those adults who appear to be hypersensitive.

Ferrum phos. I have found useful in suppurative cases when the acute symptoms do not subside when the discharge is established. the drum-head remaining deeply congested, with pain and throbbing in the ear.

Hepar sulphur is probably the most commonly used of our remedies, often, no doubt, without any other indication for its use than that the ear is discharging. Sensitiveness of the ear to touch, especially pronounced when the cotton applicator is introduced into the canal; aggravation of the symptoms from cold and relief from warm applications are indications pointing to hepar.

Silica, which is usually indicated in chronic rather than in acute suppuration, resembles hepar in the sensitiveness to cold and relief from heat. It is characterized by a thin discharge, and with an entire lack of sensitiveness of the ear to manipulation. I have seen a silica infant who cried lustily when an attempt was made to examine its ear, close its eyes with a most blissful expression when the cotton was introduced into the ear for the purpose of cleaning it. It is also useful in closing perforations after discharge has ceased.

The Calcareas are extremely useful in that large class of so-called scrofulous children so often seen in our city clinics. I need not mention the characteristics so well known to all of us. I would simply suggest that as adenoids and enlarged tonsils are causative factors in acute and chronic suppuration of the

middle ear, that valuable time should not be wasted in the attempt to reduce these growths with internal remedies, while the suppuration may be going on unchecked to a possible fatal termination, or more certain destruction of function. In such a case time is a factor of great importance, and expediency should control our actions.

Hydrastis. Discharge from the ear of a muco-purulent character, associated with post-nasal dropping of thick mucus. Dr. Cooper says: "Hydrastis has probably the strongest pathogenetic action on the ear of any known drug, and has certainly in my experience a very strong curative action."

He advises as a local application in chronic suppuration one drachm of hydrastis tincture to the ounce of glycerine. This in my hands has not proved so entirely satisfying as it seems to have been to Dr. Cooper.

Capsicum is of value in relieving pain in the early stages of mastoid involvement, but is probably of very little value in extensive empyema of the mastoid cells.

Cases of acute inflammation of the middle ear when seen in the early stage usually respond quickly to treatment, and as a rule recover in from three to four weeks. After the discharge ceases and the perforation closes, the case should not be discharged as wholly cured until an effort has been made to restore the hearing to as near the normal as the circumstances will permit. The ears should be inflated every other day for two to three weeks, and massage applied to the drum-head to break any adhesions that may have formed in the tympanic cavity which would impair the mobility of the ossicles and the membrana tympani. In this stage Mercurius dulcis and Kali muriaticum are valuable for the absorption of exudate and the opening of the Eustachian tube.

UNITY IN MEDICINE.—We abstract from the International Journal of Therapy the following ideas concerning unity in the medical profession: To unify the profession, to bring under one roof all men who are practicing medicine legitimately, is the wish and aim of all those who love the profession and its ideals. What now is looked upon as the consummation devoutly to be wished, will ere long be the unavoidable outcome of the present condition. Even granting that sectional therapeutic interests have a raison d'etre, why should the profession be divided into hostile camps? No one, except an idiot, ever thought of classifying the men practicing physical therapeutics under the head of a special school or sect. They are physicians in identically the same sense as surgeons or any other specialists. They represent a specialty in therapeutics. Why should homoeopaths or eclectics be classified otherwise? There are associations of laryngologists, dermatologists, etc., for the purpose of studying certain minor subjects in general medicine. The men belonging to these associations do not constitute special schools in medicine. Their association does not kill ambition and progress. On the contrary, it concentrates and intensifies effort. Why should we not have special associations for the study, elaboration, and practice of minor therapeutic subjects or special therapeutic methods? This would enhance the work quantitatively and qualitatively. It would serve to disseminate knowledge and promote the true aims of medical practice.

FURUNCULOSIS OF THE EXTERNAL AUDITORY CANAL.

By Thomas L. Shearer, M.B., C.M. (Edinburgh), Baltimore, Md.

Circumscribed inflammation of the external auditory canal may involve either the hair follicles or the sudoriferous glands. As these structures are only found in the cartilaginous or external part of the canal, the furuncles or boils do not occur in the deeper or osseous portion of the passage. The boils may be a local manifestation of a general furunculosis, may arise from an unknown cause or be the result of a local infection. Of all these causes the most frequent is mechanical irritation, the result of scratching the ear with the sharp tipped finger nail, hairpins, the head of the ordinary pin, and other blunt or sharp instruments, followed by inoculation. Cutaneous diseases, such as chronic eczema, and suppurative otitis media sometimes, by leading to a loss of superficial epithelium, offer an abraded surface which acts as a point of entrance for pathological organisms. Probably in the larger proportion of cases local infection is the direct cause of these annoying inflammations, but certain constitutional states such as debility, impairment of the general health, disturbances of digestion, anaemia, diabetes, and, in a few instances, reflex tropho-neuroses render the patient very liable to the malady. Occasionally furuncles occur without any appreciable cause and to this class the term "idiopathic" is applied; however, it is consoling to realize that every year of scientific research diminishes the number of so-called idiopathic diseases, for the word is now simply a frank expression of ignorance. The fibro-cartilaginous part of the canal is freely supplied with glands, and the inferior, posterior and superior walls are more frequently attacked than the anterior wall. As a rule, the focus of inflammation is located near the orifice of the meatus—although it may be found in any part of the canal. The abscesses occur usually in groups, rather than singly, as the infectious material may have infected several glands at the same time. Sometimes the boils follow one another in "crops," and indicate a deeper underlying diathesis. The hearing is usually but slightly affected unless the lumen of the canal is greatly or completely obstructed. Pain is more or less intense according to the depth of the inflammatory process. The furuncle does not always present the appearance of a boil, as the skin is tense and adheres closely to the cartilaginous meatus, thus preventing the usual elevated formation; the swelling is, therefore, then more diffused and only slightly elevated. The first symptom of the process are usually a feeling of fullness or discomfort in the ear or a sensation of itching relieved by pressure against the tragus. Very soon, however, one finds that this region—the tragus—is tender on pressure and later pain in the ear becomes pronounced. At

this stage sometimes tinnitus of a high pitched quality develops caused by congestion of the deeper parts from the increased blood supply or to stenosis of the canal. The pain becomes more severe, and in twenty-four hours from the onset of the symptoms may be unbearable; then the pressure in front of the tragus especially aggravates it. At times mastication, through the relation of the cartilage of the tragus to the intermaxillary articulation, becomes difficult and only liquids can be swallowed. Pain is usually worse at night and may prevent sleep, although the patient can attend to his duties during the day. If the furuncle is located on the anterior wall of the canal the region in front of the ear becomes swollen. If, however, the abscess affects the posterior wall of the canal, the auricle may be rendered more prominent, crowding the external ear forward and making it stand out more from the side of the head than the ear of the opposite side. In these latter cases considerable oedema of the skin behind the ear may be present, and the slightest pressure upon any part of the ear causes pronounced suffering. The cervical and pre-auricular glands may be infiltrated, giving rise to swelling and induration along the sterno-mastoid muscle or over the side of the face directly anterior to the ear respectively. Fever may be present or absent—but usually develops if glandular involvement occurs. There is a general feeling of malaise, some headache, loss of appetite due to the loss of sleep and pain rather than to any general infection. These symptoms last for three or four days and disappear with the rupture and discharge of pus from the little abscess. In the early stage of the inflammation the diagnosis may not be easy as the patient is often unable to locate the pain, referring it to diseased teeth or some other part of the face adjoining. It is best, then, to make an examination of the ear without any speculum, drawing the auricle upward and backward in an adult, or, in a very young child, downward and backward; then use reflected light for the examination. After thorough visual inspection of the canal, a cotton-tipped probe should be gently pressed against the anterior, superior, inferior and posterior walls of the passage, thus searching for any points of tenderness which may be the forerunners of inflammation. A slight tumeaction may be observed encroaching on the lumen of the canal from one of its walls. There may be no change in color from the surrounding parts or a slight pinkish hue may be seen. Having determined these points, one should gently insert the speculum, cautiously watching for any evidence of special sensitiveness—after making due allowance for a certain amount always noticed in the ears of some people. Through the speculum the deeper parts of the canal should be tested with the cotton-tipped probe and any marked tenderness and swelling in that locality looked upon with suspicion; this is particularly the case if the swelling is found upon the posterior superior wall where such an appearance would point to inflammation in the mastoid antrum.

The otoscopic picture when this condition exists in the osse-

ous portion of the canal gives the impression of a canal rapidly becoming narrow at the fundus, the line between the drum membrane and the superior and posterior walls of the meatus being poorly defined. At times only a small slit-like opening is visible at the inner extemity of the canal, the membrana tympani being nearly completely hidden from view except over this area. This points to fluid in the mastoid antrum which may have arisen in the canal or commenced in the antrum. In furuncular inflammation the orifice of the meatus is the narrowest part, and once the speculum is past that region the diameter of the canal permits one to have a clear, unobstructed view of the deeper portion. Any movement of the auricle will produce discomfort and pain if furunculosis in the fibro-cartilaginous canal exists; if oedema to a marked degree is present over the mastoid process, care must be taken, during examination, to exert pressure with the thumb against the mastoid process inward and backwards—without drawing on or disturbing the auricle. In this way tenderness or pain elicited by such pressure over the mastoid area would point to mastoid inflammation, provided no movement of the canal occurred. If the inflammation is confined to the canal, such pressure, however firm, will not produce pain; but the same amount of pressure directed forward so as to move the auricle and the cartilaginous canal will occasion suffering. This is a most valuable point in diagnosis, and in every case of pain in or about the ear let us remember that a furuncular condition may exist. And now, once the nature of the case is well defined what treatment should be employed? This naturally divides itself into local and general—or internal.

I. Local.

When a patient presents himself before any special inflammation has developed, except slight localized tenderness, the canal may be syringed with a warm saturated solution of boracic acid, gently dried and a 5 per cent. solution of carbolic acid in glycerine applied to the part. If the boil develops or has developed, an incision should be made into it and immediately after the incision, the 5 per cent. solution of carbolic acid in glycerine should be applied to the wound. If a purulent discharge from an otitis media exists, the canal must be kept cleansed of the infective discharge by syringing with a small rubber bulb syringe, in which equal parts of warm water and a saturated solution of boracic acid are used. This should be done every three hours if the discharge is profuse and continued until conditions improve. As watery solutions cause maceration of the epithelium lining the auditory canal and the membrana tympani, syringing should be discontinued as soon as possible after discharge diminishes or ceases. Poultices should never be used in the cases of furuncles, but there can be no objection to the application of the hot water bag to ease pain.

II. Internal or General Treatment.

If the case is seen very early, a remedy such as Podophyllin,

given at bed time to act upon the liver and incidentally to eliminate any putrefactive substances in the intestines, is an excellent way to begin treatment. Pulsatilla (when the tincture is reliable and made from good, fresh materials) will frequently abort these little inflammations and prevent suppuration. It is best exhibited in the 3x *dilution* on tablets and two tablets given every half hour or hour for a few doses. If the process has advanced too far for this remedy and suppuration is apparently inevitable, Hepar sulphur 3x trituration in tablets, a tablet every hour will hasten the process. Once the boil has discharged, a few tablets of Silica, 6x trituration, a tablet every two hours will render excellent service. After the attack has subsided, and to prevent fresh furuncles developing, Calcarea picricum, 6x trituration, may be given—a tablet three times daily. It is an excellent remedy and of course applies to cases of general as well as localized furunculosis. It is remarkable that this well-tried means of combating the constant recurrence of furuncles has been so little used by either specialists in ear diseases or by general practitioners. When the patient is a sufferer from diabetes mellitus, appropriate diet and remedies would, of course, be indicated. If the boils have developed because of defective metabolism (diminished oxidation) and retained waste products, thus lessening the general power of resistance to infections, steps should be taken to overcome this situation at once by exercise, drinking freely of good, pure water, abstaining from alcoholic beverages, fatty, fried, greasy foods, rich pastry, sweets, and too much "red" meat; by living on cereals, milk, chicken or turkey, eggs, fruits and vegetables until the condition improves. Any suitable laxative, such as Mercurius dulcis, 1x tablet triturates, followed by Cascara, may be given to carry off any products of intestinal putrefaction. If anaemia and general debility be the underlying cause of furuncles, plenty of fresh air, good food, sunshine and rest, even sleeping in the open air, are indicated. Iron in a suitable form can be exhibited if the blood percentage of haemoglobin calls for it; but it is most important to ascertain the cause of the anaemia before prescribing iron. In all cases in which furuncles are encountered, diminished power of resistance to disease is present, and unless we ascertain the cause of this lowered index and remedy it, the furuncles will continue to recur. Finally, patients should be advised to let their ears alone; to be content with the generous use of soap and water about the external parts of the ear, and in the event of any irritation of any kind arising in the external auditory canal to consult their physician about it. There is too much jabbing of sharp-tipped finger nails, hair pins, twisted corners of towels, and other substances into the canal, and the dropping of hot oils, laudanum, cocaine solutions, pain drops, etc., into the ear is especially to be condemned. No one would treat his gold watch in that way; are we to think less of our organ of hearing, lying as it does in close proximity to the cranial cavity?

INCISION OF THE DRUM-HEAD.

By Howard P. Bellows, M.D., Boston, Mass.

One of the simplest and yet one of the most satisfactory of all the operations upon the ear is incision of the drum-head. But like other simple operations, it may be so botched that the patient is needlessly tortured, or it may be done so inopportunely that nothing but disappointment or damage results. In any given case the first question is, naturally, whether to incise or not, and the answer requires an accurate estimate of the local condition present, as well as a knowledge of the conditions which are relieved and also of those which are made worse by an incision. Without some degree of skill and some experience in the inspection of the canal and drum-head, by means of the head-mirror and speculum, the very first step in determining whether or not to incise cannot be taken. Assuming that the specular examination has been properly made, and the local changes recognized with confidence, the question as to the expediency of incising is fairly opened.

When to Incise.

Whenever in the course of an acute inflammation of the middle ear there is severe pain and tenderness, accompanied usually by a sensation of fulness and tension and by subjective noises and reverberation of the patient's own voice on the side affected; when this condition tends to increase rather than diminish as time passes; and when upon inspection the drum-head shows an outward bulging, together with the evidence of marked local congestion in the middle ear, the incision should always be made, and with as little delay as possible. Not only is it desirable as a means of relieving the distress of the patient but also as a means of shortening the suppurative attack which is developing, and of conserving the hearing power of the ear and the subsequent integrity of the drum-head—since a clean incision heals usually with no loss of tissue while a spontaneous rupture, if allowed to occur, very frequently leaves a permanent perforation.

There are cases where the degree of pain and tension is quite out of proportion to the local appearance of bulging and congestion, and is not to be explained by hypersensitiveness on the part of the patient. The drum-head may look flattened, thick and gray and distinctly less congested than the thinner, more translucent and plainly inflamed and bulging drum-head just referred to. There may also be some degree of dizziness characterizing these cases. In such, incision is demanded even more than in the cases first named, because here the drum-head has been made abnormally resistent through the thickening effect of previous catarrhal disease, and the increasing tension in the tympanic cavity threatens the integrity of the internal ear itself,

the citadel of the hearing power and the chief factor in the ear's subsequent usefulness.

In the presence of mastoid inflammation the freest incision of the drum-head is often demanded for the purpose of securing abundant drainage, and an incision is even carried upward onto the superior canal-wall for the purpose of both drainage and depletion.

In cases where the drum-head appears to be of practically normal thickness, where the pain, although severe, is not unbearable, and where there is only a moderate degree of congestion of the middle ear, the incision should not be made, even if there is evident a slight degree of bulging. These are cases of acute catarrhal rather than of suppurative inflammation, and the paracentesis should at least be deferred, in the hope of bringing down the inflammation, mitigating the pain, and securing resolution without perforation or discharge. In these catarrhal cases an incision is made only in the presence of very marked bulging and tension, accompanied by violent increase in pain.

Still other cases are occasionally seen where the pain is severe and where the drum-head is so highly congested that it appears thick, sodden and beefy, but with flattened surface rather than bulging. Here an incision should never be made, for in this state of acute myringitis an extensive sloughing of the drum-head would almost surely result.

In the non-inflammatory conditions an incision of the drum-head is only made to evacuate muco-serous fluid accumulated within the tympanic cavity in cases of otitis media serosa; to liberate some foreign body lodged in the tympanic cavity; for purposes of exploration; or as a first step in operations involving the ossicles or tendons of the middle ear.

Where to Incise.

Having determined the necessity for an incision of the drum-head the point chosen is usually the posterior-inferior quadrant, either following the direction of the inferior border of the membrane, at a short distance only from its insertion into the tympanic ring, or else carrying a more vertical incision downwards to terminate close to this inferior border. In case there is a distinct area of bulging, however, at any other point upon the surface of the drum-head, the incision is made directly through this area, wherever it may be. In case of mastoid involvement the distinctive incision sometimes made enters near the superior border of the drum-head, just below the end of the posterior fold, and extends upwards well onto the superior-posterior wall of the external canal. Exploratory incisions, or those for operative entrance to the tympanic cavity, may be made wherever desired.

How to Incise.

The preparation of the parts. This is a matter of no little importance. First must come the cleansing. If the ear is tender

and painful and much inflamed this is a delicate process, but none the less necessary. A careful removal of wax, scales or accumulations of any kind can be made with the ring-probe and with cotton wound upon the applicator, under perfect illumination and with extreme care not to alarm the patient, especially if it be a child. Then follows a soaking of the canal in dioxogen, full strength, either applied upon a loose, wet pledget of cotton, left in position for some minutes, or by filling the canal, with the patient in a recumbent position. In exceptional cases a solution of the bichloride of mercury—one to four or five thousand—may be advisable. When inflation is to be practised, following a paracentesis, in order to expel fluid contents from the tympanic cavity through the incision, it is desirable to also cleanse the nasal cavity and naso-pharynx with an alkaline spray previous to the operation upon the ear.

Anæsthesia. Following this comes an application of cocaine to the surface of the drum-head. This is not very satisfactory as a local anæsthetic but it is the best we have, on the whole, for the purpose. It will not completely obtund the sensitiveness of the drum-head upon incision but will lessen it, and will at least let the patient know that all is being done that can be to make the operation easier for him. I find it well to explain that the pain will be only momentary and less than is often caused by the dentist. I have found even children reasonable in regard to this when they feel that one is really frank and truthful with them. The best way to apply cocaine is to use a ten per cent. solution in equal parts of anilin oil and absolute alcohol—a cotton pledget saturated with this solution to be held for a few minutes in close apposition with the drum-head. Failing to have this at hand an ordinary four per cent. aqueous solution, well applied, is better than nothing, at least in its effect upon the patient's mind. General anæsthesia is seldom necessary or desirable for this operation when it is properly done, the pain being so momentary and often so slight. When the deep, upward incision is made, however, in mastoid involvement, the pain, both at the time and afterwards for some minutes, is very much greater. The use of nitrous-oxide gas is the ideal anæsthesia in these cases, especially as the patient can thus be kept in an upright position during the incision, a matter of very decided convenience to the operator. A short chloroform anæsthesia would be next in desirability, when this agent can be safely employed.

The knife. The great secret of success in the performance of a paracentesis with the minimum amount of pain and distress to the patient I believe lies in the choice and preparation of the knife employed. I much prefer a broad paracentesis needle, so-called, to any other kind. Not the narrow, pricking instrument so commonly presented by the instrument maker, which is

wretchedly inadequate for the purpose, but a little, thin, diamond-shaped knife having a breadth across the blade of at least 3 mm. This should invariably be tested, in every case, before use and should be so exquisitely sharp in its point and double cutting edge that it will slip through the testing-kid without the slightest sense of resistance. This is the secret. A point which is slightly dull, or an edge which catches the least bit as it cuts, means torture to the patient in spite of any other precaution or any degree of skill which may be employed. In making the deep superior incision I prefer a small, sharp-pointed, curved bistoury, with rather stout blade. Of course the careful sterilization of the knife is essential.

The manner of incising. This is also a matter of some importance, from the patient's standpoint, at least. Under perfect illumination, with the patient if possible in an upright or semi-upright position, the knife is advanced rather slowly through the speculum until its point is brought close to the surface of the drum-head at the desired place. A little, quick lunge then plunges the knife through the membrane, and if an incision is desired which is longer than the breadth of the blade a quick cut is made, in the desired direction, as the knife is withdrawn. It is wise, in all cases, to make the incision rather too long than too short, a long incision healing almost as rapidly as a short one and both healing, as a rule, much sooner than we want them to. In the case of the superior incision more time must be taken to insure the length, depth and position desired.

After Treatment.

Purulent accumulations within the tympanium usually evacuate themselves readily after the incision, and the ear continues to discharge until the suppuration ceases. Wick drainage is often useful, and thorough daily cleansing of the canal with absorbent cotton, and sometimes with dioxogen on cotton. Syringing after recent incision is to be avoided, and instillations of any kind are rarely advisable.

After incision for the evacuation of muco-serous accumulation within the tympanic cavity it is necessary to draw out the fluid with the pneumatic speculum, or blow it out by inflation through the Eustachian tube, or both. In two or three cases I have seen the accumulation so thick and tenacious, like caoutchouc, that it could only be withdrawn by engaging and stringing it out with forceps. When the secretion is thin it can usually be blown or drawn out two or three days in succession, if it tends to reform, but by the end of that time the incision is usually found so firmly healed that reopening is impossible with any degree of force which can be used in inflation. The only local protection necessary after incision of the drum-head is a loose wad of cotton in the external meatus, to be worn until healing is complete, with careful avoidance of exposure to draughts or cold winds.

EARACHES IN CHILDREN.

C. Gurnee Fellows, M.D., Chicago.

At a recent informal gathering of physicians I was asked the question—"What sort of cases should the general practitioner send to the specialist?" The query referred to ear cases only at the time.

Within a few days an ear case has been sent to me by a general practitioner, and the physician asked me during the course of my treatment whether it was proper to have sent me the case. In other words, was he bothering me to take care of a simple case that he could have taken care of as well; was I willing or anxious to see that class of cases, or should the physician be sufficiently educated to take care of them without the aid of a specialist? These questions evidently are in the minds of both the general practitioner and the specialist.

These questions of ethics—as to when a patient should go from the general practitioner to the specialist and from the standpoint of the latter when they should come, perhaps have not been discussed sufficiently, and, of course, I can only give my views upon the subject.

To take an illustration: This last case was one of suppuration, with spontaneous rupture of the drum membrane, the patient having been confined to his house with the usual symptoms for several days. I told the physician that I thought he was right in sending the case for the following reasons: The general practitioner is not prepared with instruments of precision, and often is not capable of making deep local applications or deciding whether to syringe or not. Although many of these cases do go on to spontaneous closure of the drum membrane and the absence of symptoms, a large proportion of them are left slightly deaf, to be subject to recurrent attacks with increased deafness, and then finally seek a specialist of their own volition. In other words, an acute attack that is not entirely cleared up and restored to the normal, leaves a patient somewhat diminished in hearing and more subject to subsequent attacks of acute inflammation.

What can the specialist do to help him? His methods of examination by proper speculae and good illumination, by magnifying speculae of the type of Siegel, through which he can carefully observe the conditions of the drum membrane and infer those of the tympanic cavity, his ability to clear out absolutely all discharge that may remain in the form of secretion which cannot extrude itself but must be mopped out, or in a case of gelatinous secretions within the tympanic cavity must be sucked out by means of some pump or vacuum apparatus, the restoring of

the patency of the Eustachian tube and finally the testing by the watch, acumeter, voice and tuning fork to know that the conditions are normal before the patient is discharged, are a few of the things that can be accomplished. I think it is the experience of all specialists that patients left to their own volition simply fail to come to their physician when the discharge stops or soon after that time, and that it is really wrong for them to do so, for then is the time when their hearing is as much at stake as ever, though the pain has ceased.

Another question that the general physician meets is whether the drum membrane should be allowed to rupture spontaneously or should be opened surgically, and the man most familiar with the subject will generally tell you that it is preferable to err on the side of surgically opening the tympanic cavity too soon than to allow for the dangers which often arise from too tardy spontaneous rupture. In other words, mastoid inflammation is much more common in the latter case, and here the specialist can give the general practitioner much assistance. I have seen many cases of incipient mastoid inflammation disappear after the drum membrane had been opened and emptied by suction, which latter may be used not only through the external canal but likewise through the Eustachian tube, in some cases without doing a paracentesis.

The application of hot douches through the external canal and the application of icebags over the mastoid region, together with the homoeopathic remedy, will assist still other cases to a good recovery. With all of the indications for surgical interference, there is no place where homoeopathic remedies exert such a happy influnce as in this very class of cases; and I would not give up belladonna, hepar, capsicum, bryonia and the mercurials so long as they could be obtained, for their action is often prompt and generally satisfying.

These diseases of acute suppuration, with the involvement of the mastoid, constitute by far the greatest number of cases which show themselves by "earache in children." We all see earaches which come with decayed teeth and are evanescent and really are spontaneously cured or disappear with the cause when the teeth are restored or pulled, but a careful inspection of the drum membrane and other well-known tests settle the question of diagnosis. In the one case the withholding of ear treatment will result in a cure, and in the second case the best that we have is none too good.

I believe that in the incipient stage of middle ear inflammation our homoeopathic remedies are of great assistance, but I know that they are very much assisted by the proper local application of heat, rarefaction of the air in the external canal, or careful tentative opening of the Eustachian tube. The more we see of such diseases, the more careful we are to exert our best efforts in the beginning of trouble and so avoid the severer com-

plications which so frequently arise. It is no criticism of the general physician that he cannot be "up" in every specialty, and this disease, being only one of the many to which children are liable, demands the best that any physician can furnish, be he general practitioner or otologist.

I believe that the deaf people of the future will be fewer in number than they are today, as they are fewer now with our modern methods than they were twenty years ago. The answer to my friend's question is therefore contained in the above discussion, and as a resume I should say that when a physician is is in doubt, be he general or special practitioner, he should not hesitate to ask for consultation, and so early that the patient may gain the benefit of the prevention of complications and severer methods of treatment when possible, and thus be as sure as two or three physicians can be, that all is being done for the interest of the unfortunate sick that can or ought to be done.

THE EVOLUTION OF OUR PHARMACOPEIA AND A BRIEF REVIEW OF EFFORTS MADE TO SECURE ITS ADOPTION.*

By J. Wilkinson Clapp, M.D., Boston, Mass.

The term Pharmacopeia (lit. the art of the drug compounder) in its modern technical sense denotes a book containing directions for the identification and preparation of medicines, published by the authority of government or of a medical or pharmaceutical society. Directions for the preparation of prescriptions have been found in a papyrus dating back to 3300 years B. C. Cuneiform inscriptions contain formularies corresponding in some respects to the modern idea of a pharmacopeia. The earliest collection of formulae, showing evidence of supervision of drugs, was a Sanskrit work entitled "Prayogramarita" of Vardij-achim-tamain. The "Compositiones Medica" of Scribonius Longus, written 42 A. D., is evidence of a Roman attempt to fix some standard.

An Arabian book of formulae, the "Ibdal," appearing in the year 900 A. D., included directions for preparation of drugs. To the Arabs is credited the first pharmacopeia and the establishment of the first apothecary shops. From them we have had handed down to us many of the names and forms of medicine familiar to all pharmacists.

The first work corresponding to the modern idea of a pharmacopeia, and which received legal sanction in Europe, appeared in 1542 and was entitled "Pharmacorum Conficiendorum Ratio, Vulgo Vocant Dispensatorium" by Valerius Cordus.

The term pharmacopeia as a distinct title was first used in 1561. The work of Aldrovandi of Bologna entitled the "Anti-

*Read before the Hughes Medical Club, November 27, 1908.

dotarii Bononiensis Epitome" is of importance as furnishing the model from which nearly all subsequent pharmacopeias have been compiled. The last edition of the Cordic Dispensatory published in 1666 contains in addition to the old Galenic formulae, chemicals, extracts and tinctures and all classes of medicines found in modern pharmacopeias with the exception of alkaloids, which were not discovered until the nineteenth century.

The first Prussian standard was issued in 1698, the first Austrian pharmacopeia in 1739, while the first Spanish pharmacopeia appeared in 1601. In Paris the first was issued in 1637.

In 1617 the first authorized London Pharmacopeia was issued under the direction of the College of Physicians. In 1699 the first Edinburgh Pharmacopeia was published, and in 1807 the first Dublin Pharmacopeia. By Act of Parliament in 1858 these were combined in what is today the British Pharmacopeia, although the first edition was not issued until 1864. The first American Pharmacopeia was published in 1778, the result of efforts of Dr. Felton of Delaware to reform the commissary department of Washington's army.

Twenty-three or more countries now have official Pharmacopeias. These have been issued under the authority of their respective governments, excepting in the United States and possibly Mexico, and in the United States the U. S. Pharmacopeia has been duly recognized by the general government and most of the States as the standard in the national and State laws regulating the sale of pure drugs.

The early part of the nineteenth century marks the date of the introduction of homoeopathic pharmacy by Samuel Hahnnemann. He selected for the dispensing of medicines but two forms of preparations. As the form to best preserve and dispense drugs made from fresh or dried vegetable substances he selected the "tincture" (originally introduced by Paracelsus) and he himself devised what he designated as "triturations" as a means of comminuting and attenuating medicines prepared from chemicals and from insoluble substances.

While he failed to supply us with a pharmacopeia, in several of his works he gave us much information as to the preparation of medicines.

In his "Fragmenta de Viribus," etc., published in 1805, he gives directions for making 27 medicines. In his Materia Medica Pura, published in 1811-20, and in his "Chronic Diseases," published in 1828-30, he enlarged his list and gave directions for the preparation of triturations.

The total number of medicines made by him of which we have a record is eighty-three, forty-seven of which were made in form of tincture.

Several homoeopathic pharmacopeias were published during the life of Hahnnemann and it is probable that they received his approval. Among them may be mentioned Caspari's, Hartmann's

and Jahr's, the latter published in Paris in 1841 at the time Hahnnemann was a resident of that city, follows more closely the directions of Hahnnemann than any other. This work was extensively used in the United States for many years: an American edition was published in Philadelphia in 1842, this being the first homoeopathic pharmacopeia published in this country.

Among other homoeopathic pharmacopeias of importance may be mentioned Quinn's, published in London in 1834; Buchner's, published in München in 1840, and particularly the one published in 1845, by Carl Ernest Gruner, a German apothecary. Gruner introduced the process of maceration for the preparation of all tinctures, including those made from fresh plants in lieu of the process of expression used by Hahnnemann.

The pharmacopeia entitled "Jahr & Gruner's New Homoeopathic Pharmacopeia and Posology," edited by Dr. Charles J. Hempel, followed, this being compiled from the works of Jahr, Buchner and Gruner. This became the leading authority for many years, and is today used by several of our pharmacists. The work of Doctor Wilmar Schwabe, an apothecary of Leipzig, entitled "Pharmacopoea Homoeopathica Polyglottica," should be mentioned. It was first published in 1872, and while purporting to follow Hahnnemann's works does so in only sixteen out of the eighty-three Hahnnemannian medicines included.

Dr. H. R. Madden of England was the first to call attention to the necessity of securing uniformity in the preparation of homoeopathic medicines, and through his efforts and the aid of Dr. Frederick F. Quinn, then president of the British Homoeopathic Medical Society, there was issued in 1870, under the auspices of this society, the first edition of the British Homoeopathic Pharmacopeia. This may be said to have been the first and only attempt to place the pharmacy of the homoeopathic school upon a scientific basis up to the time of the issue of the Pharmacopeia of the American Institute of Homoeopathy.

In 1882 the first edition of the American Homoeopathic Pharmacopeia was published in Philadelphia. The descriptions of drugs were taken largely from the United States' Dispensatory, the United States Pharmacopeia, and the National Dispensatory: the rules for preparation were taken from the "Pharmacopoea Homoeopathica Polyglottica." It was therefore essentially a reprint of Schwabe's pharmacopeia.

The second edition was published shortly after in 1883, the descriptions having been rewritten by Dr. J. T. O'Connor. This work is today used as a standard by a number of our pharmacists.

In 1898 and 1901, respectively, homoeopathic pharmacopeias were published in France and Germany, and these works are official.

We come now to consider the efforts of our own National Society to secure a standard in this country.

As early as 1868 the American Institute of Homoeopathy

appointed a committee to prepare a dispensatory which should include pharmacy. Eight years later the chairman, Dr. Carroll Dunham, reported the near completion of the work, but his death and that of the secretary, Dr. Robert J. McClatchey, prevented publication, and efforts to secure the manuscript failed.

In 1886 the question was again considered and referred to a committee of three physicians, who reported in 1887, when a committee of three pharmacists was appointed to further consider the matter and suggest methods of action. This resulted in 1888 in the appointment of a committee of twelve members, six of whom were pharmacists, and six physicians all active as professors of Materia Medica, Chemistry and Botany. This committee was given definite instructions to prepare a pharmacopeia which should receive the official endorsement of the Institute.

As a result of nine years of labor on the part of this committee, reporting annually to the Institute, the "Pharmacopeia of the American Institute of Homoeopathy" was completed and published in 1897.

In 1901 under instructions of the Institute a second edition was issued and the title changed to the more comprehensive one of "The Homoeopathic Pharmacopeia of the United States."

The work promptly commanded the unqualified approval of the Institute and received the highest praise from its officers and members. It was endorsed by the medical press, the profession, and the American Association of Homoeopathic Pharmacists, and was at once adopted by about one-half of the homoeopathic pharmacists of the United States, and it may be well to add that the most complete and satisfactory press notices of the Pharmacopeia were those of the pharmaceutical journals, authorities best qualified to judge of the work from a scientific standpoint.

The committee at this time had reason to be well satisfied with the result of its labors. They expected, however, that it would take time, possibly several years, to effect a complete change in the then existing conditions of homoeopathic pharmacy.

In the production of the work every effort had been made by the pharmacopeia committee to have it represent the consentient opinions of its members, which included six of the leading homoeopathic pharmacists, each of whom represented different interests.

The nature of the work and intentions of the committee were well known to homoeopathic pharmacists throughout the country, particularly as regards the adoption of the British method of tincture preparation.

As to this most important rule of action: not only was the committee unanimous in favor of its use, but it was compulsory, as their instructions from the Institute to employ it were definite and had been several times confirmed. In 1887 and 1888 by the Institute's acceptance and adoption of the reports of its special committees, and again in 1888 by definite instructions to use the

British Homoeopathic Pharmacopeia as a basis in the preparation of the new Pharmacopeia.

During the period of nine years in which the work was in process the only word of opposition to the adoption of the English method of tincture preparation was in a paper read before the World's Congress in 1890 on the "Pharmacy of Tinctures" by Mr. A. J. Tafel of Philadelphia, and following the reading of this paper the subject was fully discussed and the Institute saw no reason to change its decision.

The Pharmacopeia committee therefore had reason to feel that as practically no opposition had been shown to the well-known intentions of the Institute that the work would secure more prompt acceptance.

Pharmacy is a department of medical science that unfortunately has commanded the interest of only a limited number of physicians. This is especially true of the homoeopathic profession, which has left it to his pharmacist.

The pharmacist, who after years of service with no definite standard having been practically a law unto himself, and who has accumulated a stock of preparations made by his own peculiar methods, is apt to prove conservative and slow to change his methods. The necessary change then looks to him as somewhat revolutionary and involving much expense: the question in the case, particularly of the more mercenary, becomes a personal and financial one, and the benefit which the homoeopathic fraternity is to gain is entirely disregarded in solving what is to him a personal problem. This explanation may be offered as one reason why the pharmacopeia has been discredited and the progress of the work retarded.

The fact that the new pharmacopeia makes tinctures represent 1-10, classing the dry crude drug as the unit of strength and by so doing making the tincture the equivalent to the first decimal attenuation, has offered a great opportunity for misrepresentation and this has been made use of to the fullest extent. Notwithstanding many denials it has been so repeatedly reiterated as to lead many to accept adverse statements as facts.

The notes published in the pharmacopeia in reference to the limit of divisibility by the process of triturating has also furnished an opportunity for further misrepresentation in attempts to prejudice the advocates of the higher potencies by leading to an erroneous belief that the work limited the degree of attenuation. Finally, the effort has been made to lead to the belief that the products of the pharmacopeia varied essentially from those made by Hahnemann and from the substances used in the original provings.

This opposition to the work has been limited to a few sources, but from these sources it has been most virulent, and seldom has a book been subject to such gross misrepresentation.

These efforts to create distrust and prejudice have had the effect of causing much delay in its general acceptance, and have

necessitated much labor on the part of the pharmacopeia committee in endeavors to educate the profession as to the true nature and advantages of the work.

This present year the committee has made marked progress. Their efforts to gain recognition of our pharmacopeia in the national pure drug laws have done much to call the attention of the homoeopathic medical profession to the necessity of action in adopting and enforcing a standard. The "Homoeopathic Pharmacopeia of the United States" has a well-defined and unalterable standard of strength for its tinctures, and with the one exception of the British Homoeopathic Pharmacopeia it is the only homoeopathic pharmacopeia which has this requirement, consequently it is the *only* work available as a homoeopathic standard in the national pure drug laws.

Early in the first session of the present Congress the Pharmacopeia Committee caused to be introduced into both the Senate and the House of Representatives a bill to amend the national pure drug law by inserting the "Homoeopathic Pharmacopeia of the United States" as one of the standards. This action was taken by the Pharmacopeia Committee as the law now makes the U. S. Pharmacopeia and the National Formulary the only standards for medicines made and sold under the titles which appear therein. As about forty of our tinctures have simliar titles to those of the U. S. P., eighteen of them varying in strength, the effect of the law is to class those at variance, as adulterated products, unless the strength is printed on the label: this being a marked discrimination.

The labors of the Pharmacopeia Committee have so far succeeded in getting the bill successfully passed by the Senate, and it is still pending in the Committee on Interstate and Foreign Commerce of the House, and there are strong hopes of ultimate and entire success. The Committee consider, however, that secret opposition on the part of a few pharmacists has done much to hold the matter in abeyance and so far prevent action on the part of the House.

The Committee has also been active in securing action on the part of the homoeopathic medical societies, and at this date twenty-seven of the thirty-one State homoeopathic medical societies at present in existence in the United States have endorsed the Institute's Pharmacopeia and have demanded of their pharmacists that medicines shall be prepared in accordance therewith.

These twenty-seven societies include Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, Illinois, Ohio, Kansas, Minnesota, Wisconsin, Iowa, Michigan, Nebraska, Colorado, Oregon, California, Oklahoma, Louisiana and Texas. The four remaining States yet to take action are: Arkansas, Indiana, Missouri and Kentucky. Of these, Indiana and Missouri have appointed special committees to ex-

amine and report, and we have already received assurances of favorable action. The twenty-seven States that have already endorsed the pharmacopeia represent a membership of 4055, equal to 86 per cent. of the total membership of the thirty-one societies.

The pharmacopeia has also received the endorsement of thirty or more local medical societies, most of our homoeopathic medical colleges, and a large number of hospitals, clubs and other institutions.

These facts would seem to indicate that the homoeopathic medical profession has clearly and forcibly made its demand for the acceptance and adoption of its standard pharmacopeia.

I have here given you a brief outline of the evolution of our pharmacopeia and the efforts made to bring it into general use. I wish now to call your attention to a few points in reference to the work itself.

The advantages gained by the use of the Institute Pharmacopeia have been many times stated, and it is unnecessary to repeat them here, but it occurs to me that it will not be out of place to answer here a few questions not unfrequently asked as to what is implied by "the unit of strength," and, further, as to what is meant by securing uniformity in strength of tinctures, and in what way does the new pharmacopeia secure it. A few illustrations and comparisons will perhaps enable me not only to answer these questions, but to show more clearly the difference in strength of the resulting tinctures.

In order to place our homoeopathic pharmacopeia on a scientific basis it was essential that it should prescribe methods of preparation which would secure uniformity of its products.

The method employed by the English, the value of which had been clearly demonstrated and embodied in their authoritative work, the "British Homoeopathic Pharmacopeia," offered a complete solution of this problem, and was, after a study of all questions involved, adopted by the American Institute of Homoeopathy and made the basis of their standard pharmacopeia.

By this method the dry crude drug is made the unit of strength in all cases. This does not imply that we always employ the dried drugs. On the contrary the fresh succulent plants are used wherever possible, and the moisture becomes a part of and is estimated in the menstruum.

To make it fully understood as to what is implied by the method of securing uniformity of product and of strength, we will compare the process of tincture making according to the Homoeopathic Pharmacopeia of the United States with that of others, and as an illustration we will select first the drug Gelsemium as a plant having an average amount of moisture. The method of preparation of this plant and the process of maceration are in this case the same in most homoeopathic pharmacopeias.

We first ascertain the percentage of moisture present in our plant. To do this we weigh out a certain portion, say 100 gms.,

and on an evaporing dish we place it in an oven until it is reduced to a perfectly dry state, when we again weigh it. If we find that it then weighs say 30 gms. the result will show a loss of 70 gms. weight in moisture. While it is advisable, and under certain conditions quite essential to ascertain accurately the amount of moisture present, it is not an absolute requirement, and the physician is left free to use the percentage given in the pharmacopeia formula, which is intended to indicate a fair average.

We then consult our pharmacopeia, page 293, and find that the average plant moisture given equals 70 per cent., and consequently each 333 parts of plant to be used will contain 100 parts of solids and 233 parts of water. The formula then is plain, viz.: to add 167 parts distilled water and 635 parts alcohol in order to yield 1000 parts of the tincture. I have here used the term parts instead of the French scales as given in the pharmacopeia. The French decimal system renders the formula quite simple; the use of "parts" or even drachms or ounces can be substituted if desired. Note, however, that solids should be measured by weight and the liquid menstrua by volume.

Note that 167 parts of distilled water have been added, and this for the reason that water in this case is the better solvent and its addition yields a better and stronger tincture. The extra 35 parts of alcohol are necessary to make good the loss of volume consequent upon a mixture of strong alcohol and water. Now if the plant was found to contain a lesser or a greater proportion of moisture than the 70 per cent. indicated, we are enabled to add to or deduct from the quantity of water given in the formula. By so doing we know that the resulting tincture will represent just one part of the solid substance of the drug to each ten parts of menstruum.

This illustration shows that by this method we secure uniformity in strength and in preparation, and also a well-defined and unalterable unit from which to estimate strength, and we also are enabled to select the solvent with reference to the requirements of the drug.

Now to show the advantage gained by this method we will compare our product with a tincture of Gelsemium prepared according to the directions of the American Homoeopathic Pharmacopeia.

This tincture is made by simply adding one part of the prepared fresh plant to two parts of alcohol by weight. As a result, if the quantity of moisture in the plant at time of preparation should be 70 per cent., the proportion of drug to menstruum in the resulting tincture would be practically the same as in the "Homoeopathic Pharmacopeia of U. S.," viz.:

Proportion of plant by weight, 333 parts, representing
solids, 100 parts, and moisture, 233.....333 parts.
Alcohol, 667 parts by weight, equal in volume to.....787 "
Proportion of solid or dry drug to menstruum, 1-10.

It should be considered, however, that the quantity of moisture varies materially, dependent upon season, and nature of soil, wet or dry, and more particularly upon the length of time from which it was gathered. A plant may lose half its moisture in but a few days time, and even more under certain conditions of heat or moisture. Now let us note the marked difference if the tincture is made when the plant contains but 50 per cent. of moisture. Viz.:

Proportion of plant by weight, 333 parts, representing solids, 166.5 parts, and moisture, 166.5.....333 parts.
Alcohol, by weight 667 parts, equal in volume to.....787 "

Proportion of solid or dry drug to menstruum, about 1-6.

If containing but 40 per cent. the result would represent but 1 in 5, or 20 per cent. On the other hand, if the amount of moisture present was found to be 80 per cent., the proportion of drug to menstruum will then be only 1 in 14, or 7 per cent., and certainly 80 per cent. of moisture is not excessive.

This comparison further shows that where the proportion of moisture exceeds 70 per cent. the Institute Pharmacopeia tincture will represent a greater proportion of soild drug to menstruum than that of the American Homoeopathic Pharmacopeia, and where the proportion is less than 70 per cent. the proportion will be less.

As a second illustration we will compare the tinctures of Belladonna and Chelidonium, especially succulent plants, the formulas being the same.

According to the "Homoeopathic Pharmacopeia of the United States," these tinctures are made as follows, viz.:

Proportion of plant by weight, representing solids, 100 parts, and moisture, 567 parts.....667 parts.
Proportion of alcohol by volume.....470 "

This formula is on a basis of 85 per cent. of moisture. These plants when first gathered contain a much larger percentage, sometimes as much as 95 per cent., so that should a tincture be prepared immediately after gathering, this excess of moisture would have to be evaporated in order to secure a product equalling 1-10 in strength.

Tinctures of these same plants, "Belladonna and Chelidonium," if made according to the American Homoeopathic Pharmacopeia would represent, viz.:

Proportion of juice by weight, 500 parts; equal to 500 by volume.
Proportion of alcohol by weight, 500 parts; equal to 590 by volume.

These would be made also by the process of expression, and as a result the juice only is used, the soluble constituents of the drugs themselves being thrown away and forming no part of the tincture, further; the variations in percentage of moisture must cause wide variations in strength of tinctures, thus rendering it impossible to secure uniformity.

From this comparison it will be seen also that the tinctures

under this class are not only uniform in strength but much stronger if made according to the Institute Pharmacopeia.

The third comparison will be of tinctures made from dried drugs.

By most homoeopathic pharmacopeias these are made in the proportion of 1-10 or 1-20, the only exceptions being "Schwabe" and the American Homoeopathic Pharmacopeia. These require a proportion of 1 to 5 by weight, which is equivalent to 1 to 6 by volume, and the process of maceration is used exclusively.

The "Homoeopathic Pharmacopeia of U. S." provides for the preparation of these tinctures by percolation and in the proportion of 1 to 10. It is considered that in most cases this quantity of menstruum is necessary to exhaust the drug, and, further, it enables us to better secure uniformity of preparation.

As a comparison of the results of these two methods I will call your attention to an experiment made a few years ago for the purpose of demonstration and which I reported to the American Institute of Homoeopathy the same year.

Three tinctures of Cinchona were made from one lot of Squibbs' assayed red bark: One by percolation in the proportion of 1-10 according to the rules of the Hom. Phar. of U. S.; one by maceration in the proportion of 1-5 according to the rules of the Am. Hom. Phar.; and one by percolation using only the dregs of drug previously used in making the American Homoeopathic Pharmacopeia tincture.

These were assayed by the professor of chemistry of the Mass. College of Pharmacy and his report showed that the Institute Pharmacopeia product contained .41 per cent. of alkaloids, while the Am. Hom. Phar. tincture contained but .38 per cent. of alkaloids and the remaining tincture (made from the dregs) when concentrated to the same bulk contained even a larger percentage of alkaloids than the American Homoeopathic Pharmacopeia product.

It seems to me that these illustrations indicate:

First—That the improved methods of the new pharmacopeia yield not only tinctures of uniform strength, which is in itself a great desiratum but in most cases stronger tinctures.

Second—That many if not most of our plants cannot be exhausted in the proportion of 1 to 5, particularly by the process of maceration.

TUBERCULIN IN ORTHOPEDICS.—By means of the opsonic index we have learned the importance of those small doses of tuberculin and the time at which they should be administered. . . . Tuberculin in small doses at proper intervals is of noted value in the treatment of selected cases of tuberculous bone and joint infections.—Ogilvy, American Journal of Orthopedic Surgery.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only, and preferably to be type written—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.

ASSOCIATE EDITORS:
F. W. COLBURN, M.D. C. T. HOWARD, 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, if possible.

A NEW TRIBUTE TO HOMOEOPATHY.

During the past few years there have been a number of instances where prominent members of the dominant school in medicine have made public acknowledgment of the debt that the world owes to Hahnemann and the science that he so carefully studied. In earlier years nothing but obloquy was the lot of homoeopathy when discussed by those who were not its adherents, and, in fact, at present this is still the popular way of disposing of the subject. Lately, however, this disparagement has originated more from the "lesser lights" than from the acknowledged leaders, if we except the recent pronunciamento of that apostle of therapeutic nihilism, Professor Osler.

In a late number of the journal of the American Medical Association is given the opinion of homoeopathy as it appears to one of the former class. Dr. Edmunds, of the University of Michigan, writes concerning therapeutic progress from the early times to the present. In its proper chronological order he thus delivers his dictum in regard to our sect. "There can be no doubt but that this school performed a great service to medicine in clearly demonstrating of what recuperative powers Nature is capable of if she is not meddled with." In other words homoeopathy is allied to the faith cures as far as drugs are concerned, for our second, third and sixth decimal dilutions cannot contain any sufficient amount of drug to be efficient. It is certainly surprising, however, to see members of his same school, and we doubt not the good doctor himself, using and widely proclaiming the value of medicines corresponding to our sixth, eight or even tenth dilutions. Surely our friend has this time "barked up the wrong tree," as, if modern medicine has proven nothing else it has demonstrated beyond possibility of refutation the efficiency of these small doses. Let any who doubt study the use of tuberculin and of all the bacterial vaccines where the influence is actually visible by using the microscope.

How much more creditable is it for one to be intelligently honest and to admit as do Koch, Behring, Lombroso, Huchard, Cabot and others that there is indeed some truth in homoeopathy although just how much they may not know! And where such admissions are made the homoeopaths will be much more ready to make concessions in return. For we must be honest, truth is not entirely summed up in homoeopathy, however unwilling we may have been to admit that fact while being bullied and scoffed at by others. We have much truth; others have much; all have made mistakes, many of them foolish in the extreme. Let us admit it and let us reason together for the purpose of clarifying this truth from the dross that obscures it.

An indication of this growing tendency is found in a letter written by Dr. Eduardo Fornias in the Homoeopathic Recorder for March, from which the following abstracts are made:

"It is with pride and satisfaction that I wish to call your attention to a transcendental vindication of Hahnemann by the Professor of Therapeutics of the Medical Faculty of Madrid and Ex-Minister of Public Instruction. The eventful acknowledgment was reported by my esteemed friends, Drs. Comet Fargas and Pinart, of Barcelona, in the "Revista de Medicina Pura," under the direction of the former physician. This chivalrous and fearless recognition took place during the National Congress of Tuberculosis, held in Zarasora, Spain, in October last, when Dr. Amalio Gimeno was developing his theme on "New Orientations of Anti-Tuberculous Therapeutics." Among other things, this eminent professor said:

"Life is no more than a problem of digestion. To live is to digest and prevail over the continual conflict of executioners and victims."

"For failing to understand this, therapeutics in general has followed misleading tracks, and that of tuberculosis, in particular, gave negative results, until the efficacy of tuberculin was demonstrated and its action graduated by means of the opsonic index, thus avoiding the accidents of anaphylaxis."

"We have entered into a new era, where we will obtain, thanks to the new routes taken by medicine, the cure of this terrible malady."

He pointed out the convenience of riveting the attention on the excelling merit of Samuel Hahnemann, whom he called "a genuis, and, who, at the beginning of the nineteenth century, foretold the modern routes which science would take." He praised, likewise, the efficacy of certain infinitesimal substances, "for infinitesimal are the anti-corps created by the very individual affected, tuberculines and other antitoxins evidently curative."

And he said more still. "What I have stated is so certain, that I, the author of a work on therapeutics, published in Valencia twenty-five years ago and a text-book in the Universities of Spain.

highly deplore to have had devoted in said work some depressive pages to Hahnemann and his followers, a wrong which modern discoveries are now committed to mend; pages I wish I were able to tear from my book."

"In regard to *tuberculosis,* we draw out from the patient the bacillus origin of his malady, it is cultivated, then killed, and the residue, previously filtered and prepared, is injected *de novo* into the blood, if possible of the same patient, and in this manner we obtain true cures. So is a creature immunized, so is humanity prepared to defend itself against aggression, not only of the tubercular bacillus, but of many other pathogenic agents, continually in wait to attack us."

"We find all these elements in a state of molecular division, which we can call infinitesimal, and consequently we owe veneration to the founder of Homoeopathy, who anticipated what the course of events has come to sanction."

"The metallic ferments, whose action is undeniable, are also prepared in a similar manner, and so it is that they act on colloidal substances, which are the limit of organized matter with the mineral kingdom."

And so there come one by one these signs of the more liberal progressive spirit that is beginning to move the entire medical profession out into one broad, level plain, where all claims and assertions can be examined in a calm and judicial manner by those who are unbiased either for or against them. And may this spirit not only actuate all other medical divisions but may it also move the homoeopaths to a realization that we have not an exclusive monopoly on all medical truth and that we too must be willing to test all our claims by the same rigid rules required of the others!

"LET US HAVE PEACE."

The above phrase, so common as to have become almost a by-word, has persisted in the mind of the editor for a considerable length of time, continually being more and more strongly impressed as each month brings its quota of homoeopathic periodicals.

This is an age notable for fairness, open-mindedness and liberality, an age when men of divergent ideas come together to work in unison for the achievement of some common aim. We see this particularly in the religious life, where Methodists, Congregationalists, Baptists, Episcopalians and not infrequently Roman Catholics join forces for the welfare of the people as a whole.

On a larger scale the same is true of races and nations; a general recognition of the need of co-operation and assistance rather than bickering and strife.

Is this likewise true in the medical world? Are the various factions becoming more open to conviction that their ideas, accurate though they may be, do not necessarily contain all the truth? These questions, easy to ask, are not easy to answer. From one, however,

who will carefully study the conditions in the country at large, we think that we would receive an affirmative answer. In general it would seem that a spirit of tolerance and generosity toward the opinions of others so conspicuous by its absence twenty or more years ago is steadily becoming more noticeable.

If this were a time for it, we might with advantage follow the development of this feeling in the various sectarian schools. Our present purpose is, however, to show its nature among homoeopaths in particular. In a general way homoeopaths are divided into two classes, the "low potentists" and the "high potentists," a comparatively small number, probably, using both forms. Once again, then, and in more concrete terms, are the two factions in homoeopathy showing the tolerance so well defined in other lines toward those who happen to disagree with them? If we may judge from the nature of some of our homoeopathic journals of recent date, we must decide in the negative. Straightforward articles in defense of our faith, however strongly expressed, must always be appropriate; facts that will challenge attention and inference thereon are never out of place, and to such no objection can ever be made. But that to which we take exception are the cheap jibes, humorless jokes and far-fetched witticisms that are used by one to cast discredit upon the other. These are things that can be of no benefit to anyone and must result only in ill feeling on both sides. What is the object of such? What the purpose to be gained? As we see it, none!

It should be remembered that because one homoeopath uses tinctures or another gives medicine in the CM potency, it is no sign that either is a rascal or an ignoramus. It is well to remember that in both divisions are men of intelligence, integrity and honesty, each striving to reach for truth, some by one route, some by another. The "high potentist" should realize that his "low" brother cannot honestly see why he should use anything higher than the third or sixth, or perhaps he disbelieves in the "fluxion" potencies, or something else. For these honestly held beliefs scoffing is not due. On the contrary, let the "low potentist" who says he cannot conceive of any effect from infinitesimals, bear in mind the notable change of heart of the entire dominant school whereby instead of ridiculing our third to sixth dilutions now it is itself using those equivalent to our seventh or eighth, with excellent results. Thus are the heresies of today the convictions of tomorrow.

Let us then for our own reputation in the future and for the sake of our amity and happiness in the present abstain from nagging and irritating those of divergent views concerning medicine by little irritating, useless criticisms of what we believe to be their shortcomings. Instead, let each find the truth or at least a part of it, assured that only by the union of many can the entire picture be disclosed. May we not all do our little to put aside petty bickerings and to hasten the time when " . . . . . each in his separate star shall lift the truth as he sees it to the God of Truths as they are."

BOSTON UNIVERSITY SCHOOL OF MEDICINE AND ITS FINANCIAL NEEDS.

The Gazette stands essentially for anything and everything that makes for progress in homoeopathy. It is with the most unalloyed pleasure that it learns of the earnest and successful propaganda that the friends of the cause are carrying out in Great Britain. In the satisfaction of the homoeopaths in Colorado and in California it most heartily joins. News from Ohio, from Pennsylvania and from New York contains much cause for rejoicing. It is, however, perhaps natural that New England interests should be considered of paramount importance. Therefore anything concerning a leading institution is eagerly followed in all its details. Boston University School of Medicine is such an institution, the centre of homoeopathy in New England and the alma mater of many of the most progressive of the medical profession. It is the only homoeopathic school in the world that forms the independent medical department of a university. It has done much for the common cause, as all the readers of the Gazette know. Like all other medical schools it has been bothered with financial considerations when the efforts could have been more useful if made along strictly professional lines. Recently its alumni have become increasingly active and energetic in co-operation. Among other things a committee called the "Loyalty Committee" has been appointed for the double purpose of interesting possible benefactors and to secure a larger number of new students. This committee has been at work for nearly two years and can show an excellent beginning. It has received the indorsement of the Faculty of the School as well as that of the Alumni Society. Following the decision of the New England Hahnemannian Association to celebrate Hahemann's birthday in April, this committee has taken on itself the attempt to raise the entire debt now borne by the School as one phase of the celebration. Accordingly the Gazette has recently received from the Secretary of the Loyalty Committee the following statement, a paper that is presented to our readers with great satisfaction in the hope that much benefit may be derived therefrom.

In view of the fact that extraordinary efforts are to be made during the next few months and years to better the financial condition of Boston University School of Medicine, it is well for us to consider at this time just what these needs are.

The first great need of any educational institution is a body of capable and efficient professors, instructors and teachers to compose its Faculty. Boston University School of Medicine in all its career has never lacked this great asset.

The second and, to-day, the greatest need of any institution of learning is *endowment*. Boston University School of Medicine does not possess an *endowment*. Therefore it must follow that the reason for the continued existence of the School is found in the

self-sacrificing loyalty of the men who, from time to time, have filled positions upon its Faculty, together with the support accorded them by the Massachusetts Homoeopathic Medical Society, the Boston Homoeopathic Medical Society, the various alumni organizations, Boston University and alumni scattered everywhere, rather than any direct financial gain to be derived from their connection with the school.

While this general state of things has continued through the years and continues to this day, the times have changed. The heredity of the School is secure but its environment has changed and needs attention. The status of medical education has changed immensely. The cost of educating present day medical students has increased ten-fold. The laboratory method, in the use of which the School is in the front rank, is an exceedingly costly method. But the results are well worth the cost, for by its application the fundamental truths of Homoeopathy itself are to be scientifically demonstrated. The standards of medical education have been raised, and it must not be forgotten that Boston University School of Medicine has always led the way in this direction.

A medical school is not a moneymaking proposition, as many seem to think. As far as we know it never has been and never will be. It is just as dependent upon philanthropy as is the academic college. The friends of other institutions teaching medicine, recognizing this fact have not relied to any considerable extent upon the self-sacrificing labors of their Faculties but have furnished endowments of large amount with which in part at least to remunerate them. It is probably true, however, that few medical schools are able to forego entirely their reliance upon the self-sacrificing spirit of their Faculties.

The graduates of this School have gone to the farthest corners of the earth and in all places and times have reflected credit upon their alma mater. And, mark you, these men and women have been produced without adequate financial resources.

Not only has the School no endowment but, worse yet, it has an indebtedness of $38,000 in the form of a mortgage. This mortgage was assumed for good and sufficient reasons and as originally assumed was of larger proportions. With the passing of the years the amount has been reduced to the present figures. While Boston University School of Medicine needs and can use to great advanatage an endowment of large amount, still it seems to us that the first need is the cancellation of this indebtedness.

The friends of the School comprised in the membership of the New England Hahnemann Association are to mark the birthday of Hahnemann, April 10, 1909, by a social function, to be given on the evening of April 22, at Hotel Somerset, Boston, the proceeds of which, together with any subscriptions received in connection therewith, will be applied upon the mortgage. The Loyalty Committee of Boston University School of Medicine also has pledged

itself in an attempt to lift the entire amount on or before Commencement Day, June 2, 1909.

Let no one be skeptical about this matter. This money can be raised. It *must* be raised. We believe in the good-will and loyalty of the alumni and friends of the School. These qualities exist within them as never before. There is then no reason why this burden should not be lifted at once and for all. With due apologies to Longfellow we would say:

"Let us then be up and doing,
With a heart for *but one* fate,
Still achieving, still pursuing,
Learn to *labor*, and *not* wait."

UNFAIR CRITICISMS.

In a recent number of one of the most widely read journals of the dominant school of medicine appeared an article (the first upon this subject that we have ever noted there) upon Osteopathy. In it this new science was supposedly calmly and judicially studied as one should study any new claimant for favor. The implied purpose and the actual results of this article are so divergent, however, that we cannot refrain from comment upon it.

To begin with, it is unquestionably safe to say that there is some degree of truth in every sect in medicine, the tenets of which receive any wide acceptance. Therefore, we can assert with assurance that there is at least some truth in osteopathy, else it would not be steadily growing as it now is. The question comes, how much truth is there? An answer to this is supposed to be given in the article under consideration. As it is in principle, a sample of many other so-called "investigations" reminding us of the "investigations" of homoeopathy by the opposing school some attention may be appropriately devoted to it.

In the first place the investigator should begin work with an unbiased mind, ready to recognize truth under whatever guise and to accept it even amid otherwise undesirable surroundings. This condition is here most conspicuous by its absence.

Osteopathy is spoken of as "the alleged science," etc., in the introduction, while throughout the entire article it is made the butt of jokes and sarcastic remarks. The first part of the paper then takes up for adverse criticism the failure of the osteopathic schools to provide for sufficiently high standards of scholarship for their matriculants. By the use of such phrases as "they claim," "they say," etc., the presumption is left that the statements concerning those that are enforced are at least questionable. Further along quotations from one of the State Osteopathic Associations are made which the author of this article not only claims to be false, but also that they are deliberately made so with the intention of deceiving. It is certainly most instructive to read that: "The osteopath has

always held to the germ theory as the cause of certain diseases, but the osteopath does not use the same means to recover the health of a patient so infected, yet he recognizes that such conditions exist. The osteopath, emphasizing that disease is primarily of mechanical origin, holds, therefore, that germs are generally a secondary factor in the cause, and he believes that so long as the tissues of the body are healthy no germs can infect the body. There must be a suitable soil for the bacteria to live in or the bacteria will not cause infection. He further believes that if any part of the body is infected, and he can restore a good circulation of pure blood to the part so as to restore a healthy condition of the tissues, the invasion of bacteria stops then and there." This statement the critic seems to think most extravagant and absurd, thereby showing his own ignorance of the latest studies along the lines of immunity and opsonic therapy. The fact that the offices of the osteopaths are almost always handsomely fitted up next comes in for notice, although what this has to do with the question is difficult to see. Another irritant seems to be that the osteopathic patients are mostly from the better classes rather than the poor. Following this is a list (doubtless made as absurd as possible) of those diseases for which osteopathy is claimed to be serviceable. No investigation is made concerning the truth of the claims, it being assumed without any given reasons that they are without any foundation at all. Once more they are accused of deception in connection with the use of drugs. Osteopaths say that in a general sense, they use no drugs. In this article they are indicated as falsifiers because they happen to occasionally recommend necessary medicinal measures, such as thyroid extract in myxoedema, antiseptic irrigations in cystitis, and other common adjuvants. The writer then asks as apparently the height of absurdity how peristalsis can be inhibited by pressing near the ninth dorsal vertebra. True, this cannot be explained, but instead of laughing at it how much better it would be if our learned man had questioned instead "is it true?" Who can explain the action of .0000001 gram of tuberculin on the human body, or why quinine cures malaria? Nevertheless, the facts remain irrespective of our opinions. There are merely samples of the paper. Instead of its title of "Osteopathic versus drug treatment," the title "A Tirade against Osteopathy" would have been more correct. Every man has a right to his own opinion, but when one supposed to be an authority and who is backed by the influence of a powerful medical organization can find nothing more logical to bring against osteopathy than ridicule and sarcasm, it tends to make one think that there must be a considerable modicum of truth in the new science.

At least, let us not condemn it if we have nothing more plausible than this eminent writer appears to have found.

THE PROPHYLAXIS AGAINST ACIDOSIS.

Acidosis is the term that has come to be employed in that vague uncertain condition in which acetone is found present in the urine. That the acetone itself is merely an indicator and not a cause of the abnormality is apparently demonstrated by the fact that it is relatively innocuous when introduced, experimentally, into animals, as well as by its not infrequent demonstration in persons presenting no pathological symptoms.

Whether we are dealing with the "pernicious vomiting" of pregnancy, with post-operative emesis or with gastric disturbance of many other varieties, we now almost instinctively think of acetone. And immediately following this comes the co-related thought of sodium bicarbonate for treatment.

Some years ago Beesley and Beddard in their careful studies of this acidosis suggested that in these cases occurring after anesthesia, glucose might give even better results than did soda. In order to thoroughly test this new idea, Wallace and Gillespie carefully studied two hundred cases. They give their results in the London Lancet for December last. The cases were divided into three series, one untreated, one treated by sodium bicarbonate and one treated by freshly mixed glucose. In an accompanying chart it is shown how by using glucose instead of soda there was a decrease in both primary and in secondary vomiting as well as a marked decrease in the number of persons showing acetonuria.

The conclusions drawn are that glucose has a much greater power of controlling acetonuria than has sodium bicarbonate, and that the secondary vomiting is in direct relation to the amount of acetone produced. They also conclude that after vomiting persists for hours, it is wise to thoroughly wash out the stomach in the bicarbonate of soda solution.

These results are somewhat at variance with our present ideas that soda is almost a specific for this form of emesis. As, however, the series untreated showed sixty per cent. with acetone, those using soda fifty-three, and those taking glucose only twenty-two, we must either question the universality of the series of cases taken as a sample or become converted to the use of glucose.

We understand that a number of workers are now investigating the matter with the intention of either disproving or of strengthening the claim. Their reports will therefore be awaited with interest.

EVOLUTION OF OTOLOGY. The evolution of operative otology from the time when the first imperfect simple mastoid operation was performed, consisting of little more than boring a hole through the cortex, up to the time when Schwartze, Stacke, and others devised the comparatively perfect radical operation, has shown great strides in a procedure calculated to save the lives of thousands, and in this respect is scarcely secondary to the great boon conferred upon suffering humanity when the operation for appendicitis was first devised.—Smith, Medical Record.

OBITUARY.

HENRY C. ALLEN, M.D.

Dr. Henry C. Allen was born October 2, 1836, near New London, Ontario. After receiving his academic education he taught in the schools near his birthplace for several years. Entering the Royal College of Physicians & Surgeons of Toronto, he graduated therefrom in due time. In 1861 he received the degree of M.D. from the Cleveland Homoeopathic Medical College. Shortly after this he entered the army, where he served as surgeon under Grant. Later he practised medicine for several years in Brantford, Ontario, where, in 1867, he married Miss S. Louise Gould. Here a son and daughter were born. Both wife and children survive.

He moved to Detroit in 1875, remaining there until 1880, when he was appointed to the chair of Materia Medica in the Homoeopathic Department of the University of Michigan in Ann Arbor. This position was held for ten years, when, in 1890, he was elected to the Department of Materia Medica in the Hahnemann Medical College of Chicago. This position was held for two years, but for various reasons the surroundings were not congenial.

Dr. Allen, with a few loyal supporters, organized in 1892 the Hering Medical College, the office of Dean of which Institution he occupied until his death, with the exception of a single year when he was made president of the corporation. For a number of years he edited with much skill and acceptance the "Medical Advance," probably the leading exponent of high potencies in American medical journalism. His writings and contributions along medical lines have been numerous. Among these may be mentioned: The Homoeopathic Treatment of Intermittent Fever, The Keynotes of Homoeopathic Remedies, The Therapeutics of Diseases of the Respiratory Tract. A book on the use of nosodes in homoeopathic practice is now in press.

Dr. Allen was fortunate in the maintenance of his comparatively good health whereby he was enabled to work with comfort until a half hour before he died. He undoubtedly was the leader of the high potency homoeopaths in this country if not in the world, his influence being felt wherever homoeopathy is known. By nature quiet, humble and unassuming, he was a remarkable example of what a silent worker may do when possessed with ability, inspiration and enthusiasm.

To him, Hering College owes not only its being, but a large amount of its prosperity. He was at work early and late. For the cause of Homoeopathy he did everything and devoted his entire life and every moment to the advancement of this cause that was so dear to him. He left a place in the medical profession that will long remain vacant. Those of us who had become familiar with him at the Institute meetings will sincerely and earnestly mourn him, even though perhaps not always agreeing with him in his many ideas. We only trust that his life may serve as an inspiration to the younger members of the profession as an example of the good that one man may do and of the influence that will persist for a long time.

SIMEON ORISON PILLING, M.D., died at his home, 17 Niles Street, Hartford, Connecticut, on the 17th of March, from cerebral hemorrhage.

Dr. Pilling was born in Cumberland, Rhode Island, May the 7th, 1864, and was the youngest of eleven children. He was educated at the Danielson, Connecticut, High School, and obtained his medical education at Boston University School of Medicine, graduating in the class of 1891. After his graduation he served for one year as house-surgeon in the Massachusetts Homoeopathic Hospital.

For the past twelve years Dr. Pilling had practised his profession in Newburyport, Massachusetts, but on account of gradually failing health he was obliged to retire from active practice, and in December, 1908, he removed from Newburyport to Hartford. While in Newburyport Dr. Pilling was a trustee of the local Homoeopathic Hospital, a member of the local Medical Society of which he at one time was president, and also a member of the Newburyport Board of Health. In his church relations, he was a member of St. Paul's Parish which he served as vestryman and as clerk, acting in the latter capacity many years.

In 1893 he married Katharine Beals, who, with one daughter, Elizabeth, survives him.

Funeral services were held at Trinity Church, Hartford, the interment being at his old home at Danielson, Connecticut.

SOCIETIES.

20TH CENTURY MEDICAL CLUB.—The February meeting of the 20th Century Medical Club was held at 373 Commonwealth Avenue on February 17th. The session was in charge of Drs. Ransom, Cross and Woodman. Electricity and its uses was the subject of the evening, demonstrations being given by Drs. Gary, Mann, Barnes, Swain, Cahill, Fawcett and Ebbs.

THE TWENTIETH CENTURY MEDICAL CLUB. The March meeting of this club was held at the residence of Dr. Lucy Appleton. The subject was "The Attitude of the Hospital Toward Women Physicians," opened by a paper by Dr. Margaret Sanford. This was freely discussed by Drs. Cahill, Hall, Ransom, Leavitt, Sears and Lucy.

THE BOSTON HOMOEOPATHIC MEDICAL SOCIETY.

One of the most interesting meetings of the Society was held in the Natural History Rooms on March 4th, 1909, with the President, Dr. Nelson M. Wood, in the chair.

In the absence of both secretaries, Dr. E. S. Calderwood was appointed secretary pro tem.

Upon motion of Dr. Horace Packard it was voted that the Society through a committee consisting of the President and such other members as he might choose, appear at the State House to act in favor of the proposed new charter for the City of Boston.

Scientific Session.

Dr. Horace Packard reported a case of a man 56 years of age upon whom he performed an interesting cholecystotomy.

The speaker of the evening was Dr. R. S. Copeland, Dean of the New York Homoeopathic Medical College, who gave a most able paper upon "The Scientific Reasonableness of Homoeopathy." This was received with marked attention by a large audience and was later freely discussed by Drs. Walter Wesselhoeft, H. P. Bellows, F. B. Percy, George R. Southwick and W. H. Watters.

A rising vote of thanks was extended to Dr. Copeland for his kindness in favoring the Society as he had done.

BOOK REVIEWS.

Clinical Treatises on the Symptomatology and Diagnosis of Disorders of Respiration and Circulation. By Prof. Edmund von Neusser, M.D., Professor of the Second Medical Clinic, Vienna; Associate Editor Nothnagle's Practice of Medicine. Authorized English Translation, by Andrew McFarlane, M.D., Professor of Medical Jurisprudence and Physical Diagnosis, Albany Medical College; Attending Physician to St. Peter's and Child's Hospital and Albany Hospital for Incurables. Part I: Dyspnoea and Cyanosis. E. B. Treat and Company, New York. 1908.

Undoubtedly the majority of the readers of the Gazette are by this time familiar with the excellent series of monographs upon disorders of metabolism and nutrition recently translated for this publishing house from von Noorden's writings. Those on nephritis and on diabetes mellitus in particular are now known and quoted the entire world over. Along similar lines has this new series been prepared on the disorders of circulation and respiration from an equally prominent teacher and clinician. Part I, or the first monograph of this series covers dyspnoea and cyanosis. These are first considered from the respiratory and later from the circulatory standpoint, an introductory chapter being first given to the conditions inducing dyspnoea.

The subjects described are treated in a clear didactic style, all circumlocution being avoided. In a direct manner the author expresses his meaning without unnecessary unimportant details.

Preparation of brief articles such as these cannot fail to be popular and will sooner or later justify the foresight of the house that prepares them.

The Cure of Tumors by Medicines. With Especial Reference to the Cancer Nosodes. By John H. Clarke, M.D. Price 2/6, net. James Epps & Co., Ltd. London, England. 1908.

This is another of Dr. Clarke's books dealing with the nosodes, this time in their relation to cancer.

It may not be out of place to quote the author's own words in the introduction: "That the methods of Pasteur, Koch, von Behring and Roux are really homoeopathic, has been acknowledged by Professor von Behring, Dr. Roux, and others. 'There is much truth in the Hahnemann method of curing like by like,' said Dr. Roux, and von Behring has been much more explicit. 'By what technical term,' says von Behring, 'could we more appropriately speak of this influence, excited by a similar virus than by Hahnemann's word—Homoeopathy?' Therefore, it is incumbent on the representatives of the "like to like" therapy to see that their system has the credit of its own products. This is my chief reason for offering this small contribution to a very great, and very important subject."

The book consists mainly of a citation of cases of tumors variously treated by medicines, by surgery and by the nosodes. Those at all familiar with Dr. Clarke's method of writing will hear as a matter of course that the style is excellent.

Some, possibly the majority, of the readers of the Gazette, may disbelieve in nosodes. Certain it is that the principle involved by Burnett when he introduced tuberculinum seemed most fantastic to the very men who are now among the most ardent advocates of the so-called "immunization" ideas of the dominant school. In view of such facts, it is wise for us who may be disbelievers to preserve an open mind and not say "false" when we really mean "not proven."

Diseases of Children.—By William Nelson Mundy, M.D., Professor of Pediatrics in the Eclectic Medical Institute, Cincinnati, O. Second Revised Edition, Illustrated, 8-vo., 512 pp. Cloth, $3.00. The Scudder Brothers' Company, Publishers, Cincinnati, O.

With this new edition of Mundy's Diseases of Children we are frankly well pleased. Probably no other one subject will prove of such general knowledge to the average homoeopathic physician as a thorough knowledge of pediatrics; and for the best results this knowledge should not be confined to homoeopathic text-books but should be as broad as there are methods of treatment. While we have always had the greatest respect for our friends the eclectics, who have as their high ideal the selection of the best in every creed, yet we never fully realized how closely their road lay to that of homoeopathy until we read the author's introduction. In this he says, "We have the courage of our convictions and believe in therapeutics, notwithstanding the skepticism so rife among medical men. There is a physiological and therapeutical action of a remedy. It is the latter we desire. Ipecac, for instance, will produce emesis; in small doses, frequently repeated, it will stop vomiting. Strychnia in large or poisonous doses produces tetanic spasms; in therapeutical doses it will act as a stomachic and a stimulant and will relieve pain. Belladonna in large doses produces congestion, even paralyzing the vasomotor system, as evidenced by the dryness of the throat and flushing of the face, yet it is one of our best remedies for congestion when given in therapeutical doses.

"We do not believe that the study of the poisonous action of a remedy in the laboratory, by experimentation on animals, suffices as a study of its therapeutical action."

With such an introduction, with which every reader of the Gazette should agree, we can scarcely fail to find this book of great value in the therapeutic sections as well as in those of etiology, pathology and diagnosis. It is divided into three parts: infantile therapeutics, care and management of infants and diseases of childhood. The third part is, of course, the largest, containing as it does eighteen chapters upon the various forms of disease to which children are subject. No space is wasted on abstract propositions, etiology, pathology, symptoms, diagnosis and treatment all being clearly described in brief form. In conclusion we can but repeat our introduction, that the book is very pleasing to the reviewer, who feels that his opinion will be shared by other readers. It makes a notable one of a list of already notable books on eclectic practice.

Paraffin in Hernia. The Cure of Rupture by Paraffin Injections. By Charles C. Miller, M.D. Comprising a description of a method of treatment destined to occupy an important place as a cure for rupture, owing to the extreme simplicity of the technic and its advantages from an economic standpoint. Oak Printing Company, Chicago, 1908.

This little book, as its name indicates, is a plea for the non-surgical treatment of hernia. It admits the occurrence of bad results from the treatment in the past, but claims to have now largely overcome the earlier faults.

In the absence of very detailed descriptions of methods of technique, the reviewer has suggested to him, possibly unjustly, it is true, the idea that the purpose of the book is to induce physicians to refer their patients to the author as an expert, rather than to give them description of something that they can use for themselves. The cases briefly cited seem to indicate that favorable results may be expected in a certain number of instances where the paraffin method is employed.

Progressive Medicine. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D.; assisted by H. R. M. Landis, M.D., March 1st, 1909. Lea & Febiger, Philadelphia and New York. Six dollars per annum.

In the March number of this quarterly is found a digest of advances in paedology, otology, rhinology, laryngology, surgery of the head, neck and thorax and the infectious diseases arranged by Drs. Frazier, Preble, Crandall, Kyle and Duel.

The purpose of this, as of the entire series, is to give a resumé of the year's best articles dealing with the subjects under discussion, particularly those treating of improved methods of study, of diagnosis and of treatment. The first section has to do with surgery and as such will be of major interest to the surgeon rather than to the clinician. Much of a technical character is here reviewed. After-treatment of cancer of the breast will prove of general instruction as well as carcinoma of both breasts, the simultaneous occurrence of mammary cancer and tuberculosis, and a number of other subjects.

Probably the chapter by Preble on infectious diseases will be the most generally appreciated. Three charts showing the relation between milk routes and the occurrence of epidemics of typhoid, scarlet fever and diphtheria are particularly instructive. Prophylaxis and anaphylaxis in the use of diphtheria antitoxin receive adequate notice. The open air treatment of pneumonia seems to be increasing in use as its value becomes better demonstrated. In paedology a number of valuable articles on infant foods and infant feeding are abstracted. Perhaps the newest ideas in treatment of nasal disturbances is found in the use of vaccines and of lactic acid bacilli cultures in suppurative conditions of the accessory sinuses. Lateral sinus thrombosis and oto-sclerosis are well covered in the year's work in otology.

So much is contained in all parts that no review can be adequate, but must, like the present one, merely touch here and there on salient points, leaving the great bulk of the matter unattended.

The Blues (Splanchnic Neurasthenia). **Causes and Cure.** By Albert Abrams, A.M., M.D. (Heidelberg), F.R.M.S., Consulting Physician, Denver National Hospital for Consumptives, The Mount Zion and the French Hospitals, San Francisco; President of the Emmanuel Sisterhood Polyclinic, etc. Illustrated. $1.50. Third Edition, Revised and Enlarged. New York. E. B. Treat & Co. 1908.

The Blues (or, as the author otherwise calls it, splanchnic neurasthenia) is certainly a title sufficiently unique to arrest attention. And as it claims to tell of the causes and cure of this almost universal heritage, it invites the reader. Auto-intoxication, intestinal atony and weak abdominal walls are brought forth as the active causative factors of many indefinite disorders. A distinct departure from the regular routine of medical books is noted throughout, and new thoughts are adduced and arrayed in new coverings. Irrespective of whether all agree with Dr. Abrams at every point or not, we will all surely be much interested in his strongly-worded arguments and clever marshalling of facts. The arguments once accepted, the treatment as given is most logical. One of the notable features of the treatment, which is largely physiologic, is the facility with which it can be followed by the patient himself and without direct medical attention.

To anyone with a spare interval, perusal of this comparatively small book should be both profitable and interesting.

Mind and its Disorders. A text book for students and practitioners. By W. H. B. Stoddart, M.D., F.R.C.P., assistant physician to Bethlehem Royal Hospital. With 74 illustrations. Price $4.00 net. P. Blackston's Son & Co., publishers, Philadelphia, 1909.

The rapid strides of modern physiological psychology and its intimate and practical bearing upon psychiatry needs no proof. It has, however, made necessary an entire revision of our older conception and classification of the diseases of the mind and rendered practically obsolete all books on the subject which antidate the work of Campbell, McDougell, Kraepelin and others. It is therefore with great pleasure that we review Dr. Stoddart's new book. Therein we find that the author has not only given full value to this more recent laboratory data but he has so classified his materials as to give the student in his first part a brief survey of normal psychology. Part second deals with the abnormal psychology and in the third part is given a comprehensive section on mental diseases following mainly Kraepelin's classification with some modification which the author has found desirable in his class room. His final chapters are devoted to general treatment of the insane; case taking and the legal aspect of insanity, and finally a few pages are devoted to methods of staining and examining nervous tissues and the cerebro-spinal fluid. If we were to offer any criticism of the work it would be that the author has undertaken to put so much into so small a space (480 pages) that it would seem a practical impossibility to treat many of the subjects adequately. Turning to his discussion of the "Disorders of Association," we find that though he has summarized it from the psychological aspect, he fails to introduce a description of the association test proper that is now taking such a leading part in the analysis of cases of suppressed ideas, dementia praecox, etc. On the whole, we can highly recommend the book to those who have not the time to spend in more elaborate works as a practical and excellent resumé of mental diseases from a modern view point. The book is well illustrated and attractively bound.

A Manual of Clinical Diagnosis. By James Campbell Todd, Ph.B., M.D., Associate Professor of Pathology, Denver and Gross College of Medicine (University of Denver); Pathologist and Clinical Microscopist to Mercy, St. Anthony's, and the Denver C ty and County Hospitals. Illustrated. Price $2.00 net. W. B. Saunders Company, Philadelphia and London. 1908.

In this book we find the following subjects briefly but rather clearly covered: Use of the microscope, sputum, urine, blood, stomach, feces, animal parasites and miscellaneous subjects. It is written as a brief guide to laboratory methods that are of d stinct clinical value in distinction to those that are not of practical benefit. Some of the latest tests are included, such as, for example, Cammudge's pancreatic reaction. Some of the illustrations are very poor, particularly the one of the anopheles and culex. The c is uniformly omitted in Turck's name, and a few other errors are noted.

Considered as a whole, however, the book is one that may be safely recommended to any but a laboratory man as one containing the most important things in clinical laboratory examinations.

THE MONTH'S BEST BOOKS.

Physiological Chemistry. Hawk. $2.50. P. Blakiston's Son & Co.

Quain's Elements of Anatomy. Schafer. $4.50. Longmans, Green & Co.

Cataract Extraction. Herbert. $3.75. Wm. Wood & Co.

Bacteriology of the Eye. Axenfeld. $6.00. Wm. Wood & Co.

Tuberculosis in Infancy and Childhood. Kelynack. $4.00. Wm. Wood & Co.

Infant Feeding. Chapin. $2.25. Wm. Wood & Co.

Diet and Dietetics. Sutherland. $10.50. Oxford University Press.

PERSONAL AND GENERAL ITEMS.

Dr. Herbert W. Hoyt, B. U. S. M., 1891, has removed his office to 84 East Avenue, Rochester, N. Y. Here he will limit his practice to diseases of the ear, nose and throat.

The practice of the late Dr. H. C. Allen of Chicago has been assumed by Dr. Harvey Farrington, who had been associated with Dr. Allen for a considerable time prior to the latter's death.

Mrs. Isabelle M. Fowler, of Jamaica Plain, Boston, recently deceased, has bequeathed by her will fifteen thousand dollars to the Pillsbury General Hospital of Concord, N. H.

Dr. George Henry Martin, B.U.S.M. 1881, having returned from an extended tour abroad, announces the opening of offices in the Butler Building, Stockton and Geary Streets, San Francisco. Attention will be particularly devoted to mental and nervous diseases.

The North American Journal of Homoeopathy suffers a loss in the resignation as one of its editors, of Dr. P. W. Shedd. At the same time it is to be congratulated upon the acquisition of Dr. R. F. Rabe, the well-known staunch advocate of homoeopathy.

Jacob Sleeper Hall, the old home of the College of Liberal Arts of Boston University, has been finally transferred to the Boston Lodge of Elks in consideration of the payment of $160,000.

Dr. Henry I. Twiss, an alumnus of Boston University, class of 1903, who has until recently been located in Melbourne, Australia, has just passed successfully the Washington State medical examining board. He will locate in Seattle, Washington, where he will limit his practice entirely to orthopedic surgery.

The two men's fraternities of the Medical School of Boston University, Alpha Sigma and Phi Alpha Gamma, have each given a reception and dance to the students and to invited guests. These events, which are repeated several times throughout the year, do much to break the monotony of what might otherwise be a course of uninterrupted study, and go far toward making the social part of college life a pleasing factor. They are becoming yearly more popular.

Dr. Helen M. Junkins, class of 1903, B. U. S. M., is to be married at Stanford University, California, on April 6th, to Mr. Edward James Beach, a graduate of Massachusetts Institute of Technology. Mr. and Mrs. Beach will make their home at 1183 Locust Street, Dubuque, Iowa.

Through an unfortunate mistake Dr. Henry E. Spalding's Boston office was omitted from the February list of telephone subscribers. His telephone number is still Back Bay 2376. The Doctor claims that "this is only one of several similar experiences he has had with the Telephone Company," and that such experiences tend to make him "tired."

Dr. Wm. T. Bull, the eminent surgeon of New York, died Feb. 22nd near Savannah, Georgia, where he had recently gone for the benefit of the warmer climate. It has been known quite generally for nearly a year past that the Doctor was suffering from carcinoma which had become inoperable. His fight against the inevitable has been most courageous and it is to be regretted that it was unavailing.

Obtaining a wide experience in general surgical work in the New York dispensaries he achieved a position high in the esteem of the medical profession throughout the entire country, and his loss will be felt by many.

A NEW JOURNAL.—January last witnessed the appearance of a new journal in the semi-medical field called "Prophylaxis." This is published by the Burton Publishing Company of Kansas City, Mo.

OPPOSITION TO LIQUOR.—One of the Ohio medical societies is reported to have adopted a resolution by which no member shall give a prescription for liquor except at the bedside of patients and then only in cases of extreme urgency.

HOLMES CENTENARY.—It is announced that under the auspices of the Cambridge Historical Society the centenary of Dr. Oliver Wendell Holmes will be properly celebrated on April 27th. Special invitations are being sent to the graduates of the Harvard Medical School now practising near Boston, who were formerly pupils of Dr. Holmes during his incumbency in the Chair of Anatomy and Physiology, 1847 to 1882. The exercises will be held in Sanders Theatre, President Eliot presiding. Addresses will be given by Drs. E. W. Emerson, D. W. Cheever, S. M. Crothers and by Col. Thomas Wentworth Higginson.

SMOKING PROHIBITED IN NEW YORK SUBWAY.—The Gazette is glad to note that by order of the Board of Health of the City of New York, since March 3d the smoking or carrying of a lighted cigar, cigarette or pipe in the New York Subway is a misdemeanor. Carrying or smoking of such cigars, cigarettes or pipes is also prohibited on the platforms of the stations or on the steps leading thereto.

We wish that we were able to record a similar rule in our own Boston subway and tunuel.

The March number of the American Journal of Surgery shows a somewhat unusual feature in medical journalism in that the entire contents are contributed by the surgeons of Greater New York alone, the issue being therefore called the Greater New York number. Several new operations are described for the first time. Among the contributors we note Drs. Lilienthal, Tuttle, Willy Meyer, Brincker, Warbasse and Simpson. Much credit is due the publishers and the editor for this collection of noteworthy papers.

ALPHA SIGMA BANQUET.—The annual banquet of the Delta Chapter of Alpha Sigma was held at Young's Hotel, Friday, March 5th.

The alumni held their business meeting with Dr. Flanders, the first vice-president, presiding in place of Dr. Rockwell, the president.

The guests of the evening consisted in the undergraduate members of the fraternity. After a banquet the various speakers were aptly introduced by Dr. C. R. Bell, and were: Drs. C. T. Howard, F. C. Schubmehl, E. S. Calderwood, D. F. Downing, Clarence Crane and D. W. Livermore. For the undergraduates Messrs. E. R. Hird and E. D. Lane spoke. There was a large attendance and much enthusiasm was manifest.

The officers for the ensuing year are: President, Dr. W. H. Watters; Vice-President, Dr. W. A. Ham; Secretary, Dr. D. F. Downing; Treasurer, Dr. E. S. Calderwood.

HOMOEOPATHIC PROPAGANDISM IN MAINE.—We have received from the Committee for the Advancement of Homoeopathy in Maine the following circular:

"There are a score or more of good locations in Maine, city, town or country, for competent, energetic homoeopathic physicians. Recent graduates and those with hospital experience will in most cases be best suited in these fields. Many of these towns are growing rapidly and offer excellent opportunities for the right men.

"The Committee will be glad to give all aid in its power to physicians who are thinking of settling in the State."

The members of this Committee are Drs. F. A. Ferguson of Bath, Me., L. A. Brown and Charles D. McDonald, Portland, Me. Knowing these gentlemen as we do, we can most cordially commend their statements as being entirely in accordance with facts and not made for the purpose merely of attracting new men to fields already well occupied.

TUBERCULOSIS EXHIBIT IN WORCESTER.—It is noted that the homoeopaths are well represented in the anti-tuberculosis campaign now in progress in Worcester. Dr. Carl Crisand is Secretary of the Worcester Consumptives' Home Association, presiding at the free public meeting held on March 23d. At this meeting Dr. J. P. Rand delivered an address. On Thursday, the 25th, Dr. H. C. Clapp spoke on the "Modern Hygienic Treatment of Pulmonary Tuberculosis."

HONORARY BANQUET TO DR. WALTER WESSELHOEFT. The medical friends of Dr. Walter Wesselhoeft gathered on the evening of March 3rd at the Hotel Somerset to the number of about one hundred and twenty-five, for the purpose of tendering to him a complimentary banquet upon the fiftieth anniversary of his entrance into the medical profession. The occasion was one of the pleasantest that has occurred in homoeopathic circles for a long time. Many expressions of gratitude and esteem were noted from all present. The presiding officer, Dr. J. P. Sutherland, introduced as the speakers, Drs. John L. Coffin, F. B. Percy, H. P. Bellows and Wesley T. Lee. The feature of the evening was the presentation to the guest of honor of a loving cup suitably inscribed and bearing with it the good will of nearly two hundred physicians who united in procuring it. Dr. Wesselhoeft responded briefly, expressing his appreciation of the courtesy rendered. Such a celebration was certainly fitting, as probably no one now living in New England has given more time, energy and thought to the advancement of the Boston University School of Medicine, the Massachusetts Homoeopathic Hospital and Homoeopathy in general than has the distinguished recipient of this honor.

NEW HOMOEOPATHIC MEDICAL JOURNAL. The Gazette learns that the Italian Homoeopathic Association has decided to establish a new homoeopathic journal in addition to the one already existing. The Italian Society is now having translated for distribution among its members and friends the pamphlet well known to our readers "Why Students of Medicine Should Select the Homoeopathic School."

HOW WOMEN FACE SUFFERING AND DEATH. A British colleague has observed: Tell the man of higher type and greater intelligence that he is facing death and he begins to fight, demands a consultation, talks of going to specialists and fights grimly to the finish. Tell a woman the same facts, and she lies back to await her fate. All women are fatalists. But tell a man that he has one chance in a thousand to recover if he will undergo an operation, and he will trust rather to his own strength and endurance than endure the knife. The woman will choose the thousandth chance and submit with amazing calmness to the operation.—Medical Times, March, 1909.

INTERNAL VACCINATION. Those homoeopaths in Iowa who believe in internal vaccination instead of the method usually employed, have won their fourth local case in the courts. In Red Oak the local board of health refused to accept the certificate of Dr. L. A. Thompson who had used variolinum to immunize certain pupils. An injunction was obtained from the courts restraining the school board from this exclusion on the ground that no board of health is empowered to dictate to a regularly licensed physician the method by which he shall treat his patients.

Dr. J. A. Balcom of Lynn, while making a call a short time ago, left his horse and buggy standing before the house. At the conclusion of the call he found that both horse and buggy had disappeared. Later in the day, while making his calls by the aid of the street car, he saw the team in the possession of a man whom he had arrested and locked up for drunkenness and unlawful appropriation of property.

CHANGE IN NEW YORK AMBULANCE SERVICE. By the withdrawal of the ambulance service of the Roosevelt Hospital, the Flower Hospital will cover a greater extent of territory, including now from 47th Street to 67th.

THE RUTLAND JOURNAL. The Massachusetts State Sanatorium at Rutland has decided to publish a monthly journal for rather general distribution. This is intended to convey information regarding the sanatorium and the treatment of tuberculosis in general. Information concerning the institution and its inmates will be included to a varying extent.

GIFT TO THE UNIVERSITY OF PENNSYLVANIA. A gift of two hundred thousand dollars has been received from an anonymous source by the University of Pennsylvania for the establishment of a department of medical research. The gift was made through the agency of Dr. John H. Musser, Professor of Clinical Medicine in that institution.

SOME BENEFITS OF VIVISECTION.—The rescue of mankind from smallpox by vaccination, from diphtheria by antitoxin, and from the inexpressibly horrible deaths of hydrophobia and tetanus is due to animal experimentation. If some over-sensitive people could see one death from rabies and then look through the writings of that great philanthropist, Pasteur, and observe how he has instructed the world in a method of preventing this disease, we doubt if they would ever again let their tenderness of heart obscure their judgment in regard to the true value to be put upon the results of vivisection. Needless and foolish experiments on animals should be prevented; just as driving lame and galled horses, setting dogs and cocks to fight and not giving milch cattle sufficient fresh air should be punished. We believe that all these practices are now forbidden by law. But the interference with the work of such an institution as the Rockefeller Institute would be an act of folly which its own advocates would afterward regret.—Editorial, American Health, September, 1908.

New England Medical Gazette, Editor, Boston, Mass.

Dear Doctor:—I am collecting material for a paper upon atropine as a hemostatic, and would be obliged to any of your readers who would send me notes of their experience with this remedy. I am particularly anxious to receive adverse reports, as well as those favoring the remedy.

Thanking you for the courtesy of inserting this note, I remain,

Very sincerely yours,

WILLIAM F. WAUGH.

UNIQUE METHOD OF NURSING.—Northrop, in the Medical Record, reports a case of obstinate vom ting in a baby about three weeks old. The milk supply of the mother was unusually abundant, the baby therefore obtaining a large amount of nourishment in the minimum time. The result was that vomiting became so common as to almost prohibit any nursing at all. In order to obviate this condition of obtaining its food too fast, the following procedure was adopted, which is certainly unique, and which is stated in this case to have been entirely successful:

"The mother was asked to lie on her bed, turning so that the breast to be used would be the lower. The baby was then laid across the mother in such a way that its head would be lowest and it must drink up-hill. From the breast and nipple to the baby's stomach was all up-hill. The baby had to work for his food. The result was he took his food slower, took less of it, and stopped when he had enough.

"Three days later the doctor reported that the baby had kept down every feeding. Besides, the mother had discovered a further improvement in technique. She now sits in a rocking-chair, sling ng the baby over one shoulder and the baby crawls down head first to the opposite nipple. The up-side-down position is a success and the much relieved mother is going to the country carry ng in her breasts a summer's supply of properly modified baby-feedings. The doctor has ascertained the amount of time necessary to take in three ounces and the baby does not spit up a mouthful. Occasionally, he can take a feeding lying on his back. Whenever he vomits, the mother simply slings him over her shoulder so that he crawls down head foremost to h s food. The method succeeds."

THE HOSPITAL PROBLEM.—No one can deny that the development of medical eleemosynary institutions has been largely responsible for the progress of medical and surgical science. But coincidental with the growth of the hospital idea, grave dangers to the rank and file of the medical profession have appeared. In most communities wherever one finds a hospital, there also will one find a small clique of medical men enjoying especial advantages and privileges by virtue of their hospital connection. Their less fortunate and influential colleagues are denied these advantages, and are proportionately handicapped in the practise of their profession. Since to send patients to such institutions is tantamount to losing their patronage nine times out of every ten, the "outside" practitioner naturally discourages hospital treatment, except as a dernier ressort. A case, even though a charity one, may be exceedingly interesting and the attending physician may wish to gain all possible experience from its observation and study. If he is not a member of the hospital staff, however, his connection with any case ceases when it enters an institution. All these things tend to defer the well-recognized benefits to be derived from hospital regimen, and it is a notable fact that hospital cases are usually advanced—not infrequently too far advanced. Therefore, if hospitals have not fulfilled their most complete function in any community, the reason can usually be found in rules which confer special advantages on a few medical men and rigorously deny any privileges to those outside the "charmed circle."—"American Medicine," September, 1908.

TUBERCULIN AS A THERAPEUTIC AGENT.—In view of the very favorable and, what is almost more important, uniformly successful results which can, as will have appeared, be obtained even in the most intractable cases of localized tubercular infection by the therapeutic inoculation of tuberculin carried out under the safeguards explained above; and in view of the fact that not less favorable results can be obtained in connection with the treatment of other localized infections by the aid of the corresponding bacterial vaccines, I do not hesitate to contend that we have, in the power of raising the antibacterial power of

the blood with respect to any invading microbe, out of all comparison the most valuable asset in medicine. I would, in view of this new asset in medicine, fain induce the surgeon to abate something from his conviction that extirpation and the application of antiseptics offer in connection with bacterial infection the only possible means of cure. I would have the surgeon resort to extirpation only when the physician tells him that all other means have been exhausted; and I would have the physician assume everywhere the role of an immunisator; and I would have him defer handing his patients over to a surgeon before he has tried in every case of localized bacterial infection which is unassociated with immediate risk to life the therapeutic inoculation of the appropriate bacterial vaccine.—Sir A. E. Wright.

PROPHYLACTIC TREATMENT OF SCARLET FEVER.—From an editorial in the Medical Record upon the prophylaxis of scarlet fever, the following items are abstracted: "Of all European countries Russia shows the greatest morbidity as well as mortality so far as scarlet fever is concerned, and it is perhaps this fact that has led the Russian physicians to special activity in devising methods to fight the frightful epidemics that often take place in the villages. . . . Some years ago Gabritchevsky began to use injections of dead streptococci in the treatment and prevention of the disease, sharing the view of those who saw in that organism the specific cause of the disease. . . . Accordingly, he isolated a streptococcus from the heart blood of children dying of scarlatina and then grew it on the usual artificial media. The first experiments with the dead cultures were made by him on himself and on his children, and after these proved to him the harmlessness of the procedure he supplied the vaccines in large quantities to the Russian profession. From that time till April, 1908, 37,000 persons have been treated in accordance with his ideas, over 50,000 injections having been made, for it was soon seen that repeated treatment was much better than a single injection of the dead bacilli. . . . The general effect of the vaccinations are best seen in the figures of morbidity given by Danilow. Only 1.1 per cent. of all the vaccinated persons were taken sick with scarlet fever. The total mortality from scarlet fever of the vaccinated persons was but 0.123 per cent."

PROHIBITION OF OBJECTIONABLE ADVERTISEMENTS.—The Massachusetts Legislature recently passed the following act that will certainly meet with the approval of every right-minded person, whether professional man or layman:

Be it enacted, etc., as follows:

Whoever publishes, delivers, distributes or causes to be published, delivered, or distributed, an advertisement, statement or notice, other than a label which is attached to a bottle or package of medicine, or which is contained in a sealed package of medicine, describing the causes, symptoms, details or effects of a venereal disease, or of a disease, infirmity or condition of the sexual organs, for the purpose of calling attention to or advertising a person or persons from whom, or an office or place at which information, treatment, or advice may be obtained concerning such diseases or conditions, shall be punished by imprisonment for not more than six months or by a fine of not less than fifty nor more than five hundred dollars, or by both such fine and imprisonment. But the prohibitions of this act shall not be deemed to apply to the printing or delivering in sealed packages outside of this commonwealth of books, pamphlets, or circulars containing such advertisements; nor to newspapers printed outside of this commonwealth. [Approved April 11, 1908.]

THE NEW ENGLAND
MEDICAL GAZETTE

Vol. XLIV MAY, 1909 No. 5

ORIGINAL COMMUNICATIONS.

A NEW METHOD OF PURIFYING AND STERILIZING WATER.

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

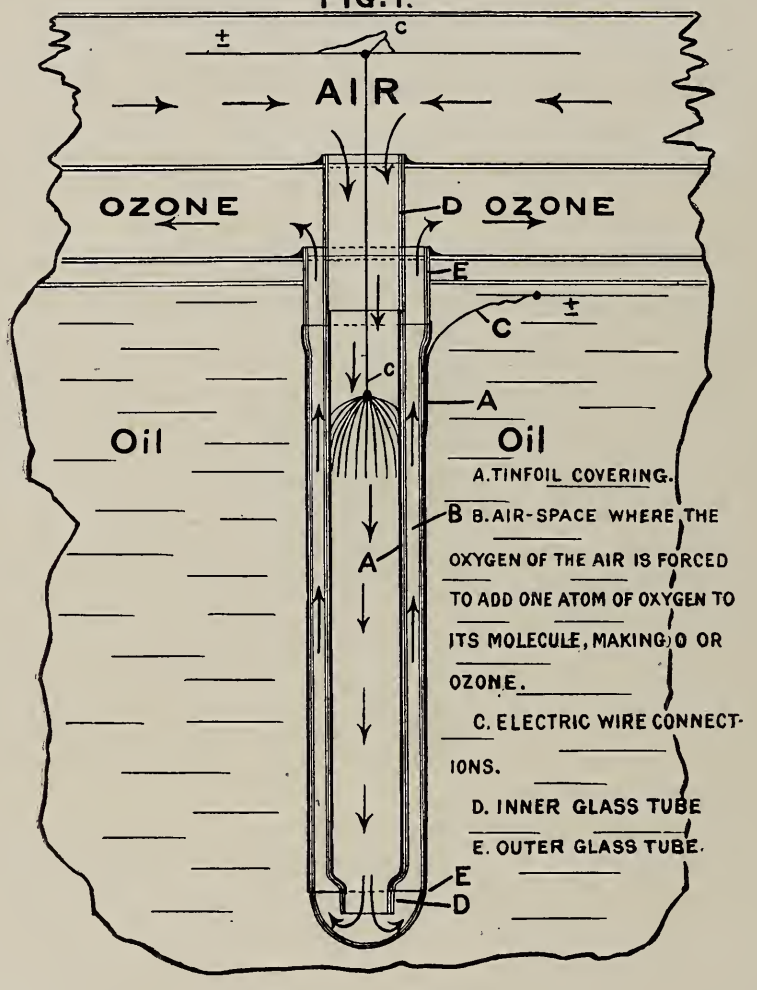
There has been installed at the Pittsburgh Homœopathic Hospital a new system of purifying and sterilizing water. The method is quite unique as the purifying agent is ozone. It has long been known that ozone, or O_3, is one of the most powerful oxidizing agents, the difficulty being to secure enough of it. The ozone produced by a static discharge from a high power Holt's machine is in such minute quantity that it cannot be used to advantage. Even in such minute quantity its oxidizing power is demonstrable, and is utilized to a very limited extent. Until a very recent date it has been impossible to produce ozone without also producing two very obnoxious products, viz., nitric acid and nitrous oxide. Another and probably the most serious difficulty, and one which has been recently overcome, has been the production of ozone without heat. Heat will not only rapidly turn ozone back into oxygen, but is also destructive to the apparatus producing ozone.

The Ozone Plant at the Pittsburgh Homœopathic Hospital has been accepted as thoroughly reliable. A brief description of the generating apparatus and the results obtained in purifying Pittsburgh municipal water is here given. Professor Leon Gerard, the Belgian scientist, has perfected an ozone generating system which depends for its effectiveness upon the production of ozone by passing dry, cool air through an air space charged with the effluent of fifteen thousand to twenty thousand volts of electricity (see Fig. 1). This is accomplished as follows:

The electricity used is any 110-volt alternating current, which is passed through an ordinary transformer or "booster." This raises the voltage to about eighteen thousand volts. Atmospheric air, after being passed through a dryer, is carried through a large glass tube open at both ends. This tube fits into a larger glass tube closed at the lower end. The dry air passes through the smaller tube into the larger, or into the space

between the two (see Fig. 1). The air space between the outside surface of the inner tube and the inside surface of the outer tube is about one-quarter of an inch. On the inside surface of the inner tube and the outside surface of the outer tube is a covering of ordinary tinfoil. The two electric wires from the transformer are attached to these two electrodes—one wire to each tinfoil surface (see Fig. 1). The electricity, driven by the high voltage through the flint glass tubes from one tinfoil

FIG. 1.

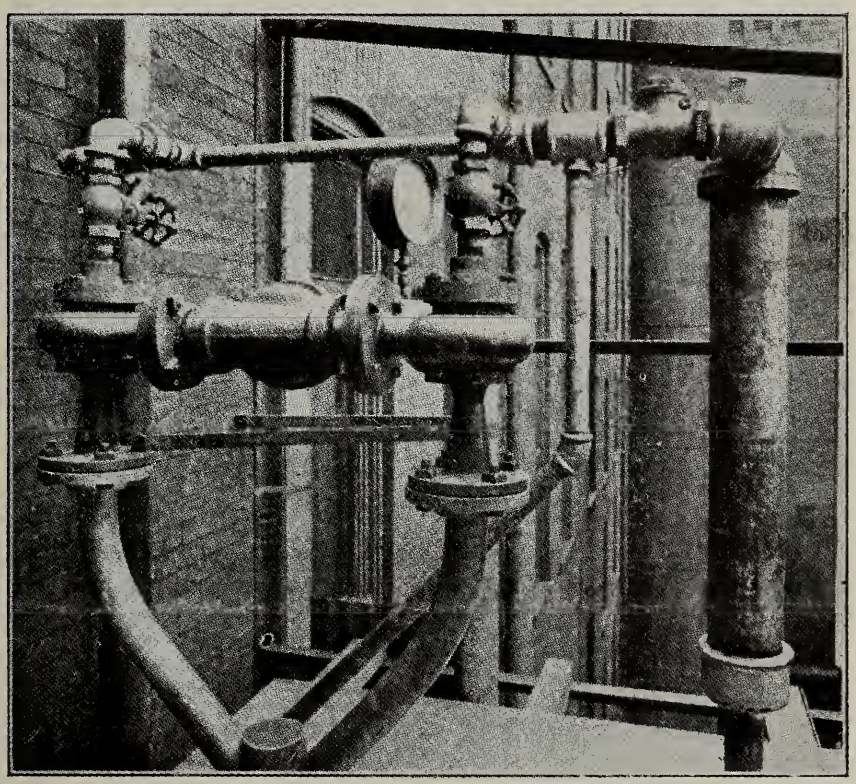


area to another, forces the oxygen (O_2) of the air passing through the air space between the glass tubes to add one atom of oxygen (O_1) to its molecule, and ozone (O_3) is the result.

The ozone is then piped to the point where it is to be mixed with the water. This mixer or injector (see Fig. 2) is an ingenious device in which the water itself sucks the ozone into the water pipe. Thus the city water, with its pressure, acts as an air suction pump, and thus no fan is required for this purpose. In other words, turn on the electricity and the water, and the production of the ozone and the mixing of the water with the ozone is automatic. The ozone is intimately

mixed with the water at the injector. This mixture must be thorough, therefore assurance is made doubly sure by passing the water and ozone through a tower, a very large, upright pipe, about forty feet high (see Fig. 4). There are twelve sections to this tower, and, at the junction of each section, large celluloid plates, perforated by thousands of minute openings, are inserted. The water and ozone, passing through these small openings, become again and again so thoroughly mixed that the ozone comes in contact with every particle of water. This intimate mixing takes from sixteen to twenty minutes. When the water flows out at the top of the tower it is pure and sterile.

Fig. 2



INJECTOR

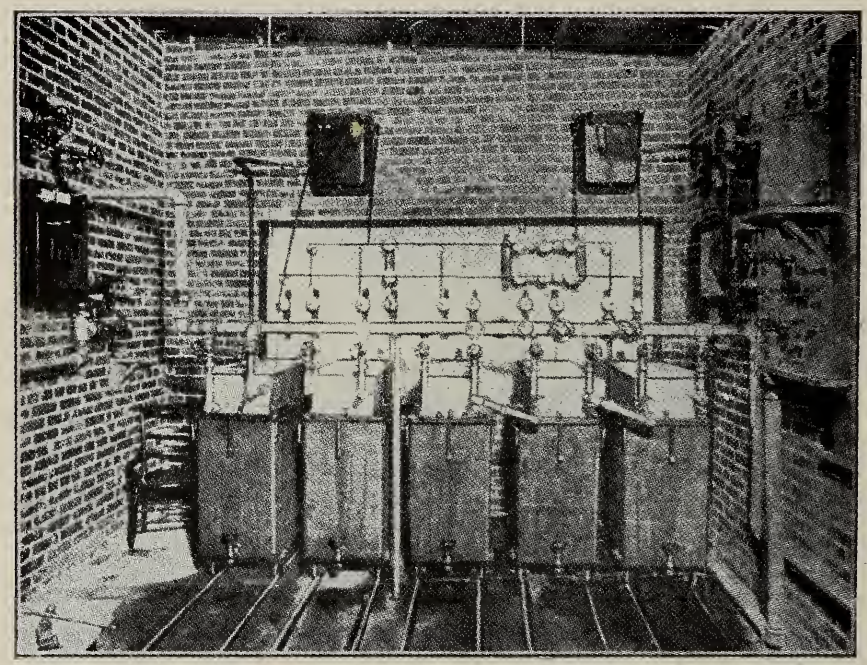
Ozone and Water mixed here

So little heat is generated during the passage of the electricity from one tinfoil surface to the other, that it is not sufficient to melt the paraffin with which the tinfoil electrodes are fastened to the glass tubes. The air being thoroughly dry, no nitric acid or nitrous oxide are formed. A concentration of ozone of six to fourteen can be easily had and maintained. Passing the air through a series of tubes will give a very high concentration of the ozone.

Pittsburgh municipal water is very impure, containing the colon bacillus as a constant ingredient and a large amount of

organic waste in suspension. During the last eight months nearly thirty-five hundred bacteriological tests have been taken of the water, both before and after ozonation. In every series of tests the colon bacillus was isolated before the water was ozonized, but never after. Even when the concentration of ozone was only two and a half to three the colon bacillus was killed. At the Ozone Plant here the concentration is kept at an average of nine to ten; never below six. The last series of tests consisted in inoculating the water, before ozonation, with millions of colon bacilli; the process killed all the germs.

Fig 3.



Five of the Ozonizers, three for water, two for medicinal purposes

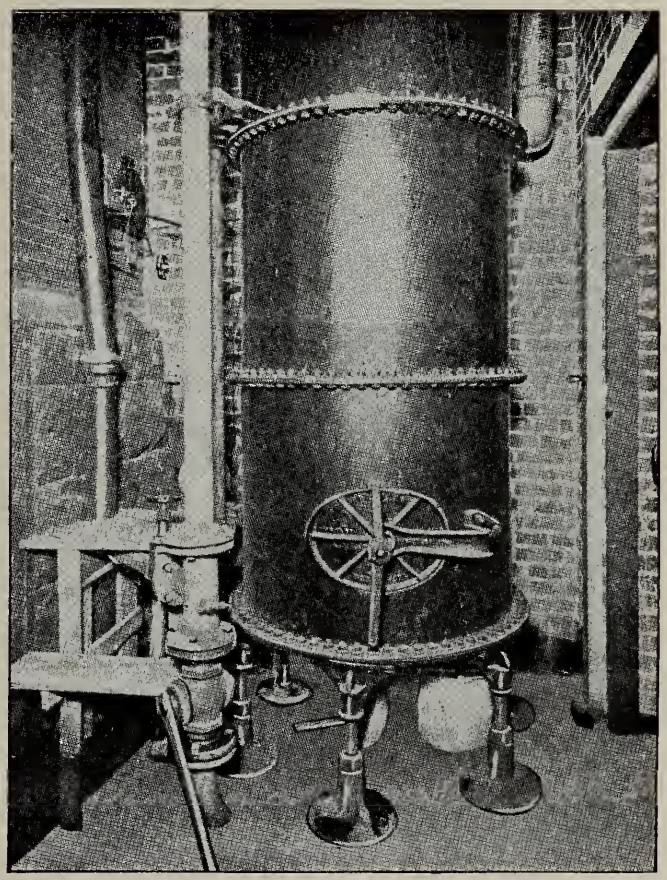
The manner in which the ozone acts on the germs is interesting. It not only kills the bacteria, but also burns them up—oxidizes them completely. All organic matter also is oxidized. Take a litre of rich colon culture in bouillon, and through it bubble ozone gas at a concentration of six to eight. At first the ozone attacks the waste organic matter, urea, ammonia compounds, etc., etc.; the odor immediately disappears. As soon as the waste material is oxidized the bacteria are deprived of the elements in their molecular structure that have the greatest affinity for ozone. Sulphur, for instance, has a high atomic number in the molecule of organic waste. Sulphur is especially attracted to ozone. Thus when any organic putrid odor comes in contact with ozone, the sulphur is appropriated, and the foul odor immediately disappears. In a few moments of time the litre of bouillon containing millions of bacteria is bleached white

and clear, has no odor, and not a bacterium can be found in the ozonized fluid.

Ozone is a boon here in Pittsburgh as the question of pure water is a serious one. No municipal water is any more contaminated than the water which flows from the Monongahela and Allegheny rivers to form the Ohio river; it is always rich in sewage. Pittsburgh's reputation for a high typhoid fever index is extremely unsavory. Ozone purification has solved the difficulty.

As installed at the Homœopathic Hospital, the cost of the Ozone Plant is about ten thousand dollars. This plant gives

Fig 4.



Lower End of Sterilizing Tower

ozone enough to sterilize two hundred and fifty thousand gallons of water every twenty-four hours, as well as ozone enough to fumigate any and all rooms in the hospital, the house being piped to carry ozone all over the building. It is in constant use as a deodorant. Foul discharging wounds or sinuses are completely deodorized by placing over the wound a pad of gauze saturated with ozone gas. Ozone may be used to sterilize gauze, etc.

The cost of maintenance is very slight. The plant, when run to its fullest capacity, uses only as much electricity as would be required by half a dozen sixteen-candlepower incandescent lamps. Once started it is automatic.

As above stated, during the past eight months about thirty-five hundred tests have been made to test the efficiency of the water plant alone, and the results have been highly gratifying. The water after ozonation is used for every purpose,—for drinking, or in the operating rooms without further sterilization.

In conclusion it is interesting to note that ozone has a definite action on the healthy human economy. A few provings have been made. Its action suggests its use in hay fever, asthma, pulmonary tuberculosis, and pertussis. The few cases of the above-named dieases already treated would seem to justify its further trial, which is now being given. Later on a full report of its action in certain pathological conditions will be reported.

A UNIQUE FEE TABLE.—According to the Journal of the Indiana State Medical Association the Fort Wayne Medical Society has adopted what is termed the minimum fee table, giving the members of the medical profession in that city charges for professional services rendered. The schedule is as follows:

Day visit, $1.50. Night visit, $3.00. Ordinary office consultation and advice, $1.00. Advice or prescription by telephone, $1.00. Obstetric case, uncomplicated, $15.00. In all cases where medicine is furnished an extra charge shall be made.

The unique part of this table, however, is the footnote added that is as follows: "This schedule is advisory. However, these provisions will be made the minimum standard of charges by 'competent' members of the Fort Wayne medical profession. There are some physicians who, because of deficient skill and training, conscientiously feel that their services are not worth the above-named sums, and of course these men will charge less for their work." Printed copies have been distributed to all members of the medical profession in the city and have been conspicuously posted in the offices. The table has been published in all the daily papers of the city, together with the announcement of the date when it will become operative.

As will be seen, it places every physician in a position whereby he must maintain fees or face the charge of believing himself to be incompetent and therefore entitled to less than the fees charged by competent men.

American Medicine Publishing Co. desires that advanced announcement be made of a coming publication by Dr. J. H. Kellogg, entitled "A Practical Manual of Photo-Therapy." This, it is stated, will cover in a complete manner our present knowledge concerning light therapeutics, their ethics, their physiological effects, technique and clinical application.

PRESIDENTIAL ADDRESS.*

By N. R. Perkins, M.D.

The time-honored custom you have imposed upon your presiding officer, of an address at the close of his official duties, would no doubt be a bar to his re-election, in many instances, especially if the address came before the election, had not custom already settled the tenure of office to one year—a wise forethought of the fathers of this society.

Quite a little work has been done this year, and some results have been attained. Considerable time has been spent in trying to secure much needed legislation; moments spent here and there in getting together material for this—the closing scene of the sixty-ninth annual session of this society, and here let me say that this has been one of the pleasantest years of my professional life.

The feeling that I have been honored by you, my associates, many that have been my intimate friends for years—others that I have known only as I have met you at our meetings. To have been selected by your suffrage as your presiding officer, I felt was an honor I could only repay by giving to the society my best endeavors for the advancement of its members and the profession at large. and I assure you that what has been done has been purely a labor of love, and if anything has been accomplished, the society has the credit.

The members have proven their loyalty to the society by their attendance at the meetings, and by their endeavors to make them successful—in the presentation of carefully prepared papers, friendly but critical discussions, the substance of which this or any other medical society might well be proud, and I would here thank all the officers who have so ably assisted me in the work of the year. Without their generous aid the work of your president would have been more laborious and the results obtained would be far less than they are.

I would also thank, in the heartiest manner, the members of the executive committee and the legislative committee, each of which has done so much to make the labor of your president lighter, and has added much to make the meetings of the year successful—and in publicly thanking the officers I would say a special word of commendation of our efficient secretary, who is always on duty and ready to give of his valuable time to make our meetings interesting and its work efficient.

My first official act was to visit fire-stricken Chelsea the morning after the conflagration. Strange as it may seem, none

*Delivered before the Massachusetts Homœopathic Medical Society, April 14, 1909.

of the members of this society were burned out, but many of the profession had lost their all. This society responded promptly—as it did at the time of the San Francisco calamity. In times of distress and suffering we know no sect nor creed, but the broad platform of Brotherly Love—a platform as broad as the east is from the west, and the north from the south, and from which we can extend the helping hand to any member of our noble profession.

At the last annual meeting seventy-five dollars was appropriated to erect a memorial tablet to the memory of the late Hans Burch Gram, the first homœopathic physician in America, the same to be placed in the hall of Boston University School of Medicine.

After consulting with the officers of the school it was thought that Commencement Day would be an appropriate time, and with an audience filling the amphitheatre, it was presented by your president, with a short historical address, and accepted by Dean Sutherland in words fitting to the occasion. It is placed near the tablet of the late Dr. Talbot and makes a fitting historical niche.

Boston University School of Medicine. Of the 424 members of this society, 300 are graduates of our own Boston University —a family of which any mother might well be proud, and of which we need not fear a race (homœopathic) suicide.

Boston University, at one time, was called a child of this society, but by a seeming kaleidoscopic change, the child has become the mother of a large and growing family, and what was once an assumed maternity has become a child indeed.

Boston University should receive more of the patronage of the members of this society—with the large, able and progressive corps of instructors and with the extended course of study, the future graduate will have a training second to none in this country. I trust every member will read carefully the last announcement before sending students to other colleges—especially to those conducted by the *Dominant School.*

Clinical Week, instituted last summer by the Faculty, was enjoyed by a large number of physicians from our own and neighboring states, two hundred and fifty tickets being issued. Forty--five per cent. of those in attendance were graduates of homœopathic schools, and fifty-five per cent. were from regular schools.

The lectures were timely and full of thought; the clinics were themes of the hour, diversitive, and showing a broad latitude of material for instruction and study. I sincerely hope that what was an experiment last year will become a fixture hereafter, and that the per cent. of attendance will be in favor of the members of our school—not in the spirit that we would withhold the best from our friends of any other school of thera-

peutics, but that an interest should be shown by our members in keeping abreast of the times, by all the opportunities that are given us.

A travelling man, who has been through the middle and extreme West, meeting physicians daily, said to me: "Boston University graduates are better homœopaths, use less of the physician's help in time of laziness (the combination tablets) than the graduates of most other homœopathic colleges."

A suggestion has been made—in fact has been considered by the Faculty and by a committee of the Alumni Association—that a chair of "old school" therapeutics be established in Boston University.

Soon after this suggestion was made, a physician asked me, "What is old school therapeutics?" I was unable to answer him—for today anyone must be convinced, if he reads the current literature, that old school therapeutics is in more of a chaotic condition than when, in 1790, Hahnemann proclaimed the law of *Similia similibus curentur.*

Some of the old school colleges have like ideas in regard to therapeutics—some teach hygiene only, with the use of anodynes and something to keep the bowels open—some teach the use of drugs, to a limited degree—some have almost reached the stage of therapeutic nihilism—and some teachers combine psychotherapy in the main, with the clergy as an ally.

The physiologic action of drugs is taught today, and has always been taught in Boston University—and not only this, but anatomy, physiology, surgery in all its branches, gynecology, obstetrics, life insurance examination, chemistry, medical jurisprudence, sanitary science, pedology, the various specialties—eye, ear, nose, throat and chest, insanity, diseases of the skin, rectum and nervous system, clinical neurology and electrotherapeutics, genito-urinary diseases, pathology, theory and practice, and materia medica—and in the department of materia medica students are instructed not only in the use of drugs according to the law of similars, but are taught their past and present use by others than homœopathic physicians—and not only this, but the latest views in medical science, including the views and theories of the use of vaccines in disease. The methods and technique of obtaining the opsonic index is taught until the students are familiar with this new method of treating disease, which is really but a phase of the law of *Similia similibus curentur.* To cover this wide field of instruction more than sixty professors and teachers are engaged. Students have not alone didactic lectures, but clinical and laboratory work comprise a large part of each year's study.

In the out-patient department of the homœopathic hospital from seventeen to eighteen thousand cases are annually treated—and all of these cases are available for study by the students,

and they are not only available, but the student must attend the clinics, both in the out-patient department and in the hospital as well.

Can it be said, after careful thought, that another chair is needed? Can others teach the collateral better than the present faculty?

Size them up—visit the school—and I think you will agree with me that the teaching force of Boston University is as good, if not better than many schools rated as number one by the Committee of Education of the American Medical Association. But by all means, if Boston University School of Medicine is to bear the proud name of "homœopathic" let homœopathy be taught as the only scientific law of therapeutics.

When one of the great political statesmen said, "I am a Democrat," he did not speak more from the heart than I do when I say *I am a homœopath*, and if I use my feeble influence in favor of homœopathic institutions, it is because I believe that more good can be done and is being done for the communities in which we live by homœopathy than by other methods of practice. And when I lay particular stress on the work of Boston University it is because she is my *Alma Mater*. I have been in close touch with her since she sent me out into the world with her *God Speed* and bearing her signet. I have seen her courses of study extended here and there—ever keeping abreast of the times—in fact, a leader in many instances. For all this, should I not be loyal to her and what she represents?

The Homœopathic Hospital, once fostered by this society, has grown from a fledgling to a bird of power. Even the medical board, I am told, has but little voice in its management.

The department for contagious diseases, made possible by the munificent gift of the late John G. Haynes, has been opened for the reception of patients during the past year, and is truly a magnificent memorial of a splendid type of New England citizenship.

There is a demand, by the physicians of the Commonwealth, for an interstate reciprocity, and the inquiry is frequently made, "Why are not the physicians of Massachusetts allowed the same privileges that are given to the physicians of many of the states"—why have we been taken up into the mountain and allowed to view the promised land of reciprocity enjoyed by others, only to be told that this is not for us, unless we should take another examination—possibly in our sister state of Maine?

We may well ask, "What is reciprocity?" Webster's dictionary says, "a mutual giving and receiving"—therefore, if we would establish reciprocal relations—with Ohio for instance—we must be willing to accept documentary evidence from the Examining Board of Ohio for her licenses, and Ohio must do the same for those who have been registered by the Board of

Massachusetts. But the law of Ohio distinctly says, "These (reciprocal) relations are only accorded to applicants from states and territories whose laws demand qualifications of equal grade with those of Ohio." The Ohio law further states that "only graduates in medicine from colleges recognized by the State Board of Registration and Examination are admitted to the examinations." It is obvious that reciprocal relations cannot be established with Ohio—and similar conditions prevail in most of the states.

Of the forty-nine states, including the District of Columbia, thirty-three have reciprocal relations of some kind—one state has what they call a special examination clause, so that when a physician who has been in active practice for several years comes to the Board well recommended, a graduate of a reputable medical college, the examiners sit down and talk with him, and if he satisfies them that his claims are good, he is given a license.

Sixteen states have no reciprocal relations by law—Massachusetts is one of these.

A little closer study of the medical laws of the several states may give a better understanding of the conditions.

Again, of the forty-nine states, forty-two require that all applicants for registration shall be graduates of approved medical colleges—of the seven that do not demand the graduation requirement, Massachusetts is again in the list, and, strange as it may seem, states having no reciprocal relations do not exact the graduation requirement as a pre-requisite to become eligible to examination; and, again, certain state boards have the power to refuse recognition to low-grade medical colleges—all states have this power, with certain limitations, except ten. Massachusetts is with the minority, and again has almost the same associates as in the non-reciprocity class. But let us look a little further.

Thirty-five states have some requirements in regard to preliminary education. Of the states that make no provision at all in regard to this, Massachusetts is one, and has for associates the states that do not reciprocate and do not require applicant to be graduates of approved medical colleges. It seems to me that the key to the whole situation is—*that our law is imperfect in this respect.*

A petition on the subject of candidates for registration to be graduates of recognized medical colleges, coupled with a definition as to what is the practice of medicine, presented to the next General Court by physicians—I care not with what school of medicine it originates—but let it be followed up by the physicians, through the legislature, step by step, and I firmly believe laws can be enacted that will give us—physicians of Massachusetts, with the acknowledged high standard of re-

quirement for registration of the Massachusetts Board—a standing before the registration board of the other states that we do not now have, and cannot have, until our law complies with the law of the majority of the states.

This and other matters of vital importance to the profession, and to the community and people at large, have been before the legislature, and when hearings have been given a bare handful of physicians have been present—some would stay at home to see an office patient, and some in the fond hope that they might see one. The opposition would be out in force, aggressive to the limit, and our indifference loses us the day.

Not only must the physicians be active in this work, but the public must be educated, and thereby become interested and active also. This education must come from the physician by every-day work. When physicians will become united, and each interview and labor with his member of the legislature, suitable medical laws can and will be enacted.

So many physicians seem to feel—at least their actions show it—that once registered, all interest ceases. The old Biblical saying, "Am I my brother's keeper?" applies to us today—and until every one will make the well-being of his brother-man his especial care, interstate reciprocity in medicine will not be possible for the physicians of Massachusetts.

Another matter that merits our attention is the composition of the present Lunacy Board. It is composed, at the present time, of three physicians of the regular school and two laymen.

There are, at the present time, in this Commonwealth, under homœopathic treatment, one general hospital for the insane and eight private hospitals and homes that receive insane patients, or those bordering on insanity—and these institutions are under inspection of the Lunacy Board.

I am not raising the question of the wisdom of the inspection—every safeguard should be thrown around the unfortunate ones who are unable to care for themselves, who are detained (voluntarily or otherwise) in these institutions—yet at the same time I feel that this society should have a representation on that board—a strong, virile man, one who is familiar with hospital work in every detail and one that would have the interest of homœopathy, and institutions under homœopathic treatment, always in mind.

We always like the American idea of "fair play"—whether it be the school boy asserting his rights before the British general on Boston Common, or the diplomat at the Court of Arbitration at The Hague—and it is only "fair play" that we have a representative on the Lunacy Board, and we should not ask for it in the spirit of the mendicant asking for alms, but in the same spirit that has always characterized us as a people—as citizens of a great Commonwealth—in the spirit of our fore-

fathers when they said, "no taxation without representation."

I would earnestly recommend that a committee be appointed to whom this matter be referred, and that they be instructed to present a candidate, a member of this society, to His Excellency the Governor, when a vacancy occurs—as it will next September.

Professor Carver of Harvard University, in a late address on Socialism, said, "The medical profession has the best professional morals. Doctors work deliberately for conditions which will cut off their own source of income. This willingness to benefit the community, at their own expense, exists to such a degree in no other profession."

Assuming this to be true—and I think there will be few to dispute its truthfulness—is not the medical profession to be found far in advance of the great wave of Socialism that is surely sweeping over this country—yes, over the whole world?

Socialism, in the abstract, is but the great principle of the brotherhood of man, the uplifting of one to the level of another. The work of the great religious bodies of today, in their efforts to evangelize the world, is but a phase of Socialism.

The many hospitals and dispensaries in operation today are evidence of the labor and sacrifice of the medical profession. Has this labor been remunerative to the profession in dollars and cents? I think not—only to the few.

Has it accomplished the end sought, in its beneficence to the poor? Certainly no one can question this.

What has been the effect of all this munificence on those who are able to pay the physician, who has given years of his time and many of his hard-earned dollars to prepare himself to occupy an accredited position in our honorable profession? A careful examination of the records of our hospitals would tell tales, I think, of abuses of noble charities, and abuses of a profession that has done, is doing, and will continue to do, as long as there are such high-minded men and women in the world, who work for the uplifting—for the betterment of our brother-man.

With the present wide-spread religious awakening throughout the world has come a revival, or a new phase of suggestion, psycho-suggestion, or whatever it may be called. At least the church has entered the realm of medicine—and many seem to think the church will be benefited thereby, while the clergymen are sure that by this union medicine will be improved.

When the "Emmanuel Movement" was first brought forward some of the better physicians favored it, gave it their sanction, were even enthusiastic over the results obtained—for at this time only psychic conditions were treated, and as long as the devotees of the new realm of therapy devoted their efforts to mental or psychic conditions, the physicians remained apparently loyal. But as soon as treatments were instituted for the more material ailments of the body there evidently began to

be a fear that the tail might wag the dog—and they refused to be the dog, even should it be the cause of stopping the play.

It reminds me of the story of the farmer who had a pair of steers that he had trained in the way that all good steers should go. He had the misfortune to lose one of them by death. He (the farmer) had work to be done, so he volunteered himself, was yoked in place of the defunct animal, and started the team. The steer became frightened at his new associate and began a brisk run—the man trying his best to keep up.

When nearly exhausted he espied some men in the road and shouted at the top of his voice, "Stop us! Stop us! We are running away!" And so it seems to me the physician of this ill-mated pair is shouting, "Stop us! We are running away!"

The Church has a distinct line of work and so has medicine, but when the two unite in one line of work each will act as an incubus to the other.

Far be it from me to belittle or make light of the work that is being done by Dr. Worcester—but his education, his training, his whole life work has been outside of the training of the physician—and only he can do his work well who has had the special training for that special work.

Now, fellow members, if I have wearied you with this long tirade, I trust you will consider that the matters of which I have spoken are dear to me. I am one of the older school of homœopaths—I love homœopathy and everything that pertains to that school of therapeutics—this is my only excuse.

"The world is full of noble tasks
And wreaths hard won.
Each work demands strong hearts,
Strong hands, till day is done."

ENTHUSIASM FOR HOMŒOPATHY IN GREAT BRITAIN.—One of the best indications of the increased activity among the homœopathic profession in Great Britain is found in an occurrence at the meeting of the British Medical Association last fall. At this meeting Sir Victor Horsley, one of the leading members, is reported to have said that "It is obvious that the question of homœopathy will have to be inquired into and reported upon by the representative meeting in future. Members cannot have failed to notice that at Bristol lately there seems to have been a kind of revival on the part of the homœopaths and a desire to concentrate themselves and to push homœopathy as a distinct entity."

We hope that many other localities will be thus induced to emulate the efforts of our Bristol confreres.

PSYCHOTHERAPEUTICS AND THE GENERAL PRACTITIONER.*

By Charles L. Nichols, M.D., Worcester, Mass.

About ten years ago a celebrated London physician, addressing a graduating class at the Royal College of Physicians, said: "You have been studying books and clinical cases during this medical course. Let me advise you now to read the writings of George Eliot, for in them you can learn better than anywhere else the springs of human action and the principles which guide our daily lives, a deep knowledge of which is of vital importance to your professional success."

This sentiment is one of many signs which have been developing with increasing strength during the past quarter century, until today the term Psychotherapy is on every person's tongue. To the fact that the medical profession in general has not taken to heart advice like the above, but has avoided its responsibilities in this trend of modern public opinion is due the formation among the laity of those attempts in this direction called mental and Christian Science.

These efforts, although in the right direction, have been productive of infinite harm in many ways by ignoring all medical knowledge and all scientific attainment. Another of the evils resulting from them has been a separation from other religious denominations by the formation of a distinct religious cult.

Today, that effort known as the Emmanuel Movement is an attempt to stem this tide by showing that religious suggestion is not confined to any denomination or sect, but belongs to every church, and that it can be best carried on in conjunction with careful medical oversight. The success of this movement has been remarkable, and I wish to record myself here as entirely in harmony with the work and I would gladly see hundreds in place of the few centres of influence in this important field. In this statement I refer of course to the movement as outlined at its inception and carried on as nearly along these lines as possible. My interest arises because the movement is a direct protest against the evils of Christian Science and because it is a legitimate outlet for that large class of people who, although they believe in medical skill and scientific progress, will always be more influenced in certain disease conditions by religious suggestion than by medical effort. It is not surprising that this movement has already reached the period in its growth where criticism has replaced perfect confidence and that it is now on trial at the bar of public opinion. Its present

*Read before the Hughes Medical Club.

danger lies in the fact that there are so few centres of work from which can go out an influence powerful enough to sustain public interest. Its limitation as an extensive movement lies in the fact that each centre of work requires a leader of considerable medical knowledge, of large psychological experience, and an earnest conviction of the righteousness of the cause, qualities which are rare in this combination! That the movement may emerge from its hour of trial unscathed and go on with increasing success is my earnest wish!

In the meantime there is a duty which belongs to the general practitioner today; a duty which calls the more loudly for effort because of the conflict before noted lest this important principle of psychic treatment fall once more into unworthy hands. I say it is the duty of the general practitioner, because, on the part of the specialist and research worker, discoveries regarding and proofs concerning the relations of mind and body have been pushed forward by them from the time of Dr. Pinel, more than one hundred years ago, until today each link in the process of mental action has been laid bare except that point of interchange which may never be known.

The many remarkable forms of apparatus devised by Dr. Kraepelin of Munich in order to record with mathematical exactness the evidences of health and disease in the brain and nervous system is the latest proof, on the part of specialists, of their efforts to make useful to the general practitioner the modern knowledge of the inter-relations of mind and body. The duty and present opportunity, then, of physicians in general is to put into daily practice this too little used addition to our therapeutic weapons—psychotherapy.

To this end many methods are offered to us, among which that of Van Eden of Amsterdam, that of Freud, of Janet and many others come into mind. It is my desire, however, to call your attention this evening to the system of Dr. Dubois of Berne, with which I have had an opportunity to become acquainted. Like all other therapeutic means, pschyotherapy has its limitations, and it is because of the definite limits put upon its field of usefulness by Dr. Dubois as well as because of its rational character that this system appeals to me.

In his work on "Psychoneuroses and Their Moral Treatment," lectures delivered at the University of Berne, he says that the origin of psychoneuroses is psychic. It is the mental process of ideation which creates and harbors functional disorders of the brain and nervous system, and these being psychic in origin require psychic treatment.

These functional disorders differ from those due to primary lesions resulting in visible organic changes and may be placed in the following classes: Neurasthenia, hysteria, hystero-neurasthenia and the lighter forms of hypochondria and melancholia.

To confirm the functional character of these cases each person should be examined with all modern aids to diagnosis and all the precision of modern biology, but in this examination one must not forget that the brain,—the organ of thought, the world of ideas,—is to be studied also.

Careful investigation has shown that the symptoms of these conditions—the stigmata to be recognized—are merely exaggerations of the usual characteristics of our human nature. In suggestibility, in fatigue, in sensitiveness and in emotion, such persons are easily and constantly moved to excess and so moved by causes entirely disproportioned to the results upon the system.

The end of treatment is to develop a willingness to be cured and a confidence that cure can and will follow and to show that the sick person can attain this by the development of self-mastery rather than by dependence upon others. The means used is the education of will or more properly of the reasoning powers.

This education is accomplished by the application of the philosophic method with the end in view of discovering the flaw in reasoning or judgment which first misled the patient and strengthening the mental processes in opposition to such false ideas. This, then, in outline is the system of Dr. Dubois. Let me speak a little more in detail of the symptoms.

Exaggerated suggestibility means, of course, a greater susceptibility to the influence of the ideas which the mind harbors, together with an inability, because of hasty and inadequate judgment, to distinguish between healthful and diseased ideas. Our birth heritage, our education, and our environment make sound judgment difficult for the wisest of mankind, and when we consider how few of us have large opportunities or make the best of those we have, it is not surprising that false ideas take possession of us and lead to mental twists and obsessions.

The aim of the physician should be to point out to the patient the importance of accurate reasoning and sound judgments carefully and slowly made, for our reason, as Dr. Dubois says, is the filter which arrests false conclusions and only allows to pass through those which lead us on our path towards truth.

Again, all these cases are sensitive, and excessively so, to fatigue. This fatigue comes on not only as a consequence of physical and mental overwork but as a result of a sudden angry word or even a fancied slight or some equally insignificant cause.

Analyze this fatigue and one will find that there is a small amount of real fatigue lost in an enormous amount of auto-suggestion of it which is not fancied but real and which bears with it a conviction of powerlessness to withstand its effects.

Here the task of the physician is to analyze with care the physical and psychic state of the patient and to decide when

rest and when stimulus to activity is necessary, and in either case to persuade and convince the patient that he is able to overcome the sense of helplessness to resist its force after due physical rest has been obtained.

So it is, and still more with those false ideas which come from erroneous interpretations of the stimuli entering through the avenues of the senses. Here too the difficulty lies in teaching the sick one to slowly and correctly interpret the sensations received and separate the false mental pictures which tend to crowd out the true.

But the most difficult of these symptoms is extreme emotional sensitiveness. Dr. Dubois claims, contrary to the belief of William James, Lange and others, that the emotions are entirely psychic, not physical, in their origin. In excess these also are irrational and are constantly strengthened by autosuggestions and by the loss of power to cope with them. In these cases in particular the reply to reasoning and encouragement is too often, "It is my temperament, it has always been so with me and I cannot help it!" There is a large element of truth in this, for our temperament does go with us, as do our physical defects to the grave. Yet we can greatly modify it by education and by constant struggle. In the words of Dr. Dubois, we can suppress by a sane philosophy of life, by a moral hygiene, this toxic element of the emotional temperament and remove or reduce to a minimum its untoward effects.

The treatment of digestive disorders, of circulatory troubles as well as urinary and sexual disturbances when dependent on or aggravated by these causes, are treated of in detail by Dr. Dubois, but without delaying I desire to call your attention to the foundation of his philosophy. It is not necessary for me to repeat to you his line of thought regarding the inter-relations of mind and body, although his arguments are of great interest and are convincing up to the point of the interchange from matter to mind. Von Norden, in his "Psychic Factor," says that there are today five theories of the relation of mind to matter:

Materialism, which claims that matter embraces mind.

Idealism, which holds that mind embraces matter.

Monism, which insists that matter *is* mind, that consciousness is an aspect of material force.

Ideal realism, which considers that mind is parallel with matter; and

The belief that matter and mind, while different in substance, have a causal connection between them.

Of these theories, that of Dr. Dubois which bridges the unknowable is Monism or Determinism. He says that the study of biology reveals a constant parallelism between physical phenomena and the work of which the brain is the seat, although there is, without doubt, between the facts of consciousness and

the physical state of the brain, an abyss which appears impassable in any logical explanation of the different steps in the process of thought and action. Either they are related as cause and effect or are dependent upon a third cause—such as some pre-ordained relation by the Deity. When one proves, as he believes to be possible, the relation of causality between body and mind or establishes the constant parallelism of physical phenomena and cerebration, one at once reaches Determinism. This conclusion removes from our lives the factor of free will: but Dr. Dubois replaces this, in his philosophy, with so noble and lofty an altruism that it would make one almost willing to forget the obstacles to such a creed.

Let me quote his own words: "In the absence of all religious conception, of all peremptory morality, the thinker feels the unspeakable trouble which results from a life where egotism prevails. To find complete happiness and health, we must turn our attention away from ourselves and fix it upon others: Altruism should take the place of native egotism. . . . In this domain of higher morality our step is at best as unsteady as in the mental hygiene which we should oppose to physical ills and vexations. Here also we have need of all possible moral assistance. Those whose turn of mind still permits of a simple faith find a support in their religious convictions if they are sincere and lived up to. Those whose reflexions lead them to be free-thinkers find in themselves, in a stoicism free from egotism, strength to resist all which life brings them. Woe to the indifferent ones; those who seek only the satisfaction of their selfish desires! It is dangerous to go through life without religion or without philosophy! I can even, without doing any wrong to believers, say plainly, without philosophy: for religion itself can be efficacious only when it creates a living philosophy in him who practises it.

"The banner matters little, if we carry it high enough!

"The influence of the physical over the moral is generally exaggerated, and biological science, not well understood or well interpreted, has encouraged a crude and gross materialism which can never avail in regulating life. . . . We can draw largely from the depths of moral conceptions which successive generations have created and work for the harmonious development of our personality. Our moral health depends upon it, and as our body suffers in the rebound of the various conditions of our spirit we shall, without repeal, assure our physical health by the education of our reason."

I repeat, and believe that you will agree with me, that these are noble thoughts and that they breathe a breadth of sentiment and a loftiness of spirit which few of us aim at, few indeed attain to!

While I cannot follow Dr. Dubois into the realm of philoso-

phy and reach the conclusions he has found so logical because my belief in a personal Deity rather than an abstract first cause is too strong: yet I do believe with him that the principle of treatment he has formulated for the care of these cases is sound.

As has been stated, religious suggestion appeals to and, I believe, will alway appeal to a certain class of mind, but this can be safely left to the clerical profession, whose province it is, so long as the method is practised along safe lines.

For the medical profession suggestion in sleep or the waking state is the legitimate field. Suggestion in hypnotic sleep has been used successfully by many physicians and in many disease conditions. In my opinion, however, its dangers are too serious for general use even in our profession. These dangers are the employment of it by unscrupulous persons and the fact that subjects treated by it are usually found to lose rather than gain self-reliance. Moreover the day of mystery in medical practice is over and those methods which appeal to the reason and to common understanding will endure longer and will satisfy the largest number of people.

I believe, therefore, that suggestion in the waking state is the better method for us. I believe that reasoning upon the conditions of fear and of false judgments found in these cases can effectually alter for the better such diseased persons and that they can be convinced by an appeal to higher standards of thinking and living and be taught the self-reliance and cheerfulness which brings mental and physical health.

You may say that these words are vague and abstract, and it is true, because the limits of such an article necessitate a general statement only.

In its application in our practice, however, when we are called upon to attend those included in the classification above given, we find that such persons have already suffered much, have already learned too well the powerlessness of drugs alone to resent an appeal to other means which promise more lasting results.

Apart from these cases to which this philosophy applies directly, we as physicians are using daily, perhaps instinctively, the same appeal to philosophy and are inculcating, in those whose organic sufferings are mitigated by medicine only in part, a noble and high-minded stoicism, the striving for which even will induce some comfort and bring a measure of relief. Truly Dr. Nathaniel Ames, the old almanac maker of Dedham, spoke wisely when he wrote in his diary, more than one hundred and fifty years ago: "If a knowledge of medicines alone makes the physician then the apothecary is the best doctor"!

But I would go farther and apply the same method of philosophical reasoning—though on a different plane—to those cases where we know nothing can be the outcome but death.

Euthanasia in its best form is not simple drug giving, but comfort and helpfulness to the mind worn and weary with hopeless struggles! Was it to drugs that Dr. Clarke of Boston turned when, in the midst of his last struggle for life, he wrote that epoch-making book, "Sex in Education"? Nothing but a deep and earnest philosophical spirit could have upheld him!

Again, recall the brave continuance of daily routine by President Harper to the last minute of an over-crowded life!

But we need not multiply cases, for each of us, as physicians, knows many—less illustrious perhaps, but not less heroic—persons. Bravery on the battlefield is simple compared with such strife! To these cases as well as the simpler and more hopeful, to which Dr. Dubois confines his practice, we can bring the solace and help of a true philosophy of life. It is for these reasons that I have called your attention this evening to the method of Dr. Dubois, as being especially applicable to the needs of the general practitioner for use in the increasing number of cases due to our strenuous American life, as well as because it will satisfy the growing interest of thinking people in this important field of thought.

MERCURIUS CORROSIVUS IN CYSTITIS.

By B. C. Woodbury, M.D., Portsmouth, N. H.

Case I. May 25, 1908. Patient, Mr. P. Age 59; of good habits; has had chronic hydrocele for several years. Family history good, and has always been well except for typhoid as a young man, and an occasional attack of catarrhal conjunctivitis, from which he has usually quickly recovered, but there remains a certain degree of weakness of the eyes, with granular lids.

Is very low-spirited of late and has lost a good deal in weight the past month, during which time he has noticed that he has had to pass water frequently by day and at night. Now presents following symptoms: Malaise which has increased very perceptibly during past week when, after working in an exposed place in his garden, thinks he took cold, and in fact there is now a very persistent cough with but scanty expectoration. These symptoms seem to him slight as compared with his persitent backache, smarting and pain on micturition with sensation as if bladder did not completely empty itself.

Remedies prescribed at this time were Cantharis and Berberis, and relief of the backache followed. Later Phosphorus was given, which apparently quickly dispelled his cough, but the uneasiness and frequency of passing water still remained.

Uranalysis June 1st, by Dr. W. H. Watters, showed a

marked cystitis, and as shown by the finding of a few hyaline casts, excessive caudate epithelium and calcium oxalate crystals, there was some question about there not being a possible co-existing pyelitis. In support of this there was the pain in the back, but absence of the characteristic temperature and chills of pyelitis and the urine was always acid in reaction. I therefore considered it a case of cystitis with an accompanying hyperæmia of the kidney pelvis.

On the other hand many modern authorities state that it is seldom that an acute infection of the genito-urinary tract is confined entirely to one locality.

Another analysis, June 19th. I quote from the report as follows: "There is a distinct improvement as manifested by the decrease in the amount of pus and of albumin. At the present time, if there had been no previous examination, I should hesitate somewhat in my diagnosis of cystitis. A pyelitis or some prostatic involvement, probably the former is rather more suggested.

These conflicting reports were somewhat clearer after the case became more fully developed.

May 30th, five days after my first visit, there occurred, about 10 P. M., a severe chill. Temperature, which had before this been practically normal, rose to 103.8. Pulse 106, with marked tenderness and severe pain in right testicle and cord (side on which hydrocele was located). The following day I evacuated the contents of the hydrocele, which gave temporary relief, but disclosed a characteristic swelling of the epididymis. From this time until June 18th the pain, swelling and tenderness increased to its height and disappeared under Pulsatilla, principally with some other remedies.

On June 19th the symptoms of an epididymitis began on the other side and went through a very similar course. Here Hamamelis 3x internally and extract applied as hot as could be borne externally gave more relief than did the Pulsatilla. By June 28th he was much improved, and urine was clearer in appearance. As improvement progressed but slowly, I gave in the meantime Conium 3x and Rhododendron 3x at different times, thinking I might benefit somewhat the hydrocele, which had partially refilled. The Rhododendron in due time reduced entirely the swelling and induration left after the epididymitis, but had no appreciable effect upon the contents of the sac.

Microscopic analysis from time to time still showed pus and bladder cells. During the height of the inflammatory process I examined the prostate per rectum, but could detect no enlargement or sensitiveness. Improvement was slow in the urine and there was still the sudden urging to urinate, with continual mental worriment. Petrosolinum 3x dilution, three times a day, relieved somewhat, but had but little if any effect upon the urine.

I next note that October 22nd I was called about noontime and found patient shaking with an intense chill. Temperature 102+. Pulse rapid. Intense backache, headache and vomiting. Here Eupatorium perf. relieved the urgent symptoms, but there soon developed a very acrid coryza, with the urine, as I greatly feared, again loaded with pus.

I now again went over all the symptoms and noted that the most prominent were these: Sudden urging to urinate, with more or less tenesmus of bladder after passing water, excessive weakness, with the fluent acrid coryza and intense thirst more or less constant. I prescribed Mercurius corr. 3x trit. Two tablets three times a day.

October 31st. Urine much improved in amount of pus; less tenesmus.

November 23rd. Patient called for more of same medicine, saying urging was entirely gone, and examination showed urine free from pus or sediment, urea nearly normal, and at my last knowledge there had been no return of the difficulty. About a month later I treated him for an attack of his catarrhal conjunctivitis, and since then he has remained well.

Case II. Patient, wife of Admiral D——. Age 60 years. No history of a previous attack, but during early part of present summer was annoyed by frequency of passing water, which ceased after a day or two. Patient is short and rather stout, of rheumatic tendency. On the evening of October 27th, 1908, began to have a sense of uneasiness in passing water which gradually increased until the pain and restlessness became almost unbearable. I was called at 1 A. M. There was very frequent bloody micturition with pain and scalding; very restless and nervous, with intense shaking of body with hot perspiration. The nervous symptoms were soon relieved after prescribing Belladonna and Cantharis, but the pain and tenesmus continued more or less unabated. I later found that solution more than any other remedy gave at least temporary relief. Uranalysis by Dr. Watters day following showed blood, very slight trace of albumin, but no pus, and none was found until October 31st, four days after the hæmaturia, which had in the meantime cleared up.

November 1st. Urine showed a faint suspicion of cystitis, and by November 4th the pus was very marked. I here note that the urging to urinate was very severe before and after micturition, with sticky perspiration on the hands, weakness of limbs, and more or less moisture in mouth, a moderately coated tongue with brassy taste.

I now gave Mercurius corr. 3x, of which one grain was taken once in three to four hours, with an occasional dose of Cannabis solution, principally for temporary relief, until Novem-

ber 20th, when the tenesmus was entirely gone and urine microscopically showed no pus.

In both the above cases a milk diet was insisted upon. The patients remained in bed or in a recumbent position. Spring water was given to dilute the urine. In both cases I confess several remedies were given from time to time, but nothing except homœopathic treatment was given except in the first case. Here capsules of Arheal (active principle of sandal wood) was given, but I fear my dosage was too attenuated to obtain desired results, as I abandoned it after a week's trial to no purpose.

In justice to myself I should add that in the first case I prescribed Mercurius corr. on my second visit, which was taken for only a day or two, when other symptoms suggested other remedies, and I did not give it a fair trial. I offer as a well-deserved criticism that one should first be sure of the correct remedy and stick to it, but just as much deserving of criticism would be the continuation of improperly selected remedies when in the judgment of the prescriber no benefit was apparent.

As an added thought I will say that I have recently prescribed for a case which presented the following symptoms: Patient, a naval officer. A year and a half ago had an attack of cystitis following exposure aboard ship. For acute symptoms he was given the routine Urotropin, which cleared up the urine, but there has since persisted frequent urination during the day and night, with dull pain above pubis when bladder became filled with urine. Tongue large and flabby and he feels sleepy and very full after eating.

November 10th, 1908, received an initial dose of Lycopodium 200 dry on the tongue, and thereafter Chimaphila 3x, of which he took a dose once in two to three hours during the day. Ten days later reported much improvement of all symptoms and more tablets were given him to take occasionally when symptoms were troublesome at night. At last report he considers himself practically rid of the difficulty. Uranalysis in this case was negative.

DESIRABILITY OF MIXED STATE MEDICAL BOARDS.—In the April number of "Progress" appears an editorial by Dr. D. A. Strickler of Colorado, in which the subject of the comparative advisability of mixed and sectarian State boards of medical examiners is unusually well expressed. The Doctor has been a member of the Colorado board for the past eight or ten years, having served a term as its president. This board consists of representatives from the various medical sects. It is therefore after much experience that the practical workings of the subject that the Doctor writes. He is strongly in favor of a non-sectarian board and gives excellent reasons for his stand. The article is commended to any who are interested in the subject.

A REVIEW OF CHLOROFORM-ETHER SOLUTION AS AN ANÆSTHETIC.

By G. J. Jackowitz, M.D., New Haven, Conn.

In this article it is not intended to advance anything new, but merely to bring before the reader a brief review of an anæsthetic that has not been given as much consideration as it is worthy of, namely, two parts ether, one part chloroform in solution. According to some chemists a true molecular solution of these two ingredients consists of fifty-six and three-quarters parts of ether and forty-three and one-quarter parts of chloroform; if this is so then in the anæsthetic advocated there is a slight excess of ether.

In considering the physiological effects of these drugs separately, we find stated by some of the best authorities that ether when inhaled produces faucial irritation, sense of strangulation and cough followed by a stage of cerebral excitement during which the face is flushed, respiration and pulse accelerated, with more or less muscular rigidity and spasm; ultimately followed by complete insensibility, muscular relaxation and a loss of consciousness. On the other hand, although the action of chloroform is very similar to that of ether, there are a few important differences that must not be lost sight of. Unlike ether, chloroform is more agreeable upon first inhalation, producing sensations not unlike those experienced in drowning, flashes of light before the eyes, noises in the ear, sense of weight on chest with an extreme stage of cerebral excitement and muscular activity, as with ether, ultimately unconsciousness, muscular relaxation, with a decrease in pulse rate and loss of reflexes. As compared with ether, chloroform is less stimulating, less irritant to the kidneys, more depressent to the vital functions and more dangerous on account of its action on the heart. Nevertheless, its vapor is less irritating to the air passages, more pleasant, more prompt in action, and produces a more profound narcosis but less subsequent vomiting (Potter). As to which of the above anæsthetics is best for general use is a much discussed question far from being settled, and, as is natural, the advocates of each are eager to uphold the virtues of their particular choice.

As yet no ideal anæsthetic has been discovered, but if one carefully considers and tries out this solution of ether and chloroform he will find that it is as near ideal as any anæsthetic used at the present time by the profession. It is not meant to insinuate that it is indicated in every case, for such an assertion would be extreme, but if carefully given it is safer than either ether or chloroform in a majority of cases. Physiologically it is neither a stimulant nor a depressent nor an irritant. As one

may readily conjecture, the ether as a circulatory stimulant overcomes the depressing effects of the chloroform. The chloroform, on the other hand, by reducing the amount of anæsthetic necessary, prevents the irritating effects of ether on the kidneys and mucous membranes of the respiratory and gastrointestinal tracts; therefore it may be given where either chloroform or ether are contra-indicated, and especially where rapidity of action and small bulk is an absolute requisite for the success of the operation.

During a period of eighteen months' experience of the writer at Grace Hospital, where this anæsthetic is used almost exclusively to all others, there has not been one case of post operative albuminuria due to the anæsthetic where the kidneys were previously healthy, nor was there any increase in the amount of albumin in cases where operation was essential on those suffering from kidney disease. Still further in the many years' experience of the surgeons connected with the institution there has not been a death due to the anæsthetic.

As compared with ether or chloroform, it is pleasanter to take than either of the above. It does not irritate the fauces, hence there is little or no coughing upon administration. Cerebral excitement, excepting in patients recently afflicted with delirium tremens, which is so common with ether or chloroform, is almost entirely absent. Respiration and pulse is practically unchanged from that previous to administration, there is little or no muscular rigidity or spasms, and a complete loss of consciousness and reflexes is attained much sooner than with ether and fully as soon as with chloroform.

The mode of administration should be by the open method, the advantages of which have long been demonstrated, the amount of air regulated as to the needs of the patient, requiring less than with ether and slightly more than with chloroform. If care is taken and a fine dropper used, it will be found that the amount of solution for complete anæsthesia will be far less than when ether, or fully as small as when chloroform, is used, the amount varying and depending upon the experience of the anæsthetist. The average amount for an hour's anæsthesia should be from seventy-five to one hundred eighty cubic centimeters. The advantages of this solution are obvious, for there is less intoxication than with either of its separate ingredients, hence a more rapid return to consciousness, and that post operative nausea so common with other anæsthetics is almost entirely eliminated.

To those who have had little or no experience with this anæsthetic, and are inclined to be skeptical as to its merits, the writer refers the twenty-second "Don't" in Dr. A. Hartley's article in the Hahnemannian Monthly," month of January, 1909, namely, "Don't condemn anæsthetics with which you have had little or no experience."

SOME SURGICAL LESIONS OF THE SPINAL CORD.*

By Winfield Smith, M.D.

Scarcely two decades ago, an appendectomy was considered a wonderful operation. Now hundreds, and I may say probably a thousand such operations are performed daily within the confines of this country. It is not uncommon for a layman to make the diagnosis; to find a relative or friend with the patient, who has had this fashionable malady, and possesses a clear conception of its symptomology, for education in this particular branch of surgery has become almost universal.

Such has been the advance in abdominal surgery, no one can prophesy what the next two decades may unfold, to our astonishment, in cerebro-spinal surgery.

Operative procedures on the spine are not an infrequent occurrence in the large metropolitan hospitals, and it would seem as if this branch of surgery, in view of the daily accidents from railroad, electric cars, automobiles, and I may well add flying machines in prospectu, were destined to advance in the near future.

The intention of this paper is to present some possibilities in this field, as the time allowed will not permit more than a passing glance at conditions which might be benefited by surgical interference.

The symptoms that indicate pathological or traumatic condition of the cord are perverted or impaired innervation of the parts below the lesion.

Disorders of sensation are first symptoms to be noticed.

Pain, parts supplied by spinal nerves below the point of lesion, sharp, radiating, shooting, burning, agonizing pains, often intermittent, or neuralgic in character, aggravated by motion, and preceding paralysis. Nothing causes such localized, recurring, persistent pains. Recently a case was operated on at the Massachusetts General Hospital for a tumor of the cord that caused no pain. The neurologists and surgeons watched with much interest the procedure, expecting nothing but disappointment to reward the bold adventurer, the neurologist, for his trouble. The tumor was found; the chagrin of the gentlemen that prophesied failure to the doughty neurologist can well be imagined.

The situation of the pain will depend on the position of the tumor, it being felt in the part of the body related to the segment or nerve root first affected; and in any case in which the pain is continued for over a month in one particular part of the body, there being no local disease to explain it, and no

*Read before the Massachusetts Homœopathic Medical Society.

evidence of spinal caries or carcinoma, a tumor may be expected.

Local tenderness often a symptom indicating little more than an injury to bone or muscle.

Anæsthesia one common symptom involving the sensory nerve roots.

Hyperæsthesia a common early symptom, even in total paralysis of motion may last for months or years; there may be an exalted sensibility of the skin giving a cutting or burning sensation.

Disordered spinal reflexes may depend upon increased sensibilities, the so-called spastic paraplegia in which the limb is suddenly flexed or extended, involuntarily, may cause pain.

Continued or tonic spasms is a constant and early symptom, especially those affecting the anterior column.

Priapism usually from fibres that pass down the spine, paralysis of the spinal sympathetic fibres.

Motor derangements are present in most cases of spinal irritation. Inability to empty the bladder or rectum are common early signs with or without paralysis of the extermities.

Partial or complete paraplegia is the most characteristic sign of injury to the cord.

Loss of voluntary motion may be of all degrees, and with or without muscular rigidity or lack of co-ordination.

Trophic disorders are seldom wanting in paralyzed parts, muscular atrophy, neuropathic eschars which form on the sacral region in case of paraplegia; these occur so early that they can hardly be due to presure alone, sometimes on the inner aspect of the thigh, sometimes on the heel, and the ball of the great toe.

Arthropathy, the limb suddenly becomes enormously swollen, and as suddenly reduces, after which the joints and bursæ distend with fluid.

Excessive sweating, an increase or diminution of temperature over limited areas of skin are the probable result of vasomotor derangements through the sympathetic fibres.

Cerebral and functional derangements largely predominate over the symptoms of spinal irritation in certain class of cases; the chief symptoms in many cases are those of nervous prostration from fright and worry, and are of the brain rather than of the cord.

Headache, loss of memory, sleeplessness, melancholia, irregular attacks of nausea and vomiting are quite common.

An understanding of the various functional disorders which may simulate organic disease of the cord, also spinal reflexes, is requisite for a thorough comprehension of the effects of lesions to the cord.

Case 1. A woman 36 years of age, of good family history, with marked neurotic tendencies, dark complexion, medium size,

was taken suddenly ill at the third month of pregnancy with sharp shooting pains in the limbs and back; they seemed to run almost any way. Nothing definite to account for the weakness and prostration other than neurasthenia, which was diagnosed by the attending physicians and nerve specialist.

These physicians were puzzled by the ever-changing train of symptoms and turned the case over to a celebrated obstetrician in New York City, and still the case kept growing worse, presenting all the time new and unexplainable phenomena, in spite of every effort.

Other physicians saw the case, and they were in turn puzzled.

The patient's husband being called away from New York for several months on business, she accompanied him. Every effort to give her relief was taken. Finally she fell into the hands of an orthopœdic specialist of repute, who claimed there was mobility of the ilium and sacrum. This he claimed gave rise to the pains down the back and limbs, the sciatic nerve, and other conditions. He assured them there would be improvement by replacing the ilium, but the patient's condition was such that she could not stand the necessary pain.

About the fifth month the patient, who had been suffering untold pains and tortures without any apparent relief from any means whatsoever, suddenly broke down completely; in an instant she lost the control of her limbs (lower), dropped on the floor, absolutely helpless. She was put to bed never to get up again.

At this time another neurologist was called to see the case.

The patient could draw up her limbs a very little.

She had no reflexes in either feet or legs; these were completely abolished.

Sphincters moved with difficulty, and then only after repeated efforts and much artificial assistance.

Paralysis rapidly increased, extending up to the navel.

Hyperæsthesia above the navel.

Destruction of the lumbar and sacral conditions rapidly ensued.

Sixth month. At this time the fundus was normal, though it was patent that sudden and deep-seated changes were taking place.

Within one week of the previous examination, the vision, which had been unaffected, became seriously involved; an optic neuritis which rapidly went on to total blindness, with enormous distention of the disk.

At this time it was supposed that the trouble was due to some general infection, auto-infection. No other assignable cause could be found, though often repeated and diligent search had been made.

No vomiting or headache, no cranial nerve palsies, except, at times, there was a little trouble with the third.

She now began to romance and tell queer stories; hallucination of sight; her mind was not clear, yet she dwelt much of the time on her pains, especially those of the back, that was the subject of all her talk. In fact she talked so much about the pain in her back that the doctors and nurses minimized her sufferings, notwithstanding she kept the clothes in perpetual motion trying to find a comfortable place to lie.

The pains continued, extending up farther on the spine, even to the arms, which she kept in constant motion, throwing the clothes about her continuously.

These conditions pointed to miliary tuberculosis.

About the eighth month she began to grow more stupid, calling for her husband as long as she could articulate.

Finally labor came on a little prematurely, which was painless. The respiration gradually went up until she expired.

Autopsy. The thoracic organs were healthy; in the abdomen two small tubercules were found. On opening the brain a gush of water showed it to be a case of internal hydrocephalus.

The upper part of the spinal cord was normal.

The cord from the cervical region to the tip of the coccyx filled the entire canal.

This tumor of the cord began in the sacral region, and extended nearly to the top, a glioma invading the sensory column.

No disturbance of motion, because the areas were not touched.

Complaint of pain, even to the last, though unconscious.

Growth closed the sub-dural spaces, preventing the drainage by the nerve roots. The fluid should pass through the foramen of Magendie, which relieves the pressure in the ventricles.

Case 2. Reported by Dr. Fowler of Brooklyn; involves a much mooted question of regeneration in section of the cord, which is substantially as follows:

A young man, shot in the back between the eleventh and twelfth dorsal, suffered severely from the shock, and paralysis of the lower extremities occurred at once. He was found to be paralyzed below the waist line and on a level with the tenth and eleventh dorsal spines. Sensation is absent over all the lower extremities and over the abdomen as high as the crest of the ilia on both sides.

The bladder and rectum are also paralyzed. The bowels move irregularly and involuntarily and without the volition of the patient. There is considerable twitching of the muscles of both legs, especially the toes.

Two weeks after the injury an incision was made, and the bullet was found between the severed ends of the cord transversely.

The ends of the cord sutured with chromicized catgut sutures, the dura was secured, the wound closed with drainage.

Three weeks after the operation the wound healed. The line of anæsthesia descended one to three inches lower than at the operation.

Twitching and muscular spasms of the thigh ensued.

The patient could tell when the rectum or bladder was distended. Knee jerks are exaggerated, particularly the left side. Right Babinski reflex more marked than left. Marked rigidity and spasticity of both legs.

Trophic changes slight.

Two years after the operation voluntary motion is practically lost in the affected area. He is able to stand when supporting himself by hands resting upon apparatus. The bladder and rectal control is doubtful; urine is sometimes voided during sleep.

Sensation is practically abolished in entire affected region with the exception of an area about five inches in length extending down the outer side of the thigh.

He is not able to distinguish between cold or heat.

Tactile sensations usually recognized, but are usually referred to a point two or three inches distant from the point touched.

There was no reaction of degeneration. The trouble is that the back and abdominal muscles, which are supplied with nerves from the point of lesion, are innervated from so many segments that the lesion of any one segment does not destroy their activity.

Now may not this singular provision of nature, a collateral anastomosis of nerve tissue, if you please, play an important part in nerve suturing? Does not some such connection exist which keeps alive neurones and axones, favoring a connection and ultimately some formation of nervous structures through which impulses may be transmitted?

This suggestion of nerve anastomosis through the media of branches of adjacent nerve trunks having origin respectively above and below the lesion, and in turn to the possibility of still further enhancing this effect by operative anastomosis of nerve trunks themselves.

This assumes a relative limitation of the ascending degenerative process with the elements of the cord as well as those of the axis cylinders of the divided and sutured nerve trunks, and resulting innervation of parts below the lesion and those supplied by the injured segments of the cord.

Case 3. Several months ago a middle-aged man who was accustomed to indulge freely in alcoholic stimulants climbed on a haymow to sleep off the effects of said intoxication.

Unfortunately he slipped off, falling on his left shoulder

and head, but was able to walk about much of the day, though in great pain, and without food.

At night he brought up at an acquaintance, an undertaker's establishment, where he wished to sleep that night. To this the embalmer refused to give his consent, but decided to furnish him with lodgings for the night.

Consequently they started in quest of a haven of rest for the unfortunate man, the funeral director steadying his charge, as he had grown rapidly worse during the few minutes delay; his head seemed to be drawn down on his left shoulder, presenting a hunched appearance. The injured man's gait grew rapidly worse; in fact the undertaker almost carried him, until suddenly he dropped, unable to move.

With the assistance of a couple of men, he was carried to the police station.

The patient was severally examined by three physicians, who respectively pronounced it alcoholism, neuritis, and a bad sprain.

He was taken to Danvers Asylum, suffering from paralysis of the left arm and incoördination of the muscles of the limbs, reflexes abolished.

Death ensued in 48 hours.

The autopsy revealed a fracture of the sixth transverse (left) process and lamina.

VACCINE TREATMENT OF VULVOVAGINITIS.—"The inoculation treatment of vulvovaginitis apparently shortens the stay of patients in hospital. Whether or not is actually lessens the total duration of the disease, as compared with other methods of treatment, future investigations must determine."—Churchill & Soper, Journal A. M. A.

THE VALUE OF THE MEDICAL MISSIONARY.—The subject of the work of the medical missionary is largely slighted by the general medical press, as it is also by the lay newspapers, with the possible exception of the work of Dr. Grenfell. It is a pleasure, therefore, to learn somewhat of this most important medical work from such an eminent physician as Dr. Keen of Philadelphia. The Doctor, among other things, speaks as follows: "The value of the medical services of the missionaries both to East and West is almost impossible to state. They have alleviated the dreadful sufferings of the natives by the introduction of anaesthetics and of vaccination; of a rational treatment of cholera; of preventive inoculation against plague, and the prevention of the spread of plague by rats; by the use of modern Occidental methods and drugs instead of the useless and nauseating mixtures of the native Oriental practitioners; by the introduction of modern surgical aseptic methods; by the substitution of modern obstetrical asepsis for the cruelties and often fatal barbarities of the native practitioners; and many other hygienic and beneficent services to suffering communities.—Monthly Cyclopaedia.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only, and preferably to be type written—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.

ASSOCIATE EDITORS:
F. W. COLBURN, M.D. C. T. HOWARD, 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, if possible.

CLINICAL WEEK AT BOSTON UNIVERSITY.

Last year the Medical School of Boston University introduced a feature that was unique in New England. It devoted the first week of June to what it denominated "clinical week." During this time six hours of every day were devoted to lectures, demonstrations and clinics prepared and arranged especially for the general practitioner. Tickets to the number of about two hundred and fifty were issued to as many applicants, representatives of all sects in medicine. So successful did this prove that many requests have been received for a repetition of the course. To meet this very evident desire the Faculty has arranged not only to repeat the series but to somewhat amplify it as well.

Beginning on Monday, May 31st, and continuing for six consecutive days will be given hourly exercises, six daily, by different members of the Faculty, each selected on account of special fitness for the particular matter under consideration. While the general outline is very similar to that of last year the individual exercises will be entirely different, thus avoiding repetition. The outline of the course is given below. Tickets will be issued without fee, in the order of application, to the number limited by the accommodations available and will be transferable. They may be obtained from Dr. F. C. Richardson, Registrar, Boston University School of Medicine, East Concord Street, Boston.

A number of requests were made last year for some laboratory course in addition to the above. Thinking that this might still prove to be a want, a tentative laboratory course has been arranged for the week following "clinical week." This will be given to a limited number only, not more than twenty, provided sufficient applications for it are received. For it a fee will be charged as noted below. Application must be made not later than June 1st, in order to provide time to make satisfactory arrangements. The horarium is as follows:

HORARIUM FOR CLINICAL WEEK

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9 to 10	Ophthalmology Wells	Orthopedics Earl	Orthopedics A. G. Howard	Neurology Colby	Rhinology Strong	Laryngology Houghton
10 to 11	Rhinology Rice	Surgery Packard	Gynæcology Cahill	Surgery Smith	Surgery C. T. Howard	Ophthalmology Payne
11 to 12	Proctology Halsey	Surgery Briggs	Obstetrics Windsor	Surgery W. F. Wesselhoeft	Surgery Chandler	Gynæcology Southwick
12 to 1	Chemistry Rowe	Medicine Percy	Medico-Legal Burdett	Neurology Richardson	Medicine Sutherland	Medicine Piper
1.30 to 1.55	Demonstrations in Museum of collections illustrative of tuberculosis, gynæcology, neoplasms, calculi, etc.					
2 to 3	Diseases of Chest Clapp	Hospital Topics Mann	Ophthalmology Suffa	Pædiatrics Moore	Batchelder	Surgery Emerson and Wilcox at Emerson Hospital
3 to 4	Dermatology Coffin	Otology Colburn	Medical Life Insurance Allard	Otology Bellows	Medicine Allen	

Laboratory Week.

Laboratory sessions will be conducted from 9 to 12 each morning and from 1 to 4 each afternoon, in Physiology, Chemistry, Bacteriology, Hæmatology, Bacterial Therapy, and Clinical Microscopy under the direction of Professors Weysse, Rowe and Watters and Doctors Rockwell, Eaton, Chadwell, Calderwood, Hayward and Henry Watters.

Fees. Clinical week, no fee.

Laboratory week, $10, payable at beginning of course.

In addition it is planned to arrange for a banquet, probably in conjunction with the Alumni dinner, June 1st, at which the Faculty and the physicians in attendance may become better acquainted in a social way.

RATIONAL HOMOEOPATHY.

Among the number of articles written on homœopathy during the past few months, that one that has in many of its phases most appealed to us appeared in the Journal of the British Homœopathic Medical Society, written by Dr. Charles W. Hayward of Liverpool.

Unlike many others, it admits the lack of wisdom and tact in parts of our earlier history, a lack still more noticeable in our earlier opponents. So well are many of the facts stated that somewhat extensive quotations may be merited.

"All the difficulties under which we as a sect suffer, and most of the odium medicum from which some of us, with our friends, the enemy, suffer, are due to a shallow and unreasoning view of the true position. Homœopathy, as such, does not in the least affect the many other branches of the healing art. The truth of the principle of homœopathy has rightly no more to do with surgery than the truth of transubstantiation has to do with the multiplication table. Whether the doctrine of homœopathy be right or wrong, it has no more control over drainage and other sanitary precautions for the public health than a theological doctrine has over the pons asinorum or other problem of Euclid. Regarded from the view of a complete medical education, homœopathy ranks as a therapeutic speciality, which develops its own proper and limited sphere to the highest position yet attainable; but in itself it is not a medical education or equipment.

"I fear it is a fact that the false opinion of what the description 'homœopath' really signified was due in great measure to the unwise method in which the doctrine was promulgated. I am willing to put the most charitable construction upon the facts, and to allow that it was over-zealous enthusiasm—perhaps goaded by some measure of inappreciation or persecution—which caused the earliest homœopathic medical men to take up an attitude which quite justified the opposition, though it should not have stifled the reason, of the remainder of the profession. They appeared to claim that homœopathy was the first and only truth, and gave ground for the assumption that other knowledge outside this law was unnecessary in medical practice. In so far as they did this, the opposition and ostracism of the profession were not only justified, but meritorious. Of course, as unfortunately happens in all human societies, when once opposition and hatred were wakened, untruth and exaggeration took the places of truth and enquiry. This caused an opinion to become widespread that 'homœopaths' practised nothing else than drug-prescribing in a peculiar manner, and that they knew nothing outside this one department.

"This wrong estimate of our capabilities has acted against us very materially, and it has taken 100 years for its final refutation."

These statements seem to be particularly sane and conservative, stating the truth as practically all will admit it. Nothing seems to be gained by making extraordinary and unfounded claims that homœopathy comprises all the truth in medicine and that outside of the administration of drugs little or nothing exists. We all think that similia similibus curentur is the best rule for giving medicinal agents for their curative effect. But we have no ground for claim-

ing that this is the only way they can be given to produce such effect merely because it has not yet been discovered. It is, therefore, gratifying to further read:

"In my opinion, the ideal medical man is one who has kept right abreast of all the latest developments; who knows, and has watched, the action of drugs upon the human subject, both—and I especially call your attention to the word 'both'—in what are described as 'physiological doses' and their direct action, and in infra-physiological doses and their curative action, when selected, upon the law, similia similibus curentur."

Since reading the article from which the above abstracts were taken, a second one has been brought to our attention that also appears to be worthy of particular commendation. This article appeared in the Medical Counselor and was written by a physician who is apparently not an homœopath. The title is 'Ionic Medication.' In it he takes an attitude so fair and open and one so similar to that of Dr. Hayward, above quoted, that it is well worth repetition. Among other things he says:

"Hahnemann has been discredited, abused, vilified, for the ideas he believed in, taught, and practiced. Perhaps matters have not been greatly helped by the attitude taken by many of his defenders. He lived and was most active prior to the year 1800. That he was a student is acknowledged by friend and foe. To assume that all which he believed and taught should resist the onslaught of time and its teachings, is puerile; to assail his teachings now merely because he taught them is foolish.

"Liebig was a great agricultural chemist contemporary with Hahnemann, and some of his theories have been exploded long since by later discoveries and methods, but no one thinks the less of Liebig because he had erroneous ideas and drew wrong conclusions. The 'Novum Organum' of Lord Bacon as a text-book in science today is of course an impossibility (withal it is very interesting reading), but nevertheless it made the reputation of the writer as a philosopher.

"Contact with some members of the homœopathic profession has led the writer to speculate upon what text these practitioners would be using, had fate made them science teachers instead of physicians, assuming that they fell into possession of the 'Novum Organum' early in their preparation for teaching.

"Hahnemann apparently had a glimpse of a great principle when he evolved the minute dose of medicine, and the assumption that the effect of the drug upon the system would be varied by the diluting of the drug, in the light of the Ionic theory, takes on tremendous importance."

To these sentiments we give our most unqualified approval. It must be by a recognition of the earlier mistakes of homœopaths, as well as of their many pre-eminent advances in therapeutics, that our

claims for the general acceptance of our law will receive credence in the medical world at large. And by thus frankly admitting our mistakes we will do much to disarm the hostility of others who have become too accustomed to expect us to claim if not infallibility, a state closely approximating it.

BRITISH HOMOEOPATHY TO THE FORE.

The Gazette has already expressed the satisfaction that it felt at the prospects of homœopathy in Great Britain and the stimulus that the propaganda received by the establishment of the British Homœopathic Association. The wisdom manifest in the foundation of this association is now once more in evidence. As already noted in an earlier number of this journal, the Lord Mayor of London, Sir George Truscott, is a warm supporter of homœopathy and one of the founders of the above society. In order, therefore, to give added impetus to the movement, he, on March 17th, called a general meeting of all in Great Britain who were interested in homœopathy. The object of the meeting was to make provision for the raising of a general fund for the entire kingdom, the income from which would be administered by a central committee for the benefit of the greatest number. To this call more than six hundred people responded, coming from all parts of the country. Not only was it notable for the enthusaism manifested, but it was undoubtedly the greatest national expression of the interest in homœopathy that has ever occurred there.

The British Homœopathic Review gives a very complete account of the proceedings and to this journal we refer those who may desire full details. The meeting was under the presiding direction of the Lord Mayor, who made a strong plea for the public recognition of homœopathy and for a fair, liberal test of the various methods of treating the sick in some large institution. Other speakers of well-known repute followed. Among these may be mentioned the Earl Cawdor, the Earl of Donoughmore, Sir Robert Perks, Colonel Clifton Brown, Dr. J. H. Clarke and Dr. C. E. Wheeler.

The following resolutions were passed:

"That this meeting regards homœopathy as an important asset in the national health, deems its advancement to be an important interest of the State, and welcomes the action of the Lord Mayor in holding this conference.

"That this meeting urges the wider prosecution of original research into the problems of medicine on homœopathic lines; desires an ampler foundation for a teaching and examining medical school; and affirms the necessity for an immediate increase in the homœopathic hospital provision for the country."

Another noteworthy feature of the meeting was the subscrip-

tions toward this general fund. These were made to the amount of about forty thousand dollars, and while by no means more than a beginning, nevertheless is a gratifying start. It is all the more encouraging when it is remembered that it has been made just after the successful completion of the sixty thousand dollar debt fund and one hundred and fifty thousand for the extension of the London Homœopathic Hospital. It surely behooves America to become more active and energetic lest our perhaps too much vaunted homœopathic strength prove less powerful than that of our kindly and closely interested neighbors.

In all these successes the Gazette takes much pleasure. They serve as good examples for America, subjects well worthy of emulation.

MASSACHUSETTS HOMOEOPATHIC HOSPITAL.

It is with even more than the usual amount of pleasure that the latest report of the Massachusetts Homœopathic Hospital has lately been read. Considering that this is but the thirty-ninth annual report, a comparatively short space of time, the degree of success that has been attained is truly remarkable, speaking in no uncertain manner of both the wisdom of the founders and the sagacity of the present management.

Without doubt the most important event in the history of the hospital during the past year has been the successful completion and opening for occupancy of the Haynes Memorial, or West Department. This places homœopathy not on a level with any other branch of medicine in the treatment of contagious diseases, but even on a higher elevation, as it is the only institution of its kind in Greater Boston, built by private philanthropy and suitable for all classes of patients. The Gazette applauds the action of the trustees in permitting any properly qualified physician, of whatever school, to take his private patients there and treat them himself. This seems not only fit and proper but is an indication that the homœopath is willing to bring his work and its results into comparison with those of anyone else. While planned for one hundred beds it has already accommodated one hundred and forty at one time, and has repeatedly had its capacity stretched to the limit. Much credit is given by the trustees, and we think it is certainly most deserved, to Dr. W. O. Mann, the superintendent of the hospital, for the successful outcome of the work on the contagious department.

The total number of patients treated in all departments was 4,543, an increase of thirteen over the preceding year. This was in spite of the fact that both the maternity and the children's buildings were closed on account of the financial stringency of the year. The former building has been sold, and wisely so, as it was but imperfectly adapted to the purpose for which it was used. It is hoped

that in the near future benefactions will be received in sufficient amount to allow for the construction of special buildings for each of these important branches. In the out-patient department 10,530 persons were treated, while 8,743 visits were made by the physicians and 3,187 by the district nurses at the homes of the needy poor. The daily average of free patients was eighty-one, a smaller number than has been reported for the past five years. The total mortality was 3.61; including medical, 11.71; surgical, 2.70, and obstetrical, 1.17.

Taken in its entirety or in sections the report is well worth reading and is one of which the homœopathic profession throughout New England may well be proud.

SOLAR THERAPY.—Dr. S. A. Knopf, the well-known authority upon tuberculosis, has the following to say concerning solar therapy, a therapeutic measure recently warmly recommended by many: "Solar therapy is not good for everyone, even in our temperate zone, but certainly it has proved beneficial in many cases in the hands of others and my own. The directions I am in the habit of giving my patients regarding the sun when outdoors are something as follows: Never walk in the bright sunlight without having your head covered When taking the rest-cure, have your body bathed by the rays of the sun, but keep your head in the shade; if the glare of the sun causes your eyes to feel uncomfortable, wear smoked glasses; when you are feverish do not take any sun-baths. Should the prolonged exposure to the sun give you headache, cause a rise of temperature, or make you feel uncomfortable in any way, discontinue these sun-baths until the physician orders them to be resumed. The patient undresses entirely, but if he complains of cold feet, he can keep his stockings and even his shoes on until he has become warm enough and desires to take them off. He places first a warmed sheet around his body, and then a large blanket; he then lies down on the floor in the sun, the head in the shade and slightly elevated by a cushion. As he begins to feel the warmth of the sun, he uncovers himself gradually until the whole of his body is exposed to the rays of the sun; he exposes his back by turning on his chest. He remains in the sun-room for from half an hour to two hours, according to the directions given him by his physician. He may change the recumbent to the sitting position, or walk about."—American Medicine.

NURSES' FEES.—I enter a protest—in the kindliest spirit, I assure you—against the autocracy of those trained nurses whose spirit is hard and mercenary and whose motto is, "Do the public—good."

Lest there be some who think I am mistaken in this matter, let me read to you the schedule of prices advocated by these mistaken enthusiasts, and printed in the organ of the nursing fraternity ("American Journal of Nursing," Vol. III., No. 2, page 886). "Acute diseases, $25 per week; maternity cases, $30 for the first week, $25 for succeeding weeks, unless there are two nurses, when $25 per week each will be charged for the entire time. Nervous cases, $30 per week; contagious cases, $30 per week; for attendance at an operation, or one day's engagement, $5; from two to six days, $4 per day." Then, as a special concession, the very generous statement is affixed: "No extra charge is to be made for attending to the body after death."—W. A. Newman Dorland, M.D., in "The Sphere of the Trained Nurse."

SOCIETIES.

MASSACHUSETTS HOMŒOPATHIC MEDICAL SOCIETY.—The 69th annual meeting of the Massachusetts Homœopathic Medical Society was held in Boston, Wednesday, April 14th, under the presidency of Dr. N. R. Perkins.

At the business section reports of committees were given by Drs. H. C. Clapp, Charles Leeds, E. P. Colby, N. R. Perkins, Wesley T. Lee and Howard Moore.

The officers for the ensuing year are:

President, Charles R. Hunt; vice-presidents, Amanda C. Bray, A. Howard Powers; recording secretary, Thomas E. Chandler; corresponding secretary, Charles T. Howard; librarian, Caroline Y. Wentworth; treasurer, Thomas M. Strong; censors, Edward E. Allen, Carl Crisand, Frank W. Patch, George E. Percy, N. R. Perkins.

Thirteen candidates were elected to membership as follows:

Louis K. Cross, M.D., Winchendon; Robert L. Emery, M.D., Rockport; Walter T. Fuller, M.D., Dorchester; Harris D. Handy, M.D., Harwich; Walter E. Harvey, M.D., Cambridge; Arthur B. Jenney, M.D., Stoneham; John A. MacMillan, M.D., Haverhill; Arthur V. Pierce, M.D., New Bedford; Harriet E. Reeves, M.D., West Medford; J. Walter Schirmer, M.D., West Roxbury; Florilla M. White, M.D., Boston; DeWitt G. Wilcox, M.D., Boston; Prince T. Woods, M.D., Middleton.

The scientific part of the meeting consisted in the reports from various chairs.

At 10 A.M. the Committee on Insanity and Nervous Diseases, under the chairmanship of Samuel L. Eaton, reported the following program:

Kræpelin Classification of the Insane, S. C. Fuller, M.D.; commitments, F. X. Corr, M.D. The Psychological Principles and Field of Psycho-Therapy, Morton Prince, M.D.

The paper of Dr. Prince, in particular, was of unusual interest and elicited an excellent extemporaneous talk by Dr. Richardson in its discussion.

Following the intermission for lunch, Dr. J. H. Lambert for the Committee of Diseases of Children, presented Dr. John Lovett Morse with a paper on "Infection of the Urine and Urinary Tract by the Bacillus Coli in Infancy," and a second by Dr. Thomas S. Southworth, on "Some Important but Often Neglected Factors in Infant Feeding."

For the Committee on Obstetrics, George D. Bliss, Chairman, Dr. Walter G. Crump spoke on "When and How to Enter the Uterus." Dr. Bliss then gave a report of his obstetrical service at the Massachusetts Homœopathic Hospital.

Dr. J. Arnold Rockwell represented the Committee on Clinical Medicine. The papers were two in number: "The Out-Patient Clinics and Their Advantages," by George R. Southwick, M.D., and "The Norwick Insane Hospital and Its Progress," by H. O. Spalding, M.D.

Following the Scientific Session the meeting adjourned to Young's Hotel for dinner.

The post-prandial exercises consisted of the presidential address by Dr. Perkins, an address by the Rev. Dr. R. Perry Bush, of Chelsea, on Science and Religion, and brief addresses by the president-elect, Dr. Hunt, and Dr. W. A. Dewey of the University of Michigan.

Following the suggestions in the president's address, Dr. Strong moved, and it was unanimously voted, that the legislative committee of the Society advocate a measure aimed toward the establishment of

reciprocal relations in medical licensure between Massachusetts and the various other States and Territories now showing reciprocity. It was further voted, also upon the motion of Dr. Strong, that steps be taken toward the representation of the homœopathic school on the State Board of Inspectors of Insane Institutions.

Rev. Dr. Bush frankly stated his objections to the so-called Emmanuel movement, plainly asserting that he would never consent to the establishment of such a clinic in his church.

Dr. Dewey spoke as the representative of the educational committee of the American Institute of Homœopathy, briefly describing its work, its aims and its purposes.

Over 150 members and their friends were in attendance, the entire session being one of much pleasure and profit.

BOSTON HOMOEOPATHIC MEDICAL SOCIETY.—The regular monthly meeting of the Boston Homœopathic Medical Society was held in the Natural History Building, April 1, 1909. The President, Dr. Nelson M. Wood, presided.

Dr. D. W. Wells exhibited a small instrument invented by Dr. Webster Foss, that is intended to prevent atropine from entering the lachrymal duct, thus minimizing the chances for symptomatic effects from the absorption of the drug.

The program for the evening consisted of two papers as follows:

High Blood Pressure as Beginning Evidence of Disease, Percy G. Browne, M.D.

Relation of Blood Pressure to Life Expectancy. Frank E. Allard, M.D.

Both papers were of unusual interest and value, and were freely discussed by Drs. F. P. Batchelder, S. H. Blodgett, D. W. Wells and others.

The various forms of sphygmomanometers were exhibited and their use explained.

AMERICAN PROCTOLOGIC SOCIETY.—The preliminary program of the American Proctologic Society has been received by the editor. This Society meets on June 7th and 8th at Atlantic City, its headquarters being Haddon Hall.

The medical profession is cordially invited to attend all meetings. The President is George B. Evans, M.D., of Dayton, Ohio; the Secretary-Treasurer, Lewis H. Adler, M.D., of Philadelphia, Penn.

In all, twenty-six papers are to be presented; a program that will be of undoubted interest to all those working in this specialty.

AMERICAN ASSOCIATION OF PATHOLOGISTS AND BACTERIOLOGISTS.—The annual meeting of this association was held at the Harvard Medical School, Boston, on April 9th and 10th. Many papers were presented of unusual interest, giving the results of original work.

OBITUARY.

Dr. Mary Eudora Farnham Whitney.

Dr. Mary Eudora Farnham Whitney died at her home in Medford, Massachusetts, on March 30th, aged 51 years. She was a graduate of Boston University School of Medicine of the class of 1893, and had been settled in Medford since 1894. Her death was caused by ulcer of the stomach. She is survived by her husband, N. Herbert Whitney, and a young daughter.

Mary Eudora Farnham was born at Woolwich, Maine, Sept. 27, 1858, and was a direct descendant of Ralph Farnham who sailed from Southampton, England, and landed in Boston, June 3, 1635. In 1874 her family moved to Auburn, Maine, where she entered the high school, graduating with honors, as the valedictorian of her class. After several years of teaching in Auburn she entered Wellesley College in 1884 and took a special teacher's course of two years, specializing in French, German and English. Returning to Auburn, she taught in the high school for five years.

Becoming interested in medicine, in 1890 Miss Farnham entered Boston University School of Medicine, from which she was graduated with credit in 1893. She served a term as house surgeon at the Philadelphia Homœopathic Hospital, and in 1894 settled in Medford as a regular practitioner. In 1896 she married N. Herbert Whitney, who has been long connected with the management of Tremont Temple.

Although she was busied much with the cares of her profession, she found time to be an ideal wife and mother and a true friend to many who knew her professionally and socially. Those who had known her as a lifelong friend and who were thus privileged to learn more of her beautiful character and who witnessed her patient suffering, so uncomplainingly borne, and through it all her thoughtfulness for others, feel that in the loss of Dr. Whitney they have parted with one who endeared herself to their hearts so closely that her place cannot be filled.

Dr. Whitney was a member of Tremont Temple Baptist Church, the Boston Homœopathic Medical Society, and was for several years a member of the Medford Women's Club.

THE REDISCOVERY OF HOMŒOPATHY.—In his presidential address delivered before the American Institute of Homœopathy at Kansas City, Dr. R. S. Copeland, in addition to many other subjects, thus treats of the rediscovery of homœopathy:

Homœopathy was an experiment in Hahnemann's time; it proved its value by the clinical test during the next period; by the present day methods, it has been scientifically proven, both as to the theory of similars and the small dose. Sir A. E. Wright's opsonic work, for example, is but a confirmation or rediscovery of homœopathy. The results of his research are familiar to every professional listener. Working, for instance, with the germs of pus production, he, too, observed the law of similarity. Taking minute quantities of the toxins of the disease-producing germ, toxins capable of producing symptoms similar to those caused by the germ, he was able to cure the lesions produced thereby. Not only did Wright thus rediscover the law of similars, but also, strange as it may seem, he hit upon the century-old conclusion as regards the size of the dose. One ten thousandth of a milligram, equal to the sixth decimal dilution of the homœopathic profession, is the dosage recommended by this scientist. This work is but one example of recent unbiased confirmation of homœopathic claims.—The Hahnemannian Monthly.

BOOK REVIEWS.

Refraction and How to Refract. Including Sections on Optics, Retinoscopy, the Fitting of Spectacles, Eye-glasses, etc. By James Thorington, A.M., D.M., Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine, etc. Fourth Edition. 220 illustrations, 13 colored. B. Blakiston's Son & Co., Philadelphia. 1909.

The appearance of a fourth edition is sufficient evidence of the popularity of this book. The author has succeeded particularly well in his avowed purpose of presenting the problem of the reduced eye, so that it may be comprehended by one who lacks a knowledge of the higher mathematics. Twenty more illustrations have been added.

The etymology of ophthalmological nomenclature is invaluable, but the unfortunate error of giving Greek roots in the Greek alphabet has been continued. It is premised that the average physician is not an adept in higher mathematics. It is also a well known fact that he is not a Greek scholar, and the English equivalents are absolutely essential if the etymology is to serve any useful purpose. This principle was adopted ten years ago by the Standard Dictionary and Dunglison's Medical Dictionary. The author should have recognized that scientific courses have crowded out any general study of Greek, and should have adapted his book to the needs of the majority of his readers.

The chapter on Applied Refraction is in line with the popular idea of case teaching. An appendix has been added "giving additional information on the subject of refraction." The information consists of the description and advocacy of DeZeng's Skiascope as the most practical method of measuring refraction, the eye being under the influence of a reliable cycloplegic. This the reviewer heartily endorses. There are also incorporated some valuable tables showing the relation of visual acuity to refractive error. The book can be recommended to the beginner in the study of refraction. D. W. W.

Metabolism and Practical Medicine. By Carl Von Noorden, Professor of the First University Medical Clinic, Vienna. In three volumes. Vol. I.—The Physiology of Metabolism. Vol. II.—The Pathology of Metabolism. Vol. III.—The Pathology of Metabolism. Anglo-American Issue Under the Editorship of I. Walker Hall, Professor of Pathology, University College, Bristol; Pathologist to the Bristol Royal Infirmary. W. T. Keener & Co., Chicago.

The author of this book needs no introduction to the American medical fraternity so familiar has become his name by his well-known writings on Metabolism. He has prepared what is undoubtedly the most complete work upon this subject that has appeared in any language. It is published in three volumes, each well printed and neatly bound.

Vol. I. treats of the physiological aspects of the subject. In it is given first a review of the different classes of foods, the changes that each undergoes during digestion and absorption and their final disposition in the body. The former very familiar term, uric acid diathesis, is here given recognition as havng a probable existence in fact. The major part of this volume is occupied by normal metabolism, as it occurs in man. In view of the latest work on tuberculosis one finds the section on forced feeding is of particular interest following the work of Chittenden, as is also that on under feeding. Much of interest is also found in connection with the influence of the sexual processes and of old age on metabolism.

The other two volumes discuss the pathological phases of the subject. Vol. II. contains several chapters of particular interest on the stomach, the intestines and the liver. Probably the one that will prove most attractive of all is that written by Von Noorden himself upon diseases of the kidneys. This subject is taken up in great detail and is treated in a manner indicative that the author is indeed a master. He well defines uræmia as "nephritis in its most advanced stage" and agrees with the French in their use of the term "petite Urémie" to indicate symptoms accompanying renal disease in general.

Again in the third volume the most universally instructive chapter is that also by the author on diabetes mellitus although those on gout and on drugs and poisons are worthy of particular mention. All the various pathogenetic causes of glycosuria such as renal disturbance, pancreatic, supra-renal lesions and hyperglycæmia are given due weight in the work. Anyone who desires to obtain the most complete data upon this subject of ever increasing importance, can do so in no better manner than to thoroughly master the facts and conclusions to be found in this very excellent work.

Practical Dietetics. With Reference to Diet in Disease. By Alida Frances Pattee, Graduate, Department of Household Arts, State Normal School, Framingham, Mass. Fifth Edition. A. F. Pattee, Publisher. New York.

"Practical Dietetics" is a book which may be safely recommended for use among those who care for the sick and by all who see in proper feeding the means of preventing much of the sickness about us.

The classification, composition, nutritive value and digestibility of foods have been carefully considered, and bring clearly before the reader the fundamental principles of dietetics in such a way as to be readily put into practical use in arranging the dietary for the sick.

The chapters dealing with the dietetic treatment of disease are especially well arranged. Most of the commoner diseases are dealt with in detail, in each case the cause of the disease being given, and the results aimed at by the prescribed diet.

The recipes contained are simple and practical and cover the whole range of cookery for the sick and convalescent. Each class of food is considered separately and is introduced by brief remarks in reference to its source, use in the body and practical points in the preparation of it.

On the whole the book is exceedingly practical and one which we feel confident will prove intelligible and interesting to anyone desiring to obtain some knowledge of foods and the difficult problems of nutrition.

G. E. G.

D. Appleton & Company have just prepared an illustrated catalogue of their medical books in which the very extensive sale of some of the best known is noted. Among others we learn that Osler's "Principles and Practice of Medicine" has been printed to the number of 117,000 copies, while Holt's book on Children has reached 71,000 copies.

The Gazette desires to acknowledge the receipt of the Proceedings of the 39th Annual Meeting of the American Medical Editors' Association. This meeting was held in Chicago and was notable for the number of papers of a superior merit presented. From the standpoint of the homœopath the paper by Dr. Hills Cole of the North American Journal of Homœopathy was perhaps of particular interest. This was entitled "A Plea for a Square Deal," and brought out considerable discussion from several members.

PERSONAL AND GENERAL ITEMS.

The American Institute of Homœopathy will hold its sixty-fifth annual meeting in the Y. M. C. A. Building, Detroit, Michigan, June 21-26, inclusive. Institute headquarters will be at the Cadillac Hotel, O., O. and L. at the Tuller. J. Richey Horner, M.D., Secretary.

Dr. Howard L. Cushman, class of 1908, B. U. S. M., has opened an office at 429 Court Street, Plymouth, Mass.

Dr. W. A. Dewey, the secretary of the Educational Committee of the American Institute of Homœopathy, was a welcome visitor at the recent meeting of the Massachusetts State Homœopathic Medical Society.

Dr. Maurice W. Turner presented a paper recently to the New York County Homœopathic Medical Society upon "Logical Extensions of Treatment Suggested by the Remedy."

Before the Bureau of Pathology and Preventive Medicine of the Homœopathic Medical Society of the County of New York, Dr. W. H. Watters read a paper on "Immunity and Homœopathy."

Dr. DeWitt G. Wilcox is scheduled for a paper before the New York Society for May 6th on the "Education of Women as to the Diseases Incident to Menopause."

It may be well to remind those readers of the Gazette who intend to attend the sessions of "clinical week" that it will be wise to apply early for tickets of admission. Last year the number of applications far exceeded anticipations, and the accommodations were correspondingly somewhat crowded.

By the will of the late Wm. P. Henszey, of Philadelphia, the Children's Homœopathic Hospital and the Homœopathic Hospital, each benefits to the extent of ten thousand dollars.

The editor has received with pleasure the announcement of the marriage of Dr. Helen MacDuffee Junkins, B. U. S. M., '03, to Mr. Edward James Beach in California, and extends to them his most sincere congratulations.

At the last meeting of the Medical Board of the Massachusetts Homœopathic Hospital, Dr. Nelson M. Wood, of Charlestown, was nominated as the Pædiastrist in association with Dr. J. H. Moore, who has given such excellent service in the past few years.

The Homœopathic Hospital of Yonkers, New York, has received a donation of $20,000 by the will of the late Mrs. E. S. Cochran of that city.

The Women's Homœopathic Hospital, the Children's Homœopathic Hospital, the Hahnemann Hospital and the Southern Homœopathic Hospital, all of Philadelphia, each receives $5000 according to the will of the late Dr. W. J. Earhart.

TESTIMONIAL TO DR. ROBINSON.—The students of Dr. Byron Robinson of Chicago are erecting a bronze bust in his honor.

The very popular "American Physician," edited by the late Dr. Frank Kraft, has been consolidated with the "Medical Councilor" under the editorial guidance of Dr. Dale M. King.

The 49th commencement of the New York Homœopathic Medical College is to be a notable one, if one may judge from the announced plans. Among the Boston physicians who have been asked to attend the exercises and banquet are N. H. Houghton, J. M. Jernegan, C. L. Kingsbury, J. H. Moore, H. E. Rice, J. T. Sherman, W. H. Tobey, H. E. Spalding, M. F. Styles, T. M. Strong and J. H. Stevens.

The American Journal of Dermatology contains in the March number an article of unusual historical interest upon public charities and leprosy in ancient Byzantium by Dr. Zambaco-Pasha of Cairo, Egypt.

Dr. W. E. Bongartz, for many years settled in Beverly, Massachusetts, has retired from active practice and has removed to Ashdale, Maine.

Dr. Ellen Eastman Schenck, class of '80, B. U. S. M., has removed from Ashby to Shirley, Massachusetts.

Dr. Hovey L. Shepherd of Winchester, Massachusetts, Associate Professor of Materia Medica in Boston University School of Medicine, has gone with his family to California, for the benefit of the health of his little son. Dr. Shepherd expects to remain away from New England until fall, and during his absence Dr. H. F. Simon (B. U. S. M., 1904) will care for his practice.

On Tuesday, April 13th, the Sophomore class of Boston University School of Medicine, under the guidance of Dr. Nelson M. Wood of Charlestown, Instructor in Sanitary Science in the School, visited the large and modern milk plant of H. P. Hood & Sons, in Charlestown. After inspecting the laboratories and all other departments, the company furnished the visitors with a fine lunch which was greatly enjoyed. Mr. Brown and Miss Ewart explained the laboratory work and food values scientifically.

AUTO-SERO-THERAPY OR ISOPATHY.—One of the latest methods of treating exudative pleuritis and one that will be of interest to homœopathic physicians has been introduced by Fade of Naples. He withdraws one c.c. of the pleural exudate and immediately injects this sub-cutaneously. These injections are repeated from two to five times, according to the severity of the case. A number of cases have been reported, a large proportion of which show beneficial results.

DEATH OF THE EDITOR OF THE LANCET.—Dr. Thomas Wakeley died March 5th, 1909. For many years he had been editor of the London Lancet, first in association with his father, later independently. It is interesting to note that the Lancet was first issued in 1823 by a Dr. Thomas Wakeley, a grand-uncle of the late editor. During this entire time the position of editor has been held by some member of this family.

Dr. N. W. Emerson announces to the profession that Dr. De Witt G. Wilcox, recently of Buffalo, N. Y.; is now associated with him in the exclusive practice of general surgery, and that together they will conduct the Emerson Hospital. City office, 244 Newbury Street. Hours, by appointment only.

By an unfortunate mistake some of the cards recently sent out gave the address of the city office as 224 Newbury Street instead of the correct one as above.

Dr. Osmon Royal of Portland, Oregon (B. U. S. M., class of '85,), has recently been appointed a member of the Board of Medical Examiners of the State of Oregon for a term of five years. Commenting on his appointment, the Oregon Sunday Journal of March 7th has this to say: "Dr. Royal's appointment comes to him unsought and is a recognition of his ability and standing in the city and State, where he has been a well-known representative of the homœopathic school of medicine for many years."

ADDRESS OF DR. D. H. BECKWITH.—It is with some surprise and with unalloyed pleasure that we have recently read in the Cleveland Medical Journal the address by our well-known Institute worker and former President, Dr. D. H. Beckwith. The article occupies the leading place in this journal and is upon the Erie Street Medical College of Sixty Years Ago. In it Dr. Beckwith explains how he became interested in homœopathy and later adopted it to the exclusion of the more heroic methods then in vogue. The address is dignified throughout and is one that we are sure will be read with interest not only by homœopaths but by the subscribers to this non-homœopathic journal.

DAMAGES FOR GAUZE LEFT IN THE ABDOMEN.—A judgment of $4000 is reported to have recently been made against a Chicago physician in favor of a patient. It is stated that four years ago the patient came to Chicago as a charity patient and the physician removed one of his kidneys. After the operation the patient was attended by the regular staff of the hospital and it was claimed that gauze was left in the wound. It was decided that the surgeon was personally responsible for the mistake, even though having nothing to do with it and being entirely ignorant of it.

The Gazette has received from a Committee on Increase of Membership of the Homœopathic Medical Society of Ohio, one of its circulars sent to the homœopathic physicians of that State. This consists of an active logical appeal for non-members to affiliate themselves with the Society, and should prove a decided benefit toward this propagandism. The fact that in 1907, fifty new members were elected, and in 1908, ninety-four, speaks well for the activity and the foresight of those in charge.

WOMEN IN THE ROYAL COLLEGE OF SURGEONS IN ENGLAND.—The Council of the Royal College of Surgeons of England has finally decided to admit women both to the membership and to the fellowship examinations. This has been done in spite of an adverse vote by a majority of the Fellows of that association.

Excellent reports are heard concerning the new ambulance service recently established by the Flower Hospital in connection with the New York Homœopathic Medical College. The Trustees of the Hospital voted the sum of fifty thousand dollars for purposes of enlargement and preparation for the increased amount of work thus made necessary. It is reported that the Commissioners say that the work is now better performed than it has been for years past.

BENEFIT FOR MEDICAL SCHOOL OF BOSTON UNIVERSITY.

On the evening of April 22d a Tanzkranzchen was held at the Hotel Somerset in honor of the birthday of Hahnemann, and under the auspices of the New England Hahnemann Association.

This consisted in a ball and various other forms of entertainment, such as whist, picture puzzles, etc. A large number attended, filling the unusually fine ballroom of the hotel. In every way, financially and otherwise, the affair was a success and must be marked as one of the most brilliant occasions of the year in New England homœopathic circles.

For the successful outcome much credit is due to Dean Sutherland, Dr. Richardson and Dr. Ransom. The reception committee consisted of President and Mrs. W. E. Huntington, Mr. and Mrs. E. A. Whitman and Dr. and Mrs. Frank C. Richardson. Among the patronesses were some of the best known of New England society.

The annual meeting of the Southern Homœopathic Medical Association was notable among other things as bringing forth the announcement by Prof. E. S. Bailey of the Hahnemann Medical College of Chicago that he had produced a substance called Radio-Thor. This substance was obtained from Prof. Bailey's mine in Colorado and, he claims, possesses curative powers not unlike those of radium, it being much less expensive and much more plentiful than radium. Investigation into the merits of the matter is important. A partial promise of giving the results of such continued research at the Detroit meeting of the American Institute was made.

THE USE OF TUBERCULIN.—It is with some surprise that we note in an article upon "Tuberculin and Its Use" by Sterne in the Cleveland Medical Journal the denomination of the various strengths of that material by the homœopathic 1x, 2x, 3x, etc. This seems for very obvious reasons to be the simplest manner of indicating the various strengths, but is one that we have not heretofore seen outside the homœopathic school.

CLEAN BEDS IN NEBRASKA HOTELS.—A bill has been introduced in the Nebraska Legislature providing that all hotels in that State shall be inspected annually, that all bedding therein must be aired and disinfected at least once every three months, that in every wash room a clean individual towel shall be furnished each guest. Another provision is that hotels shall provide each bed with pillow slips and under and top sheets of white cotton or linen, and all such pillow-slips and sheets after being used by one guest must be washed before they are used by another guest.—Medical Record.

By the will of the late Nancy Harding Fosdick, Cullis Consumptives' Home, Dorchester, is to receive $3000 and the Boston Floating Hospital the same amount, upon the death of the testator's sister. Several other public institutions are made beneficiaries, the entire amount left to charitable purposes being $40,000.

ALCOHOL AT THE MASSACHUSETTS GENERAL HOSPITAL.—Dr. Richard Cabot, in a paper in the Boston Medical and Surgical Journal, gives some interesting statistics concerning the cost of alcoholic stimulants and of other drugs for the past decade. For alcoholic stimulants there has been an almost steady decline during this time. In 1899 the cost of alcohol per patient was 57 cents; in 1907 it had fallen to 13 cents. The cost of medicine per patient in 1900 was $2.02; in 1907, 92 cents.

THE NEW ENGLAND
MEDICAL GAZETTE

Vol. XLIV JUNE, 1909 No. 6

ORIGINAL COMMUNICATIONS.

TUBERCULOSIS IN THE YOUNG.*

By W. B. Hinsdale, A.M., M.D.,

The belief is rapidly gaining ground that the first years of life are more important as regards tuberculous diseases than has generally been realized. No one can longer believe that tuberculosis is hereditary. It is ridiculous to speak of any infectious disease being hereditary in the biological sense. True, children are born tuberculous, but even then the disease has been contracted. When we divide life into pre-natal and post-natal periods, we do not draw a very sharp line after all. Infection can take place in both periods as we well know in case of many exanthema.

A child may contract tuberculosis in utero and the extent of the diseases will be proportionate to the tubercular process in the placenta.

The child of a tuberculous mother may be born with the germs attached to him, so to speak, and they may have set up their destructive processes while he was still living as her parasite. Such a case we would call congenital tuberculosis. No sooner is the infant ushered into the world than he becomes more exposed than grown people, and it is probably true that he presents more vulnerable points than they do. That he is more exposed, I shall assume to be granted by every one. It has also been held that his tissues are more susceptible. Two of the points of contact that he presents peculiar to his age are the gums and the tonsils. The jaws of infants are tender, easily abraded and almost naturally inflamed at time of dentition, affording free opportunity for the admission of infections. The tonsils during early life are more prominent and also more frequently present opportunity for invasion. I have seen some computations lately undertaken to demonstrate that advanced age is quite as susceptible a period as any in regard to tuberculosis, but we have not seen it denied that the opportunities for infection and the avenues of entrance are more numerous in childhood.

It is being quite generally held, at the present time, that the majority of those who die of tuberculosis when it causes the highest mortality, contracted and suffered from the disease in childhood, that the individuals have carried in their bodies from their early years, the

*Read before the Ohio and Michigan Homœopathic Medical Societies at Toledo, May, 1909.

foci that finally explode and cause their taking off, and that, as a matter of fact, they are not, as they so frequently appear to be, recent cases. The explanations for this statement will be exacted by those who do not accept it. I believe the explanations to be, in part, the fact that the processes of growth and rejuvenation are rapid from babyhood to full physical term and that the warfare against invasion is more energetic and the disease lies dormant and closed. It is a notable fact that the time of greatest mortality is the critical period of social activity. Tuberculosis is aggravated by worry. Sleeplessness, working under a strain, and mental anxiety promote its advancement. The loud awakening of the sexual functions in girls, who are not physically prepared for it, by marriage and motherhood acts powerfully at this time to bring out their smouldering weaknesses. When young people begin to enter upon life seriously; when, if married, they become confronted with establishing a home and get their first children, they labor, perhaps quite unconsciously, under a tension that they never experienced during thoughtless years of childhood and adolescence. At this time the fires that were kindled years before are fanned into a flame that actually burns out their very lungs.

It may be the alarmist's view, but the tracing of the connection between tuberculosis in childhood and early life and that occurring in later years has been called the most important progress that has been made with reference to the disease since the discovery of the tubercle bacillus.

If it be true that the larger number of pulmonary cases are derivatives from lesions in other parts of the body implanted in earlier years, a great many of them must escape detection while they are in the arrestable stage, and the medical features of the problem, for that reason, are the more grave.

This fact imposes upon both the parents and physicians of children the keenest search and the greatest exactness in methods that they do not lapse before it is too late.

We recognize that the forms in which tuberculosis is manifest in childhood are usually quite different from the forms that occur in adults. All the infantile forms may occur at any period of life, however; and the pulmonary forms, so common during the early periods of grown up life, may occur even in infancy.

Time does not permit the consideration of the avenues of admission of the germs to the seat of their first mischief only in a very cursory manner.

It has always been recognized that the scrofulous form of tuberculosis or tubercular adenitis is very common in childhood. This was noted before it was discovered that scrofula is etiologically a tuberculous process.

The germs may be received by inhalation, ingestion and, among children especially, by direct introduction through the membranous parts of the tissues as, for instance, when a child applies any object

he may pick up from the floor to his inflamed gums. The germs do not by any means start their pathological lesion at the point of entrance into the body, because we meet cases of tuberculous peritonitis and tuberculous lesions in the mesentery, the germs possibly having meandered here by the way of the lacteals and lymph vessels from the alimentary tract, which tissues they have passed by, or through, without taking root. We must cease from holding, if there be no tuberculous enteritis, colitis, appendicitis or typhylitis, that ingested germs can not be held accountable for mischief found in remote glands or even in the lungs themselves.

The tonsils, of course, are open gates for the admission of infection in case they be irritated, as they so often are, in children.

It is quite likely that glandular disease may be secondary to pulmonary lesions; on the contrary, there seems an abundance of evidence to justify us in still holding that pulmonary lesions are very often secondary to adenitis.

The course of involvement of the cervical glands indicates the source of infection. As they are usually involved from above, downward, it indicates that the primary center is not in the thorax, in which case the advancement will be from below, upward.

The bronchial glands are probably involved oftener than we appreciate. The old notion that a chronic cough will run into consumption is well founded.

The sooner we stop regarding chronic bronchitis as a disease and begin to recognize it as a symptom only, usually of oncoming tubercular pulmonitis, the better it will be for our patients. Simply treating a case of bronchitis with a little spray and vapor and a lick-and-a-promise of a prescription, is not far short of a punishable negligence. The spray may be soothing and harmless, and an indifferent prescription, probably, may be inoffensive, but the case demands a comprehensive and searching survey, the most painstaking prescribing and many other things just as well. The general lines of hygienic and regiminal treatment must be laid out and persistently followed, if we look to save the patient from final disaster.

Tuberculous adenitis, then, we will lay down as one of the commoner forms of disease among children. Another liability in early life is the meningeal form. I have seen a considerable number of cases of meningitis during the past year. More of both the cerebrospinal, and of the tuberculous form than I had been privileged to see for some years previous. I have become apprehensive of every case of infantile tuberculosis, wherever the primary focus seems to be, as it carries the liability of assuming that necessary fatal form, tubercular meningitis, for which there is no hope.

I do not believe that tubercular meningitis is ever primary, although some text-book makers state that it may be so. Since it is secondary, our opportunity is to arrest it before it reaches the inner skull. The child with any form of tuberculosis is predisposed to meningeal involvement.

Tuberculous adenitis is quite a tractable disease, and, while the infection remains confined to the glands, it is our time to fight with great hope.

I wish to emphasize the statement that adenitis is not, by any means, confined to the cervical region. All the lymphatic glands of the body intra- and extra-abdominal are susceptible and the location of the lesion, when we are positive of its presence, is often a fruitless search, but the remedies and the treatment may be effective regardless of location. When surgery is invoked, as it often is with the happiest results, the offending part must of course be located.

I wish now to come to something more specific. The following are some of the commoner conspicuous, if not diagnostic, signs of what I have been speaking.

1. Morning anorexia, no appetite for breakfast.

2. Fatigued easily. Every child that comes home from school or an outing complaining regularly of being "so tired" needs to be looked after.

Excitement may hold the fatigue in abeyance for a time and the child may do well in his classes and study hard, but the reaction is then the more noteworthy.

3. The child who is continually catching cold has the predisposition, if not the disease.

4. Cough. A coughing child can not thrive. He wastes his energy by his explosive efforts, irritates his laryngeal membranes, invites emphysema and probably either is, or will become tuberculous. Children should be taught to control coughing by will power. This education is an important feature of the treatment. Of course some coughing is necessary, but the hacking is often vicious and must be broken up so far as it is a habit symptom.

5. A sore spot in the lung will sometimes be complained of by a child old enough to define his real aches and pains. Investigate its cause and cure it.

6. Loss of weight. It is a very impoverished child that does not gain some in weight. An adult losing in weight without a quite apparent temporary cause has a very suspicious symptom. Loss of weight in a child is more serious. The rule as applied to children should be stated: "Does not gain as he should"; "Does not thrive."

7. An uneven run of temperature is always a bad sign. If there be a regular evening rise above normal for days and weeks, do not hesitate to pronounce the case as one pretty well under way.

8. Ascultation and percussion should be employed in every suspected case of pulmonary or pleuritic involvement. Determine if there is any particular "spot" in the lung that sounds unlike the corresponding spot in the other lung or surrounding territory.

9. Sweating. Sweating is very suspicious of tuberculosis in the child if, (a) not due to heavy clothes or to hot drinks; (b) if worse in cold weather whenever the child catches cold; (c) if around the neck and across the forehead, but if the child has wet the pillow

since birth, the probable cause is rickets; (d) if the sweating stops for intervals and starts again.

I will close these discursive remarks upon causes and symptoms by emphasizing once more that we can not be too thorough in investigating the cases that may present any of the premonitory, suspicious or diagnostic signs of any form of tuberculosis. With these signs recognized sufficiently early, we can arrest, if not cure, a large majority of them. The treatment is not in the least spectacular except when the surgeon removes for us suppurating glands or for diagnostic purposes opens the abdomen to note if it contains any undetected nodules. The advice of the surgeon is necessarily useful in all cases of bone disease, be it incipient or necrotic. The general treatment, or rather the management, involves time, often the whole period of growth and development of the individual. It is proper to speak of children growing out of a disease or out of a condition. Our services take the form of helping in this out-growth from disease.

Advice must be given and supervision exercised respecting clothing, sleeping conveniences, general household management, dieting, bathing, bodily habits of children, going to school, etc.

Especially should the principles of the fresh air treatment be taught the parents who should carry them into effect. All these most important adjuvants I must pass by for lack of time, but any of them, within itself, furnishes material for a paper.

Medicines must be given as indicated to correct either present or anticipated states. The treatment is many times prophylactic, although the indications for the prophylactic must be read in the bodily status of the child at the time it is given. Since so many of the cases are glandular, in fact the glandular type is the real child's type of tuberculosis, Calcarea and Calcarea iodatum are frequently indicated. With myself, Calcarea iodatum is a favorite remedy. I have had excellent results from Phytolacca in chronic enlargements of glands, although the diagnosis may not be positive with reference to tuberculosis in Phytolacca cases, which matters not, if the remedy is indicated.

Cistus canadensis many times relieves indurations of lymphatics in children extremely sensitive to cold. When fluctuation takes place of course surgery, Hepar, Silicea or Arsenicum may be indicated. Surgery may be recommended in "alternation" with one of the other remedies.

The therapeutics of tuberculosis is a volume within itself. The contents of a brief paper can only be an assortment of hints.

My last hint is, although it must be as slow as it must be deep in its action, the remedy should be worked out, be it nosode, Calcarea, Phytolacca, Sulphur, Lapis alba, Nitric Acid, Causticum, Silicea, Mercury, Iodi, Lycopodium, Ferrum phos., Phosphorous, or what it may.

HEMATURIA, CANCER AND TUBERCULOSIS

By George Laidlaw, M.D., New York.
Professor of Medicine in the New York Homœopathic Medical College and Flower Hospital; Visiting Physician to the Metropolitan Hospital.

The recent popular interest in tuberculosis has emphasized an important feature of the modern treatment of disease, that is, early diagnosis of serious diseases which in their early stage are curable but in an advanced stage absolutely hopeless. This is true not only of tuberculosis but also of diabetes, Bright's disease and cancer; and in none is it more important than in cancer. Cancer of the kidney resembles tuberculosis of the kidney in several particulars. In the early stage, both diseases are often confined to one kidney, both may be attended by bloody urine and tumor, both are absolutely unaffected by any medicine known to us and both are sometimes curable by timely surgical removal of the affected kidney.

It is here that the subject of diagnosis touches the homœopathic physician, and it is right here that humanity demands of him all the diagnostic skill that he can acquire. In diseases curable by prescribing medicine, it is sufficient to say that diagnosis is superfluous for a homœopath, that diagnosis does not help in the selection of the remedy. It is true that diagnosis does not help in the selection of the remedy, but here are two conditions where the remedy does not help either. Here are two conditions where timely diagnosis and surgical excision will cure the patient. This is the true reason for training homœopathic physicians in the art of diagnosis, not merely to satisfy scientific curiosity, not to show off their skill in the manipulation of new instruments, but solely for the benefit of the patient, to recognize disease at a time when that disease may be curable or where palliative treatment may greatly prolong life.

Roughly speaking, the age probability of bloody urine runs thus: Under ten years of age, cancer or calculus; twenty to thirty, tuberculosis; thirty to forty, calculus; above forty, cancer.

It is a mistake to consider a diagnosis of cancer of the kidney only in patients over forty years of age. As a matter of fact, one-third of all reported cases of cancer of the kidney have been in children under ten years of age. Cancer may be present at birth, but if a new-born child presents tumor of *both* kidneys with bloody urine, it is more apt to be a case of congenital cystic kidney. A *unilateral* kidney tumor with hæmaturia in a child under ten years of age is nearly always a cancer, usually sarcoma. The presence of pain and cachexia confirm the diagnosis, though some of these tumors run their course without pain and may be discovered before cachexia has developed.

Passing childhood, hæmaturias that appear between the ages of twenty and thirty strongly suggest tuberculosis. This must be distinguished from calculus though calculus is more frequent during the next decade, from thirty to forty. In calculus, a severe pain is apt to come suddenly in a well-fed healthy-looking patient between thirty

and forty years of age. The tubercular patient is usually emaciated and distinctly sick and there is no pain in the kidney, or at most a dull aching, like a pyelitis. Always examine such a case for tubercular nodules in the epididymis and prostate or in the lungs. Subnormal morning temperature with afternoon rise is an important sign of tuberculosis. So are the tuberculin reactions, skin, eye and hypodermic. However, these are not constant and they do occur now and then in apparently non-tubercular cases. The agglutination test is unreliable. A good radiograph shows extensive renal tuberculosis by a shadow corresponding to the whole kidney or portions of it and differentiates calculus easily as a rule.

The only positive diagnostic sign of renal tuberculosis is the discovery in the urinary sediment of the tubercle bacillus; and the hæmaturia can only be attributed positively to the kidney by catheterizing the ureters or cystoscopy. The recent demonstration by Rosenberger, of tubercle bacilli in the blood promises to be a great advance in our ability to recognize tuberculosis.* As yet, there is no possibility of diagnosing cancer by blood examination.

Arriving at the age of forty, we must distinguish between calculus and cancer. It is a common error to suppose that cancer of the kidney can be recognized or excluded by the pathologist who examines the urine. This is not the case. In many cases of cancer of the kidney, the ureter is blocked and no urine comes from the affected side. Urine coming from the other kidney may be healthy and the disease overlooked by those who depend upon the pathologist's report alone. In cases where urine comes from the cancerous kidney, blood is the chief symptom. There is no cell which is characteristically a "cancer cell." I am aware that some pathologists are so expert that from the shape of an epithelium they can sometimes make a reasonable prediction of its having come from a carcinoma; and that in sarcoma of the kidney, the sarcoma cells may be recognized in the urine. In spite of this admission, the statement remains true that, in a majority of cases, cancer of the kidney, either carcinoma or sarcoma, remains unrecognized by the urinary examiner.

How then shall we recognize cancer of the kidney in time to give the patient a chance of cure by excision? There are three signs of this cancer that are quite distinctive; pain, tumor and bloody urine. The co-existence of these signs is quite positive of cancer. When, however, a cancer of the kidney has grown large enough to be palpated, it is rather late to speak of early operation. This confines us to pain and hemorrhage as early symptoms. Here we must differentiate from tuberculosis and calculus.

Tuberculosis has been discussed. Renal calculus may give pain as agonizing as cancer. History of previous attacks of pain and bloody urine fits cancer as well as calculus. There is no difference in the location of pain between calculus and cancer. In both cases it

*American Journal of the Medicial Sciences, February. 1909.

may radiate along the twelfth rib or the crest of the ilium. Drawing up of the testicle on the affected side I have never seen in cancer; but it is quite common in calculus.

A good radiograph will usually reveal calculus. Since renal hæmaturia is so often due to diseases which, in their early stage, are curable surgically, an exploratory operation is advisable in any persistent renal hæmaturia of doubtful origin.

What attitude should the homœopathic physician take in the treatment of a case of recognized or probable cancer or tuberculosis? Should he attempt to cure it by prescribing or should he operate? Is it a question on which equally experienced physicians at the present day can reasonably differ? From an experience of twenty years in New York City, ten years of which time included much pathological work, with an opportunity to observe the practice of many homœopathic prescribers, my conclusion is that the evidence in favor of cancer or tuberculosis of the kidney having been cured by any remedy of any school is insufficient to justify the physician in postponing surgical excision of a kidney known to be cancerous or tuberculous, if the other kidney is healthy. The best treatment of cancer and tuberculosis of the kidney, as of cancer or tuberculosis anywhere, is early excision, if the other kidney is healthy. If the other kidney is not healthy, the case is inoperable.

Inoperable cancer requires treatment for relief of pain or possible prolongation of life. For the relief of pain, the symptomatically indicated remedy is undoubtedly of service. Intense pain has been modified or even relieved by careful prescribing; but one should not confound relief of pain with cure. Most cancers of the kidney will come sooner or later to require morphine hypodermically or opium by rectal suppository. The use of extract of opium by rectal suppository, combined either with hyoscyamus or belladonna is not practised as generally as it deserves. It disturbs the stomach less than morphine, does not require the physician or trained attendant to give each dose, it is well borne for months at a time and, if successful in relieving the pain, is preferable to morphine.

Inoperable tuberculosis should be treated like pulmonary tuberculosis, with open air, change of climate, abundant food, especially fat food, and rest Arsenicum, phosphorus, calcarea, kali and the tuberculins should be tried.

The hæmaturia is rarely severe enough to endanger life. It may be controlled by symptomatic prescribing of such remedies as hamamelis, phosphorus, terebinth; by empirical remedies like thlaspi bursa pastoris or the newer preparations of hydrastis, styptol or stypticin, which are really excellent hæmostatics; or by a chemical remedy like Lionel Beale's favorite, gallic acid, ten grains every three hours. The gallic acid is eliminated in the urine and probably exercises a local astringent effect if it happens to reach the bleeding point.

Of the X-ray and radium, I believe that we can not reasonably

expect the cure of an internal cancer or tuberculosis from their use. As yet they are purely experimental. The same can be said of the Coley toxins of erysipelas and the bacillus prodigiosus. The injection of radium emulsion, as practiced by Dr. Dieffenbach at the Flower Hospital, seems worthy of further trial. Treatment by trypsin and pancreatin has been successful in only one case of cancer of many that have come under my observation. However, all these treatments are worthy of trial in inoperable cases.

ON SOME UNUSUAL EFFECTS OF QUININE, WITH REMARKS ON CONSTITUTIONAL PECULIARITIES.*

By Walter Wesselhoeft, M.D.

The following letter may serve as an introduction to a somewhat unusual case:

"These are the facts in my cases of quinine poisoning, as far as Mother and I can remember them.

"The first time it happened was in 1885, when I was three years old; and was caused by an external application of ointment made of quinine and lard. It did not produce an eruption till after three weeks' application. Then came a red rash. I was having bronchitis and whooping cough at the time, and the eruption caused the whooping cough to cease. We do not remember about my temperature.

"The second time was in 1886, the next year. Hypophosphites had been prescribed, and I was given a half-teaspoonful at 7 P. M. By nine I had great restlessness and feverishness. In the morning I had a slight eruption. Not knowing what caused it, I took another dose, making altogether 1-4 grain of quinine. The eruption increased gradually, spreading all over the body and lasting a week. There was great irritation, itching and restlessness, but my temperature was not taken so we do not know about the fever.

"I have been free from symptoms thus observed when suffering since from any acute disturbance. Mother says that I am of a very eruptive nature. I always break out furiously in measles, chicken pox and brown-tail moth poison.

"In June, 1904, I had tonsilitis. I was feverish, but did not feel sick enough to go to bed. About 5 P. M. I went to see the doctor, who gave me rhinitis tablets. I did not know what they were, and had no idea of quinine. By 9:30 I had taken four tablets, which, I discovered later, contained altogether 1-2 grain of quinine. About 9 P. M. I began to have a chill and soon my teeth were chattering so that I had to give up and go to bed. I shook so that I had to hold on to the bed while undressing, and my teeth chattered so that I could not say a word. I found there was an eruption on my back

*Read before the Hughes Medical Club.

which was all a bright pink, and at once suspected quinine. The doctor came and took my temperature, which was 102. I had already some fever on account of my throat. The chill continued, decreasing, till I fell asleep. About twelve I woke up in a perspiration, and had a confused idea that I must change my gown. So I crossed the room and did so. On the way back my strength gave way entirely and I fell to the floor. I do not know, but I rather think that I fainted. I was not able to move a muscle for about five minutes. Then I recovered strength enough to crawl back to bed.

"In the morning my fever was about 101. My throat was better, and in two days was well, although it had been very bad indeed the first day. The doctor was much surprised at the quickness of its recovery.

"The eruption spread gradually over the body, a new place each day, till my hands, inside and out, my face, inside the throat, the top of the head and the bottom of the feet; in fact *every inch* was covered. The color was dark red, little beads and blotches of plain color. The doctor said there were four kinds of eruption. The itching was not bad till the eruption began to go down, which it did in one place at a time, in the order in which it had appeared. The eruption was so severe as to be almost hemorrhagic just above my knees after standing for a few moments. The color then was a dark purple all over my legs. The eruption lasted for five days, when the treatment was changed, and in two days I was almost over it. The fever was gone in two days from the taking the rhinitis. I peeled as if I had had scarlet fever.

"In December, 1904, the hair-dresser rubbed some tonic containing a little quinine, on the back of my head. This was in the morning. By night I had a tremendous itching on my head. I felt as if the skin had been cooked, and I felt gritty particles there. In the morning I found an eruption on the face, just as in the summer, but not so severe. It was checked, I think, by the X-ray. I did not feel feverish so did not take my temperature. In a few days the eruption was gone.

Comments of Doctors.

"Two doctors saw me when I had the quinine poisoning last summer. They said they had never seen anything like it, and never heard of anything approaching it. At first they could not believe it was from quinine, but finally they admitted that it was quinine poisoning in an excessively severe form. They said that if I had taken an ordinary dose, which they say is twenty grains in Cincinnati (where I was at the time) it might have been the end of me."

This case presents a number of points interesting from both a scientific and practical point of view, too apt to be overlooked by the busy practitioner of whatever school or shade of opinion. From the rigidly homœopathic aspect it might well be exploited for quite a number of new symptoms to be added to a list already unduly long, and for others confirmatory of old ones. For my purposes it will

be enough to consider more in detail, certain features, having a wider bearing than pure symptomatology.

First; regarding the chill so clearly described: It could not have been the initial chill preceding the slight tonsilitis, since it occurred several hours after this had begun; in fact, towards the end of the attack, but very promptly after taking the quinine preparation, and in a form and degree wholly unlike the ordinary chill ushering in a minor affection. In view of the peculiar sensitiveness of Miss W. to this drug, the chill, heightened temperature, final sweat and extreme prostration following may properly be attributed to its action. This inference is strengthened by the large number of similar experiences noted in Allen's Encyclopedia. We find there under quinine sulphate, "violent chill with chattering of teeth and trembling"; "shaking chill followed by copious sweat"; "severe chill, then fever"; and many other similar symptoms, given almost in the words of the above report, and all gathered from old school literature.

We see, therefore, that, though by no means the rule, chills not infrequently result from quinine, and I should mention, from doses much below those ordinarily prescribed. This lends support to the view that somewhere within the human organism are hidden spots, tendencies or dispositions capable of responding to quinine, even in small doses, by symptoms of a typical chill and its attendant phenomena. The question is, whether this same disposition exists in every human being, but so fortified, or perhaps obscured, in the majority that both small and large doses fail to liberate its reactions.

How Miss W. would respond to quinine in case she were afflicted with ague is doubtful. I know it would be difficult to persuade her to take it.

The familiar fact that chills often of great severity occur both in the course and onset of many affections, pneumonia, typhoid, pyæmia, hectic fever, etc., raises the further question whether they are caused directly by the micro-organisms peculiar to these affections, or from the toxins they produce, and consequently whether such remedies as we command in these affections act by destroying the microbes or by arousing the defensive processes and substances in the body by which the toxins are neutralized and the microbes rendered harmless. The latter theory seems now generally accepted for all diseases excepting ague, in which disease it is still held that quinine attacks the plasmodium directly. In this connection I must call attention once more to the accurate experiments of Rosenbach by which it is conclusively proved that plasmodia retain their vitality quite as long and actively in media to which a large proportion of quinine solution has been added as in those without it. Hence it must be inferred that the cessation of chills after quinine is due to a more complex process than that currently taught; in fact, to changes wrought in the processes of the organism similar to those produced by strychnine, ipecac, arsenic and other drugs in ague; in fact, by the organism itself as in the cure of scarlatina and other diseases.

A second point of interest in the letter is the cutaneous affection appearing in the patient even from very minute amounts of quinine. What is described is clearly an eruption of many forms, erythematous, miliary, papular, even hemorrhagic in appearance, attended with intense itching and burning and followed by exfoliation.

Here again, Allen's Encyclopedia records a great variety of cutaneous lesions from quinine: "œdema and rash followed by desquamation"; "rash over the whole body, vivid as in scarlatina, attended with intolerable and incessant itching"; "scarlatina-like eruption with violent itching over whole body, followed by desquamation lasting many weeks"; furthermore, papular, vesicular, and rough rashes; eruptions on lips, chin, neck and genitals; acne-like pimples on face and body, dark purple eruptions, etc.

Thus we have evidence that in no small number of individuals the skin exhibits a selective proclivity for quinine not manifest in the majority of mankind, but not improbably everywhere existing though not easily reached. Both in private practice and in my hospital cases I have observed slight but long-continued desquamation, and also troublesome itching after one and two grain doses of quinine in cases of intermittent fever. But these are still exceptional occurrences.

Their exceptional character, however, is the point that must engage our attention. Why should these effects occur in one individual and not in all, when so many symptoms caused by quinine are the same in every case? For the most part we put the whole question aside with the answer, "idiosyncrasies." But except that this states a general observation it sheds no light on the subject. In fact, no sufficient explanation of these phenomena can be offered. Nevertheless it is not without interest to pursue the question by the light of certain biological inquiries induced by the growing importance of the issues involved.

I am not sufficiently familiar with all the researches into, and all the speculative inferences regarding the ultimate nature of organic matter to go beyond a brief consideration of the cell, which for practical purposes must even now in the day of ions, electrons, and the like be accepted as the vital unit of the body. Whatever of characteristics it may present in structure and function and whatever of modifications it may undergo in the course of its development into tissues, necessarily depend upon the nature of the molecules of which it is composed. In the constitution of the albumin particles of the cell, therefore, must be sought the origin of the structure, function, character, strength, excitability and all other peculiarities of the organs and parts built up of the tissues, and hence the individual peculiarities of the entire organism. The most powerful microscope and most minute chemical analysis detects no difference between the homologous cells of different species of animals, but since the biological experiment shows the apparently identical cells to react differently in different species to the same causes, we are warranted

in declaring the albumin molecule of different animals and likewise of different human beings, to differ in its biochemical constitution. This difference is exhibited in many ways, not only by such elaborate and forensically important experiments as those on the blood of different species and varieties of animals, and men of different races, but by the more crude but equally convincing observations on living animals with drugs of various kinds. Kobert, in his compendium of Toxicology, mentions a number of striking facts, which go to show, among other things, the futility of applying the results of animal experiments to human beings. While there is no longer a doubt in the minds of reasonable clinicians on this point, few laboratory men appear to have given it due consideration. Merely as a matter of interest, to show how fully the subject has been studied and how wide is the difference in reactions of different organisms, in other words the biochemical constitution of structurally identical cells, let me mention that the smallest snail easily bears more strychnine than the strongest man. Many powerful poisons have no effect on insects. This is true more especially of vegetable poisons. Rabbits bear doses of morphine fatal to men; goats, as we know not only from the comic papers, but also from actual experiment, remain in perfect health after consuming amounts of lead, nicotine, cystosin (the alkaloid of varieties of cystosus, of which .0005 gr. is a strong dose for an adult man). Amygdalin has no effect on dogs, while rabbits are promptly poisoned by it. Among all animals, however, possessing great resisting power to drugs, the hedge-hog appears to be most blessed. Hovarth, in an article on the comparative effects of poisons, says[1]: A hedge-hog will, without the least disturbance of health, cheerfully and with evident relish, eat a number of cantharides-beetles sufficient to cause the death in great agony of a whole company of vigorous soldiers. Lewin,[2] who also has subjected this highly favored animal to many experiments, mentions: "that it is far more resistent to the effects of opium and hydrocyanic acid than other animals," and further: "that one must have witnessed with how much enjoyment it will sip strong, warm, well-sweetened grog, to believe how much of this beverage it can bear before showing the first signs of intoxication." Many other similar observations might be mentioned.

But it is by no means only in the lower animals, or by a comparison of their reactions to those of man, that the difference of susceptibility is exhibited. Martius[3] mentions—on what authority is not stated—that Malays and pure negroes are thrown into convulsions and delirium by doses of opium producing no more than a mild narcotic effect on Caucasians. Lewin[4] declares that children bear calomel and tincture of belladonna in doses sufficient to cause poisoning in adults; while Kobert[5] insists that children are especially sensitive to opium, and the aged to all vasomotor poisons, especially to cystosin, which my Encyclopedia of Practical Medicine tells me, stands as a poison between woorara and strychnine. How well

founded these observations may be in actual experimentation, I do not know, but we may well accept Lewin's dictum that "there is unquestionably a toxic personal equation—either of a positive or negative character, acquired or inherited—for every human being, a heightened susceptibility, or an unusual resisting power, towards certain pathogenic agencies, and this quite irrespective of becoming accustomed to these effects."

I have mentioned these details in order to be able to emphasize the fact, so little regarded by many, that the same cause, whether drug or etiological factor, may produce widely different effects in different subjects, that this difference lies *much less in the nature and quantity of the cause* than in the individual constitution on which it acts. Racial differences and those of temperament, habit and environment are known to influence the action of drugs; but not in sufficient degree to come under the designation of idiosyncrasies. That disease both heightens and lowers the susceptibility to many drugs is not to be doubted; but as yet it has not been demonstrated when or how—that is, *under what conditions* the heightening or lowering takes place. These are matters to which the strict Hahnemannians have given the greatest attention by the study of the modalities. I recall with horror, even at this late day, what surprising quantities of alcohol children with diphtheria, consumptives and others were made to swallow 40 years ago; how nearly in these pathological conditions they approached the hedge-hog in resisting intoxication, but how surely the little ones died and how many among adults were ruined physically and morally.

All these questions are of great interest from the homœopathic standpoint, and here I may mention my personal conviction, that whatever may be the errors and imperfections of homœopathy, no other therapeutic method and no other conception of the aims and limitations of medicine has an equal merit in bringing a man face to face *with all the weightiest problems of both pathology and pharmacology*. Its insufficiency lies in this, that its adherents have far too much attempted to solve these problems without adopting the slow and laborious course of scientific experimentation.

As germane to my subject let me mention only the psora theory, this stumbling block on our path. It had its origin not in any speculative conception, but in the observation confirmed by many pathologists contemporary with Hahnemann and by many modern ones, to wit; that the same cause may produce widely different effects in different constitutions. Its weakness lies in the fact that it at once attempts *to interpret the nature of the cause* by speculative assumptions rather than to seek an explanation by experimental tests. Since it is known that the male acarus does not convey the disease, that only the fertilized female is the agent of transference; that neither the freshly killed parasite, nor pus from the itch vesicle can produce the affection, the majority of us have abandoned the psora theory in its original form. Yet the underlying thought is not to be so readily

set aside. Martius,[6] whom I have already quoted, in speaking of the mutability of diseases, points out that the predisposition inherited from one disease does not necessarily show itself in the same form in succeeding generations. It may assume a variety of forms, as for example, gout in the parent may produce renal gravel, obesity, diabetes in the child. Edgren,[7] too, speaks of sclerotic changes developing out of certain general etiological factors which may in turn manifest themselves as obesity, diabetes, gout, rheumatism, chole- and nephrolithiasis, certain skin diseases, as eczema and others. He quotes Huchard's conception of the origin of many heart lesions out of precisely these predispositions, all of which may in the last analysis, be reduced to one underlying cause.

But it is unnecessary to cite further authorities in favor of changing forms of disease. Whoever is careful in taking the family history of patients, or has lived long enough to observe three generations,[8] will have been able to note the descent from one to the other of *identical weaknesses and traits and many diverse ones.* He will have seen the disappearance of some peculiarities and the acquisition of others; in fact, he will have been in close touch with the modifications of human constitutions, by both hereditary and acquired agencies, though without having gained much positive knowledge.

Some light we have today on places which not so long ago were in utter darkness, however many problems may remain unsolved. Among those partially solved is the problem of heredity which has received of late much attention from biologists.

As Martius says[9]: "The medical and practical problem of heredity, from whichever side we approach it, inevitably ends in the question, whether any given deviation of structure or function or of function alone, results solely from some external cause, or is the consequence of an inborn anomaly springing from a pre-existing tendency or disposition." And further, "if this latter is clearly the case, whence comes this unfavorable inheritance?"

Without attempting anything like a detailed examination of these questions I will remind you only of Weismann's theory, the only one so far in accordance with such facts as are known, and therefore still holding out against the disintegrating effect of new research and criticism the forces which have brought to nought so many fine theories pertaining to the subject.

According to this conception the inherent tendency or predisposition can have its origin only in the germinal plasma of the cell out of which the individual is developed—developed with all the typical attributes of its kind and with all the anomalies or deviations from the type. It is known that the essential part of the process of fecundation is the intimate union of the two nuclei of both parental cells, and hence the mingling of all the qualities of both sides expressed in the term "amphimixis." The protoplasm contained within the cell membrane of the germinal cells—called chromoplasm from the fact

that it readily accepts certain stains—divides into an equal number of filaments, the chromosomes, during the process of segmentation. The number of these is invariably the same for each species and variety of plants and animals. For the human being the number has not been absolutely established, but both Duesberg and Flemming agree, after most minute investigation, upon twenty-four as the most probable number.

During the process of segmentation following amphimixis each one of those filaments divides longitudinally so that each new nucleus again contains the same number of chromosomes bearing the original properties of both the ovum and spermatozoon. But at this point a certain differentiation in the newly developing cells is noted, the division into somatic cells and sexual cells. Out of the first the tissues are formed from which the individual is developed with all the peculiarities, either latent or active, produced by generations of ancestors and consequently liable to great variation or deviation from the type, while the sexual cells are set apart for the perpetuation of the qualities of the species with their unvarying typical characteristics. As I construe this theory given briefly in both Kirke's Physiology and Cunningham's Anatomy, the sexual cells take a course of their own. Their differentiation from the somatic cells is predetermined, their existence uninfluenced by agencies outside of their own cell membranes and continuing unchanged during successive generations in any environment in which the type or species can maintain itself. The existence, side by side in the individual, of permanent cells, unvarying and uncontaminable, with those of a varying character and perishable in so far that they do not, like their congenors, necessarily transmit all their qualities, offers in some measure a rational explanation, not only of the continuity of the species despite countless adverse influences tending to compass its destruction, but also the possibility of great variation of individual peculiarities with the preservation of the general type, and throws light on the further possibility of healthy offspring from degenerate and diseased parents.

On many of these points the microscope and biological experiment, more especially in scientific cattle breeding, throws much light. For the explanation of others recourse must be taken to hypothesis. To account for the transmission of bodily defects, for example, the very probable theory of *determinants* is constructed. These are forces, or possibly structural peculiarities—residing in the chromosomes, or abnormally absent from them. In color blindness, for instance, and hemophilia, certain determinants, those controlling the development respectively of the red-green elements of the retina and the coagulability of the blood, are either missing or too feeble, to perform their function. In polydactylism, on the other hand, a redundancy of determinants must be assumed, unless it is preferred to attribute the supernumerary digit to a supernumerary chromosome.

However, my aim is merely to call attention to hereditary constitutional characteristics in relation not so much to their transmis-

sion as to their mode of reaction to the causes of disease and to therapeutic agencies. My point is, that inasmuch as constitutional peculiarities determine in large measure the life history of the individual, they determine in equal degree the course of his diseases and many of the symptoms commonly attributed to the nature of their causes. These are the symptoms by which every case is distinguished from every other arising from the same cause, and those by which every proving of a particular drug is seen to differ in different provers. The manner in which Miss W. reacts towards quinine illustrates this sufficiently, and raises the question whether we should endeavor to influence the diseased organism by directing our therapeutic measures toward its constitutional peculiarities—in other words, whether we should individualize *quoad* the personal equation of the patient with all its infinite variety determined by inheritance of countless ancestral traits or *quoad* the cause of the disease with its more invariable effects determined by the general tissue proclivity manifest in the great majority? By which of these methods shall we call forth most effectually the recuperative forces inherent in the system. I believe the latter to be the more specific course and the only practicable one. We cannot cure, in the true sense, hemophilia, color blindness, polydactylism, myopia, astigmatism or countless other inherited defects, which are individual peculiarities, as are the stigmata of degeneration, many neuropathic affections, such as hereditary ataxia, forms of progressive atrophy and the like. Some of these may be practically remedied as, for example, visual defects by appropriate lenses; others, like marks of degeneracy, may be in great measure outgrown under favorable outward circumstances, and with the aid of discipline, training and the establishing of character and good habits. These may be looked upon as specific measures in so far as they are special means adapted to special cases, but they are not specific in the accepted sense.

The possibility of cure or positive benefit in all pathological conditions in which the intensity of the exciting cause does not preclude all favorable reaction, depends upon the degree of inherent weakness or insufficiency of the structural elements of the unsound tissues and on the degree of resisting power of the elements of the sound tissues. This would be a meaningless truism if it were not based on the embryological considerations before mentioned, and did not tend to correct certain old theories or to limit certain new ones of like import. It affords a better conception of the constitutional conditions underlying many forms of disease, even now ascribed to some peccant material capable of affecting the body in a hundred different ways. The interchangeable forms, for instance, of neuralgias, epilepsy, insanity, hysteria, and hypochondriasis; of gout, diabetes, obesity, arthritic affections, acute and chronic, the diathesis of renal and biliary concretions, dermatoses, heart lesions, interstitial and parenchymatous nephritis, and arterio-sclerosis, to mention only some of the hydra heads, this transmutability is, I say, still attributed to some

pathogenic entity. In homœopathic literature we still hear much of *miasms,* transmissible from generation to generation and manifesting themselves in countless forms; while among laboratory enthusiasts these "humors" are modernized in the theory of auto- and hetero-infection, which has gained a degree of prominence not warranted by experience, observation or experimental research. That toxic agencies of many kinds do exist, that they have been shorn of the mysterious halo by which they were surrounded and obscured before the days of bacteriology, there can be no doubt. But we can never lose sight of the fact that they remain as innoccuous as the penumococcus, the tubercle bacillus, Klebs-Loeffler and all other pathogenic micro-organisms unless they fall upon favorable soil; that is, upon tissues predisposed to afford them the means not only of existence—for they may and do exist in us everywhere and at all times—but the means of unchecked proliferation; and what is more, that under normal circumstances the organism commands automatic and effective scavenger service in its lymphatic system, and powerful emunctories in the lungs, kidneys, intestinal tract, ever ready to rid it of undesirable elements. It is the constitutional weakness in these and other organs and tissues that favors the yielding in chronic affections and may be said to invite the attack in all acute invasions, in the identical manner in which the idiosyncrasy, for example, shown in the case of quinine poisoning, lays the individual open to effects from which the great majority are free. We know that immunities exist, partial or complete, temporary or permanent, natural or artificial. All those exposed to measles, diphtheria, tuberculosis, etc., do not accept the disease, nor do all die who become infected. The immunity, partial or complete, is not in any sense due to changes in the virulence of the infection, nor to accident, neither do the mild and favorable cases owe their recovery to any particular method of treatment. That the greater or lesser intensity of the cause of disease may and does determine its course and ending, is true, as the greater or lesser force of a blow may produce a fatal or trifling injury. But the highly complex processes of invasion by disease and of resistance to its effects must be judged from different premises. The invading force for the most part is the same for all cases of the same invasion, while the resisting forces vary within wide limits.

We shall walk more securely in adjusting our theories to facts clinically observed if we seek the origin of many pathological conditions and their accompanying phenomena in inheritance, and construe them as weakness or insufficiency derived from imperfections in the (biochemical) constitution of the germinal protoplasm. Practically important as the question is, I cannot at the end of my remarks, consider the difference between genuine inheritance of constitutional peculiarities and the transmission of actual diseases, that is, the question of hereditary syphilis, tuberculosis, etc. The first is now held to be the perpetuation in the offspring of all the latent and active attributes both of structure and function inhering in the paren-

tal germinal tissue; the second an actual transmission of infectious spores adhering externally to the germinal cells. The first, therefore, is a morphological inheritance in the true sense, the second an actual infection, more or less accidental, of the new individual by one or the other parent—a wide difference concerning which the battle still rages.

The distinction is one of great interest in relation to the question of inherited and acquired constitutional peculiarities and weaknesses. The conception of these as predispositions manifested in exceptional susceptibility towards certain agencies, of undue excitability or irritability of certain tissues, or an undue liability to the liberation of certain reactions in response to slight stimuli, rather than the result of material causes such as miasms, psora or bacterial toxines, is not without a direct bearing on therapeutic considerations. At first sight it might appear that the existence of predetermined constitutional characteristics and their inevitable consequences upon structural development, must necessarily lie beyond therapeutic control, a conception which has, in fact, caused no little confusion and much of the modern therapeutic nihilism. Nevertheless—despite the learned neurologists who so lately have declared that there are no functional diseases—it cannot be denied that in the great majority of non-surgical diseases our measures are directed against disturbed functions. Who has not known pronounced structural defects to exist throughout long lives without other ill consequences to the bearers than certain limitations? I might cite many cases in illustration, but will content myself with pointing out the functional compensations of structural heart and other lesions, the adaptation to many adverse internal and external conditions and the effects of habit, all of which are functional processes correcting functional disorders produced by structural changes. These and many more might be instanced to bring clearly to our minds the predominating part played by function in the inception, the course of internal diseases, and in the recovery from them.

And this brings me back to an important consideration suggested early in the case of quinine poisoning—that of the relation of idiosyncrasy or predisposition to the immunity that guards the lives of all who survive disease. We know how difficult it is to gauge the vitality of individuals, how hard some die of the gravest and most advanced affections, and how easily others succumb to lesions pathologically far less pronounced and menacing. In the last analysis the question is one of functional resistance on the part of the cell-molecule out of which are liberated the reactions that set free in their turn the defensive processes for the neutralization of harmful material and its elimination, the control of reflexes attended with danger and suffering, the rushing of congestions where needed, and the equalization of those excessive and harmful. The question is whether the organism has other resources to overcome diseases actively progressing, or must depend on the same immunities and

defences by which it is guarded in health against invasions and disturbances. It is certain that at times the defensive processes are liberated on very slight provocation to the degree of danger, while at others they are clearly inhibited to an equally serious degree. A few of the most ordinary doses of quinine would certainly have been of the gravest consequence to the writer of the letter; while so many consume the drug recklessly without ill effect for every threatening cold.

I would have been glad to subject the lady whose case has served as a text for these lengthy remarks, to varied tests, but this has been impossible for several reasons. She has been much out of my reach, and what is more, she refuses to take knowingly *any* preparation of quinine. But even in the absence of further experiment the case is full of instruction. Not only the question of a specific relationship between a drug and tissues possessing, as their normal condition, an exceptionally high degree of susceptibility, but the question also of a specific relationship between a drug and tissues either abnormally heightened or blunted by disease, is brought prominently before us. These are questions I propound without the intention of offering any other explanation than that to be inferred from tracing them back to inherent constitutional peculiarities in place of accidental or temporary and changeable conditions. Already too much theorizing and speculation have been wasted on the subject which none but the most painstaking experiment and observation can elucidate satisfactorily. The questions of specific reactions in health and disease are forcing themselves more and more to the front as biological research stimulates and gives direction to pathological and pharmacological experiment; but it is certain that without the aid of systematized clinical tests the problems involved will never reach a practical solution.

They are questions of the laws controlling normal physiological processes and those manifesting themselves under abnormal conditions. The law of specific reaction is one of the fundamental laws governing our origin and development. It is the law of which the law of similars is a secondary or derivative law. The first is plainly visible in daily observation as in biological experiment, though too often disregarded and much misunderstood. The second a law of pharmacodynamics, seen only in clinical experience and therefore difficult of demonstration. For him who has once conceived it, it appears at times in striking form, at others it is only dimly perceived. Though we may ignore it, it will not down. All modern clinical research and much pharmacological experiment tend to confirm the fact of its existence. We see it, yet we cannot grasp it. In our most careful observation it too often eludes us. In our sorest needs it too often forsakes us. Though we have founded hospitals to apply it, schools to teach it, organizations to uphold and develop it, we do not yet sufficiently know the conditions governing its action. We have been hurried by theory and imperfect observation beyond sound knowledge. We are right and we must fight, but unless from this

time forward our weapons are the slow methods of science the victory will not be ours.

---

[1]Deutsch. Med. Wochensohr, 1898, No. 22, "On the Immunity of the Hedge-hag to the Cantharides."

[2]Lewin, Contributionss to the Question of the Natural Immunity to Poisons, Deutcch. Med. Wochensohr, 1989. No. 24.

[3]Pathogen and Inneren Krnakseiten, p. 96.

[4]Die Nebenworkungen and Arynesen, p. 12.

[5]loc. cit.

[6]loc. cit. p. 225.

[7]On Arterio-sclerosis, p. 12.

[8]In fifty years a man may have experience with one outgoing generation, two wholh geuerations aud one incoming generation, if during that time he has devoted himself to family practice.

[9]loc. cit. p. 374.

SPHERE OF THE TRAINED NURSE.—The Gazette is in receipt of a very interesting little booklet upon the above subject, written by Dr. W. A. Newman Dorland of the University of Pennsylvania. It consists of an address delivered before the graduating class of the Philadelphia School for Nurses, and states in a very succinct manner the sphere of the modern trained nurse.

INCOMES OF PHYSICIANS IN BERLIN.—According to financial statistics recently published, we learn that of the four thousand physicians practising in Berlin 778 have a yearly income of less than $750; 683 an income of less than $1,125. It is rare that a physician there receives more than $2,000 per year for his professional services.

WOMAN'S STATE MEDICAL SOCIETY OF MASSACHUSETTS.—A new society has been formed to consist exclusively of women graduates in medicine, in good professional standing, and who are members of the Massachusetts Medical Society.

THE ABBOTT-AMERICAN MEDICAL ASSOCIATION CONTROVERSY.—The Chicago Clinic, in speaking of this war that is now waging between the above factions, probably states the feeling of a large proportion of the profession when it speaks as follows:

We cannot go into the discussion fully in this limited space, but we are inclined to feel that Abbott has not been given the "square deal" he asks for and that some personal feeling must have dictated the unusual energy of the Journal in its continued attacks. It may be that Abbott and his methods are open to criticism, but there should be overwhelming evidence to justify the action taken by Dr. Simmons. The medical profession should at least read what Abbott has to say, after going over Simmons' scathing attack, and if there is reason to believe that Dr. Simmons' action has been occasioned by personal animus there should be some way of showing that the American Medical Association stands for absolute fairness.

The spirit of fair play is one eminently American, and when we see a large person or combination of persons trying to bully one much smaller the average Yankee almost instinctively favors the weaker, even though not always agreeing in all respects with his side of the question.

THE KINDERGARTEN OF GYNECOLOGY.*

By Willard A. Paul, M.D.

I have sometimes found myself overlooking simple diseases and simple methods of treatment in searching and expecting to find larger diseases and conditions that could be removed rather than cured. This has happened not only in gynecological work, but in the general practice of medicine; and it seems to me, when I stop and take account of stock, that the great majority of cases are amenable to remedies internally administered and to simple and effective local applications and treatment; hence the subject of this paper impressed itself upon me when asked to contribute something upon gynecology.

While it may seem like beginning at the wrong end of my subject, I am going to speak first of the local and mechanical treatment in gynecological cases. I do not think there is less demand for mechanical treatment in diseases peculiar to women because of the great advance in surgical treatment, but rather has it increased and I might say kept step with the surgical advancement. Because the surgeon is able to successfully amputate a limb afflicted with an incurable disease does not lessen in our practice the successful use of bandaging limbs that require bandaging; and because some joints have to be resected and some sections of bones have to be and are successfully made, does not lessen the use of bandaging the plaster casts for certain joints, and the immobilizing and bandaging of limbs afflicted with compound and comminuted fractures. Neither does the multitude of successful surgical operations upon the pelvic organs of the female any more preclude the same careful and intelligent treatment, bandaging I might say, of those organs; and, while I am perfectly aware that what I shall say will not be new to anybody, yet I feel that it is worth while to in a brief way enumerate some of the what seem to be kindergarten methods.

Why is it not necessary for the physician to be at his best, to go over the rudiments again and again, daily, all the time, that he may not only keep what he has but may improve upon it—as does the pianist, the singer, the speaker, the painter, the actor and a hundred other artists who drill daily and hourly, not only on the actual work which they are doing but on the a b c's as well?

Many forms of local treatment are advocated: douches, washes, applications, a dozen different kinds of tampons recommended, many pessaries, much treatment of the abdominal walls enumerated and dwelt upon in the various text books and journal articles that we read. I merely desire to outline some simple methods that I have followed for many years.

*Read before the Massachusetts Homoeopathic Medical Society.

The local, vaginal treatment of the various diseases of the uterus and cervix I have divided under three heads,—pressure, support, and the local application of medicines. To me the pressure seems a simple matter of bandaging, reversed. An engorged, inflamed, enlarged, diseased uterine cervix, were it where we could get at it as we can a limb similarly affected, or the neck or jaw, or other parts of the body that we can reach readily, we should bandage, possibly with the application of some drug locally. The uterus can be as successfully bandaged as any limb by means of tampons; hence, the first step in relieving many of the conditions which we find is that of the old first surgical principle, bandaging. At the same time that we pack or bandage the uterus we give it the proper support; and, if there is a tendency to prolapsus, this support is I believe in every case very helpful and beneficial, and in time, with remedies, will result in cure. If there be other displacements, the packing in one direction or another as the displacement would indicate corrects gradually but surely that displacement if it be amenable to other treatment than surgical. At the same time any local medicament that we desire can be applied either upon the tampon or locally with pencil or brush. Now it seems to me that the careful following up of many, by far the great majority of cases that are not actually surgical, may be cured by this method of treatment: three steps,—pressure, support, local medicine. Of course this would not apply to, neither do I intend to touch upon, accidents like a badly lacerated cervix or a badly torn perineum, but this treatment will affectually help and in most instances I think cure nearly all of the simple forms of disease of the cervix, of the uterus, of the lining of those bodies, and of displaced, inflamed ovaries and tubes where there have developed no actual pus or degenerative processes.

For uterine tamponing (bandaging), I have at some time in my practice used all of the substances commonly recommended; I prefer lamb's wool. It is less irritating; it is less absorbent (for this purpose we do not want an absorbent), and more springy, and will last in position longer than any other substance I have used; hence I use nothing else. I believe that wool, properly prepared as it usually is if you buy for that purpose, is less irritating to the mucous surface than any other substance. There are very many local medications used by the profession. I use largely ichthyol, iodine, hydrastis, belladonna, boracic acid, all in the form of glycerites.

In packing (bandaging) the vaginia for treatment of the organs, I almost invariably do it through a speculum. Of course one has to first thoroughly locate and understand the diseased condition by a digital examination bimanually. Perhaps the first important thing in considering the subject of diseases peculiar to the female pelvis is the examination; and the method and

manner of approaching the patient. I think it were well if every physician should try in his handling of these cases to live up to that old but beautiful adage, "Put yourself in his (her) place." I believe that many of the failures in treating the curable diseases of women come from the lack of understanding, not the disease but the patient, from the lack of ability to get the full confidence of the patient, which I believe is necessary to get a complete understanding of the case. Perhaps it is necessary in any case, but more especially in this class.

Then I think we are not careful enough many times in examination. If we are going to make an examination we should make a thorough one, and know when we are through exactly what there is abnormal in the case. There are some cases of which it is practically impossible to make a thorough examination without an anaesthetic, but I believe the majority can be pretty thoroughly diagnosed and understood without the use of ether.

In this work it is well of course to train both hands. This is really necessary in any line of work, and it seems odd that, while we have advanced so much in the sciences and arts in the last hundred years, we should still be right handed, when in reality a right-handed man is a one-handed man. I sometimes wonder if another hundred years will pass without the majority of people becoming ambidextrous.

But whichever hand we use in making our examination let us use enough of the hand to discover all that we possibly can. We would not think of taking the pulse with one finger: why should we think of making an examination of the most delicate and sensitive and really-hard-to-find-out organs in the body with one finger? Use as much of the hand as you can. There are few cases, none of married women, in which you cannot readily use two of the most prominent fingers in making this examination. You can explore farther and wider and more thoroughly with half of your hand than you can with a quarter of it. While this is strictly kindergarten work, there are many who have passed through all the grades and the universities and have many degrees attached to their names that still insist upon using but the first finger; and that is the reason I put particular emphasis on this subject.

With the long dressing forceps, with the vagina somewhat dilated by the speculum, you can most effectually pack the vagina, and in nine cases out of ten accomplish in this way of pressure, support and application what you want to accomplish; and then by carefully removing the speculum, holding the tampon in place with the forceps, you leave your work exactly as you want it, and it will usually remain indefinitely. By that I do not mean that it should be allowed to remain longer than at most forty-eight hours. One should be very careful that all of the

packing when left is well up beyond the sphincters, or it will produce irritation and have a tendency to work out. The measure of success here depends upon the care that is used in following a well worked-out technique, as much as is any mechanical or surgical procedure.

I think here I should speak of pessaries, and, as I am trying to express just my own experience and ideas, I shall say very very little, for I rarely ever use a pessary. Personally, I believe very little in them. In absolutely displaced organs, without inflammation, sometimes in lieu of a surgical operation, a pessary might be allowable, if the patient can be instructed to remove it and replace it for very evident reasons at least twice a week. I absolutely and emphatically am opposed to the placing of a pessary and leaving it there indefinitely. It has been done, and so reported in this society, successfully for six months at a time. You can perhaps run in front of a moving express train and escape, but it is not good practice. It appears to me that anything left in the vagina unduly long is endangering more serious inflammation and trouble than already exists. The pessary is hard and unyielding, and it seems to me possesses none of the attributes tending to a cure. Only in certain very bad cases of displacement, where it is impossible to perform the proper surgical operation, or in aged people, would I use the pessary.

I am aware that I have not in any way exhausted this subject of local treatment, and did not intend to touch in the slightest degree upon the surgical side; but I have, as I think, suggested some of the kindergarten points of local treatment.

Now, as to the internal medication. In none of the diseases which I have been called upon to treat have I seen more prompt and beneficial results from the internal medicine than I have in diseases peculiar to the female pelvis. If I were not a homoeopath and a staunch believer in the *similia* in anything else, I certainly should be when it comes to the diseases of women. Carol Dunham, than whom there has never lived a better prescriber, once said in a lecture of his trinity, pulsatilla, lilium tig. and sepia, that few things that were curable of the diseases peculiar to the female pelvis would not be cured or greatly relieved by one of these remedies. Dr. Bailey (E. Stillman of Chicago), in a paper a year ago before the State society of Illinois, added to this trinity of remedies as enunciated by Carol Dunham his three favorites which were aconite, belladonna and nux vomica. It is said there is nothing new under the sun; there is really nothing new in these six remedies, and yet they are always new.

Probably there is in every one of your minds today another trinity; there certainly is in mine. It would be bryonia, cimicifuga and gelsemium; but even the whole nine do not come anywhere near covering the remedies that we are called upon to use

for these cases almost daily. And yet it is better, I think, to know a few remedies and know them well than to try to use a larger number, and not know any of them thoroughly; and by the addition to the list of perhaps three more remedies, as caulophyllum, sulphur and rhus tox., you would have a group of remedies that can accomplish great things.

Aconite as a remedial agent it seems to me is almost without a peer and is wonderful, and will accomplish wonders in many of the acute affections that we are discussing today. When you get that peculiar restlessness (we are all familiar with it; it is hard to describe), and everything is red, red face, red eyes, red lips, surface circulation full to bursting, the hot, dry skin, and the pulse, nothing but aconite will cure, and aconite will cure. Pay special attention to the restlessness, and it is water, water all the time, and give it freely.

The chief sphere of action of belladonna seems to be in the head, causing active congestion and inflammation, thereby affecting, perhaps, every other part of the body. There is so much dizziness in belladonna, and as much redness as in aconite, but a different deeper red. The aconite red is more of the scarlet; belladonna is the deep, almost purple red. You have fearfulness and the restlessness, but not to the same extent as in aconite. It is especially a menstrual remedy. The menses in belladonna are too early, too profuse, last too long. The blood is bright red, sometimes dark. You get in belladonna a burning pressure, uneasiness and a feeling of weight in the pelvis. You get the burning in the ovarian region, while in bryonia you get the stitching pains.

Belladonna will control a uterine hemorrhage. I am often at a standstill to see if it shall be aconite or belladonna. In aconite all is hot, dry and sensitive; in belladonna everything is hot and swollen. As in aconite everything is red; in belladonna a purplish red.

While aconite and belladonna are more pre-eminently cerebral remedies, nux vomica acts more especially upon the spinal cord, and is a remedy that is usually regarded as affecting profoundly the functions of nutrition; and just as profound is its effect upon the general nervous system, both sensory and motor, as well as sympathetic. Nux also exerts a special influence upon the genito-urinary organs, and particularly upon the organs of the female pelvis. It, with belladonna and bryonia, has practically the same irregularity of menstruation, that is, too soon and too profuse; but with those symptoms in nux comes the peculiar influence upon the digestive organs, causing nausea and faintness and often chilliness. Nux is often the remedy in uterine spasms. It has heaviness in the pelvis. The nux patient is apt to be melancholy, sometimes cross and spiteful is often called for in women who have been living high and taking too much wine and rich food; time of aggravation in the early morning.

I am always afraid I shall be called a bryonia doctor as I find so many cases that require it. I always—most always—get results: stitching pains in ovaries and in the ovarian region, worse from the slightest movements, and still worse the more one moves; that is bryonia—stitching pains, worse on motion. Does any one doubt it? Bryonia's especial field seems to be in the serous membranes and organs therein, as well as the synovial and mucous membranes, and more definitely perhaps upon the first than the others. Then the menses, somewhat different from belladonna, come too soon and too freely, blood dark, again entirely stopped, and hemorrhage from nose. Again a real uterine hemorrhage of very dark blood. In bryonia the breasts are often red and swollen and very sensitive, affected by deep inspiration;—here is where again the characteristic symptom comes in, worse from motion. I have used a hundred and fifty words telling of bryonia and a hundred and fifty thousand would hardly tell all about it. Bryonia is indeed a great remedy.

Pulsatilla has always been to me a very important remedy. I have usually thought of it as the opposite of nux vomica, and that it was particularly for light-haired, blue-eyed women. It does apply to the mild, yielding disposition and the sad, desponding, weeping female; and it hits many cases of menstrual colic. It has almost as great restlessness pertaining to women as aconite. The restlessness is more leisurely, of the tossing rather than of the excited, strenuous kind of aconite. Instead of thirst there is sometimes a complete lack. Perhaps this is all I should say of pulsatilla, as I am speaking of diseases peculiar to women; but I have found in later years that pulsatilla was a great, broad remedy, and included all classes and types of men and women. One of its characteristic symptoms, as in bryonia is, worse in a warm room, better in the open air. Fat food disagrees. It greatly benefits a condition that we so often have to deal with, irregular menstruation from getting the feet wet.

Gelsemium is also a cerebral remedy; in that perhaps something like aconite or belladonna, not as much so. It differs from aconite as its fever has no thirst, and again, instead of restlessness, it wishes to lie still. A prominent symptom of gelsemium is a prominent symptom often in many of the women we are called upon to treat, goose flesh. How many times you hear that expression, goose flesh. Gelsemium is especially a uterine remedy. It does not have the spasms of nux, but has the severe sharp pains. It has neuralgic dismenorrhoea. It is particularly the remedy for the rigid os.

The action of cimicifuga is very directly upon the female genital organs, more perhaps than any other remedy. It is particularly indicated in a general anxious, nervous, irritable condition. The menses are irregular, or suppressed. You get many hysterical or epileptiform spasms at the time of the menses.

Shooting pains in the region of the uterus. The peculiarity of these pains: they are from side to side while in the ovarian region they shoot upwards. Cimicifuga has that almost worse than any other affection, rheumatic dismenorrhoea. You get many mammary symptoms from cimicifuga, pains and burning.

The sepia patient is known afar off, and she is legion. She looks like a failure, and is—unless you give sepia. If you are not sorry for her, she is surely sorry for herself, if looks go for anything. She is unhealthy and feeble looking; she is lanky, stooped and awkward. Sepia will do great things in such cases. Yellow spots on nose and face, pain and bearing down in uterus, fears it will come out. This is largely a sick, worn-out, discouraged woman's remedy.

Lilium tig. has dark, offensive, usually clotted, menstrual flow and only when the patient is active; when at rest it stops. A full distended condition in all parts of the body. The whole generative system is weak and flabby, and a dragging down feeling.

As I go over the remedies in my mind, and as the name of first one and then another crowds into my vision, with all the old remedies and the new ones that we are constantly adding, and with the knowledge that is year by year piling up upon our materia medica, as is indicated by the new proving of belladonna, I shudder to think what the student of materia medica in the future will have to know, and will end my paper by saying that after the medical student's educational days are over and he has his diploma, he ought to put in a solid year in studying the materia medica; and then—never stop studying it so long as he shall practice the healing art.

It seems to me that the greatest study in medicine is medicine.

It is reported that the bill recently before the National Congress prohibiting the importation of opium except for medicinal purposes, was defeated by a single representative who claimed that as its passage would decrease the national revenue one million dollars a month it was an injudicious one to adopt. In this way it would seem that the monetary benefit of certain individuals is placed before the sanitary and moral welfare of the community.

Arrangements are said to have been made in Pittsburg whereby the automobiles of physicians will be provided with red cross plates for proper recognition. In case the patrolmen find the physicians exceeding the speed limits, instead of stopping them their number will be taken and they will be given an opportunity of explaining the cause for the unusual speed.

WHAT ARE THE LIMITATIONS OF MENTAL HEALING.*

A Neurologist's View.

By Frank C. Richardson, M.D.

Having no intimate personal knowledge of the Emmanuel Church clinics, the following views are the result of reports from various sources, including published statements concerning it, and the experience of several patients who have visited it. These reports are so at variance with the avowed purpose of its sponsors as to give rise to the suspicion that the movement has far exceeded the legitimate bounds originally intended, and that unless properly restricted it may contain elements of danger to a too credulous public.

Accepting as true the assertion that the ministrations of this movement are confined strictly to functional nervous disorders, there occur at once to the medical mind the difficulties and tremendous responsibilities inseparable from the task of distinguishing between the two, which not infrequently is one of the most serious problems the physician has to solve.

In view of the fact that most organic diseases have for a beginning some functional derangement, that the border line is often extremely shadowy, and furthermore that functional disorder and organic lesion frequently coexist, it must be apparent what scientific acumen and painstaking care are necessary for the requisite discrimination.

It is claimed that every person receiving treatment at Emmanuel Church is first subjected to medical examination, but there is reason to believe that these examinations are sometimes perfunctory and superficial. In the wholesale round-up of neurotics and defectives said to be common at these "clinics" it could not well be otherwise, and errors or omissions of diagnosis may oft-times be costly. A prescription of physical exercise entirely suitable for a case of hysteria might prove fatal to a person afflicted with heart disease.

In considering the recorded successes achieved, it should not be forgotten that in the matter of reputed cures of neurotic people there often exists a wide discrepancy between things as they seem and things as they are.

The promoters of this medico-religious movement are men whose high character, acute intelligence and large instruction are beyond impeachment; yet in the very honesty and sincerity

*In view of the extensive discussion of the Emmanuel Movement, particularly as at the recent Episcopalian Congress held in Boston, this subject was given a marked amount of attention, the following article by Dr. Richardson has been reprinted from the daily press with the idea that it would be of interest to the medical profession as well as to the layman.

of the men there lies danger of self-deception when they attempt to estimate the value of their undertaking by the testimony of those under their care.

Quite apart from deliberate and conscious fraud, neurotic people, once committed to a new healing method, are capable of saying the thing that is not and acting as they should not to an extent which is hardly imaginable by persons who are not so easily affected by the contagion of blind faith. In their anxiety to foster what they consider a good cause there is no falsity so great that these patients—honest men and women—will not lend themselves to it with apparently no clear consciousness of the moral bearings of what they are doing.

According to published reports, the cases treated at Emmanuel Church belong largely to classes of disease in which malingering is possible or hysteria presumable.

To compile trustworthy statistics of the results of their treatment is well-nigh impossible. The inspiration of hope springing from religious fervor may well bring relief to this class of patients, but the permanency of the alleged cures is extremely doubtful.

On the other hand, there can be no doubt but that, impelled by the injudicious and unqualified presentation of the doctrine of optimism as promulgated by the various methods of religious healing, thousands of people are today striving beyond their mental and physical limitations. These misguided individuals, overstimulated by an excessive dose of hope, are struggling on in utter disregard of nature's warning cry of fatigue, discomfort or pain, and so courting disease and disaster.

Man is naturally a religious as well as a social and domestic animal, and the salutary operation of the doctrines and precepts of the Christian religion upon life and health cannot be gainsaid; but for people to be led by religious teaching to ignore the evidence of their senses in the matter of pain and distress is as pernicious as it is illogical for them to rely for their physical well-being upon holding the thought of health and asking the Lord to heal.

The employment of hypnotism by the Emmanuel Church healers is certainly open to severe criticism. From the blind enthusiasm which immediately followed the rehabilitation of this old therapeutic measure there has, happily, been among scientific men a reactionary awakening to its possible pernicious effects of weakened will and warped judgment, and true hypnosis is reserved by them for very exceptional cases. Indeed, it is the current belief that the transient amelioration sometimes obtained by this method of treatment in no way compensates for the possible weakening of the intellect which it may involve.

Christian unselfishness, philanthropy, benevolence, the exer-

cise of virtues which are beneficial to others, and which eliminate from the moral constitution what has been called "the grand egoism," are precepts for the inculcation of which we naturally look to religious teaching. If the clergy are adequately equipped to make proper application of these principles to the conservation of the physical as well as the moral health of the individual, it is surely legitimate for them to do so, and their usefulness to mankind will be greatly enhanced thereby; but it does not seem hypercritical to assert that the preparation received at the theological school, even if supplemented by a course in psychotherapeutics, cannot possibly furnish equipment necessary to cope successfully with the manifold and complex conditions underlying the ailments incident to modern civilization. Furthermore, it may be said that from a neurological standpoint no method of healing involving psychotherapy can be productive of best results with least harm unless its sophistries are controlled by the rectification of scientific reasoning.

"The last disease will disappear only when man is perfect." Under existing conditions of life such perfection certainly is remote, and in the meantime the church, it would seem, might be sufficiently and legitimately occupied if it confined its efforts to the moral uplifting of the social fabric, leaving matters of physical health to the care of the physician, who is fitted by long and arduous study to combat the inroads of organic disease, as well as qualified by his unparalleled intimacy with the vast range of human individuality to discern and minister to the effects of transgression of natural law and whose life is consecrated to that specific work.—Boston Globe.

MEANINGLESS DIAGNOSIS.—Wiel, in the Journal A. M. A., has written a short article upon the above subject, from which the following abstracts are taken:

Perhaps the most commonly used of these meaningless diagnoses is that of "biliousness," and there is no other outranks it in giving satisfaction to the patient.

When "biliousness" has been diagnosed, nothing has been diagnosed. The diagnostician has satisfied both himself and patient and has cloaked his ignorance at the sacrifice of his frankness.

How many of us have encountered "typhoid pneumonia?" Today there is firmly fixed in the minds of many practitioners the idea that such a combination of diseases actually exists.

"Typhoid malaria" is to be deprecated as severely as "typhoid pneumonia,' 'for such cases are invariably one or the other. Naturally it is easily possible for a malarial patient to contract typhoid, and then he has typhoid following malaria.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only, and preferably to be type written—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.
ASSOCIATE EDITORS:
F. W. COLBURN, M.D. C. T. HOWARD, 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, if possible.

AMERICAN INSTITUTE OF HOMOEOPATHY.

As the year rolls by and the seasons follow one another in orderly procession so a certain sequence has been established in the affairs of men. To an extent this sequence is determined by the seasons themselves. But whether it is a natural evolution or whether it is an arbitrarily fixed event, the time has actually come when, once again, homœopathists may hear a call to duty which is sounding through the land. From East to West, from North to South, the summons is passing throughout the professional homœopathic body to prepare for and attend the annual meeting of the American Institute of Homœopathy.

The President of the Institute has issued his preliminary circular calling for all homœopathic physicians to gird their loins, put on their armor and mobilize at Detroit on June 21st. Possibly by the time these lines have issued from the press the full official program will be in the hands of our readers. Just what that program is to offer we can only surmise. But judging the future from the past, and being aided by our knowledge of the energy and ability of the Executive Committee, it is fair to assume that that program will prove so attractive that we all may look forward to an unprecedented gathering. Quite aside from the scientific aspects of the meeting there promise to come up for consideration matters of unusual variety, interest and importance, and it is not at all probable that there will be from any standpoint a single dull moment during the entire week of the meeting.

In the words of President Foster: "The time for the Sixty-fifth Annual Session of the Institute is near at hand; this is a crucial period for the interests of Homœopathy, especially for our Colleges; some of these require support and strengthening. . . . We need the advice and active coöperation of our

wisest counsellors; many changes in our policies are pending and must have the approval of the Institute. The Executive Committee has exerted its best endeavors to carry out the instructions given at the last meeting, resulting in legal incorporation; this will demand the formulation and approval of new by-laws.

"The Institute Journal has been established; the contract with the publishers will be presented for your consideration, approval or rejection.

"Through the Medical Council, the Committee on New Members and by the use of all the other machinery of the Institute, strenuous efforts are being made to extend the influence of Homœopathy and to encourage our brethren everywhere, especially those who are in isolated places."

Those who for years have been faithful in attendance at the annual meetings of our national organization, who realize its power for good, whose strength, energy and ability have been freely given to advance its interests and establish the principles it represents, need only to know the place and date of the meeting to ensure their presence. They are the veterans who respond promptly to duty's call. Unfortunately, however, for the effective strength of Homœopathy, and for the physicians themselves, not all the homœopathists of our country are yet enrolled as members of the Institute. It is particularly to these that the Gazette would at this time say a special word.

Attendance at the meeting of the Institute should be looked upon as a duty, a duty which in its performance brings reward not otherwise obtainable; a duty which devolves upon every homœopathic physician as a professional obligation; a duty which cannot be evaded without injury to the cause for which the Institute exists; a duty which cannot be neglected without distinct personal loss to the physician himself. The most influential single factor in Homœopathy today is the American Institute, and as the strength of a chain depends upon each separate link, so the strength and power of the Institute depend upon the integrity of its component parts. The Institute itself, however, is but a link in the great chain of the homœopathic body, and therefore the strength of Homœopathy is dependent upon the soundness and vitality of the Institute.

The motives which lead one to attend the annual sessions of the Institute should not and need not be selfish. It may be natural enough to ask, What shall I get out of it? But the spirit manifested by such a question would be unanimously declared inconsistent with any high ideals of devotion to a worthy cause. Rather should one ask, How much pleasure can I give others? In what directions can I help a great and worthy and philanthropic cause? In what ways can I be useful to others,

and thus justify my existence? The experience one accumulates in the year's work must have something in it of value to others, else the year's work has been in vain. It is a privilege as well as a duty, and it should be a pleasure to share with others that experience and the lessons taught by it.

Physicians whose daily duties bring them into contact with the sombre, seamy side of life need the rest to be had in change of activities, relaxation and recreation furnished by a new environment; the stimulation offered through contact with colleagues from distant parts of our own vast country; the unequalled joy of meeting old friends, and the inspiration of making new ones. All these are to be had by attending the Institute meeting.

It is expected that the year 1909 will surpass its predecessors in the amount of work done at the Institute meeting; in the number of members in attendance; in the number of new names added to the professional roster; in the value of essays, papers and addresses contributed and the discussions they give rise to; in the additions made to the sum total of scientific knowledge; in the unifying of purposes; in the concentration of effort and in increasing the effectiveness of our organization.

Those who attend the meeting at Detroit are those who will decide where the 1910 session shall be held. It is probably well known that our colleagues in California are most anxious to have the Institute visit the Pacific coast a year hence. They have not hesitated during the past winter to make their desire known, and by the generous distribution of attractive, illustrated post-cards they have probably succeeded in arousing an unusual interest in the question, Where shall the next meeting of the Institute be held? The sincerity of our far Western colleagues is not to be doubted, and their ability to furnish most generous hospitality is not to be questioned.

New England physicians who desire to make as much of a holiday as possible out of their trip to Detroit may find it convenient and enjoyable to travel by way of Montreal and Ontario to Detroit, and return by way of Lake Erie, Niagara, the St. Lawrence River and the Green Mountains. Parties of ten or more can secure reduced rates.

HOMOEOPATHIC ENTHUSIASM IN ENGLAND.

Dr. Margaret Tyler, an enthusiastic English homœopath, has started a fund, the income of which will be devoted to sending young medical graduates to the various homœopathic schools in America for instruction in the law of similia. As is well known, there are no homœopathic medical schools in England and the sup-

ply of young men to fill the positions made vacant by old age and death is limited. Dr. Tyler has already contributed $15,000 toward the fund, which promises to rapidly become large.

We extend to our English confreres our best wishes for their success and promise to exert ourselves to the utmost to live up to the expectations that they have of American homœopathy.

WHY THE MEDICAL SCHOOL SHOULD APPEAL TO PHILANTHROPY.

Few subjects are more suggestive of the trend of public opinion during the past years than the one dealing with the directions taken by philanthropy. In the earlier years of our country's history one of the most beneficent of its innovations was the provision for educational facilities of such a nature that all persons might be able to obtain benefit therefrom, irrespective of their own personal financial condition. To this wisdom has undoubtedly been due a large part of the rapid advance made by America in practically all departments of progress.

Subsequent to the satisfactory establishment of these facilities for general education came the monetary provision for institutions of higher learning. Accordingly colleges and universities were founded in various parts of the land. Following the Puritanical tendencies of the early settlers the theological phases of education were strongly emphasized in these places of instruction, and shortly distinct theological schools appeared. These new schools appealed to the feelings of the generously inclined, and very soon large and ample endowments were forthcoming. Some time later, coincident with the development of the modern hospital, made possible by medical researches and discoveries, the eyes of philanthropy turned toward medicine and its institutions for treating the sick.

In this last period we now live, although there seem to be signs of the beginning of a new era in the not distant future. First with general education, then with the more specialized form, with theology, and finally with the hospital, all people could readily become interested as all could at a glance understand their very evident value. Hospitals of the proper kind strongly appealed, as they certainly should, to the generosity of persons of means, because the treatment of the sick and the alleviation of pain among the needy poor is a matter the value of which cannot be gainsaid. Accordingly, hospitals now possess large and generous endowments for their various needs. There has been and still is, however, another institution, too often overlooked and neglected, to which the success and perpetuation of all hospital work is due and without which all this medical progress must cease. This is the medical school.

In former generations when the medical school consisted of the amalgamation of a collection of men in general practice, each giving as his share merely a number of lectures and obtaining more or less ethical advertisement therefrom, salaries were unnecessary, the moderate fees of the students covering the very few expenses required. These expenses were often scarcely more than the rent of a hall or building, janitor's service, light and heat. Under such conditions medical schools were not only self-supporting but not infrequently yielded considerable income to the participants. During the past ten or twenty years, however, conditions have entirely changed in this connection.

Whereas, then, the general practitioner could give the requisite amount of instruction in all departments, now his possible field is becoming more and more limited. The sphere of medical knowledge has increased to such an extent that it is no longer possible for one brain to encompass it all. This has forced upon us the age of specialists. So great, also, have been the advances in our knowledge that it is not now sufficient to give a few or even many lectures on a subject.

Lectures must be supplemented by laboratory work, recitations, quizzes, clinics and such, all with the purpose of transmitting the maximum of information in the minimum of time. To do these things requires time in abundance, time that the busy physician, serving without pay, can ill afford to give. Or if it be laboratory in nature, a specially trained worker, one who can devote his entire attenion to the subject, is required. Such a person cannot be procured without salary. Furthermore, expensive apparatus, such as microscopes, microtomes, lanterns for slides or photo-micrography, elaborate glassware, etc., are no longer luxuries but absolute necessities in the modern medical school. Many other reasons could be cited, proving the entire impossibility of conducting a good medical school as it should be conducted upon the students' fees alone. These will probably be unnecessary, however.

One may now reasonably ask: Why is it necessary to perpetuate so many medical schools if they have become so burdensome? What have these achieved in the past to justify their existence in the present? And what problems still remain for them to solve in the future? It may be well to here state our belief that there are medical schools that are by no means an honor to the profession and without which it would be far better off. For such we enter no plea. Let them die! For those, on the contrary, that are exerting themselves to their utmost to turn out good and true men, we speak. The well-worn argument that every school should be well equipped in every line in order to give the graduate the most modern ideas continues to hold all of its original strength and must be carefully pon-

dered. With it our readers are so familiar that it need not be further considered at present. Let us approach the subject from a somewhat different standpoint, and inquire how much all medical institutions and the world at large owe to the medical schools. In short, let us consider what these schools have done for humanity.

Without doubt the two greatest advances in medicine of modern times were the discovery of anæsthesia and the study of the relation of micro-organisms to disease. Of the former we may say that while first used in hospitals, its introduction and safe employment were made possible by procedures that would now be classed as laboratory experiments. And since it was first introduced who can tell the thousands of observations that have been made by physiologists in the medical schools the world over for the purpose of ascertaining the safest preparation and the best manner of its use? So successful have been these results that fatalities from anæsthesia are now practically eliminated.

What would be the field of modern surgery today if it had not been for the epoch-making work of Lister along the line of bacteriological investigation? And in this early work, a laboratory worker, Klebs, it must be remembered, strongly influenced Lister. One cannot now realize the abyss into which humanity would plunge were these two things, anæsthesia and knowledge of bacterial action in surgery, taken away. The horrors of the Inquisition were not more terrible.

Perhaps of all places, however, where the results of medical research have been most valuable have been along the lines of preventive medicine. Here it is perfectly safe and conservative to say that thousands and tens of thousands of lives are saved annually by our increased knowledge of infectious diseases gained from investigations in the laboratories of medical schools.

The first disease demonstrated to be of infectious origin was anthrax, studied in the decade of 1845 to 1855 by Pollender and Davaine. While of comparatively little importance in human pathology it has been and still is of vital interest in certain parts of France, where in past years thousands of sheep have died from its ravages. Here it was that Pasteur, that eminent laboratory investigator, made his first advance into world-wide publicity. By careful bacteriological research he discovered a means of rendering these animals immune to anthrax. When this was widely adopted it resulted in an enormous decrease in the number of cases and a still greater decrease in the number of deaths. As a result, France has been saved thousands of dollars annually that would have otherwise been an inevitable loss.

Soon after this came the notable work of Lister in surgery,

as already mentioned, made possible by the laboratory investigations of Klebs and Pasteur as well as those of Lister himself. The importance of his work can scarcely be overestimated.

During the advances in surgical procedure a French physician, Laveran, while stationed in Algiers, discovered the parasitic cause of malaria. This was not primarily due to any institutional work, and for years thereafter no further knowledge was obtained. When, however, the institutions of research and medical learning did take the subject in hand a great advance was immediately made. The cause of the disease, the transmitting agent and measures of prophylaxis were soon ascertained and employed to such an extent that its frequency has steadily diminished, and continues to do so from year to year. It is a matter of common knowledge that but for these medical investigations and those of the somewhat closely allied disease, yellow fever, such projects as the Panama Canal would have been impossible to follow to a satisfactory termination. By them, also, Cuba has become habitable, and something more than a mere seething bed of infection as she had been for years under the regime of Spain.

Again, where would the knowledge of diphtheria and tetanus antitoxin have been gleaned had it not been for the researches and arduous investigations of these same men who as teachers and lecturers constitute the medical school? Typhoid fever is yet another disease exhaustively studied by this same coterie, as are also bubonic plague, hydrophobia, influenza, cholera, leprosy and many more.

Koch did his early work on tuberculosis in an obscure Prussian town. This is, however, more a tribute to his own genius and ingenuity than otherwise. His later work is now being done in a special laboratory. Many other diseases might be mentioned, all carefully and fully studied in our schools in such a way as to render them more or less subject to control. Some such are syphilis, gonorrhœa, meningitis, pneumonia and actinomycosis.

To the laboratories one must go also for the great majority of the work now being done along the line of various infectious diseases according to the vaccine methods introduced by Wright. This is doubtless one of the most promising of the newer methods of treatment. Its full sphere is yet unknown, but sufficient is already learned to enable one to safely say that it is a large one. Without laboratories the extensive researches concerning cancer which have occupied so many investigators for years would have been impossible. It is unfortunately true that work in this paritcular path has thus far been void of results, but as the present mystery is sure to be solved some day it is extremely probable that when the light does come it will be found that

this early work made possible the dawn of that long-anticipated morning.

Illustration after illustration might be multiplied almost indefinitely showing the benefit resultant on laboratory investigations and their practical application in clinical medicine. In physiology, in chemistry, in anatomy, in surgery, in diagnosis and in treatment, the same might be said. In fact, the greatly lowered mortality in all modern civilized countries can be traced directly to the findings of the test tube and the microscope.

It is truly a great and noble achievement to save a life by a brilliant surgical operation or by some new or refined method of treatment, but far greater and more noble is it to be the person who by prolonged study and research has made such an operation or treatment possible.

In short, the hospital ministers to a limited circle that, however needy it may be, cannot compare in size or need to that open to the laboratory. The former deals with the individual, the latter with the multitude. The value of the former, yes, its very existence, depends entirely on the earlier work of the latter. Without it the hospital would be plunged into the unspeakable condition of a century ago. With it, it becomes a blessing and a most noble charity. Too often, the generous philanthropist looks at the result only and does not see the active cause. Or perhaps for various reasons the cause may be obscured for him. What a feeling of satisfaction it must be to him who is freely supplied with money and who endows a hospital, a ward or a bed, to realize that by his beneficence some of this world's suffering may be lessened at least for those few who may be able to take advantage! But how much more gratification can he attain if instead of benefiting a limited number in this manner his benefactions have made possible a discovery that will be of world-wide importance and that will save thousands of lives! Such a feeling must inspire a Rockefeller, a Carnegie, a Morgan and a number of other less prominent philanthropists to even more generous donations. They must realize as their possessions have made possible these discoveries, that to them is indeed due a distinct share of the credit accruing therefrom. Thousands of lives are annually saved as a direct result of these studies.

But the work is really only well begun. Thousands of lives are still being lost every year from diseases that are in all probability preventable. A vast amount yet remains to be done in many different departments, some begun, some well toward completion, and a large part yet practically untouched. Here are to be found, among others, the problems incident to scarlet fever, smallpox, cancer, leprosy and yellow fever, as well as the still obscure ones in connection with tuberculosis, yellow fever,

syphilis, cholera, plague and the entire question of immunity and immunization in general. In order to study these increasingly complex problems most fully, provision by endowments must be made for special research and for the training into the medical profession of men qualified to pursue it unhampered by continual financial considerations.

Recognition of the truths of these statements is steadily if slowly coming, as indicated by the increasing benefactions to medical schools. It must be remembered that the sooner these endowments are made the sooner will be made those discoveries that will enable us to cope with diseases as yet not understood and from which people are daily and hourly dying.

The question finally comes: Will our friendly philanthropist continue to devote his attention exclusively to the hospital bed, where at best but a limited number of persons can be treated and from which a minimum of benefit can ever be derived by the world at large, or will he take the wider view and include in his generosity the now almost universally financially struggling medical schools, from which is continually coming work, the results of which are of untold value to the entire human race? Will he not feel more than repaid by the realization that he has been somewhat instrumental in introducing to the world something such as the meningitis serum, the diphtheria antitoxin, the hydrophobia treatment or a serum or vaccine for the cure of typhoid, tuberculosis, cancer, or any of the various diseases that now afflict humanity? Upon the satisfactory answer to these and allied questions the future of the medical schools rests. Let us trust that the true aspect of the entire subject may become more and more evident to those persons who, while not personally in a position to themselves perform the work, are nevertheless anxious to be of actual assistance by their financial help to their associates, their country and the world at large!

FOR BOSTON UNIVERSITY SCHOOL OF MEDICINE.

Anyone familiar with the inner affairs of medical schools during the past quarter of a century knows how increasingly difficult it has become to suitably finance them and at the same time provide them with the latest apparatus. The fees will no longer satisfactorily do this, much less leave any surplus for new work. At the present time all but a very favored few are facing the financial question as one of their most troublesome problems. In this great majority unfortunately is found Boston University.

Thanks to the self-sacrifice of her Faculty she has had a very successful past, as, irrespective of what has been done along educational lines, she has erected new buildings as the need

occurred. The last to appear was the present laboratory building, opened in the early nineties. And not only have these been erected, but the mortgages placed for them at first have been gradually decreased until finally, with one exception, they have been cancelled. This one exception is that placed upon the last building. This originally amounted to about seventy-five thousand dollars, but has by careful management been reduced to thirty-eight thousand. Even this is sufficiently burdensome, particularly as the present old building urgently needs to be replaced by a more commodious new one.

As a preliminary step, therefore, to various advances, strenuous efforts are now being made to remove the entire mortgage, thus leaving a clear field for new work. A subscription list is now being circulated first among the members of the Faculty, then among the alumni and later among the laity. It is so worded that no subscriptions become payable until June 1st. 1910, and if by that date the entire sum of thirty-eight thousand dollars has not been promised, all the subscriptions become null and void. There seem to be quite strong chances that the project will be a success, as about four thousand dollars were pledged in about a week. Fourteen alumni already have agreed to give two hundred dollars apiece; a number more, one hundred each; while still others will contribute fifty or whatever other sum may lie within their means.

As many of the readers of the Gazette will doubtless be approached on this subject, we bespeak for the solicitor careful attention, for the cause is a worthy one and the need is undoubted. We also trust that some will not only contribute personally but will also interest some of their patients in order that they also may give of their plenty in proportion to the generosity of the physician with his many needs.

CONTAMINATED SMALLPOX VACCINE.

An occurrence that will doubtless be hailed with delight by our friends, the anti-vaccinationists, is found in the recent outbreak of the foot and mouth disease among cattle. This disease first appeared in Pennsylvania last November and was soon after reported in New York, Maryland and Michigan. Inspectors from the Department of Agriculture having been detailed to investigate the outbreak, it was found to have originated from calves used by a well-known vaccine firm. These calves had been inoculated with vaccine from another firm well known as a producer of biological products. Finally, by going still further back it was found that the vaccine used was an imported one that had become contaminated by the foot and mouth disease prior to its introduction into this country. The calves of one

of these firms were, after use, sold to the public and in this way the infection spread. The Department expresses its satisfaction at the hearty coöperation of both firms, once the facts became known. All the infected animals were killed, the virus was destroyed and all the vaccine from these sources was withdrawn from the market. Fortunately the disease is primarily one of cattle, affecting man only to a slight degree. When so contracted by man it is very seldom fatal, usually being so mild as to require no medical care of any form. The occurrence is unfortunate, however, as it will supply to the anti-vaccinationists a strong argument in support of their claims. To others, on the contrary, it will, as it should, emphasize the importance of the strictest supervision of all sources of supply, but will detract in no degree from the all but universal opinion concerning the value of vaccination itself.

OHIO STATE BOARD RESULTS.

The Gazette extends its most sincere congratulations to the Cleveland Homœopathic Medical College upon the excellent results obtained by its graduates at the June meeting of the Ohio State Board. According to the Journal A. M. A., we find that "the total number of candidates examined was 140, of whom 150 passed and 6 failed." In spite of the above peculiar method of figuring totals the data given below is most gratifying and most commendatory of the work done by our allied college. Out of 6 applicants for registration from the Cleveland Homœopathic School two obtained an average of 93 per cent. each, which was the highest mark given at the examination. Several from other schools obtained a percentage of 92 and a third homœopathic graduate received 91 per cent. Certainly this does not look as if the Cleveland School were doing anything but the best work.

ANTI-VIVISECTION.

So much is heard, particularly in the lay press, concerning the horrors of vivisection and the cold-blooded cruelty with which the physicians make their various experiments upon animals that a more sane article is always of particular notice. It is interesting to note that these same individuals who so strongly protest against these so-called inhumanities always refuse to attend any sessions where they claim such are practised in order to demonstrate to themselves the truth or fallacy of their contentions.

This in itself seems to be one of the weakest points in their arguments, as they seem to be perfectly satisfied with their own opinion without thoroughly testing the foundation for such. Among many other statements that might be advanced an article recently appearing as an editorial in the *Outlook* well covers one phase of the subject. It is as follows:

"It is as impossible for a legislature to prescribe rules for scientific experiments on animals as it would be to prescribe rules for scientific experiments in physics or botany. The laws of natural science do not adjust themselves to the provisions of a statute. The attempt of people to make laws on the subject is in effect an attempt to prevent such experiments. The state of affairs should be squarely faced. . . . The *Outlook* believes in the Scriptural truth, 'Ye are of more value than many sparrows,' and believes that the children who have been saved from suffocation by diphtheria are worth thousands of times over all the animals which have served to bring to men the knowledge of antitoxin. The law now confines the right to animal experimentation to those who are competent, as it confines the right of practising medicine to those who are competent. It likewise penalizes the infliction of needless pain on animals, as it penalizes the infliction of needless pain on human beings. If there is ground for complaint against a scientist for the infliction of needless pain in a laboratory, he can be proceeded against under the same laws under which a man may be proceeded against for the needless infliction of pain upon his household pet. There is no reason for singling out the scientific investigator as a subject for class legislation. There are some people who are more concerned for the comfort of a guinea-pig than for the life of a child." Such people, it adds, are beyond the reach of argument.

The statements herein contained seem to be perfectly legitimate in all ways and if their truth is as stated, do away with all need of further legislation upon this much debated subject.

The Gazette desires to acknowledge with thanks an invitation to the forty-first annual commencement exercises of the Detroit College of Medicine which was held Thursday, May 27th.

The Medical Century, in its column of General Notes, makes the following very important comment upon a custom only too common in certain quarters throughout the country: "Why is it that the most prominent members of our State societies only appear for a day, or part of a day, at the meetings? It would seem to us that these are the men who should put in a full attendance at the entire meeting, be it one, two or three days in length. These are the men that the rank and file of the profession come to see and hear; these are the men that the rank and file want their paper discussed by, and their presence throughout the meetings would add much interest and secure a revival of any enthusiasm which tends to be on the wane. To come to a meeting, read a paper and skip out on the next train is not doing good duty to the society."

SOCIETIES.

The last meeting of the Twentieth Century Medical Club was held on the evening of May 19th at the home of Dr. Lucy Appleton, 479 Beacon street, Boston. Officers for the ensuing year were elected as follows: President, Clara D. Reed, M.D., Newton; vice-president, Bertha E. Ebbs, M.D., Dedham; secretary, Grace G. Savage, M.D., Boston. After the business meeting a very pleasant social hour was spent, with a well-chosen musical program, presided over by the retiring president, Dr. Mary E. Mosher. Dr. Mosher and Miss Olive E. Smith, of the 1909 graduating class, B. U. S. M., contributed recitations which were much enjoyed.

WORCESTER COUNTY HOMOEOPATHIC MEDICAL SOCIETY.

The regular quarterly meeting of the Worcester County Homœopathic Medical Society was held in Worcester on Wednesday, May 19th, at 2:30 P. M.

The following program was presented by the Bureau of Organs of Special Sense, under the chairmanship of Dr. Albert E. Cross:

1. "Diseases of the Accessory Sinuses of the Nose." George B. Rice, M.D., Professor of Rhinology, Boston University School of Medicine.
2. "The Value and Scope of School Tests of Vision." David W. Wells, M.D., Assistant in Ophthalmology, Boston University School of Medicine.
3. "The Relation of the Dental Arches to Affections of the Nasal Cavities." Horace L. Howe, D.M.D., Associate Professor of Orthodontia, Harvard University Dental School.

The reading of the papers was followed by a general discussion, after which dinner was served.

This meeting was of especial interest to Oculists, Aurists and Dentists.

AMERICAN ASSOCIATION OF MEDICAL EXAMINERS.

The tenth annual meeting of this association will be held at the Hotel Chalfonte, Atlantic City, on the 7th and 8th of June, in association with the meeting of the American Medical Association.

Dr. Frank E. Allard, of Boston, president of the association, will deliver the opening address, which will be followed by others of vital interest to the medical examiners. Among these are papers by Drs. Horace Packard and F. D. Donoghue, of Boston, and Dr. C. T. Cutting, of Seattle, Washington.

BOOK REVIEWS.

Transactions of the American Proctologic Society, 1908. This volume consists of nearly 150 pages and includes a report in full of all the papers presented and the various discussions upon the same. Also the president's address upon the subject of the first decade, this being the tenth annual meeting of the Society.

Transactions of the Homoeopathic Medical Society of Pennsylvania, 1908. This volume contains a full report of the meeting of the Pennsylvania Homœopathic Medical Society, which was held under the presidency of Dr. W. F. Edmundson, in Harrisburg. It consists of nearly 400 pages largely devoted to the full reports of the papers read at the meeting, and the discussions thereof.

Conservative Gynecology and Electro-Therapeutics. A practical Treatise on the Diseases of Women and Their Treatment by Electricity.

By G. Betton Massey, M.D., Attending Surgeon to the American Oncologic Hospital, Philadelphia; Fellow and ex-President of the American Electro-Therapeutic Association, etc. Sixth Edition, thoroughly revised. Royal Octavo; 462 pages. Illustrated with twelve original, full-page, chromo-lithographic plates and fifteen full-page half-tone plates of photographs taken from nature, and numerous engravings in the text. Bound in extra cloth. Price, $4.00 net. F. A. Davis Company, 1914 Cherry Street, Philadelphia, Pa.

With the earlier editions of this work the medical profession has become quite familiar The purpose of the book seems to be to inculcate ideas of conservatism in gynæcology. It is well stated that "the need to call a halt is just as great today with our colleges turning out so many new operators each year, each taught a dangerous familiarity with brilliant operations and none taught how they might avoid them."

The ground covered by this latest edition is practically the same as that of the one of 1906, with occasional additions and modifications of statements as later study has proven the truth of recent ideas. One entirely new chapter has been added: that upon electro-chemical surgery or the employment of chemical energy developed by electricity in the transformation of diseased tissue into its inorganic elements. This is used in association with tumor masses. The application of one form of this, ionic surgery, is quite unique, the author claiming to be the first to employ it in the treatment of tuberculous lymph nodes. The wave current and vacuum tube currents also receive consideration in this new chapter. It is undoubtedly true that many diseases or conditions now considered to be exclusively in the domain of the surgeon may at times be amenable to treatment by electricity. It is also true that anyone working exclusively along one line of therapy becomes more or less biased in favor of that treatment.

A conservative course for the reader to take in connection with this book is to peruse carefully and ponder well, but not take every statement as the final word upon that subject. Conservatism is good, but over-conservatism is to be shunned almost as much as over-radicalism. It would seem, therefore, that some of the conditions here treated might be better given to the surgeon.

As was stated in our review of a former edition some of the illustrations in the nude could apparently have been eliminated with benefit.

Leaders in Respiratory Organs. By E. B. Nash, M.D., author of "Leaders in Homœopathic Therapeutics," etc. Boericke & Tafel, Philadelphia, 1909.

The author of this book has become well known to the homœopathic world by his somewhat numerous writings on materia medica subjects. The present book is along similar lines to several of the preceding ones. but is, in the opinion of the reviewer, much less satisfactory. It bears evidence of apparent haste in preparation; haste in which accuracy and grammatical construction have been freely sacrificed. Even the dedicatory page shows this fault.

The remarks upon general symptomatology and diagnosis are frequently quotations from a limited number of other standard works. Elsewhere in this section inaccuracies are present. To illustrate: The bacterial cause of whooping cough is assumed to be known and generally accepted. Some of the notes on pneumonia are also open to question. If the writer had adhered more closely to his materia medica alone we feel that he would have been more successful.

A short repertory concludes the book.

Upon the whole we are disappointed in it when considered in its entirety, and feel it unwise to recommend a work that is so open to criticism.

PERSONAL AND GENERAL ITEMS.

Dr. J. B. Kinley, late Dean of the Denver College of Physicians and Surgeons, died very suddenly of apoplexy on May 13th, while presiding at a banquet given by the Faculty of the College to the graduating class. At the moment of his seizure he was discussing plans for the future of the young college, of which he was the head. Previous to the union of the Denver Homœopathic College with Westminster College, about a year ago, Dr. Kinley was dean of the former.

Dr. Kinley was a native of Germany, but had lived in the United States from childhood. He had been in Colorado for twenty-five years and was fifty years of age.

Dr. J. Walter Schirmer, B. U. S. M., class of 1908, after having spent several months in hospital work in Vienna, has returned to Boston.

Doctor's quarters to let.—Office, waiting-room and private entrance, occupied by a physician for the past twenty years. Door service and practice cared for. For further information address Mrs. A. E. Jackson, 335 Centre Street, Jamaica Plain, Mass.

FOR SALE.—An invalid's wheel chair, in perfect condition, for sale at a low price. Apply to Mrs. Knowles, 422 Columbia Road, Dorchester, Mass., or at office of School of Medicine, 80 E. Concord Street, Boston.

Dr. Susan P. Hammond Field, class of '80, B. U. S. M., has removed from 563 Massachusetts Avenue, to 768 Huntington Avenue, Boston.

Dr. Winthrop S. Blanchard has been appointed Assistant Bacteriologist of the Boston State Board of Health.

THE WARREN PRIZE.—Dr. F. A. Washburn of the Massachusetts General Hospital announces that the Warren Triennial prize for 1910 is to be awarded for research on some special subject in Physiology, Surgery or Pathology. The competing theses must be in French, German or English, and must be typewritten. No work that has been previously published will be eligible in the competition. The value of the prize is five hundred dollars. Dissertations will be received until April 14, 1910, and high value will be placed on original work.

Hahnemann Medical College of Philadelphia has received ten thousand dollars as a bequest from the late George C. Thomas.

St. Louis University announces that beginning with the term 1909-10, the course in medicine in that institution will be increased to five years, high school diplomas or their equivalent being sufficient entrance qualification.

COMMENCEMENT WEEK, BOSTON UNIVERSITY.—Commencement week at Boston University will be held this year during the week of May 31st to June 5th, and will consist of the usual Baccalaureate sermon on Sunday, Class Day exercises and receptions by the various Faculties on Monday and Tuesday, and the formal exercises in Tremont Temple Wednesday morning. On Wednesday afternoon the annual convocation will be held at the College of Liberal Arts, where representatives of the different departments will speak on the progress of the year. At the Medical School, the Class Day exercises and Faculty reception will be held on Monday, May 31st. The formal part of the program will consist of a class history by Miss Olive Ella Smith, valedictory by David L. Martin, Ph.D., and the address for the Faculty by Professor Nathaniel W. Emerson. Following this will be the reception by the Faculty to the graduating class, its friends and the alumni of the School.

NEW CLINIC AT OUT-PATIENT DEPARTMENT OF THE MASSACHUSETTS HOMOEOPATHIC HOSPITAL.—A clinic devoted particularly to the vaccine treatment of infectious diseases and to the use of bacterial products in diagnosis and therapeutics has been opened at the Out-Patient Department of the Massachusetts Homœopathic Hospital. This clinic will treat the various cases of suppurative conditions referred to it, particular attention being given to the chronic forms. For the present it will be held from 12 to 1 on Wednesdays of each week.

The Gazette notes with pleasure the approval by a non-homœopathic journal of the appointment of Dr. Osmon Royal as a member of the Oregon Medical Examining Board: "The appointment of Dr. Osmon Royal, of Portland, as a member of the State Medical Examining Board, is a just recognition of a well-known practitioner, and an ex-president of the local Homœopathic Medical Society. Dr. Royal will do his full duty by the State and the applicants for examination who come before the board of which he is a member."—Medical Sentinel.

The Eclectic Medical College of Cincinnati is to be congratulated upon the prospective completion of a new modern building for its home. This building is adjoining the Seton Hospital, and is particularly well equipped with laboratories.

The editor has received with much pleasure the program of the California State Homœopathic Medical Society. This is one of the neatest announcements that has been received for a long time and contains evidence that the homœopathic profession in the far West is active, energetic and apparently prosperous.

The Boston Transcript reports a new treatment of cancer by means of gelatin impregnated with radium. This material has been devised by Drs. W. H. Dieffenbach and W. T. Helmuth of the Flower Hospital, New York. The treatment consists in injecting directly into the tumor a certain amount of the radio-gelatin. One case which has been treated shows very decided benefit.

The Gazette acknowledges with thanks a copy of the Good Will Record, a publication emanating from the Good Will Farm in Maine. As the editor knows somewhat of the work performed by this institution he feels able to give to it his earnest endorsement. We hope that the effort that is now being made to remove the debt of eight thousand dollars will be successful.

Dr. N. B. Delamater, the well-known Chicago neurologist, has retired from active practice after over forty years' work. It is reported that he will go to Florida and engage in farming for recreation and the benefit to be obtained therefrom.

The feeling is becoming apparently almost universal that the American Institute of Homœopathy should go to the Pacific Coast next year. With this feeling the Gazette is in hearty accord.

CONSERVATISM IN TONSILLOTOMY.—There seems to be at the present time an indication of reaction from the extreme surgical measures of some years ago. One of the latest indications of such is seen in the statement of Bloodgood, of Johns Hopkins, who questions the "good science" of the almost universal practice of excision at site of all enlarged tonsils. This statement he makes on account of the fact that there is now a distinct question whether the enlargement is not as frequently due to the exit as to the entrance of poisons.

Circulars are received giving the program of the Sixteenth International Medical Congress, to be held at Buda-Pesth from August 29 to September 4. This Congress is under the patronage of the Emperor and bids fair to be fully attended, particularly by the European medical profession.

RESIGNATION OF DR. GOODALE.—Dr. George L. Goodale, Professor of Natural History and Director of the Botanical Laboratory of Harvard University, has recently resigned after a long service in that institution. Dr. Goodale is a graduate of medicine from Bowdoin, but as his tastes lead him more particularly into the fields of botany, this and allied branches received the benefit of his entire activities.

Dr. N. Emmons Paine announces that Dr. Edward Mellus is now associated with him in the care and treatment of nervous and mental invalids at the Newton Sanatorium and Newton Nervine.

Dr. Mellus has been active in hospital work for about ten years, the last five of which have been passed as assistant physician at the Worcester Insane Hospital.

Hering Medical College of Chicago is making strenuous efforts to obtain financial aid for its perpetuation now that its strong support in Doctor Allen has been taken away.

A NEW JOURNAL OF POPULAR MEDICINE.—"Hygiene, Diet and Long Life" is the name of a new popular monthly medical journal that has just appeared. This is to be devoted to sanitary food, clothing, shelter and means of prolonging life. Its object is to be the medium between the medical profession and the laity; to gather and to bring forth knowledge and wisdom along sanitary lines and particularly to emphasize the prophylactic side of medicine. We wish it all success.

CANCER FROM X-RAY.—The "Homœopathic World" quotes the following from the London Daily Mail, upon which no comment is necessary to a homœopathic audience:

"Professor Cecil Rowntree, F.R.C.S., of Middlesex Hospital Cancer Research Laboratories, in a lecture yesterday before the Royal College of Surgeons, stated that there have been in England eleven cases of cancer arising in X-ray workers, and in a large proportion of cases more than one malignant growth has occurred. In several instances the patients were quite young men, whereas ordinary cancer is a disease of late adult life.

"An investigation of the influence of X-rays on animals showed that in relatively large doses they have a destructive or paralyzing action upon cell activity, whereas in small and oft-repeated doses they bring about exactly the opposite condition and stimulate the tissues to abnormal activity and increased growth."

INTERNAL VACCINATION.—It is reported that Professor Henry Albert, Bacteriologist of the Iowa State Board of Health, in a recent lecture, stated that there are two methods of vaccination, the internal and the older one of scarification. He is quoted as saying: "I believe that it will be but a question of time until there will be but one method, and that the internal one."

THE NEW ENGLAND
MEDICAL GAZETTE

Vol. XLIV JULY, 1909 No. 7

ORIGINAL COMMUNICATIONS.

WHEN AND HOW TO EMPTY THE UTERUS.*

By Walter Gray Crump, M D., New York City.

When in compliance with the request of the able chairman of this Bureau, I availved myself of the honor to present before your Society, a paper on some obstetrical topic, the selection of the subject, "When and How to Empty the Uterus," was decided upon, on account of its importance and with little thought as to my ability to condense its diversified ramifications into the form of a paper. I have made the endeavor to do it, however, because of all the variety of cases that apply to the general practitioner for treatment, there is no class that exact of him the exercise of finer judgment or require more definite action than those which have to do with the interruption of utero-gestation.

Early in my medical career, as these problems came up for solution, I found, after due reflection over my college teaching, and as a result of many hours of research through medical literature, that there was so much uncertainty and diversity of opinion regarding this subject, as to create in my mind considerable confusion as to just the right course to pursue regarding the various phases of the subject of abortion. Abortion is derived from the Latin word *aborto*, which means literally to bring forth before the time. Throughout this paper the word is used in its broadest sense.

Now, after a decade and a half of active practice, the latter years of which have been devoted largely to gynæcological and consultation work, I find that the profession at large, and especially its younger members, are more uncertain of their proper attitude towards these cases, than any others in medicine.

Knowing these to be facts, it would seem that this paper may therefore interest you, and—I trust—may stimulate among those present such discussion as will tend to further enlightenment.

It is very difficult to obtain accurate statistics regarding this subject, but the conclusions drawn from the data to which we have

*Presented before the Massachusetts Homœopathic Medical Society.

access, would indicate that probably about 20 per cent. of all pregnancies are interrupted.

In the daily periodicals of almost every city we are continually confronted by statements which when read between the lines unquestionably advertise places that by their slaughter of infants out-Herod Herod. Hardly a week passes in the life of a busy practitioner that he is not made aware through privileged communications of the fact that even many members of our time-honored profession are unscrupulous abortionists. It is probable that many of them have become such, by not having early established well-defined inviolate convictions of the right to life of the unborn child. Possibly they have not had the moral courage to persist in the application of those principles in spite of the pleadings which are poured, almost daily, into their ears, such as the preservation of an honor already forfeited, the inconvenience of gestation when extended journeys have been planned, the breaking up of a home, should the knowledge of a wife's faithlessness become known, the assertion that physically the mother is not strong enough to undertake the responsibility of added household care, that the author of the products of the conception is the brother or even the father to the mother of the offspring (two cases where brother and sister have been the father and mother have come under my care). To all these pleadings there should be no yielding to the dictates of a blind sympathy on the part of the physician, for otherwise he would not be worthy of his high calling, which permits him not only to cross the threshold of the bed chamber, but makes him the trusted counsellor in this the most sacred of all the affairs of the home.

Certainly, in this enlightened age, the idea still commonly held by the laity that there is a definite time after conception at which the child quickens with life, has no honest advocates among practitioners, yet every few days some woman will admit during her case taking that she has had her womb frequently opened by Dr. —— because she has not menstruated on time and considers it no crime because the doctor has told her that the child has as yet no form.

In this class of cases we must take the time to thoroughly explain that life begins with the fertilization of the ovum and conception with its fixation, that there is no period from the beginning to the end of a normal pregnancy when the products of conception may be interfered with, except to save the life of the mother, without a crime being committed.

Physicians should ever be the persistent and active foes of unnecessary abortion. Prof. Pinard says, "From the moment a child is conceived no one has the right to hinder its development; the obstetrician is everywhere and always bound to protect it as well as its mother."

When, then, in the performance of our duties as physicians,

shall we be justified in emptying the uterus of the products of conception?

In my endeavor to answer this difficult question I shall not try so much to present the opinions of the latest authorities, as content myself with laying before you some of the conclusions I have reached, and a few of my methods of action in these matters. It is held in common by the great majority of medical practitioners and in perfect accord with the statutes of most of the states, that one is justified in removing the products of conception when because of the presence of the fœtus a woman's life is endangered.

To do so early in pregnancy, before such time as the child would be viable, must necessarily result in the death of the offspring, but this taking of the life of the fœtus should not cause the physician to shirk his duty and thus prevent his saving the life of the mother, for otherwise not only will her life be lost, but the death of the fœtus is also inevitable. True, many of these cases will result, not only in the death of the fœtus, but that of the mother also; but that is generally due to the fact that the removal of the products of conception has been too long delayed.

Of course, if operative procedure can be postponed until the period of viability without too greatly jeopardizing the life of the mother, then that is the only course to pursue.

In carrying out these principles, I had not practised medicine long before I was confronted by the attitude of the Roman Catholic Church in these matters. Then, for the first time, decrees of the Holy Office as issued through the priests to the faithful of that denomination, were brought to my attention.

The case was one of acute exacerbation of a severe condition of pyelo-nephritis complicated by extensive valvular lesions and lack of compensation. The young woman soon after her marriage (against which I had strenuously counselled) became pregnant. She had progressed to about the eighth week, when her condition became such that in my judgment and that of another physician, pregnancy must be terminated if her life were to be saved.

Not only did I advise such a procedure, but as medical adviser and friend, I urged its carrying out. The priest was called in and the tenets of the church presented. The patient was at this time confined to her bed, not only her extremities, but her face and abdomen, were greatly infiltrated with serum. Any attempt to assume the upright posture resulted in most tumultuous heart action at times to the point of causing syncope. For a few days she hesitated and then decided to take the matter in her own hands. The uterus was emptied and curetted and the patient rapidly improved. She lived a number of years after this and further impregnation was prevented by strict adherence to rules given her. This was at variance with the doctrines of the church, which forbids optional sterility (without excepting any extenuating conditions).

Her life was not a happy one, as the husband frequently, when family differences arose, would taunt her with the fact of her not being able to be a mother and reproach her for having permitted the operation before mentioned.

This and several other cases of a like nature which were brought to my attention induced me to investigate further the attitude of the Roman Church in these matters.

We find that Prof. Hector Treub, of Holland, had had a controversy with representatives of the church along these lines. After the death of a woman whom he felt could have been saved by a timely operation, prevented by the interference of her priest, said, "I should deem myself guilty of neglecting my duty as a reputable physician if I did not do whatever lies in my power, to make it impossible for myself or any other Dutch physician to again stand at such a death bed—a death bed of which it may be said: There lies a young woman murdered through the narrow decrees of the Holy Office." And he proposed the following addition to the penal code: "Whosoever forbids, or in any way hinders another to call in, or to accept, medical aid for his ailments shall, in case death results from the illness, be punished with imprisonment."

In doing this he said that his object was to prompt the Holy Office to take into account the mind of a majority of the population of a country where perfect liberty of worship exists. Some of the arguments advanced against his position were the following: "Thou shalt not kill." "The end never justifies the means; one cannot do evil that good may come."

In answer Professor Treub replied, if "Thou shalt not kill" be interpreted without any restriction, why, then, does not the Roman Church forbid capital punishment? And in answer to the accusation that a therapeutic fœticide is the deliberate taking of an innocent human life, he declared that while in such a case there is deliberate destruction of the fœtus to save another life, it would soon be extinct, anyway, and consequently the operation is not only lawful, but it is unlawful to omit it, and that the transgressor of the precept, "Thou shalt not kill," is not he who hastens the destruction of the doomed fœtus, but he who lets the mother die without intervention.

The limits of this paper will not permit of my fully covering the various arguments advanced on both sides in this controversy. It suffices, however, to bring before you this difference of opinion which exists between the Roman Catholic Church and the profession at large on this subject.

In considering the matter from the medico-legal point of view, we find that it is lawful to empty the uterus of the products of conception whenever it is necessary to preserve the life of the mother or the offspring. For instance, Section 294, of the Penal Code of New York State, reads as follows:

"*Abortion defined.* A person who, with intent thereby to pro-

cure the miscarriage of a woman, unless the same is necessary to preserve the life of a woman, or of the child of which she is pregnant, either,

"1. Prescribes, supplies, or administers to a woman, whether pregnant or not, or advises or causes a woman to take any medicine, drug or substance; or,

"2. Uses, or causes to be used, any instrument or other means,

"Is guilty of abortion, and is punishable by imprisonment in a state prison for not more than four years, or in a county jail for not more than one year."

It is, therefore, specifically stated in the laws of New York State that it is permissible to empty the uterus of the products of conception to preserve the life of the mother or child.

The law of the State of Massachusetts, so far as I have been able to ascertain, is more ambiguous in this respect—Chapter 212, Section 15, reading as follows:

"Whoever, with intent to procure the miscarriage of a woman, *unlawfully* administers to her, or advises or prescribes for her, or causes any poison, drug, medicine, or other noxious thing to be taken by her or with like intent *unlawfully* uses any instrument or other means whatever, or, with like intent, aids or assists therein, shall, if she dies in consequence thereof, be punished by imprisonment in the state prison for not less than five nor more than twenty years, and if she does not die in consequence thereof, by imprisonment in the state prison for not more than seven years and by a fine of not more than two thousand dollars."

Undoubtedly the word "unlawful" gives the physician the same latitude as does the law of New York State. In Massachusetts it is not a crime for a woman to commit an abortion upon herself, nor to submit to one by another, while New York State law holds these acts to be criminal.

Granting, then, that it is permissible to remove the products of conception to save the life of the mother or child, let us consider for a few moments some of the pathological conditions which justify therapeutic abortion.

In my personal experience, eclampsia occupies the first place, as it has been the most frequent condition for which I have primarily emptied the uterus. When the convulsive seizure has once occurred the uterus should be emptied as soon as consistent with the best interests of the mother. My only child was delivered at the seventh month because of this condition.

Edgar states that careful observations seem to show that danger is essentially passed, in some 90 per cent. of cases, immediately after the uterus has been emptied, if this is accomplished early in the seizure.

Hyperemesis (pernicious vomiting) frequently calls for the emptying of the uterus. When nausea becomes severe and the

ejected substance contains much bile, if the pulse is rapid and the condition is becoming more and more aggravated so that no food is retained, carefully watch the urine of the patient, and wherever the amount of ammonia rises above 10 per cent. of the total amount of nitrogen in the urine, it is claimed by Kelly that this should be a positive indication for removing without delay the contents of the uterus.

Since learning of the brilliant results obtained by your esteemed confrère, Dr. Blodgett, in the treatment of pernicious vomiting, when there is present in the urine acetone and diacetic acid, which he assures us is invariably relieved by the administration of bicarbonate soda either by mouth or intravenous, I have not had a case upon which to demonstrate this glorious achievement in medicine.

The greatest error which occurs in pernicious vomiting is that frequently the accoucheur waits too long before evacuating the uterine contents, and the patient, although relieved of the vomiting, not infrequently succumbs to exhaustion. Placenta previa, accidental hemorrhage, missed abortion, hydatidiform mole, hydramnios acuta, infection of uterine contents, chorea, aneurism, severe heart lesions, or a rapidly advancing phthisis often furnish the demand for termination of a pregnancy.

Severe kidney lesions, especially cases of pyelo-nephritis, always require very careful watching when pregnancy co-exists, and should the patient present signs of an increasing toxemia in spite of persistent and careful treatment, the emptying of the uterus should not be long delayed. The pregnant uterus, by compressing the ureters and damming back the purulent discharges of a pyelitis, may thus give rise to pyelo-nephritis.

In all these cases, where in the best judgment of the physician, it is deemed necessary to terminate the pregnancy, the rule of invariably sharing the responsibility with a fellow practitioner should most certainly be adopted, except in those rare cases of emergency where the delay of such a procedure would militate strongly against the life of the patient.

What shall be the attitude of the physician in those cases which occur all too frequently where the abortion has been criminally induced by the mother or some other persons, and he has been called to the case? Shall he refuse to assume the responsibility of attending the patient, as is frequently done, or shall he accept the case?

If he decides on the latter course, then it is our best opinion, it should be his invariable rule to protect his professional reputation by requiring a statement of the essential facts that have induced the condition, signed by the proper persons and preferably in the presence of a witness.

Then having established his proper relations to the case, he

should not hesitate to adopt such measures as his best judgment may dictate.

In addition to the conditions already mentioned there is still for our consideration that great class of cases constantly occurring in the life of the busy practitioner in which abortion, due to accidental or pathological causes, is threatened. In these cases the most essential point to be decided is whether the abortion is one that can be prevented or is inevitable.

In passing it may be of interest if we express our views regarding the indication that the expulsion of the fœtus cannot be prevented. It is not the amount of blood that should be our guide nor the amount of pain.

The definite rule that we would lay down and one which I have never known to mislead is this: If on examination it is found that the os uteri is dilated to such a degree as to permit the examining finger to palpate directly the uterine contents, it is useless to waste further time in trying to stop the process. The entire activities of the physician should then be directed to the facilitation of nature's efforts to end the pregnancy.

Let us now take up the subject of how to empty the uterus. Believing that all the various drugs used for this purpose are unreliable and most of them dangerous, we will not devote any time to their consideration, but will proceed at once to the presentation of the more reliable and approved methods of modern surgical mechanics.

In order to systematize this part of the subject and condense it into suitable form for presentation, it will be necessary to segregate the cases into groups. With this idea in mind we find in regard to the surgical procedure indicated, that most of the conditions are readily arranged into three classes:

First—Those occurring in the first third of gestation up to about three and a half months, in which the decidua is the important factor to deal with.

Second—From three and a half months to the twenty-sixth or twenty-eighth week in which the placenta is the essential factor, and,

Third—Those cases of premature delivery in which the saving of the life of the offspring is all important.

There are a few general rules which apply to the handling of all these cases, which it is the duty of all to carry out as nearly as possible. Bowels and bladder should be thoroughly emptied. The patient should be placed in a good light and in an easily getatable position. In most cases a general anæsthesia is required.

Rigid aseptic technique is more essential than in the usual confinement, because of the necessity of increased internal manipulation, as the condition to be dealt with is a pathological and not a physiological one. The shaving or clipping of the hair from the vulva is a wise procedure, not only because of the difficulty of

rendering it aseptic, but because the subsequent discharges, lochia, etc., which take place, will be at once taken up by the sterile napkins and not collect in the region of the vulva to form a culture medium and thus promote infection.

The rectum, which is one of the most frequent sources of infection, should be isolated from the operative area by a thick gauze sponge or folded towel, and held in place by artery clip or sterile adhesive strap, and during the after-treatment, it can be isolated from the vulva pad by a dam of gutta percha tissue made to adhere across the perineal body by touching edge with chloroform. In dealing with those of the first class the operation is usually completed at a single sitting, and is known as the *rapid method.*

As a preliminary step the rule to precede all instrumentation of the uterus by a thorough bi-manual examination should be observed, for not infrequently because of this omission, instruments are forced through the uterine walls, and complicating conditions may be overlooked. Intestines have been drawn through perforated uteri and poisonous solutions have been introduced directly into the peritoneal cavity.

In harmony with many others, I maintain that every case of early abortion should be thoroughly curetted, as up to the time of the formation of the placenta, the uterus unassisted rarely completely empties itself; portions of the decidua or chorionic villi are almost invariably left, which form a most fruitful nidus for toxic disintegration or infection.

After the necessary dilatation I first use as large a sharp curette as can be introduced, and thoroughly denude the posterior and anterior walls, then with a smaller sharp curette, I scrape out the decidua or fœtal envelopes from the uterine cornua. If the case is not a septic one no intra-uterine douche is given. Any blood or loose debris is removed by one or more packings with narrow strips of absorbent gauze introduced into the uterine cavity through the modern canula packer. If oozing is only slight after this no pack is left within the uterus. In the more advanced cases, however, of this group, should hemorrhage be excessive and the uterus relaxed, the cavity is thoroughly packed with packing gauze, which is left in place for about six hours, after which it is withdrawn, a foot or so at a time every hour, thus stimulating on the part of the uterus good contraction and allowing of intervals for retraction as the uterus gradually contracts down upon itself.

In cases where the contents of the uterus have already been infected, we have to deal with a most serious complication, and we all know how frequently these cases are met with, especially in those induced with criminal intent; and, other things being equal, the younger the patient the more severe the infection, as pelvic lymphatics decrease with age.

In the surgical treatment of these septic cases all manipulations, if the process is advanced, should be done with great care, as

the uterine structures undergo great softening. A preliminary intra-uterine douche is a good thing as it washes out the loose septic debris.

If the abortion is under three months, I do not hesitate to paint over the denuded walls of the uterus quickly with a swab held firmly in dressing forceps saturated with three to one iodine and carbolic acid. I always counteract the effects of this on the tissues by packing the uterus a few minutes immediately afterwards with gauze super-saturated with alcohol.

In all those cases occurring in the middle period between three and a half months and twenty-six weeks, it is generally better when possible to divide the operation into two sittings. At the first measures should be instituted to bring about a slow and careful dilatation of the now formed lower uterine segment, and to bring this about I have found nothing that equals the small-sized hydrodynamic bag devised by Dr. Ralph Pomeroy, of Brooklyn, which will be described later on.

In these cases, after the expulsion or extraction of the fœtus, it is neither safe nor practicable to deliver the placenta with the curette. This should be removed when necessary to assist nature by the gloved hand or the placental forceps. If hemorrhage is severe, measures similar to those adapted to this condition at term are indicated.

One special method of my own, which I have found very efficacious, is to pack the uterine cavity with gauze saturated with a sterile solution of gelatine. In several cases adrenaline was added to the gelatine.

In the emptying of the uterus in cases after the twenty-sixth week, excepting in eclampsia and placenta previa, artificial dilatation is usually not necessary, and one should assume, as in cases of delivery at term, an attitude of watchful expectancy ever ready to assist should natural methods fail.

In those cases where the child is viable and the parturient canal will not admit of its delivery without destruction, the Cæsarean operation should be performed.

In the hands of a competent abdominal surgeon, I do not consider this operation more dangerous than the application of high forceps.

In the decision to empty the uterus, the statements of the patient are entitled to but little weight. Objective symptoms must decide.

Of the various methods of inducing abortion Krause's method usually gives the best results. Personally, instead of a bougie, I find that one or more thick rubber catheters, which are much more readily sterilized, are preferable, and can be just as easily introduced between the membranes and the uterine walls.

In eclampsia, placenta previa and all other conditions where it is essential to rapidly empty the uterus, especially in cases after

the formation of the placenta, I find the use of the Pomeroy hydrodynamic bags, manufactured by Geo. Tiemann & Co., New York, a most decided help in dilating the birth canal. They most simulate nature's processes, and are a great improvement over the Champetier de Ribes balloon, the Bosse dilator, and all other apparatus devised for rapid dilitation of the cervix.

In closing, let me advise that you have always at hand a copy of the law to help you enforce right ideas of duty when these cases apply to you. May all experience, as I do, the pleasure of knowing that many a thankful mother calls you blessed.

If the presentation of this paper and its discussion shall prove of value to any of my fellow practitioners and thus help them to solve some of the difficult problems which this class of cases bring up, I shall be more than repaid for my efforts.

ANATOMICAL WEAK POINTS.*

By Benjamin B. Kimmel, M.D.,
Professor of Surgical Anatomy in the Cleveland Homœopathic Medical College.

Lest our subject should be interpreted as meaning the mistakes of the Creator, we desire to state our object in selecting so pretentious a topic. That the human body is not invulnerable, is attested by the very existence of a portion of the race assigned to prevent and correct its disorders. While to a large extent, the cause of human suffering can be traced to a violation of Nature's laws, it will be our aim to refer briefly to some structural weaknesses which offer inviting avenues for the admission of disease causes.

When in the course of development of things animate in our little neck of creation the animal called man was fashioned, he was, by his structure, given an advantage over every other animate thing. His head was erected to the height of his greatest dimension that it might command the greatest possible horizon. His limbs so located as to be most useful as prehensile auxiliaries, were relieved of their weight-bearing function, and were given the ability to reach every point of the body surface. His mental machine was so placed that the force of gravitation might assist in the removal of its vitiated fluids. In a word, he was, without doubt, given that structure which best fitted him to be king of all created things. But the possession of those structural advantages necessary to fit him for this supreme position was secured at the expense of certain other structural weaknesses which were destined to be his vulnerability to disease causes. It is to these we desire to refer, but not in the spirit of criticism.

First, the heart is so placed that probably five-sixths of the

*Read before the joint meeting of the Ohio and Michigan Homœopathic Medical Societies at Toledo, O., May 5, 1909.

circulating fluid is on a level lower than itself. Consequently the returning blood must be lifted, part of it a large distance. The pushing power of the arterial blood is much of it lost as the stream is broken up into the capillary circulation before the venous circulation is reached. There remains the power of suction and the action of the muscles which by their contraction empty portions of the veins by pressure. The inordinate intravenous hydrostatic pressure dilates the veins, causing hemorrhoids, varicocele and varicosis. The regions thus supplied are poorly nourished. Hence, the ulcers and various painful affections due to poor nutrition.

When man was lifted from a horizontal to a vertical position and two of his limbs were assigned other duties than weight-bearing, the possibility of over-weighted feet and legs was created. Besides, the three bony segments of the leg were reduced to two, and even these had their angle destroyed, which made the transmission of weight force of the body more directly by bone. The arch was a compensatory measure, but insufficient to prevent the effects of over-weight and jarring. The great frequency of talipes planum and the various joint affections of the feet were thus made possible.

In the earlier stages of development of the animal kingdom the abdominal cavity had a horizontal position. The viscera were suspended from the top of the cavity by peritoneal attachments in such manner that the weight not borne by these structures was supported by the resistance of the abdominal walls. These being pliable and formed by an interlacement of muscles were not liable to rupture. But when the abdominal cavity assumed a vertical position the intestines and omentum rested upon the non-yielding floor of the cavity. This floor had been weakened by the outlets of the digestive and urinary tracts, by the passage of the great vessels to the lower extremities, and in the male by the passage of the testicle, while in the female pelvic floor was a rent for the entrance to the genital tract. As the testicle passed from the abdominal cavity to the scrotum it passed through a tubular prolongation of the peritoneal sac. Hence, to the other factors was added a preformed course for the passage of inguinal hernia. The femoral arteries passing from a post-peritoneal position in the abdomen through a fascial opening beneath Poupart's ligament, left a point unprotected where viscera subjected to intra-abdominal pressure might be forced through, giving a femoral hernia. The uterus, which in the horizontally arranged cavity occupied its posterior part, now comes to lie upon a floor already weakened by the great vaginal slit. Add to this the weight of intestinal coils piled upon it and into the inviting cul-de-sac of Douglas, and the great frequency of uterine flexions and displacements becomes no longer surprising.

The small intestines being suspended from a vertical wall are more susceptible to entanglements than would be the case were

the mesenteric attachment to a horizontal surface. Hence, the increased liability to intestinal obstruction from volvulus, peritoneal adhesions, mesenteric hernias and intussusception. The large intestine does not escape the baneful effects of this arrangement. In a horizontal abdomen the three main divisions of the colon all have a horizontal direction. In man, two portions have a vertical direction, and in one the current must oppose gravity. This excessive labor placed upon the muscular coats of the ascending colon predisposes to constipation. The transverse colon, poorly supported by its peritoneal attachments, is no longer supported by the belly wall, so becomes dragged down into a V shape, thus increasing the liability to incompetency. A large part of the strength of the mesentery depends upon the superior mesenteric artery and its branches. This is pulled downward, and is made to impinge upon the duodenum which crosses behind it and is thus compressed between the artery and spinal column. This forms an effectual block to the passage of gases, hence the possibility of acute dilatation of the stomach.

For the reason already stated, the appendix would probably occasion less trouble if attached to almost any other point in the large intestine. Being attached to the most dependent part of the ascending colon the opportunity for the entrance of the bowel contents is at a maximum. The mucous membrane of the appendix not coming in contact with the fecal stream has little resistance. In consequence, it becomes an easy prey to microbic invasion when irritated by some stray fecal visitor.

The testicle, preformed behind the peritoneum below the kidney, took its arterial supply from the neighboring aorta. Likewise its veins were made to empty into the nearest veins, which on the right side was the inferior vena cava, while upon the left was the renal. After its long excursion to the scrotum its afferent and afferent blood vessels formed a long loop. This indirectness made the possible frequency of varicocele. On the left side this influence was augmented by the fact that the vein enters the renal vein which must cross over the aorta before reaching the vena cava, and the fact that the left spermatic vein passes beneath the sigmoid colon which exerts some pressure.

The thousands of cases of tubercular cervical adenitis bear testimony of the gateway to disease afforded by the girdle of lymphatic tissue encircling the pharynx. And as if the architect had in mind the especial accommodation of the carousing microbes the tonsillar crypts were furnished as alcoves and cozy corners where they might safely congregate and propagate.

When the contour of the human head was decided upon it was found that there was more space enclosed than was necessary to house its anatomical essentials. Nature accordingly arranged empty chambers within the bony skull and connected them with the upper respiratory tract. The mucous lining of these unused sinuses

lacked the resistance found in other parts of the respiratory tract. Consequently, the great frequency of "head" colds. In one of these cavities, the antrum of Highmore, its outlet is far above its most dependent part. Secretions from its mucous membrane are accordingly retained and make a veritable hotbed for germs. Empyema of this sinus is a frequent result.

Like the gynecologist, the aurist has occasion to render thanks to the designer of the human body. Physiologically the ear is a wondrous piece of mechanism. But its viability to disease is shameful. The middle ear is a great cul-de-sac connected with the pharynx by a long narrow tube. Through this an infection reaches the tympanum. The closure of the tube prevents drainage and the retained secretions must perforate the drum. Nor is this the worst that can happen. The mastoid cells form a sponge-like series of cavities into which the inflammation may extend. And to complete the blunder the emissary veins carry the germ-laden blood straight into the lateral sinus. Sinus thrombosis and abscess complete the microbic victory.

The portal venous system is not supplied with valves. Its arrangement being such as to require the blood to be lifted against gravity, also the tissues which form the bed for the various vessels being lax, stagnation is encouraged. Hemorrhoids and acites thus are physical consequences.

The parovarium is another vestigial structure that furnishes a vulnerable point in the human organism. The remains of a system of tubules that, in the female result in no functional organ, they give rise to cysts.

Vestigial structures are commonly noteworthy as trouble makers. In the course of development the jaw becomes less essential as a weapon of offense and defense, and the more perfect preparation of human food diminishes the duties of mastication. In consequence the posterior tooth on each jaw is in process of retrogression. Their eruption is late, occurring when tissues are fully developed. Hence, the resistance offered causes a tendency to absorption, resulting often in the partial destruction of the tooth almost before its eruption is complete. These teeth are also frequent producers of reflex irritation, and the uncertain neuralgias and lockjaw from an irritating wisdom tooth are familiar phenomena to doctors and dentists.

The ciliary ganglion, from which the ciliary nerves passing to the ciliary muscle are derived, has a sensory root, from the nasal branch of the ophthalmic, a sympathetic root, from the cavernous plexus, and a motor root, from the motor oculi.

Deficiency of refractive power causes greater drafts of nerve force upon the third nerve. A part of this force, flowing through the branch to the internal rectus, more than balances the abducens, to the external rectus, and internal strabismus is the result.

These thoughts are presented with the hope that they may be interesting if not instructive.

HOMŒOPATHIC THERAPEUTICS OF THE LYING-IN PERIOD.*

By C. B. Kinyon, M.D.,
University of Michigan, Ann Arbor, Mich.

We assume at the outset that each stage of labor has been properly conducted; that all injuries to the parturient canal that should be repaired have been, and that every precaution against infection on the part of the doctor and the nurse has been fully carried out. Even if this be true, there are still some lacerations of the cervix and extensive bruised and raw surfaces in the vagina and vulva present and ready to absorb any poison that may reach them. I do not, for a moment, believe in attempting to perform primary repair of the cervix unless it be so badly torn as to cause a continuous flow of red blood, and even then, only stitches enough are taken to control the bleeding. More than this it is not feasible to attempt, as more harm than good will result. This sore parturient canal makes the occlusion dressing, properly applied and kept in place, absolutely essential to prevent infection. Another condition always present is an enlarged uterus and a corresponding increase of all the tissues participating in the process of pregnancy and delivery. These must all be reduced to substantially the non-pregnant condition, and this can only be done in the absence of infection and by the proper physiological workings of the mother's system. As you all know, this increased size is sixteen hundred per cent. We thus see at a glance why it is that many authors consider the condition of the mother at the close of labor as necessarily pathological, as all of this excess of tissue must be eliminated.

Another essential fact to be borne in mind is that immediately following the delivery of the child and the placenta the mother is necessarily greatly fatigued. Still another factor to be considered is the highly wrought state of the mother's nervous system. These four factors are not properly emphasized by writers and teachers, as it seems to me.

Before elaborating my ideas as to the conduct and treatment of these cases allow me a word by way of comparing the old and new school methods in these cases. The former bear in mind only the so-called material or physiological and antidotal forms of treatment while the homœopath has all these at his command, and in addition a long list of well-tried and effective remedies from which to choose. It is of these remedies I wish to speak mostly today.

Let us take the conditions as we find them, and with these conditions in mind, outline a rational and successful line of treatment. We know that the woman is very much fatigued and, may be, completely exhausted. Therefore, the first and all-essential thing to do is to insure absolute quiet to the end that she may have complete

*Read before the combined Ohio and Michigan Homœopathic Medical Societies, May 5, 1909.

rest of mind and body. This must be done at all hazards in every case. Allow but little light in the room; allow no noise and especially forbid all whispering. In this, as in all cases where the patient is conscious, whispering is not to be allowed for a moment, not even by the doctor or nurse, much less by others. After a short sleep give the patient some hot drink, such as tea or hot water and milk.

Treatment.

In each and every case, even if perfectly normal, I give Aconite 2x every hour while awake, for at least twelve to eighteen hours, or even twenty-four hours, if there is any so-called fatigue fever. For this is too early to have fever due to infection. You can tell how long to give Aconite by the condition of the skin and the character of the pulse. These are a much better guide than the temperature. The temperature may, during this time, reach 99 1-2 to 100 within a few hours after labor, but, as already stated, this is simply the so-called fatigue fever and is very promptly controlled by Aconite. When the pulse drops below 90 and the skin is moist, discontinue the Aconite and give Arnica 2x for the next twenty-four hours. This remedy will control the sore and bruised feeling and alleviate the "after pains" to a marked degree. After the Arnica I give Belladonna 3x for a week or ten days, unless the breasts are too hard, in which case I give Bryonia instead of Belladonna, and in hundreds of cases have I seen the breasts soften under its use and mastitis prevented. Of all remedies in the materia medica, Belladonna produces the most marked benefit in relieving the engorged and congested condition of the pelvic organs. This is true in all cases as well as lying-in woman.

We have now reached a very important stage in the treatment of these cases, where the accoucheur must watch very closely for the early signs of trouble that he may best ward off the danger. This is why I insist on seeing my lying-in woman each day for at least ten days, even if all is going well. I explain to them why I come and they then do not express any surprise or enter any objection to the frequent visits. Briefly, what do we look out for? At the first visit, usually twelve to sixteen hours after labor, note the condition of the bladder and by all means use every possible measure to have the patient void before resorting to the catheter. For there is not one nurse in a hundred that can use the catheter and not infect the bladder. The parts are so swollen and discolored that you need not wonder that they have great difficulty in its use and so often cause cystitis. Unless the patient is very much exhausted, indeed, I would much prefer that she be put in a sitting posture rather than resort to the catheter. This is not so tedious as it seems at first sight, and it also helps to clear the clots from the vagina. And after the patient has once voluntarily evacuated the bladder there is very little subsequent trouble; while if the catheter is once used it is often demanded for several days. And ninety-nine times out

of a hundred cystitis is produced, and you all know how tedious and how serious this condition is. Watch very closely at this and each subsequent visit the quantity, color and odor of the lochia, and upon the first appearance of anything abnormal, ascertain the cause and remove it, and then your patient is in proper trim to respond to the similimum. Without going into detail I would say that in nearly every case, if not in every case, the trouble will be due to infection or retention within the system of waste products. These waste products, if retained, soon become toxic and must be eliminated by means of the liver, kidneys, intestines, lungs or skin. You will note that I make mention of the five channels of elimination. These are all to do their share, and if any one or more of them do not perform their function it is the province of the physician to help them do their work. The sources of infection, whether from within or from without, must be removed. If from the uterus, this cavity must be cleaned out, but do it with great caution, but thoroughly, and do not use the curette or in any way injure the lining. If the system is overloaded with the toxic product or any of the eliminative functions arrested they must be assisted. How often have I seen the fever and pain due to infection disappear after a brisk purge or free diuresis and sweat! After these have done their work the Homœopathic remedy can do its work, while without the eliminative helps the patient's vitality is often overpowered before the remedy has time to act. In giving indications for the following remedies I shall confine myself to those I have tried time and time again and know, from bedside tests, what they will do. Some of these may not seem to you to be Homœopathic. I have not the time nor space, neither is it my purpose to argue the point as to their homœopathicity at this time, but rather to help you, if I may, to cure these cases.

I have already spoken of Aconite, Arnica, Belladonna and Bryonia. We have in Apis a great help in cases where the kidneys fail to work. It is often best to give it quite low, the second or third decimal. Arsenicum is often called for in cases where the toxic products have already produced the characteristic thirst, a peculiar condition of the skin, with restlessness and the gastric symptoms so prominent in the pathogenesis of this drug. Arsenate of China has, in addition to the above, the loss of blood so often noted after severe labor accompanied by hemorrhage. The Arsenate of Copper has, in addition to the above symptoms, the characteristic diarrhœa, with marked cerebral symptoms, even to the extent of threatened convulsions, which is often noted during the puerperium. When this remedy is indicated its results are truly marvellous. Calc. carb. is often called for in the third stage of phlegmasia, especially where there is a white swelling of the feet and leg. Two remedies frequently indicated during the lying-in period are frequently confounded in the mind of the practitioner. I refer to the two Cohoshes. Cimicifuga has marked rheumatic

diathesis with severe pain across the lower abdomen. These pains are cramping in character. While Caulophyllum has the pain in the same region, but it is sharp and lancinating in character. Sometimes it is so severe as to drive the patient frantic. We might add that both of these remedies are of great value in cases of difficult labor. Hyoscyamus is our sheet anchor in puerperal mania. The patient is frequently in a terrible rage, does not know her friends. Many times is very obscene and profane, desires to be naked; in fact, there may be complete loss of all sense of modesty. I have frequently noted that these symptoms are more characteristic of Hyoscyamus than those mentioned in the books. Calc. carb. is another remedy of great utility in phlegmasia with a white swelling of the foot and leg, shooting and stitching pains in the leg and also in the abdomen, the latter greatly distended with gas, great pain in the back extending down into the glutei muscles, very restless, constant tossing about, and great thirst. Two forms of mercury, Merc. sol. and Merc. bijodatus, are often called for. The former in general toxemic condition and the latter when the lymph nodes are involved. We have in Nux vomica a great remedy for phlegmasia, with red swelling of the leg with dark, painful, tender spots; leg is powerless, a bruised sensation low down in the abdomen. This same sensation is frequently present in one or both legs with a frequent desire to urinate, as well as constant tenesmus. This remedy frequently outranks Cantharis in cases of marked urinary symptoms. Nux has also a coated tongue, loss of appetite, aggravation after 3 A. M., spirits greatly depressed. With the above ensemble present Nux has done wonders for me. Pulsatilla has a pale swelling in the foot and limb, with suppression of the milk; decided aggravation in a warm room; insists upon plenty of fresh air; no thirst. Very offensive, clammy taste in the mouth, especially after sleeping. All symptoms are aggravated by sleep. This latter fact also holds good with Lachesis. This remedy is of marvellous power in some cases of puerperal fever. The great key note for Lachesis is a terrible sensation of suffocation, as though a large cloth were folded and drawn snugly about the throat. This remedy has frequently saved the patient where the case seemed hopeless, if the above symptom with aggravation from sleep were present. Rhus tox has great stiffness of the limbs and they may be powerless; red streaks running down the saphenous vein; great restlessness, with constant changes of position which seem to give relief; always worse after midnight, and worse from touching the parts with water; wants to be warmly covered. Wrapping the legs in cotton batting gives relief.

The above are some of the chief remedies in phlegmasia. For puerperal convulsions, we have several very valuable remedies. Of course, the terrible convulsions themselves must be controlled, and it may be necessary to give chloral in the following manner to check the awful convulsions. This remedy helps to eliminate

the poisons through the kidneys as it is a great diuretic. If the patient cannot swallow I give 20 grains of the chloral in two ounces of warm milk in the rectum. I sometimes repeat this, giving three doses within an hour, if necessary to control the convulsions. Veratrum viride and Gelseminum are two great remedies to be given immediately after the chloral has done its work. Cuprum and Hellebore, with Hyoscyamus, Argentum nitricum and Stramonium will keep the patient on the road to recovery. For retention of urine which is frequently quite troublesome, there are but three remedies which I have relied upon. I give them in the order of importance: Apis, Causticum and Cantharis.

For profuse loss of blood after parturition, we have a few sheet anchors upon which we rely in the order of their importance. They are: Crocus, Ipecac, Sabina, Trillium, Secale, and Ustilago. Do not depend too much upon the fluid extract of Secale. In some cases accompanied by marked gastric symptoms Hydrastis will be of great help.

For sore nipples we have such remedies to rely upon as Croton tig., Graphites, Mercurius and Silica, and above all things in those cases do not forget Friar's Balsam.

For unwholesome or abnormal secretion of milk that does not agree with the child we receive marked benefit from such remedies as Aethusia, Causticum, Belladonna, Bryonia, Dulcamara, Rheum, Rhus tox, Pulsatilla and Silica. For scanty supply of milk we have such remedies as Aconite, Agnus castus, Belladonna, Bryonia and Causticum.

I wish in closing to give you a few remedies for that terrible condition known as puerperal fever. Allow me to suggest, do not use the curette or perform hysterectomy, as the former is dangerous, for always in these cases the uterine walls are so soft that perforation is very liable to occur, and even if it does not occur it is not possible to remove all the diseased tissue, and the raw surfaces made by the curette will necessarily absorb those poisons that remain, thereby materially aggravating the case, if not proving rapidly fatal. And hysterectomy in these cases only hastens the end. To the best of my knowledge there are less than a score of cases on record that have recovered after hysterectomy, while hundreds and hundreds have died during or soon after the operation. A far better method of treatment in these cases is to thoroughly clean out the cavity with gauze, followed by a swab of iodine compound, and if need be, in case of great fever and destruction of tissue, a continuous douche may be employed by allowing it to enter the well dilated os and returned without obstruction. This is best done by a one per cent. solution of iodine in the water. I have seen cases that were considered hopeless by all the attendants, where the fever was from 104 to 106, by the daily swabbing out of the cavity as above indicated and the employment of the continuous iodine douche for several days, show decided signs of improvement and

ultimately fully recover. And I am sure that no other line of treatment would have been successful.

As to remedies. As a rule, we do not need to give anything to make the bowels move, but if they are not already moving freely Hunyadi water is one of the best laxatives we have. If the whole system is saturated with the poison and there are marked gastric symptoms I rely largely upon the Salicylate of Soda, giving two grains every two hours until the bowels show signs of being too loose. This is followed in nearly every case for at least a few hours, and perhaps two or three days, by Arsenate of China 2x. Rhus tox and Mercurius are two very important remedies in these cases. One other remedy which has served me well I mention last because it is not indicated until the latter stages of the disease, after pus has formed. Then is when Echinaca is indicated. And to be of benefit must be given in material doses. A favorite prescription with me is the following: Put one dram of the mother tincture (Luyties' preparation) in four ounces of water. Give a teaspoonful every half-hour until its results are manifest, then gradually lengthen the interval between doses. One great remedy for the lying-in period and any other cases of marked engorgement of the pelvic organs and tissues is Belladonna. This is without question the greatest remedy in the materia medica for the relief of such engorgement. For marked cases of metritis this is a great remedy, but is frequently alternated or followed by Calc. iodide 1x or Hydrastis 1x.

I feel very keenly the fact that I have of necessity been so brief that my paper will seem very fragmentary and unsatisfactory, but if I have given you any thoughts by which you can help your patients I shall feel much pleased.

LEPROSY.—It is well observed that never does the knowledge of the presence of leprosy in a resident of the North Atlantic Coast States become public without directing attention to the senseless, panic fear bred by this disease among the non-medical. Philadelphia recently had such a case, and the lay press described the family of the victim "without a home and the father unable to obtain employment" as being "in a sorry plight." Only a short time ago a leper was being hunted like a wild beast in West Virginia, and the unhappy condition of a discharged United States soldier suffering from the disease has called forth much comment. A proper institution for the treatment of the afflicted and popular education as to the real nature of leprosy are indeed sorely needed.—Medical Times, March, 1909.

MALIGNANT ENDOCARDITIS.*

By A. B. Schneider, M.D., Cleveland, Ohio.

I will make only brief reference to the simple endocarditis which is so common a complication of the general infectious fevers and which is responsible for the majority of cases of chronic valvular disease. Such endocarditis occurring in the course of tonsilitis, rheumatism, chorea, erysipelas and scarlet fever, and less frequently in pneumonia, typhoid fever, measles and milder infections, is often overlooked and the patient subjected to irreparable damage through neglect on the part of the physician to properly control the convalescent stage of the disease. Many cases of valvular disease developing in adult life without apparent cause are doubtless the result of slow sclerotic changes initiated in the valves as the result of a benign endocarditis complicating a simple infection in childhood.

The case histories which I will present, in synopsis, illustrate the graver forms of this affection, variously described as malignant, or septic, or ulcerative endocarditis. The acute cases usually occur as complications of a general sepsis or pyemia, particularly wound septicemia, puerperal fever, osteomyelitis, gonorrhea, pneumonia, erysipelas, etc., and may be entirely overlooked, the cardiac signs being masked by the general symptoms and the physician too content to dismiss the heart signs which may obtrude themselves on his notice with the trite generalization "heart failure." Cardiac signs, however, may be absent altogether and a positive diagnosis impossible, unless hematuria, swollen and tender spleen, hemiplegia, or other embolic phenomena draw attention to the heart. The fever is irregularly remittent and sometimes decidedly intermittent, and is frequently accompanied by chills and sweating. The pulse is usually small and rapid. Respiration is rapid and there is marked dyspnea and precordial pain. Delirium, edema, petechiæ and hemorrhages from the mucous membranes foreshadow the end in unfavorable cases. The chronic cases are usually engrafted on old valvular lesions and admit of a more favorable prognosis. In the so-called recurrent form, several attacks, each lasting several months, may be successively weathered by the patient. The temperature is frequently of a remittent or definitely intermittent type, with recurring chills and sweating. Some cases, especially in old people, may show little rise of temperature and yet give evidence of profound sepsis.

The diagnosis is based upon the presence of an antecedent causative disease or the knowledge of an old valvular lesion; the development in acute cases, of a mitral or aortic systolic murmur; irregular fever, chills and sweating, and embolic phenomena. Blood

*Read before joint meeting of Ohio and Michigan Homœopathic Medical Societies, May 5, 1909.

cultures will show the presence of the infecting organism and the blood count will determine a decided leucocytosis. The absence of the plasmodium malariæ and the failure of the Widal reaction will aid in excluding respectively, malaria and typhoid fever, the two diseases with which this affection is most frequently confounded.

Case I.—Malignant endocarditis.—History: James N., Irish, aet. 40. This patient was admitted October 14. He gave a history of an attack of inflammatory rheumatism four years before, with fever, swollen joints and prolonged confinement to bed. His present illness began four weeks before admission, with thirst, nausea and vomiting, headache, pain in the back and sides and diarrhoea. The temperature on admission was 104, pulse 126, and respirations 28. The face was pale and haggard, and the mucous membranes anemic; the tongue was red and glazed and the gums bled slightly; the body was emaciated and the intercostal spaces well marked, excepting in the left axillary region, where they were almost obliterated; tactile fremitus was absent over the left lower axillary and infra-scapular regions, where there were also dulness on percussion and distant breath sounds; the splenic area of dulness was slightly increased in extent; the liver extended one finger breadth below the costal arch and the abdomen was moderately tympanitic; the apex beat was in the fifth interspace and left nipple line. There were mitral systolic, aortic systolic and aortic diastolic murmurs. The pulse was small and weak.

Diagnosis: A provisional diagnosis of encapsulated empyema was abandoned when careful exploratory puncture failed to locate pus. A decided thickening of the pleura was, however, established by this procedure, and this with probable accompanying adhesions was held to account for the physical signs of empyema of the left side. The cardiac faults, viz., mitral insufficiency, aortic stenosis and aortic insufficiency, were held to be sequelæ, as they doubtless were, of an attack of endocarditis complicating the attack of inflammatory rheumatism which the patient suffered four years before. Further investigation led by a process of careful review, and exclusion of all other possible sources of the evident septicemia, to the conclusion that the heart was the offending organ and that we were dealing with a malignant or septic endocarditis of the typhoid type. There was an irregularly intermittent temperature ranging from 96 to 106, with a pulse rate of 120 to 140. Chills were not well marked and perspiration was slight. Blood examination: Hemoglobin estimate, 80 per cent.; red cells, 3,200,000; white cells, 36,000. A second leucocyte count made October 27 showed 26,000, differentiated as follows: Polynuclears, 90 per cent.; large mononuclears, 6 per cent.; small mononuclears, 2 per cent.; transitionals, 1 per cent.; mast cells, none; eosinophiles, 1 per cent. Sputum examination was negative as regards tubercle bacilli and pneumococci. Urinalysis: Reaction acid; specific gravity, 1018;

albumin and sugar, negative; bile, a trace; sediment contained numerous red cells and a few leucocytes. Blood cultures were not attempted.

Treatment: Arsenicum 3x every hour; stimulation as required; liquid diet. This patient became gradually weaker, and toward the end developed signs of pulmonary edema and cardiac thrombosis. He died October 31.

Autopsy—Superficial: General development and nutrition poor; no edema. Lungs: Pleural adhesions and thickening, especially marked and dense on the left side; no consolidations, abscesses or nodules. Heart: Slightly enlarged; myocardium normal in color but flabby; few calcareous patches; coronaries somewhat atheromatous; aortic cusps calcareous and greatly thickened. These cusps could neither be approximated nor freely reflected, and were surmounted by several reddish warty masses from which extensions ranged along the wall of the aortic vestibule to the mitral valve segments, which showed similar degeneration. The tricuspid and pulmonary valves were normal. The liver showed no gross changes. The spleen was soft and pulpy and much redder than normal, and was slightly enlarged. The kidneys showed no gross changes. Careful examination failed to show suppurative foci or infarctions.

Case II.—Recurrent septic endocarditis.—History: John D., Hungarian, aet. 30. This patient was admitted Dec. 23, 1908. He gave a history of an attack of diphtheria at six years of age. For six years succeeding this attack he was greatly troubled with cough and severe pains in the left side of the chest. At sixteen years of age he had a second attack of diphtheria. At twenty-five years of age he had an attack of hematuria with severe pains in the lumbar region. Three weeks before admission he caught cold and began to cough. The cough was incessant, with severe pain in the left side and much muco-purulent, blood-streaked sputum. There were marked dyspnea and cyanosis, with cardiac palpitation and precordial pain. His temperature on admission was 104, pulse 145, and respirations 42. He was anemic and slightly cyanotic; his tongue was dry and brown and his voice very hoarse; respiration was rapid and shallow. There was general impairment of resonance on percussion and tactile fremitus was increased over the greater part of the chest. There were numerous moist rales throughout the chest and areas of crepitation over both bases posteriorly and the right fourth rib anteriorly. Cardiac dulness was increased beyond the left nipple line and the apex was in the sixth interspace. There were marked mitral systolic and aortic systolic and diastolic murmurs. The liver dulness was normal. The spleen was enlarged and tender. Diagnosis: Broncho-pneumonia with a complicating active endocarditis. The temperature ranged between 102 and 104 for a week, when it gradually declined in the course of several weeks to a daily range of 99 to 100.4. The respirations declined to 20 and the

pulse to 100. The cough greatly improved and the expectoration ceased almost entirely. Examination of the urine showed specific gravity of 1030; reaction, acid; albumin, a trace; no casts. No blood counts nor blood cultures were made. The Widal test was negative. During the next 60 days the temperature was continuously above normal, ranging between 99 and 101.5; the pulse 90 to 120, and respirations 20 to 24. The urine showed normal specific gravity and urea and slight albuminuria, without casts. The lungs cleared up but the hoarseness did not entirely disappear. The spleen gradually returned to normal dimensions. The stomach and bowel functions were normal. For the last two weeks of this period the maximum daily temperature did not exceed 100. The treatment accorded this patient on admission was: Pneumonia jacket, liquid diet, Phosphorus 3x every hour. On January 4, the remedy was changed to Arsen. iod. 3x every two hours. On January 23, he was allowed a soft diet, and on January 29 a general diet. Subsequent remedies were successively Sulphur 6x and China 3x. The patient was very impatient and restless and frequently broke the rule enjoining confinement to bed. Each such infraction was followed by increased fever and aggravation of the cardiac symptoms. On March 18, nearly three months after admission, he refused to be further controlled, and was allowed to leave the hospital. On April 4, the seventeenth day after leaving the hospital, the patient returned in the ambulance. He had been up and about most of the time and fairly comfortable, but during the last week he had been troubled much with cough and dyspnea and had noticed swelling of his feet and ankles. On readmission his temperature was 104.5, pulse 120, and respiration 42. The skin was cyanotic and the legs and genitals edematous. The legs were dotted with petechiæ. The chest showed diminished resonance and many moist rales. The cardiac area was increased both to right and left, and there were mitral systolic and aortic systolic and diastolic murmurs. The liver was enlarged and the abdomen was tympanitic. There was a distressing cough, and expectoration of mucopurulent bloody sputum. Examination for tubercle bacilli was negative. The urine showed acid reaction, specific gravity of 1017, and a large amount of albumin and blood, and granular casts. Phosphorus 6x, then Tartar emetic 3x, and later, whiskey and Digitalis were the remedies employed. The patient continued with high temperature and rapid pulse and respiration rate, and died on April 9 as the direct result of cardiac thrombosis, with broncho-pneumonia and chronic septic endocarditis as contributing causes. Autopsy was not permitted.

This patient's cardiac lesion doubtless originated as a complication of the attack of diphtheria incurred in childhood and the succeeding years of cough and pain in the chest were probably cardiac in origin. The second attack of diphtheria presumably aggravated the cardiac lesion. The hematuria and lumbar pain of

a subsequent period were doubtless of embolic origin, as were also the splenic enlargement and tenderness noted when the patient was first admitted to the hospital.

Case III.—Ulcerative endocarditis: Geo. B., American, aet. 60. The history was indefinite as to previous illness. He had had attacks simulating renal colic. He had gradually lost weight and strength during the past two years. One week before admission he had a chill followed by high fever and active delirium. A few days later he suddenly lost the power of speech and the use of his right hand. The tongue was dry and brown and the breath was very foul. Large furuncles on the left wrist and shoulder were in process of healing. The chest showed diminished resonance over the bases of the lungs posteriorly, with fine moist rales more numerous on the right side than on the left. The cardiac area was increased both to right and left. The valvular sounds were muffled and indistinct. The arteries were markedly atheromatous and the pulse was very rapid and weak. The liver and spleen showed a normal percussion area and the abdomen was slightly tympanitic. During the first week the maximum temperature gradually declined from 103.5 to 99. On the eighth day it rose to 104.5, coincident with a parotitis of the right side, which went on to suppuration. The temperature continued in decidedly remittent form, ranging from 99 to 103.5, accompanied by slight chills and moderate sweating, until the patient died of cardiac thrombosis twenty-two days after admission.

The diagnosis of ulcerative endocarditis was based on the cardiac signs, the embolic phenomena, the cutaneous foci of infection and the evidences of general sepsis with the secondary suppurative parotitis. The term general arterial pyemia would fit this case very well. The remedies consisted, at different periods, of Echinacea tincture, Hepar sulph. 3x and Arsen. alb. 3x. Stimulants were used as indicated. The abscesses were freely incised and drained.

THE CLASSICS IN MEDICINE.—Stanley Coulter, Ph.D., a college professor, has well emphasized that the high esteem in which the classics were held by educators for centuries deserves some consideration, and, in addition, he points out the value of an enlarged vocabulary, of an acquaintance with what medical men might call the complicated morphology of the dead languages and of the literary, mythic and historic lore with which such study acquaints us. In addition, it may be stated that the medical man has to acquire a technical vocabulary of probably not less than 40,000 words, mainly Latin and Greek derivatives. Most of the newer technical words added to the medical vocabulary are Greek, or at least are imagined to be so by the men who propose them. While the use of language is not in one sense a practical matter, a fairly correct understanding of technical words is at least as practical for a physician as a knowledge of the construction of his tools is for a carpenter or plumber. Moreover, if one is to take a first hand interest in medical history, a knowledge of the dead languages is essential.—The Medical Times.

PRESIDENT'S ADDRESS, ALUMNI ASSOCIATION BOSTON UNIVERSITY SCHOOL OF MEDICINE.

By David W. Wells, M D.,
Assistant in Ophthalmology, Boston University.

POST-GRADUATE INSTRUCTION IN MEDICINE.

In the act of incorporation the object of this society is stated as follows: "To promote social and friendly relations of the Alumni, to coöperate with the Faculty in maintaining a high standing, and advancing the cause of medical education."

Probably our yearly banquet contributes more toward the first of these objects—"the promotion of social and friendly relations of the alumni"—than most of us realize. Undoubtedly more might be accomplished in this line, but it is concerning the second object—"coöperating with the Faculty in maintaining a high standard and advancing the cause of medical education"—that I wish to speak tonight.

This work has not been entirely neglected. "Considerable sums of money have from time to time been raised by individual subscription. Money secured in this manner has been used in equipping the school with the necessary apparatus, such as books, microscopes, etc."

Our alumni scholarship fund, as shown by the treasurer's report, is now available. It now becomes the business of this Association to decide the conditions of its award. The committee appointed to confer with the Faculty, asking that we be given some sort of advisory function concerning appointments to that body, has reported the Faculty's willingness to receive such suggestions from us, and the committee has looked over and endorsed the nominations for the coming year. This year, for the first time in my recollection, our convocation visitor has discharged his duty, has visited the School, has listened to lectures, and has brought us his report, with suggestions which we have acted upon. These things are all worthy, are eminently altruistic, and tend to maintain the good name of our Alma Mater.

The message I bring you tonight is more selfish. We have been confining our efforts to the *under*graduate, and we should now ask that the medical school minister to the needs of the Alumni.

Prof. Walter Wesselhoeft has told us that in the beginning there was some question of the advisability of establishing a complete medical school, that he with others had thought that post-graduate instruction in Homœopathy would be all that it was wise to attempt. He has lived to see Boston University School of Medicine take a high place among the medical schools of the country, and he tells us with pride that he was mistaken.

Most parents have passed through the experience of a sudden awakening to the fact that their child has become a man. I wonder if some of the older Alumni do not need to be aroused to the fact that Boston University School of Medicine has arrived?

The standards of admission have been continually raised, and in 1912, one year in college, or its equivalent, will be required. This raising of the requirements has undoubtedly reduced the number of applicants, but we now have nearly 1000 graduates. Under the new administration it is becoming evident that we *are* a department of a university

The new combination course by which it is possible to obtain the two degrees of Sc.B. and M.D. in six years should prove a great attraction. To quote from the School announcement, July, 1908: "In this course, by the coöperation of the College of Liberal Arts and the School of Medicine, a student will find it possible to obtain the academic degree of Bachelor of Science and the professional degree, Doctor of Medicine, by six years' work in Boston University. The incalculable advantages of such a combination course must commend themselves, at a glance, alike to would-be medical students who realize the value of an academic degree to the physician, and to candidates for an academic degree who contemplate a medical career and hesitate before the length of time demanded by its preparatory work. The first two years of this course are spent in the College of Liberal Arts, pursuing a curriculum especially designed to meet the requirements of the course; the remaining four years are spent in the Medical School. At the end of the second year in the Medical School, during which time the fundamental medical sciences have formed the chief studies, students may come up for the degree Sc.B. Two years more of study, completing the medical curriculum, will fulfill the four-year requirement for the degree M.D."

If one has read the editorials in the New England Medical Gazette along this line, he knows that Dean Sutherland has been a very earnest advocate. Incidentally the cause of medical education is immensely advanced in the recognition of the so-called medical sciences to be as cultural as Greek, and as acceptable toward an academic degree.

Dr. John M. Dodson,* Dean of the Medical Courses, University of Chicago, says: "No university with a medical department offering instruction in the fundamental medical branches of the proper sort, can deny its students credit in the medical subjects *on* the course for a bachelor's degree, unless it either repudiates the elective system, or declares these subjects not to be branches of general learning. Can the present day university adopt either of these alternatives?"

This six-year combination is not an invention of Boston University, but, according to Dr. Dodson, "is now in operation in over

*Journal Am. Med. Association, May 22, 1909.

thirty American universities." It, therefore, becomes evident to one who studies the course of events that an increasing proportion of college men of the future, those who do not take up the specialty of medicine, will be conversant with the so-called medical sciences, chemistry, physiology, embryology and human anatomy,—in a word, will be at home in the great subject of biology.

The general public is becoming enlightened by the daily press and by the many popular lectures on Hygiene, Tuberculosis, Diphtheria and Preventive Medicine. Medical inspection of schools has a tremendous educative influence. This means that many of our patients are becoming quite able to measure us, and to intelligently judge our actions. It takes but a few years to make one rusty in these subjects, especially as *our* instruction was not up to the standard offered today. In this emergency, attendance on post-graduate courses becomes a necessity, or one soon becomes a back number. Many of our men go regularly to New York or Harvard, and avail themselves of the opportunities offered.

Boston University School of Medicine has made a beginning. In the 1908 catalogue is the following announcement: "Physicians who have received the medical degree and are approved by the Faculty will be admitted to the School, and allowed to attend such lectures as they choose, and will be entitled to receive a certificate of such attendance. Those who wish to review any of their past studies, or to investigate new subjects, will have excellent opportunities in the laboratories of the School, as well as in the daily clinics of the Hospital and Dispensary. In order to obtain the diploma of the School, they must pass a satisfactory examination in the entire work of the senior year, and present evidence of competency in the full curriculum of the School.

"Alumni of this School will be cordially welcomed to all lecture courses, and special concessions will be made to those wishing to pursue laboratory or clinical investigations. Additional information concerning clinical or laboratory post-graduate courses may be obtained at the School office."

I applied for this additional information and was told that several graduates are electing portions of the work of the senior year, that is, undergraduate lectures and clinics, and that six are having strictly post-graduate courses in pathology. Concerning post-graduate courses in other subjects I was told to consult the Registrar. By this I presume that if one were persistent enough, a way would be found to supply his wants. A business man who has new goods to sell advertises them. Definite comprehensive courses should be arranged and offered.

The Clinical Week instituted last year was a great success. Invitations were sent to all physicians of New England and to members of the American Institute of Homœopathy. The number of tickets was limited to 250 and more than the number applied.

The average attendance was about 150. As you all know, we are now in the midst of another Clinical Week.

This year a laboratory course is offered. It is to include chemistry, physiology, pathology, and clinical microscopy, fee $10.00, number limited to twenty applications. This Clinical Week has been demonstrated a wide-spread post-graduate interest, and it is the opinion of your executive committee that the time has come for Boston University School of Medicine to establish post-graduate courses in all departments.

This subject was discussed at the one meeting of the full Faculty which has been held during the year. Not being a member of the *governing* Faculty I do not know if it was further considered. When an enthusiastic alumnus wishes to pursue some subject more thoroughly than the undergraduate curriculum allowed, it is embarrassing to be obliged to tell him that he must go to Harvard or New York or Europe. Naturally most of our Boston men turn first to Harvard, and it must be admitted that that institution offers very attractive courses. The writer's first post-graduate work in Ophthalmology was taken there the summer after graduation. The 1908-09 announcement of courses for graduates is a pamphlet of forty pages, giving the details of eighty-five distinct courses. These consist of twelve to twenty-five exercises, principally clinical. The fees are $15.00 to $50.00, the average being $25.00. The candidate registers at Dean's office, pays his fee, and presents himself to the instructor at the specified time. Much of the work is done by assistants, although the heads of departments figure conspicuously.

The writer went over the matter in some detail with Dean Christian. He said there was no difficulty in securing men to fill the places, and that it was an admirable chance for an untried man to show his ability as a teacher. All or part of the fee is paid by the school to the instructor, and although it is merely a gratuity, it suffices to secure attention to duty. I am well aware that this perfected system is the result of years of growth, and that our beginning would necessarily be small, and the arrangements somewhat elastic. At the Faculty meeting at which this subject was broached, President Huntington asked several of the professors if their departments were now so organized that this work could be taken up. Most replied that if not the necessary changes and additions could easily be made. Incidentally, it would be a valuable asset to inlist more of our alumni into the teaching force. We should use every man who could be profitably employed. Nothing inspires loyalty like a feeling that one is a part of the institution.

In order to get some data about the smaller and younger medical schools I have asked some of them for information on post-graduate instruction. The Secretary of Tufts replied as follows: "We have no post-graduate course, but when a graduate applies for work in the school we arrange courses to suit his per-

sonal wishes. We give post-graduate courses in all subjects, but only as above stated."

The Secretary of Hahnemann Medical College, Philadelphia, says: "We do not have any regular post-graduate course. The only thing in that line is our senior course, which is very nearly all practical work."

Dean Copeland of the New York Homœopathic Medical College and Flower Hospital says: "The College gives a so-called Practitioners' Course, Commencement week. We are planning to do serious post-graduate work in the near future, but at present have formed no definite plans. Our trustees have just appropriated $50,000 to enlarge the capacity of the hospital, and one of the things they have in mind is the installation of graduate work."

Dean Hinsdale, of the University of Michigan, Homœopathic Department, says: "In case a physician does not desire to put in a full year's work, he can attend our summer session, which is intended to satisfy the demands of such doctors as wish to review or do routine work for six or eight weeks during the fore part of the summer. The summer school is so arranged that clinics and special instruction are given in one-half of the day, the other half-day being devoted to the laboratory, which is adapted to the needs of general or special practitioners. Our aim is, in the summer school, to individualize with all who are in attendance, as far as we are able, for we do not find that any two of them want to do exactly the same thing."

From these replies it is evident that Boston University School of Medicine must be up and doing. We have a Faculty of sixty-three men and women, well qualified in their respective departments to teach not only students, but graduate physicians. We have a hospital whose trustees are always glad to coöperate. But best of all we have our Out-Patient Department, where 17,000 to 18,000 cases are treated annually. Institutions of this kind exist for two purposes. 1st—To treat the needy poor. 2d—To instruct not only the undergraduate, but practitioners. Post-graduate courses would give a new meaning to our clinics. The studious graduate would be encouraged to continue his medical education in our own institutions. It would be presumptuous to present a definite plan. This naturally is the function of the Faculty. It might be thought best as a beginning to offer summer courses.

I have no means of knowing what attitude the Faculty would take, but it is with the sanction of the executive committee of this association that this matter is brought to your attention. If it meets your approval it would be consistent with our avowed object, "advancing the cause of medical education," to pass a resolution asking the Faculty to offer post-graduate instruction in all departments of medicine.

"Maintaining a high standard of medical education" means the education of the *alumni,* as well as undergraduate. Our medical

students are told when receiving their degrees, that their education has just commenced, but we have failed to provide for their *further* needs. I am well aware that we are welcome to attend the lectures of the School and hear again the work gone over as undergraduates. As the curriculum is being constantly extended we would all be surprised to find how much more is now offered than was meted out to us.

Last year I attended many of Professor Sutherland's lectures on Theory and Practice. As my exercise with the senior class was scheduled immediately after Dr. Sutherland, I gave myself an extra hour and enjoyed immensely his extremely practical talks. There were many points suggested about which I wanted to ask some questions, but as I was only a visitor, it would have been manifestly improper to do so. Had this been a post-graduate course for which I had paid a small fee, the case would have been different. The limited number to whom such courses would naturally be given would allow of just this close relation. The undergraduate must take the material required for his degree, the Alumnus, presumably knows what he wants, and will elect it, if he be given the opportunity.

If our Alma Mater would command our highest respect and loyalty, she must minister to our needs *after* we leave her walls. She must receive us with open arms when we return for fresh supplies of her bounty. Not until a few years of active practice does a physician learn his real needs. Give us a medical school which furnishes at a nominal expense post-graduate instruction in every department of medicine, and the plea for greater loyalty will be heard no more. The Faculty have said that suggestions from the Alumni Association are solicited. Let us take them at their word.

ALUMNI ADDRESS FOR THE FACULTY OF MEDICINE—BOSTON UNIVERSITY.

By Eliza B. Cahill, M.D.

Reminiscence is a joy of old age—so it is said—and I must feel the germ tonight, for I have been thinking as I sat here of the first of June, twenty-three years ago, and wondering if this class of 1909 feel as did the class of 1886. *We* could have enlightened that *splendid* Faculty upon numerous points, many of which are being worked out by the students of that decade in the Faculty of now.

That old Medical School, built *first* for women, incorporated as the Female Medical College and later amalgamated with Boston University! We had only the main building; the lecture room on the left had board tables extending around it, and Wednesday

and Saturday mornings we studied pathological specimens under the microscope.

We had lectures all over the place—the dispensary in the basement, children shrieking from tonsillotomies and vaccinations; ate lunches in the dressing room or on the stairs leading to the dissecting room; saw the patients from the Hospital operated in that old amphitheater (it was the operating room of the Homœopathic Hospital). Rainy days they were brought from the Hospital covered with oil cloth. We wonder today that anybody survived. But they did, and that old Medical School made history.

A *surgeon*, like any other genius, is born, but physicians are *made*, and from Boston University Medical School has gone some of the best recognized ability of the day, men and women who have done their full share in the evolution of medicine from charlatanism to art and thence to science. The *patient* has learned that he has a right to expect from us as physicians, not alone *our* best, but *the* best, that he is not buying our pessimism or our optimism, but *facts*. We are strong in anatomy, in surgery, in materia medica, in diseases of eyes, ears, throats, nerves, and heart and lungs. Our laboratory has an international reputation, and more than *our* school will decree life or death from the diagnosis signed by its director. And the teaching of Hahnemann does not desert us. We want our materia medica. We believe in it; we prescribe by it. But we do *not* want to prescribe medicine for a backache caused by a displaced kidney, or a flat-foot, or for an indigestion caused by an inflamed appendix, nor for a dysmenorrhœa due to a retroflexion.

Our students need more abdominal diagnosis. The microscope aids not at all here, and it is in these and pelvic diagnoses that greatest errors are made. Finger dexterity is slowly acquired and much drill is essential. We need to teach more the importance of accuracy of description, of the dignity of scientific terms, and of intelligent report of cases. We need more room for clinical diagnosis, where class and *one* patient can confer alone. To do all this we need more definitely the coöperation of the Homœopathic Hospital, for it is not carrying our medical instruction far enough to make a clinical diagnosis and refer the patient to the Hospital for operation. We want our diagnosis verified or refuted upon the abdominal opening and report returned to the clinic. The Faculty would be in no doubt as to the quality of the diagnosticians, for medical students are hard critics, and frank, and, as a body, entirely fair.

We need a chair of psychotherapy—that science of nothing—the rock upon which the intelligence of the laity so often stumbles. Only liberal education will ever free us from the bondage of superstition and mysticism. It is *our* fault if our patients become Christian Scientists and are cured thereby. It is *our* fault of we allow the clergy to intrude upon the medical profession. We should teach psychotherapy as a specialty, and the time will come when

hysteria and neurasthenia will cease to be a medical condition, and as inexcusable as any other phase of uncontrolled disposition.

We have much clinical material ever present and ready to increase with our own ability. For these poor people who have no choice, indeed have much, and go from clinic to clinic to remain where they feel they are most successfully treated. Diagnosis made, treatment need not err.

This is the age of survival of the fittest, and those of us not equal to the requirement should leave our places to others more capable, and this in honor of the profession which returns us *all* and *more* than we ever give to it. For we are responsible for the methods of *today*, not two years ago, nor five years hence, but *today*, and each student has a right to demand it all of his medical school—his Alma Mater, whose standard is *our* standard, for what we, her graduates, represent, so *is* Boston University School of Medicine.

REPORT OF VISITING COMMITTEE, ALUMNI ASSOCIATION, BOSTON UNIVERSITY SCHOOL OF MEDICINE.

Mr. President and Members of the Alumni Association of Boston University School of Medicine:—Your visiting committee wish to report progress. A number of visits have been made by several of these, your representatives, and all report favorably.

Lectures have been interestingly given in all cases. They have been scientific and to the point. The attention of the students has been good; and in the few quizzes heard they have shown reasonable understanding of the subjects taught. Those of us who have not heard a medical lecture with the students for years are much gratified with the improvements made since our day. We have examined some of the records of attendance through the courses and they have in all cases been nearly perfect.

Altogether, our Association may feel proud of the results attained by our Alma Mater under very unfavorable conditions. We may be proud of that long line of teachers who have sacrificed much to make our School a success.

Our function as a visiting committee is not complete without some criticism. We want to know how the School may grow in strength in all departments. Your committee thinks the clinics should be improved. That the fourth year should be given up entirely to clinical work and some specialties. Some effort should be made to complete the Dispensary building so that minor operations may be performed there.

There is one department that needs strengthening. Perhaps too little attention is habitually paid to the venereal diseases. But is it right to give so little of our time and study to a disease which is the main etiological factor in 80 per cent. of all pelvic operations?

We would like to see more than one skillful man working and teaching in this department.

The strength of an university is in its graduate body, as well as in the corps of managers and instructors. We graduates of Boston University School of Medicine should not altogether look to her to support us. We have reached our majority in years. We should now stand lovingly and wisely at her side to help her.

Therefore, your Board of Visitors would recommend the adoption of the report of the special committee that has in charge the matter (advisory) of appointments to the Faculty, and would recommend that the By-Laws be amended, if necessary, to provide for the election of an advisory board as provided in the report of the committee.

Samuel H. Spalding, *Chairman,*
N. R. Perkins,
N. M. Wood.

CUTANEOUS TUBERCULIN REACTION.—From White and Graham in the Journal of Medical Research we gather the following classification as a result of extensive studies with the Von Pirquet tuberculin reaction:

1. Positive reacting cases:
   (a) Cases with active tuberculous foci in the body (except b, c and d in class 2). (1) lung; (2) gland; (3) bone; (4) skin, etc.
2. Negative reacting cases:
   (a) Normal individuals with no tuberculous infection, past or present.
   (b) Far advanced and dying cases.
   (c) Acute miliary cases (?).
   (d) Tuberculous cases complicated by measles and probably by certain other infections.
   (e) Completely healed cases.
3. Doubtful reacting cases:
   (a) Certain cases showing no evidence of active tuberculosis in the body on physical examination give positive and negative results.
   (b) Certain advanced cases give positive results.
   (c) Certain tuberculin treated cases previously positive give negative reactions later.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only, and preferably to be type written—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.
ASSOCIATE EDITORS:
F. W. COLBURN, M.D. C. T. HOWARD, 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, if possible.

THE DETROIT MEETING OF THE INSTITUTE.

The sixty-fifth annual meeting of the American Institute of Homœopathy that recently convened in Detroit will remain in the minds of many as one of the most enjoyable that has ever been attended. Detroit in June is certainly a city of which anyone might well be proud and in spite of the very torrid wave that it shared in common with the entire country it proved to be almost ideal for the purpose desired. Its increasing attraction as a convention city is manifested by the fact that during the one week no less than seven such conventions were held. This multiplicity of conferences naturally made hotel accommodations scarce and difficult to obtain except where advance reservations had been made.

Thanks to the energy of the local committee all were finally accommodated, and as far as we know, satisfactorily so. An attendance of nearly one thousand members and visitors was recorded, which, while not as large as some other meetings, notably those at Atlantic City and at Boston, was nevertheless very representative. The entire meeting may be looked at from several standpoints and will therefore present different pictures. From the business side the most important item was the Institute Journal. Much rather acrimonious discussion has been indulged in by certain individuals and factions during the past few months, discussion which the Gazette has deliberately ignored. It was expected, therefore, that this question would come up at as early a moment as possible. Fortunately the calmer heads were the guides of the actions. It was immediately recognized that there would probably be a strenuous discussion with the possibility of some bitterness. The Institute, therefore, decided to go into executive session as a committee of the whole. Here, under the chairmanship of Dr. Sutherland, the entire matter was threshed out in two eight-o'clock-in-the-morning sessions. The advice of the pacifica-

tors was finally accepted by which the whole subject was referred to the newly-elected Board of Trustees for final settlement. This board comes into power in September, till which time the Journal goes along as it has done in the past. By these means we seem to have reached a satisfactory conclusion of what bade fair to be a very annoying question, a termination that conciliates practically all on both sides.

Much credit is due Drs. Bailey and Royal for their earnest and disinterested endeavors in behalf of the project for which they had so long worked. The work of the other committees was of a routine character, and, while very important in many respects, need not be here considered in detail.

Well on to three hundred new members were elected, while only two hundred delinquents were reported, as compared with thirteen hundred last year.

The newly elected officers are:

President, James W. Ward, San Francisco;
First Vice-President, Herbert D. Schenck, Brooklyn;
Second Vice-President, Sarah M. Hobson, Chicago;
Secretary, J. Richey Horner, Cleveland;
Treasurer, T. Franklin Smith, New York;
Censor, John B. Garrison, New York;
Registrar, W. O. Forbes, Hot Springs, Ark.

While it has not yet been announced, the feeling seemed to be almost unanimous that Los Angeles, California, was the most logical city for the next annual meeting. This feeling was, if possible, even stronger when the election showed that a man from California was to be the next president. If one may judge from the introductory speech of the president-elect, as well as from past knowledge, the Institute will have for the coming session a presiding officer that can truly preside and not one that will be likely to cast discredit upon the office either by lack of physical force or of mental vigor.

Of the scientific sessions no detailed account can be here given. The majority of the papers in the various sections were very valuable and well worth listening to. Many, nevertheless, seemed to think that it would be possible to read them to better advantage when they were printed in the journals, a feeling that on account of the high degree of humidity was very excusable.

A number of particularly good papers were presented in the Bureau of Homœopathy, especially the one by Laidlaw on "Heart Lesions and Their Homœopathic Treatment."

Royal outlined to the Bureau of Materia Medica the results of the provings of the loco weed, conducted under his direction in various colleges in the country.

One public session was held at which Cole of New York and Watters of Boston gave illustrated talks on Tuberculosis and Typhoid, respectively.

The O. O. and L. Society was fully attended and was the

recipient of some original papers of unusual merit. The same might be said of the Obstetrical Society, where Southwick of Boston presented one of the leading papers. Surgery and Gynæcology, Physical Therapeutics and Neurology were also represented by good programs.

From the viewpoint of entertainment many favorable comments can be made. The Y. M. C. A. building proved well adapted for the needs of the session. Halls of sufficient size and number for all purposes were provided, all with absence of noise and good acoustic properties. The commercial exhibits were conveniently but not obstructingly placed. The reception and ball on Monday evening and the boat ride on Wednesday afternoon proved to be ample general relaxation, while excursions to Mount Clemens, to the laboratories of Parke, Davis & Co. and to Ann Arbor gave diversion to smaller groups at irregular intervals.

Of course the Unanimous Club held its annual banquet and of course all present had a most enjoyable time.

The Meissen held several business meetings and was entertained at afternoon teas, evening receptions and automobile rides.

No one yet met has anything but praise to express for Detroit, this latest session of the Institute, and the abundantly productive endeavors of Dr. MacLachlan, the local chairman.

HELP ON THE QUESTION OF NURSES.

So much are we all coming to depend upon the professional nurse in sickness that anything promising to extend the field of her usefulness is gladly received. At present it is possible only for the comparatively affluent family to enjoy for any considerable length of time the luxury of one of these quiet assistants at the sick bed.

It is not a question of the work being worth the twenty or thirty dollars a week that is the customary stipend, but rather one of the average family being able to afford even that comparatively small one for a number of months. To many of the middle classes, and to all below these this sum is quite prohibitive, thereby shutting them off completely from this merciful assistance with the loss of many lives as a certain result. Some of these people come to the hospitals, but in these institutions it is entirely impossible to house more than a comparatively small percentage. In order to satisfactorily care for the great majority a new idea has been slowly gaining ground and was strongly voiced at a recent meeting of the New England Association for the Education of Nurses. At this meeting, Dr. F. W. Patch of the Woodside Cottages, Framingham, a man well known to the readers of the Gazette, presented a paper on the subject. He recommended that all nurses, during their course in training be required to do nursing in private families at fees of from seven to twelve dollars a week, these fees being col-

lected by the hospital for the general funds in its treasury. By this means the average person will be able to provide for help in time of need.

This plan appeals to us for several reasons, although it is not without some disadvantages. In the first place, it would be of assistance in providing some additional funds for the training school, funds that would doubtless be much appreciated. It would give the nurse some insight into settlement work and show her the social requirements of her profession. It would also do away with much of that verdancy that is often so painfully noticeable in even the best of the newly graduated, by bringing her at an early stage into contact with that personal element, the patient in her own home, something that the institution cannot supply. The greatest benefit would be, as already stated, the enlargement of the sphere of the nurse and the opening that it would make for the ordinary people to receive the blessing of carefully-trained professional care.

Objections can, of course, be readily raised to the plan. One of these might be the mercenary spirit that it would stimulate among the hospital authorities, inciting them to charge to the extreme limit for the work and services of their nurses. From the institution standpoint, it might tend toward chaos to have the workers coming and going with great irregularity and would possibly disrupt the orderly arrangement of the hospital.

But in any case, these objections might perhaps be overcome after trial, leaving the benefits intact. We understand that a somewhat similar proposition is already successfully tested in a few other institutions and trust that if it is as worthy as it seems it may spread widely throughout the country.

COMMENCEMENT WEEK AT BOSTON UNIVERSITY.

Commencement Week at Boston University was begun as usual by the Baccalaureate sermon on Sunday, May 30th. On Monday evening the Faculty reception and the class day exercises of the Medical School were held at the School buildings on East Concord Street. The amphitheatre was crowded to its utmost capacity. President Huntington, of the University, made a few opening remarks, after which the class historian, Miss Olive E. Smith, delivered a most interestng and unique address illustrated by stereopticon. The valedictory was delivered by David L. Martin, Ph.D., and was remarkable not only for its context but for the eloquence of the speaker. For the Faculty, Prof. Nathaniel W. Emerson spoke warmly and well. Following the formal exercises the Faculty received the graduating class and its friends in the laboratories, where lunch was later served and dancing was indulged in to a late nour. Tuesday evening was notable as the night of the annual alumni dinner at Young's Hotel. The graduating class was the guest of the Society and was ably represented at the post-prandial exercises by Mr. Frank O. Cass. The banquet hall was well filled by an enthusiastic gathering which listened with much interest to the presidential address by Dr. Wells and the response from the Faculty by Dr. Cahill, both of which speeches are elsewhere reproduced in this issue of the Gazette. A noteworthy feature of the meeting was the announcement of the completion of the $3,500 scholarship that has been in progress of collection for some years past. This scholarship is now available for the use

of the Medical School, and a committee was appointed to decide what particular object wil be striven for in its disposal. The officers for the ensuing year are: President, Dr. W. H. Watters; Vice-President, Dr. Mary A. Leavitt, of Somerville; Secretary, Dr. Edw. S. Calderwood, of Roxbury; Treasurer, Dr. H. D. Boyd, of Boston.

On Wednesday morning the graduates of all the departments of the University assembled in Tremont Temple, where, after listening to an oration by Prof. Bliss Perry, the diplomas were awarded.

The present graduating class was the largest in the history of the University, three hundred and twelve diplomas being granted in the different departments. In the Medical School were nineteen candidates, eighteen receiving the degree of M.D., one degree M.D. cum laude. They were as follows:

George Ellwood Boynton, John Henry Butler, Frank Ozro Cass, Ch.B., Emma Hooker Fay, M.B., Herbert Francis Gammons, Gaius Elijah Harmon, M.B., Harold Otis Hunt, Ch.B., Edwin Mills Kent, Leslie Phillips Leland, A.B., Oscar Raoul Talon L'Esperance, Winthrop Clinton Lincoln, David Lorenzo Martin, Ph.D., M.B., Henry Nowmisky, Gardner Holway Osgood, William Leslie Patterson, A.B., Olive Ella Smith, Joseph Edward Sternberg and Elizabeth Wiltshire Wright, B.S., M.D., Charles Alexander Eaton, M.D., cum laude (5th-year degree).

In the afternoon of the same day the annual convocation of the University was held in Jacob Sleeper Hall of the University, where the Medical School was represented by Prof. E. P. Colby in an able address.

Taken as a whole, Commencement Week of 1909 was the most successful ever held by this institution, and in all departments a great amount of optimism concerning the future was expressed.

POST-GRADUATE WORK AT BOSTON UNIVERSITY.

The first week in June of the present year was devoted by the Faculty of the Medical School of Boston University to a series of exercises denominated "Clinical Week." As already noted in the Gazette, this consisted in hourly lectures, clinics, demonstrations and informal talks each day of the week from 9 in the morning until 4 in the afternoon. Nearly two hundred tickets were issued to graduates of all classes, homœopaths comprising a little over 50 per cent. of the total number. Those in attendance speak highly of the work performed and much appreciate the instruction along various general lines that was here given.

The following week was devoted to laboratory work entirely, for a limited class. Here, daily sessions were also held, during which time the following subjects were covered: Blood examination, including blood counts, differential counts, examinations for malaria, typhoid fever, etc.; urinary analysis, both chemical and microscopic, having in view particularly the diagnostic part of the subject. Work in the physiological laboratory, giving demonstrations of the various forms of blood-pressure apparatus, the ergograph, the sphygmograph and pantagraph, occupied one day. Another day was devoted exclusively to chemistry and chemical problems. Gastric analysis, fecal examinations and preparation of vaccines were taken up. Considerable time was also given to clinical bacteriology.

The entire course aimed to be of a practical character in order that it might be of the greatest amount of service to the general practitioner.

SOCIETIES.

MASSACHUSETTS SURGICAL AND GYNAECOLOGICAL SOCIETY.

The seventy-second session of the Massachusetts Surgical and Gynæcological Society was held in Pilgrim Hall, Boston, on Wednesday afternoon, June 9, 1909.

The meeting was called to order by the president, Dr. George E. May of Newton Centre. Five physicians were elected to membership, i.e.—Drs. Charles R. Bell of Waltham, Clarence E. Burt, New Bedford; Frederick M. Sears, Dorchester; Henry Watters, Newton Centre; DeWitt G. Wilcox, Boston.

In the scientific session, two specimens of vesical calculi that were found in connection with hypertrophied prostate glands were shown by Dr. Horace Packard.

The Bureau of Surgery, Dr. Charles T. Howard, chairman, reported in the following program:

1. "Review of Surgical Progress for the Year," Dr. C. T. Howard.
2. "Pseudo-prostatic and Prostatic Experience and Observations." A joint paper by Dr. Bukk G. Carlton, Dr. Sprague Carlton.
3. "The After-treatment of Prostate Cases," Dr. Harry J. Lee.
4. "Some Helps in Surgical Technique," Dr. Horace Packard.

Papers were freely discussed. Both papers and discussion will be found in next issue of Gazette.

Dinner was served at Young's Hotel, after which post-prandial exercises were enjoyed with Dr. Alonzo G. Howard as toastmaster. Drs. J. Herbert Moore, Horace Packard and DeWitt G. Wilcox responded to toasts appropriate to the occasion.

ANNOUNCEMENT.

The twenty-sixth session of the Southern Homœopathic Medical Association will be held in Hot Springs, Ark., Nov. 15, 16 and 17, 1909. We earnestly urge every Homœopathic physician in the Southern States to become a member of the Association and aid in the work of propagandism now being carried on all over this country with more vigor than ever before in the history of Homœopathy.

Organization and propagation are more imperative now than ever, and it is a duty each one of us owes to the system of medicine we practise to support our national, sectional, state and local organizations, if we are to maintain our rights before legislative bodies and secure the representation to which we are justly entitled in medical departments of state universities and other medical institutions of this country that are supported by taxation of the public. This can be done if we will all join together and work with this purpose in view.

The benefits of good and successful meetings for the propagation of Homœopathy in the South are already apparent and aptly demonstrated by the results of the last meeting of the Southern in New Orleans, as quite a number of letters have been received from several different states making inquiry in regard to Homœopathic treatment, and in every instance they came from places where we have no Homœopathic physician. From this it is but reasonable to suppose that where there were representatives of our school, others consulted with them. This also renders invalid that old excuse, "I can never attend the meetings, so derive no benefit from the organization," which we so often hear given as a reason for not becoming a member of the Southern Association.

The last meeting of the Southern was one of the best held in many years, and there is no reason why the next session at Hot Springs should not be even more successful if we will only work to make it so, but we must all work together with this purpose in view. Spasmodic efforts and an occasional good meeting will be of little avail in the work of propagation; they must be continuous, and we must have good meetings every year to accomplish our purpose and obtain lasting benefits, else the good one may do is lost before we hold another.

Let us again urge every Southern Homœopath to support the Southern by becoming a member, give it his moral as well as financial support and contribute his mite to the cause. "In union there is strength."

EDWARD HARPER, President.
WM. A. BOIES, Secretary.

BOOK REVIEWS

Modern Medicine. Its Theory and Practice. In Original Contributions by American and Foreign Authors. Edited by William Osler, M.D. Assisted by Thomas McCrae, M.D. Volume VI: Diseases of the Urinary System—Diseases of the Ductless Glands—Diseases of Obscure Causation—Diseases of the Muscles—Vasomotor and Trophic Disorders—Life Insurance. Illustrated. Lea & Febiger, Philadelphia and New York. 1909.

In Vol. VI of this now well-known system of practice the two authors that are the best known are George Dock, whose fame was made at Ann Arbor, but who now hails from New Orleans, and the editor of the entire series, Dr. Osler. The former speaks with authority when he discusses the diseases of the adrenal glands, the thyroid gland, the pituitary body and those conditions probably resulting therefrom, such as acromegaly, myxœdema and cretinism. These subjects are fully treated as they deserve to be in view of their increasing importance in the eyes of the medical profession. This section is also particularly well supplied with illustrations. Osler covers Raynaud's disease, anglo-neurotic œdema, and scleroderma, in well-written chapters, that also have good illustrations. Urinary diseases are treated at length, nearly three hundred and fifty pages by McCrae, Herrick, Brown and Young. It is needless to say that all phases of the subject, history, etiology, pathology, symptomatology, diagnosis, prognosis and treatment are taken up in great detail and with much care. Diseases of the muscles and a number of obscure forms of disease are described, each as fully as the importance of the subject requires, by men who, while eminent in their particular line, are probably somewhat less well known by the American profession at large.

The volume closes with a well-written and very valuable chapter on the Medical Aspects of Life Insurance, by Charles Lyman Greene, a chapter that will prove of great importance to a large proportion of the readers of the volume.

One more volume only, now remains to be printed, that on nervous diseases in their various aspects, and this is promised for the near future. It will, we trust and expect, form a fitting climax for this work that has already taken its assured place as a classic in the English-speaking medical profession.

The Therapeutics of Radiant Light and Heat and Convective Heat: By William Benham Snow, M.D., Editor of the Journal of Advanced Therapeutics; and the late Instructor in Electro-Therapeutics in the New York Post-Graduate School, etc., New York. Scientific Authors' Publishing Co. 1909.

In the last few years there has arisen a gradually increasing con

servatism in surgery. In a number of different lines it has become common knowledge that measures less radical than surgery often prove even more beneficial than does that specialty.

One of these important adjuvants is found in light therapeutics and accordingly anything that will increase our knowledge of its clinical application is desirable. In the book now under discussion, the author covered this field in a very satisfactory manner. Beginning with a description of the sources of radiant energy, its physiological effects and the various forms of technique for its application, he shortly reaches the sections dealing with treatment which constitute a large part of the book. Treatment of simple inflammations, of various infections and of dermatological lesions are well covered in some detail. A smaller section of the book (the second) has to do with convective heat, and here the same outline is followed: first, elucidation of methods, then descriptions of conditions suitable for treatment.

We believe that to all those who are in any way interested in this subject the book will come as a distinct benefit; not, perhaps, to be slavishly followed in all detail, but as a rich mine of suggestive ideas along the lines of conservatism in medicine.

Vital Economy, or How to Conserve Your Strength: By John H. Clarke, M.D. Edition for America Imported by A. Wessels Company, Brooklyn and New York.

Dr. Clarke has here prepared a book for the general reader that cannot fail to be given marked consideration by all who take it up. It deals with such common topics as the bath, fresh air, exercise, stimulants, tea, coffee and worry, all treated in the clear, attractive style with which we have already become familiar from other books from the same pen. The attitude on bathing differs somewhat from that commonly taken, but nevertheless seems to be particularly commendable. We have derived much pleasure from our study of the book and feel sure that a similar experience will come to others who do likewise.

A Guide to the Twelve Tissue Remedies of Biochemistry. The Cell-salts, Biochemic or Schuessler Remedies. By E. P. Anshutz. 91 pages. Cloth, 75 cents. Postage, 5 cents. Philadelphia: Boericke & Tafel. 1909.

This book will probably be considered an eccentricity by the majority of the readers of The Gazette. The twelve tissue remedies depend for their explanation on a somewhat fanciful theory; one not by any means as yet proven. In the first part is found an explanation of the theory, followed by description of each drug. The bulk of the book consists of an alphabetical list of diseases, with indications for the use of one or other of the drugs.

Guia Homoeopathio Brazileiro Para...1909.

This little booklet consists of a directory of the homœopathic physicians of our sister republic in South America, together with photographs of the most prominent. It also includes a list of the homœopathic pharmacies, hospitals and dispensaries. In short, it is a guide to things homœopathic in Brazil.

P. Blakiston's Son & Company have just issued their 67th annual announcement of books dealing with medical subjects. On looking over the pages descriptive of these, we find many names that are well known to every modern physician in any part of the English-speaking world. Perhaps the best known one is Gould's Medical Dictionary, of which in one form or another 250,000 copies have been sold. Deaver, of Philadelphia, has a representation probably excelled by none in the country. Anything appearing under his signature will, therefore, demand unquestioning attention. Rodman on "Diseases of the Breast," Coplin on "Pathology," Williams on "Bacteriology," and Wilcox on "Treatment" form a combination difficult to excel; while Morris' "Human Anatomy" and Kirk's "Physiology" are familar terms everywhere.

THE MONTH'S BEST BOOKS.

Modern Medicine, Osler. Lea & Febiger.

Operative Surgery, Binnie; $3.50. P. Blakiston's Son & Co.

Diseases of the Ear, Barr. McMillan Company.

Embryology, Bailey & Miller; $4.50. Wm. Wood & Company.

Refraction and How to Refract. Thorington. $1.50. P. Blakiston's Son & Co.

Conservative Gynecology and Electro Therapeutics. Massey. $4.00. F. A. Davis Co.

Surgical Disorders of the Abdomen. Douglass. $6.00. P. Blakiston's Son & Co.

ACHILLEA MILLEFOLIUM.—Cole in "Ellingwood's Therapeutist" gives his personal experience with Achillea millefolium as follows:

"My temperature stayed around 103 to 104 degrees F. for about two weeks and although I attended to business, I was the sickest patient of them all. I felt as if I was reincarnated in a wooden walking machine, as all ordinary sensations were lost, and I didn't care particularly if they stayed lost.

"About the only faculty that seemed normal was my love for experiment, and as I carelessly turned the pages of Ellingwood, Dr. John Fearn's quotation relative to the action of achillea on the skin appealed to what little reason I had left, and as my skin was as dry as some of the Southern States and my secretions locked in a safety deposit vault with the key lost, I thought I would just call his bluff and ordered a bottle of Lloyd's specific.

"The first night after receiving it I took a teaspoonful in a pint of hot lemonade with a tablespoonful of Old Crow to help along in the celebration, and went to sleep like a baby in about ten minutes and dreamed I was back in the old swimming hole with its sun-kissed water, trying to touch bottom and couldn't. When I awoke, to say I was perspiring would be putting it mildly; the water was pouring out of my skin in streams and the bedclothes were wringing wet, but I felt like myself again and was soon back to normal.

"I have taken all sizes of doses of achillea up to a teaspoonful in hot and cold water when my temperature was normal, and outside of a slight diuretic action have never had the slightest effect from it. Have taken it and given it with 100 degrees of temperature or over and never failed to get profuse diaphoresis *without* a corresponding depression, as one would naturally expect. My marked results have been in adult acute febrile conditions and seldom have I had to administer more than one dose or make more than one visit, which goes to show that from a business standpoint I have lost considerable money by three years' use of the most certain drug in the Materia Medica."

PERSONAL AND GENERAL ITEMS.

Dr. W. H. Watters addressed the May meeting of the Rutland Clinical Club upon the subject of vaccines in practice.

The editor received a very pleasant, although fleeting, call recently from Dr. David M. Gardner and son, Earl Sutherland Gardner, of Caldwell, New Jersey.

Dr. A. H. Ring has given with much acceptance a short course in Neuro-Pathology to the class in Pathology of Boston University.

Docteur L. N. Delorme, Professor of Practical Anatomy of Lavalle University, Montreal, recently visited the museum of the Boston University Medical School and expressed much pleasure with its arrangement and contents.

Dr. Isaac A. Abt has resigned his position as Associate Professor of Pediatrics in Rush Medical College and accepted a professorship in the Northwestern Medical School.

We are glad to learn that the Washington State Homœopathic Medical Association has recently been organized, with thirty-five members. The following officers were elected: President, E. W. Young, Seattle; Vice-Presidents, Charles Grove, Spokane, W. E. Russell, Wallawalla; Secretary, G. W. Beeler, Seattle; Treasurer, S. R. Boynton, B. U. S. M., 1903, Bellingham.

DONATION TO BELLEVUE HOSPITAL MEDICAL COLLEGE.—Mr. Andrew Carnegie has donated to the Carnegie Medical Laboratory of this institution $75,000, in recognition of the successful work in pathology during the past twenty-five years.

ADDITION TO THE LONDON HOMOEOPATHIC HOSPITAL.—On June 30th the Lord Mayor of London, accompanied by the Lady Mayoress and the sheriffs, laid the foundation of the new Tyler extension of the London Homœopathic Hospital.

PATHOLOGICAL LABORATORY FOR METROPOLITAN HOSPITAL.—The Metropolitan Hospital of New York is to erect a pathological laboratory as an annex to its present structures on Blackwell's Island. The building will consist of a lower story for offices, a museum specimen room and an autopsy room, and a second story for a library and laboratory rooms. In the attic provision will be made for the keeping of animals.

Dr. Clarence R. Hines, B. U. S. M., 1907, has just received an appointment as full physician in the Waldo (Maine) County Hospital, situated in Belfast.

Dr. A. C. Abbott, who has been for several years president of the Philadelphia Bureau of Health, has presented his resignation, to take effect June 1st of the present year. This is in order to enable him to resume active work as professor of hygiene and bacteriology in the University of Pennsylvania.

On May 12th the degree of M.D. was conferred upon sixteen graduates of the New York Homœopathic Medical College by Mr. M. B. Cary, the president of the Board of Trustees. On the following evening the alumni banquet was held at the Waldorf, where about three hundred physicians were present.

Dr. Hattie A. Williams-Baker, of the class of 1903, B. U. S. M., after a few years' residence at Buzzard's Bay, Massachusetts, has removed with her husband to Houston, Texas. Dr. and Mr. Baker suffered a heavy loss by fire in April of the present year, including a valuable house and its contents, and decided to begin anew in the promising Southwest. The Gazette extends its sympathy and good wishes for success in the new field.

Dr. J. M. Hinson of Boston read a paper entitled "Therapeutic Treatment" before the West Jersey Homœopathic Medical Society at its meeting held in Camden, New Jersey, on May 19th. Officers for the ensuing year are: President, Dr. Leon T. Ashcroft, Philadelphia; vice-president, Dr. H. H. Grace, Camden; secretary, Dr. Thos. I. Parker, Woodbury, New Jersey; treasurer, Dr. S. Bryan Smith.

Dr. C. R. Thomas, class of 1901, B. U. S. M., has removed from 30 Chicatawbut St. to 67 Minot St., Neponset.

The Medical Department of the Alaska-Yukon-Pacific Exposition, now in progress in Seattle until October 15th, has opened an Emergency Hospital and set aside a room for visiting physicians. Any physician attending the Exposition may have his mail sent in care of the Emergency Hospital at the A. Y. P.

Dr. Frederick H. Lovell, of the class of '09, Hahnemann Medical College of Chicago, has entered upon interneship at Grace Homœopathic Hospital, New Haven, Conn.

Dr. LeVerne Holmes, class of 1904, B. U. S. M., has removed from Arlington, Massachusetts, to West Stewartstown, New Hampshire.

Dr. Pliny R. Watts, formerly of Stafford Springs, Connecticut, but of late years prominent in surgery in Sacramento, California, died on June 1st of the present year. Dr. Watts was a graduate of New York Homoeopathic Medical College and a corresponding member of the Boston Homœopathic Medical Society.

Dr. Donald R. Gregg's recent report to the State Board of Health on infantile mortality in Boston during the summer period, from June 1 to November 1, concludes that of the 1315 infants who died during this period last year, the loss of 740 was due to easily preventable gastro-intestinal diseases due to improper feeding.—Boston Traveler.

CORRECTION.

In the May issue of the Gazette a correction should be made in the presidential address of Dr. Perkins. On page 201 is found the phrase "some of the Old School colleges." This should read "**none** of the Old School colleges," giving thereby, as will be seen, a very different meaning.

WANTED.—An homœopathic physician to take a practice in Vermont, 15 years establishment, in a large factory town on the railroad. Good farming community, pays from $2000 to $3000 per year. Introductory fee only, required. Address P. R. Bradbury, Bethel, Vermont.

Dr. J. P. Sutherland will spend the month of July in a much needed vacation, camping with friends near the Yosemite Valley, in California.

Mrs. Louise H. Taylor Meeker, of the class of 1906, B. U. S. M., has received an appointment to the Massachusetts Homœopathic Hospital, service to begin July 1.

MEMORIAL TO DR. BULL.—A strong committee of New York physicians has undertaken the preparation of a suitable memorial to the late Dr. W. T. Bull. This committee has unanimously decided that the most suitable form of memorial will be the creation of a fund for the purpose of conducting original research in medicine. This research is to be under the direction of Columbia University. It is hoped that not less than five hundred thousand dollars will be received. By this means the money can be, practically, entirely invested as an endowment for the running expenses of laboratories already erected, rather than for the erection of new ones. The object, as expressed in the circular issued, is for the co-ordination and correlation of the clinical branches of medicine with the organized laboratories.

THE SURGICAL RIGHTS OF THE PUBLIC.—Munro, in an address on surgery delivered before the Canadian Medical Association, presented a number of facts of vital interest to the physician and to the public. From these a few are abstracted, according to the Boston Medical and Surgical Journal:

The public should realize that the dangers, immediate and remote, from anesthesia are very small. Such dangers do exist, however, and it is the surgeon's duty to minimize them in every possible way. A skilled anesthetist, preferably a permanent member of the surgical corps, will cause far less damage than the student or the friendly family practitioner who etherizes occasionally and who is more interested in the operation than in giving the anesthetic. In my own experience the worst and most dangerous etherizers are the unskilled pupil house officers.

An unskilled etherizer will make certain of the difficult operations impossible, he will prolong beyond safety an operation that should be short, and he will increase in any case the chances of a post-operative pneumonia. These facts are not generally known by the laity, but that does not warrant neglect on the surgeon's part in this particular. The public has just as much right to demand a skilled anesthetist as to demand a skilled surgeon.

Another demand that the public can and should insist upon with the surgeon that is attached to a public hospital is that any and every major operation, especially if it involves the abdomen, should be performed by the surgeon himself or under his direct supervision. He is appointed to the hospital staff presumably for his special surgical fitness. His position presupposes long training in anatomy, pathology and assistance at surgical operations. The public seeks the services of a hospital because of the skill of its staff, and it has the right to demand that the full responsibility of all major operations should be taken directly by the staff.

Could our hospital trustees but see the wisdom of encouraging the surgeon to earn his living in the same building in which he devotes so much time to the pauper sick, both classes of patients would be benefited. This fact is so obvious to anyone who has carefully considered the subject that it is unnecesary to enlarge upon it here.

Dr. Herbert C. Clapp has removed his office from 334 Commonwealth Ave., to Warren Chambers, 419 Boylston St., Boston (Hours 2 to 4 P. M.), and his residence to 67 Winchester St., Brookline. During July and August he will be at Burkehaven, New Hampshire (Telephone, Sunapee, N. H.), except from July 19 to 26 and from August 9 to 16, when he will be in Boston.

Washington, Oct. —Prof. Irving Fisher, the eminent political economist of Yale University, who in one of his papers before the recent International Tuberculosis Congress in Washington declared that consumption costs the people of the United States more than a billion dollars a year, is preparing an exhaustive report for the National Conservation Commission, which will contain not only these figures but similar data on the economic loss to the country from all other preventable diseases.

Prof. Fisher is a member of the National Conservation Commission, and for many years has been carrying on studies along these lines. The Commission received letters from physicians all over the country urging it to consider the bearing of public health on the economic efficiency of the nation in its efforts to ascertain the resources of the country.

The Commission from the beginning has contemplated reports on the economic aspects of several phases of the Conservation movement which affect the duration and effectiveness of human life, but Prof. Fisher has undertaken to prepare a comprehensive statement of the whole subject of the relations of public health to the general field of Conservation, and especially as to the waste from preventable diseases and unnecessary deaths.

Dr. Fisher is professor of political economy at Yale University and chairman of the "Committee of One Hundred" of the American Association for the Advancement of Science, which has for a long time been carrying on propaganda for the increase of national health through the elimination of preventable diseases. This Committee of One Hundred is composed of physicians and men engaged in active sociological work in every part of the country, and the results of their investigations and experience are all available to Dr. Fisher, so that his report ought to be the most thorough-going and complete summary of the situation ever made.

At the Tuberculosis Congress, Prof. Fisher declared that 138,000 persons die of consumption every year. The cost of medical attendance and the loss of earnings before death average at least $2,400, he said, while if to this is added the money that might have been earned with health, the total loss in each case is about $8 000. He pointed out, also, that the disease usually attacks young men and women just at the time when they are beginning to earn money and cuts off their earning power for about three years on an average, before they die.

This subject of the economic value to the country of a general raising of the average health came up in the Governors' Conference at the White House in May. Dr. George M. Kober in his speech on the "Conservation of Life and Health by Improved Water Supply" at the Conference presented figures which showed that the decrease in the "vital assets" of the country through typhoid fever in a single year is more than $350,000,000. Typhoid is spread by polluted water largely so that the death rate from this disease can be directly reduced by the purification of city drinking water. Dr. Kober quoted statistics to show that the increased value of the water to the city of Albany, where the typhoid fever rate was reduced from 104 in 100,000 to 26 by an efficient filtration plant, amounts to $475,000 a year, of which $350,000 may be considered a real increase to the vital assets of the city. Census Bureau figures show that the average annual death rate from typhoid in cities with contaminated water supplies was reduced from 69.4 per 100,000 to 19.8 by the substitution of pure supplies.

Dr. Kober cited estimates showing that the average length of human life in the sixteenth century was between 18 and 20 years, and that at the close of the eighteenth century it was a little more than 30, while today it is between 38 and 40—indeed, the span of life since 1880 has been lengthened about six years.

DECEPTIVE SUGAR TEST.—Coleman states that the following drugs when ingested, may cause the urine to reduce Fehling's solution, and respond to some other tests for sugar: Acetanilid; arsenous, salicylic and dilute hydrocyanic and sulphuric acids; alcohol, amyl nitrite, chloral, chloroform, copaiba, glycerine, mercury, morphine, strychnine, turpentine.—Eclectic Medical Journal.

BORDER-LINE TUMORS OF THE BREAST.—Small stationary tumors which do not cause mental or physical disturbances in younger individuals up to thirty years of age may, as a rule, be disregarded, particularly so if occurring in young unmarried women and those whose social status and habits render active interference undesirable.

If any of these tumors at any age or stage grows rapidly or quite steadily it ought to be removed, if for no other reason than the necessity of anticipating severer operations proportionate to an increasing bulk.

Between thirty and thirty-five a definite lump will be better removed,—it represents distinctly a morbid process, and every year brings the individual nearer to the time when she must not have abnormal processes in her breast.

Past thirty-five, I would make no exceptions except for very definite reasons, and assuredly *never* in any process which was increasing steadily.—Gibson. Annals of Surgery.

Science progresses by additions and subtractions. Nothing better illustrates progress by subtraction than the change which has taken place regarding our conception of what constitutes urinalysis. Formerly these contained references to the various kinds of cells seen, and we thought we knew their source and significance. Today an excess of cells means exfoliation or inflammation somewhere in the genitourinary tract, the precise location being determined, if at all, by the patient's symptoms. We don't know the difference between a lymphocyte and a renal cell, hence it is more correct to speak of a cellular than of epithelial casts. The various kinds of crystals are of just as little importance as cells. Hyaline and even finely granular casts may be found in any urine. One swallow doesn't make summer or one cast a nephritis. Here, again, it is an excess of casts that should claim one's attention. They may be found after any violent exercise, in all fevers, in heart disease or anything else producing passive congestion, in senility, in the different varieties of anemia and leukemia, after the ingestion of all poisons, as well as in the three varieties of nephritis, although in Bright's disease they are usually more numerous than in other conditions. Any one of these causes may, likewise, account for the presence of albumin in the urine.—Gehring. Jour. A. M. A.

BENEFITS OF MEDICAL INSPECTION OF SCHOOLS.—From the Boston Transcript is abstracted the following note from an extended description of the results of medical inspection of public schools:

"The introduction of the system of school nurses has unquestionably given the Department of School Hygiene one of its most valuable divisions. It will be recalled that a little more than a year ago a suervising nurse and twenty nurses began their duties in connection with the schools, and that last February the number of nurses was increased to thirty, each nurse having approximately 2700 pupils in her charge. These representatives of the medical director have proved efficient in various ways, as a summary of the situation handled by them serves to indicate: Excluded pupils, 8542; referred to family physician, 9048; number cured, 4830; referred to hospital, 9715; number cured, 5329; pupils escorted to hospital or dispensary, 8891; visits to homes, 21,906; dressings, 29,017; pupils inspected for pediculosis, 43,067; unclassified, including surgical and dental operations, 10,662. The nurses have served as a link between the school and the home. There has been no friction whatever in carrying out this valuable work."

There is a strange affinity between a colored man and a chicken. Not at all unaccountable, however. One descended from Ham and the other from eggs.—"The Critique," October, 1908.

ORIGIN OF THE SANATORIUM TREATMENT.

So many inquiries have been made as to the origin of the sanatorium treatment for tuberculosis that the following brief history of the movement is here given:

About 1836, George Bodington, an English country doctor, established a sanatorium for the treatment of consumptives, on the principle of regulating their daily life and supervising their exercise, giving generous diet and keeping them in the fresh air day and night, regardless of cold or disagreeable weather.

Although he effected many cures, he was unable to convince the doctors of that day of the soundness of his theories, and after suffering much abuse and ridicule, his patients were driven from him, and he turned his sanatorium into an asylum for the insane.

The seed which he had sown, however, did not all fall on barren ground, for a few years later his ideas were taken up by a German physician, Dr. Herman Brehmer, who advocated this method of treatment for several years, in spite of much strenuous opposition, and who was finally given permission by the government to open a sanatorium in Gerbersdorf, Prussian Silesia, in 1859. This institution grew slowly, and in later years others were founded by physicians trained under Dr. Brehmer, notably Dr. Dettwieler, who opened a sanatorium at Falkenstein, Germany, about 1876, and to whom we are largely indebted for the sanatorium methods as they are carried out today.

The first sanatorium in America was opened in 1884, at Saranac Lake, by Dr. Edward Trudeau, who had himself lived in the Adirondacks for ten years because of pulmonary tuberculosis.

The sanatorium at Sharon, in this State, was established by Dr. Vincent Y. Bowditch, in 1896, to provide for consumptive young women in the early stages of the disease. This was the first sanatorium in this country for the treatment of patients in the climate in which they lived.

The success of these institutions was responsible for the founding of the Massachusetts State Sanatorium, which was opened Oct. 1, 1898, being the first State sanatorium in America.

Other States have been prompted by the success of this institution to follow the example of Massachusetts, and today there are sanatoria supported by the State in fifteen States, and in seven plans are being made for their establishment. There are today in the United States 240 hospitals, sanatoria and camps, making provision for over 14,000 patients. Over 50 per cent. of these institutions have been opened within the last four years.

There is a tremendous interest widespread throughout the whole country in the prevention and cure of tuberculosis. The sanatorium idea is responsible for this, and the sanatorium graduates have been a very great factor in the spread of the knowledge of the cure of the disease.

Every patient leaving a sanatorium should become a missionary to spread the gospel of fresh air and of right living, and so be the means of saving many lives.

Carry the principles of Bodington and Brehmer home with you; live them in your home; live them as you have learned to live them in your sanatorium life, and live them with the spirit of Brehmer, which enabled him to overcome every obstacle, every discouragement, and to establish on a firm basis a treatment which is destined to conquer the greatest scourge of modern times.—Rutland Journal.

THE NEW ENGLAND
MEDICAL GAZETTE

Vol. XLIV AUGUST, 1909 No. 8

ORIGINAL COMMUNICATIONS.

PSEUDO-PROSTATIC EXPERIENCE AND PROSTATIC OBSERVATIONS.*

By Bukk G. Carleton, M. D.,

Professor of Genito-Urinary Surgery, New York Homœopathic Medical College and Flower Hospital, and Sprague Carleton, M. D., Assistant Visiting Genito-Urinary Surgeon, Hahnemann and Metropolitan Hospitals, New York City.

The term prostatism, when originated, was intended to represent the clinical phenomena due to obstruction of the urinary tract resulting from senile over-growth of the prostate. Many of these symptoms may be produced by other causes. We will use the term pseudo-prostatism to cover these similar groups of symptoms. Under the thus comprehensive title of pseudo-prostatism and prostatism we shall present some of our findings and observations.

Several elderly patients presented thin collars or overgrown folds of relaxed vesical mucous membrane arranged around the internal opening of the urethra, partly or completely encircling the vesical outlet. During micturition the flow of urine carried the fringe of this collarette into the urethral opening, producing varying degrees of difficulty in micturition. The pseudo-prostatic symptoms thus produced are differentiated from true prostatism by rectal examination, revealing no enlargement of the prostate; when a catheter is introduced eight or eight and a half inches through the urethra urine flows from its distal end, showing that there is no increase in the length of the prostatic urethra; and finally cystoscopic examination revealing the relaxed membrane about the urethral opening rather than a bulging middle lobe. Similar folds scattered over the interior of the bladder may give the appearance of the corrugations usually considered pathognomonic of prostatic hypertrophy.

The treatment is supra-pubic cystotomy, with removal of the offending folds of mucous membrane.

Pseudo-prostatism may also be caused by a contraction of the muscular fibres of the vesical neck of the bladder, a condition which generally occurs during the prime of life. It is due

*Read before the Mass. Surgical and Gynæcological Society.

to a chronic inflammatory involvement of the parts, generally of gonorrhœal origin. It has been attributed to trauma, long-continued functional contraction dependent upon sexual derangements, and indirectly to lesions of the kidneys, seminal vesicles, and rectum. During operative procedure for the relief of this condition, though the patient be under complete general anæsthesia, it is sometimes impossible to force the forefinger through the sphincter, demonstrating it to be an organized thickening rather than a spasm of the muscle. Should contraction of the vesical neck remain unrecognized, and a perineal prostatectomy for the removal of the prostate be performed, the operation will certainly fail to relieve the symptoms, since the contracted vesical neck will still continue. Contractions of the vesical neck of the bladder are best treated by the Bottini-Freudenberg galvano-cautery incision of the obstructing ring, in conjunction with an external urethrotomy.

Another variety of pseudo-prostatism, which we exhibited at the Metropolitan Hospital, was in a patient seventy years of age, who gave what was considered to be a perfect symptomatic history of prostatic hypertrophy. Rectal examination revealed no apparent enlargement of the prostate. On opening the bladder we found that three small pedunculated tumors were obstructing the exit of the urine, producing the symptoms simulating prostatism. The growths proved to be masses of dilated veins located just beneath the mucous membrane. The obstructing masses were removed, and recovery was rapid and complete.

Prostatic concretions may be the cause of pseudo-prostatism, as exemplified in the following case. Patient, aged 62, who stated that for a year he had been annoyed by increasing calls to micturate. These frequent calls at night were extremely annoying, and interfered with his general health. He had to wait for the urine to start; the stream was slow and without the usual power of expulsion. There was diminished sexual power. He had been under medical treatment for some months; the prostatic mass by rectal touch seemed about double normal size. The length of the urethra was nine inches. The residual urine four ounces. During the past four months the calls to micturate had increased so that now he was annoyed at least every half hour. We advised operation by the perineal route. A rosette of flattened rounded prostatic calculi, about one-third of an inch in diameter, encircled the outlet of the bladder beneath the mucous membrane. A few calculi were scattered through the substance of the prostate. All were removed. Perineal drainage was continued for four days. Recovery was complete in every respect. He has been in perfect health for the past four years. The patient, previous to the operation, was melancholic and depressed. This condition all cleared up after operation.

The danger of unwarranted eagerness which prompts routine operation for all prostatic-like symptoms, is demonstrated by the

following case which was referred for operative relief. He was fifty years old, had some residual urine; slight lateral enlargement of the prostate with an apparent normal inter-prostatic space. He had noticed a rather decided loss of subjective and objective sexual functions, and was weakening in general physical strength. The frequency of urination was increasing. Had we not taken a careful history, we could easily have overlooked the main cause of his symptoms. The man had syphilis in his youth. At the time of examination the reflexes showed commencing tabes, of which our pseudo-prostatic symptoms were in the main but visceral phenomena.

Carcinomatous involvement of the prostate produces a prostatic history similar to that of senile overgrowth, but gives a different operative result.

Primary carcinoma should be suspected when prostatism occurs during early manhood. The subjective manifestations rapidly multiplying in number and severity, accompanied with perineal and sacral pains which are quite constant. Reflexly, the anterior crural nerve may be the medium for carrying impulses resulting in subjective manifestations over the front and inner sides of the thighs, as well as to the articulations of the knees and hips. Likewise, the sacral plexus is accountable for reflex pains in the perineum and throughout the lumbo-sacral region. These accompanying pains are very suggestive. Rectal examination reveals a firm tense overgrown or a bossalated prostate. The mucous membrane of the rectum is not movable over the abnormal enlargement, but appears as an intimate part of the mass.

Carcinoma very frequently complicates true prostatic hypertrophy, and it is often impossible to discover its presence before its operative removal. Senile hypertrophy of the prostate is unquestionably an important cause of cancer of the prostate. The papillary adenomata which originates in the glandular epithelium of the prostate fully explains the possibility of the frequent transformation of an enlarged prostate into a malignant new growth. Early removal of the senile prostate materially reduces the mortality from this cause. The differential diagnosis has often in the past been made by the microscope after the operation. The percentage of deaths due to malignant disease of the prostate following prostatectomies is estimated by different operators to be from six to ten per cent.

When an early diagnosis of carcinoma of the prostate is possible, one of two methods of treatment is generally advisable: either removal through the perineal route, as advocated by Young; or the expectant treatment. And when finally it becomes necessary to relieve the distressing symptoms of urinary retention, supra-pubic drainage will give the desired relief. The latter form of treatment gives the longest period of life.

In a case treated some years ago the application of the X-ray resulted in a malignant non-operable growth, which, at the time,

largely filled the pelvic cavity, being transformed into a fibrous mass, followed by six months of relief. The change which took place in the pelvis during the year following the use of the X-ray was startling. The malignant tissues contracting, formed a dense fibrous shelf across the top of the pelvis; it obstructed not only the urinary passage but the rectum, and also involved branches of the anterior roots of the spinal nerves. This caused sciatica; the limbs became drawn up and flexed upon themselves; defecation and urination were mechanically interfered with; the urinary passage became so small that it was only after much patience that a number 6 French catheter was introduced. At this time the opening through the fibrous prostate was enlarged by means of a Maisoneuve urethrotome, followed by the Bottini-Freudenberg galvano-cautery incision, which gave urinary relief during the rest of his life (about six months). The sciatic pains were relieved by stretching the sciatic nerves, and for some time the patient escaped from his bedridden condition.

It has never been our good fortune to discover a cyst of the prostate. We can, therefore, offer no discussion of this as a cause of pseudo-prostatism.

There is one more common condition that at times produces a pseudo-prostatism, namely, chronic parenchymatous gonorrhœal prostatitis. In gonococcic involvement of the prostate the local as well as the general nervous disturbances are more pronounced than those due to a true hypertrophy. Where there has been extensive infiltration and pronounced organization of the infiltrate, all of the mechanically caused symptoms of prostatism are produced.

This condition, though often cured by medication and massage, together with hydro- or electro-therapeutic measures, sometimes—on account of their failure to cause resolution—necessitates the removal of the prostate to accomplish a clinical cure.

Pseudo-prostatism, as exemplified in these cases, has been given somewhat in detail, with the hope of stimulating more generally the differential diagnosis between pseudo-prostatism and prostatism, which in turn will result in more accurate prognosis; the selection of the surgical procedure best adapted to the individual case, and more uniform surgical reports.

Prostatic Observations.

From our experience with the various methods of treatment recommended for the relief of prostatism due only to senile overgrowth of the prostate, we have become convinced that massage of the prostate, electricity in its various forms, the use of urethral sounds, and local applications to the deep urethra are in the majority of cases not only not indicated, but are many times positively harmful. Sometimes they arouse hope of relief which is not justified and which cannot be secured without surgical removal of the offending organ. These methods, which at first may seem beneficial, often postpone attempts at operative relief, during

which period conditions develop where surgical cure cannot be given with safety, and thus transform a state of comparatively little risk into one in which a guarded prognosis only can be given. The prostatic is best safeguarded who observes the laws of hygiene, receives the indicated remedy to relieve the symptomatic manifestations, and has an early removal of the obstructing mass.

We do not mean by this that we have discarded the catheter and other palliative measures. The catheter is often advisable, when the urethral canal is large and roomy, where the catheter enters easily, when perfect asepsis can be maintained, or where some severe heart or lung lesion contra-indicates surgical procedure.

While catheter life may be seemingly well tolerated and is satisfactory, there is no guarantee that it may not at any time fail to give relief to retention or pain. It is never curative, and according to the excellent statistics of Watson, in about 8 per cent. of those who have adopted it for relief, death has occurred within two months. It is frequently the exciting cause of an associated epididymitis, orchitis, abscess of the testis, abscess of the prostate, cystitis, or ascending pyelonephritis.

We have observed that there is current among the profession a feeling that even though a patient survive the shock caused by the removal of the prostate he will at best rarely live more than a year. This impression of the family physician is due entirely to a familiarity with cases in which the surgeon was not called upon until all forms of palliation had been tried and exhausted, in other words, familiarity with prostatectomies performed upon patients who, for various sentimental reasons, have postponed operative relief beyond the time where they might have been operated upon with every expectation of excellent results.

As an attempt to modify the sentiment that prostatectomies are usually followed by mental and physical decadence, we present a few histories:

Patient, aged 60, was referred by Dr. W. H. Pierson of Brooklyn; his prostatism was due to an adenoid variety of hypertrophy. During the four weeks preceding the operation all the urine had been evacuated by catheter; general health was impaired. He was much fatigued from the constant calls to micturate. The prostate was removed at the Hahnemann Hospital, by the supra-pubic route. The patient was on the operating table seventeen minutes; no unusual conditions occurred until the ninth day, that is, two days after the removal of the supra-pubic drain, when the nurse reported that there was a small amount of blood on the dressings. This increased during the next twenty-four hours; hot saline and adrenalin irrigations were used without avail; the next day the blood and clots increased in amount and the general symptoms showed the effect of depletion. Exploration of the operative area revealed the cause of the secondary

hemorrhage, the giving way of a vessel between the flaps of the prostate, where a clot of considerable size had formed. This was removed, the cavity irrigated with hot saline solution and the flap pressed down against the lower wall of the prostatic cavity. These surfaces were held in apposition by firm gauze packing, and the Freyer supra-pubic drain reintroduced. The drainage tube was removed on the third day, the packing on the fifth; after this the progress to complete recovery was uninterrupted. The patient, one year after the operation, writes: "For weeks prior to going to the hospital my condition was most wretched. I was in constant mental and physical distress; about seven weeks after the operation all my organs resumed their natural functions. The operation was a complete cure for the trouble which had afflicted me. I can do anything, eat anything, and go anywhere with perfect ease and comfort, free from all the difficulties under which I labored previous to the operation, and I am up to my usual weight and mental vigor."

Patient, aged 76, was referred by Dr. J. W. Hassler, operated at the Hahnemann Hospital, and witnessed by your colleague, Dr. Winfield Smith. The growth was of the adenoid variety, and weighed thirteen and three-quarter ounces. Its extreme size necessitated its removal in two pieces through the supra-pubic opening. As the dressings were about completed, free bleeding was observed. Hot irrigation failed to control it. We removed the drain, installed an inlaying urethral catheter and packed with gauze the prostatic cavity. To control the hemorrhage we have not, as a rule, found it necessary to hold the vesical flap of the prostate down into the prostatic cavity by gauze packing, except in cases of a malignant variety. The gauze packing was removed on the fifth day. During its removal a hot saline solution was allowed to flow through the inlaying catheter into the bladder. When the packing was removed, a profuse hemorrhage occurred, but was as quickly controlled by a strong adrenalin chloride irrigation. It was followed by some sloughing of the prostatic flap. Otherwise, convalescence was uninterrupted. Fourteen months later he writes: "My mental condition before and after the operation is much the same, except that I am relieved of the dread of coming pain. My physical condition before operation was miserable, in so far as I had frequent desire to void and felt great pain until the catheter was introduced. I was sometimes laid up and voided blood. My physical condition after the operation shows such a wonderful change that I can hardly realize it. I feel perfectly normal, have gained flesh, and feel no pain whatever. My sexual power before and after the operation was normal considering my age."

Our best result as concerns time of recovery occurred in a patient referred by Dr. B. B. Sheldon, who was operated at Flower Hospital; the prostate weighed four ounces. The bladder contained two phosphatic calculi. The patient voided his urine

naturally on the ninth day, and left the hospital with full restoration of all his urinary function on the sixteenth day after the operation.

The Bottini-Freudenberg operation and its modifications, being the pioneer as a systematic method of surgical relief of true prostatism, was employed indiscriminately; therefore, the severe criticism by many of cautery prostatotomy. We have records of 44 Bottini operations with three deaths,—two from general sepsis, one from uræmia. Full 75 per cent. of the patients were materially improved, and considered themselves cured. In the adenoid form of prostatic overgrowth, however, there was later a tendency for the prostatism to return, requiring a supra-pubic prostatectomy for relief. The following recent letter will show why we are at times very enthusiastic over the cautery method:

"My dear Dr. Carleton—My family doctor, E. D. Conklin, wished me to write you as to my condition since my operation before the Alumni Class of the New York Homœopathic Medical College and Hospital, 1901. I can only say that I enjoy the best of health, have no trouble in urinating, have never used a catheter since the operation, in fact, my water flows just as freely as it ever did in my life, and perfectly naturally, say three or four times daily. The bladder is strong, and I can hold my water as long as I ever did. This may seem remarkable when you remember that for five years I did not pass one drop of water naturally, and had to use a catheter every time I had occasion to urinate, which was very frequently. I could not go anywhere without my catheter and had to carry it in my pocket all the time. As to what I suffered before the operation I will not attempt to describe it. It is too terrible even to think of. I feel assured I should not have lived."

From perineal prostatectomies, we have a death rate of 5 per cent., and have met with the following complications: Contraction of the bladder; vesico-perineal and vesico-rectal fistula. Early and late complications of the perineal operation are common; therefore, this method should not be followed except when demanded by the location of the prostatic overgrowth and associated urethral strictures. In the supra-pubic operation we have a method applicable to the majority of senile prostatic enlargements, offering brilliant results when performed before severe bladder and kidney complications threaten the vital functions. We estimate that only a little more than two out of three when operated in the third stage—that is, about 66 per cent.—live to enjoy a considerable period of life, free from pain; while, on the contrary, we have a death rate of less than 5 per cent. in supra-pubic prostatectomies performed during the second period. We have never operated during the first stage, but know that if we could have removed this mechanical cause of so many pathological changes in the urinary and sexual organs before age caused marked atheromatous changes in the blood courses, our results

would have been even more pleasing. We base this opinion on the fact that our mortality has been less than 3 per cent. in those which presented themselves in the second stage before the general health had become essentially deteriorated.

The two-stage supra-pubic prostatectomy has become very popular as the operation of choice in prostatism classified as belonging to the third stage,—that is, those whose condition is critical, where palliative procedures have failed, and where immediate operation offers the only possible relief. The two-stage operation can be employed to advantage in the second period of prostatic hypertrophy, where the urging to micturate is very frequent, imperative, and accompanied with strangury,—particularly where there is a material diminution of vitality from loss of sleep. This operative procedure is also advisable for those who develop urinary fever, even though perfect technique be observed, and for those who give evidence of pronounced bladder and kidney complications.

In the second stage a prostatectomy of some form should be insisted upon, before incontinence or retention occurs, the urine voided drop by drop; the appetite is lost, digestive disturbances become pronounced, the body suffers from auto-intoxication; and continued efforts at palliation augment the local congestion.

If we wait until later, when complete retention and nervous exhaustion have upset the balance of the vital function, the operation often fails. Nevertheless, the extreme condition of the patient is rarely a contra-indication for operation. The two-stage operation frequently gives brilliant and satisfactory results, even when the prognosis is extremely unfavorable.

Fully 85 per cent. of all operable prostatic over-growths, in our judgment, require some form of supra-pubic work. About 10 per cent. call for the perineal method, and 5 per cent.—those of the fibrous variety—give the best result with a perineal section and the Bottini-Freudenberg galvano-cautery incision.

In short, prostatectomy in the third stage is an act of humanity that must be performed; prostatectomy in the second stage is imperative; prostatectomy in the first stage, before very many years, will become the operation of choice.

In closing, we wish to emphasize that the prognosis in a grave case depends to a large degree upon the arterio-sclerosis present. It is often the seeming cause of circulatory and pulmonary complications following prostatic operations. Hence, whenever it is possible, treatment directed towards correction of the blood pressure should be instituted previous to the proposed surgical relief. Furthermore, aside from such evident factors in the prognosis as the condition of the heart, general circulation and kidneys, practical experience proves that nervous exhaustion from business, emotional condition of the patient and the attitude of the family materially influence the final results.

THE CARE OF PATIENTS FOLLOWING PROSTATECTOMY.*

By Harry J. Lee, M. D.,
Assistant Surgeon, Massachusetts Homœopathic Hospital.

Following removal of part or the entire prostate gland the after-care is naturally divided into the immediate surgical convalescence as seen in the hospital, and the conditions of the urinary organs requiring attention on the part of the patient, or his physician, after the return to his home.

We will consider these in the order in which they occur, taking for an example a typical case of supra-pubic prostatectomy taken at a period before marked bladder and kidney changes.

The patient is taken from the operating room to his bed following a short operation in point of time, with bleeding controlled, a good pulse, and in fair order to commence his convalescence. He has two wounds situated in a part of his body difficult to keep clean, and with drainage and appliances quite unlike anything else used in surgery. The patient's first conscious expression is a need to urinate, but explanation usually relieves his feelings and he passes the next 12 to 18 hours uneventfully. At this time the rubber bag devised by Dr. Briggs has accomplished its work in controlling bleeding, by exerting pressure at the site of the prostate, and the water with which it is distended is allowed to escape, the collapsed bag with the attached small tube extending through the urethra and supra-pubic wound is allowed to remain until the end of the first 24 hours after operation. The removal of the collapsed bag by traction upon either the urethral or supra-pubic end is easily accomplished, a soft number 22 French catheter being attached to the tube, which acts as a pilot and insures the catheter following the course of the prostatic urethra and finding the lowermost part of the bladder.

At this point several seeming refinements regarding the retained catheter are essential, secure fastening of the catheter by straps or a split rubber tube to the penis, or a thread fastened to the tip of the catheter and passing through the supra-pubic wound, where it is securely fastened, will prevent the accidental withdrawal of the catheter and the frequently harmful attempts to return it. Several eyes cut in the catheter lessen the likelihood of its obstruction by clots or mucus. Much harm can be done by using too stiff a catheter which does not adapt itself to the channel through which it should pass, but creates one for itself, and in so doing by pressure devitalizes or destroys tissue that cannot be spared in the urethra and bladder.

The removal of the rubber bag and the insertion of the catheter is done under the same care as regards asepsis as the operation, and dating from this time must commence a continued effort to maintain cleanliness by frequent irrigations of sterile water or very dilute peroxide of hydrogen. The supra-pubic

*Read before the Mass. Surgical and Gynæcological Society.

wound must be dressed frequently, large absorbent masses of gauze or absorbent cotton being used to take up the urine, beyond such as can not be siphoned out.

The irrigation is performed through catheter with patient upon his side catching the fluid in a basin pressed firmly against his abdomen. The frequency of irrigation can hardly be overdone provided the exposure to cold can be minimized, and the irrigation is not so prolonged or awkwardly done as to fatigue the patient.

Methods of continuous irrigation have been quite successfully applied, but the gradual trickling of fluid aside from its power of diluting the urine has not the necessary cleansing effect of a more copious flushing. The use of antiseptics or of too frequent peroxide of hydrogen is harmful and accomplishes nothing that is not to be gained by the use of plenty of water in irrigating.

Where clots of blood, or other condition of the bladder requires the use of a large tube for reasons of drainage, in the supra-pubic wound, the early removal of the tube saves much time. Where the amount of flocculent material and mucus in the irrigating fluid shows the bladder and prostate region to be clean the pressure necrosis and destruction of tissues by such drainage is extensive, and in the supra-pubic region of old men is slow to granulate and bring about repair.

It is essential for the comfort of the patient to bring about the closure of the supra-pubic wound promptly except where a greatly contracted bladder or a purulent pyelo-cystitis make such unsafe. In these cases the removal of all attempts at supra-pubic drainage other than the daily passage of a gloved finger into the wound to keep it open is all that is needed and leaves the supra-pubic wound under perfect control. Strapping or holding the edges of the supra-pubic wound in apposition with frequent removal and cleansing augments its healing after the appearance of vigorous granulations, and in a patient of average reparative power is not a long story provided the bladder is relieved of pressure by free drainage through the catheter.

The catheter has been removed and replaced at intervals of a day or two, being withdrawn through the supra-pubic wound and used as a pilot for the fresh catheter for so long a time as the supra-pubic sinus is large enough to allow, and after this is inserted through the urethra with the greatest gentleness. As the wounds heal it is well to leave the catheter out for an interval varying from a few minutes to several hours, this interval depending upon the rapidity of urinary secretion and the known capacity of the bladder. The catheter should never be withdrawn for a time sufficient to so over-distend the bladder as to endanger reopening of closed wounds, either at the former site of the prostate or the supra-pubic wound. The patient is encouraged to be up after the second day and frequently is reticent about sufficient change of posture, fearing to sit in a wheel chair or get

about as his strength will allow. The bowels are often packed as the muscular movements of straining at stool are pain producing. The bowels should be kept open with enemata. Food is given according to the patient's desires, with nourishment kept at the limit of tolerance. The patient is encouraged to drink water.

This completes the hospital after-care of an uncomplicated prostatectomy and commences the equally important and often mismanaged care at home. Very essential at this time is an atmosphere of encouragement and assurance of a cheerful future. Many men, through fear of injury by over-distending the bladder, by over-exertion, straining at stool, or other imaginary condition regarding the sexual sphere, are liable to become morbid and enter a pitiable state of introspection.

On return home, irrigations are usually unnecessary, the catheter is not needed, and manipulation of all kinds in the neighborhood of the urethra and prostate is harmful.

The temptation to pass a hard catheter or sound with the desire to explore or relieve some symptom is great, but if allowed, is playing with fire. Instrumentation, however gentle, is dangerous. The course of the old urethral canal is altered, it is presumably lined with easily injured epithelium extended from the bladder edge to the urethra, if not completely covered with epithelium granulating tufts that are easily injured and bleed, producing clots that obstruct the ready exit of urine. There is opportunity for an instrument to make a false passage between bladder and any of its surrounding structures.

I can not put it too forcefully that the passage of sounds within a period of three months is mutilative, can bring about no good and may do great harm.

Infrequently there is some incontinence and dribbling or vesical anesthesia which, with improved general tone of the tissues, increased local muscular strength, and perhaps galvanic stimulation disappear.

To instruct the patient to empty the bladder completely, to avoid over-distention and still allow of sufficient bladder stretching to insure proper bladder capacity, is necessary.

The proper adjustment of the bladder musculature in which the bladder has been over-capacious previous to prostatectomy, and collapsed and without distention for a long period during the presence of a vesical fistula, must take a longer time than either patient or physician anticipate.

To recapitulate:—

Aside from that generally applicable to elderly surgical patients.

1. Cleanliness of which strict surgical asepsis in every detail of the after-care has added frequent forceful irrigations with large quantities of water. By frequent, meaning 4 or more times in 24 hours, and in quantity 1 to 4 quarts.

2. Minimization of pressure necrosis by employing no tube or drainage apparatus in the wound continuously. Using catheter sufficiently soft to avoid undue pressure in urethra and bladder.

3. Abstinence from all instrumentation except with a soft rubber catheter for 3 months following prostatectomy.

PUBIOTOMY, ITS INDICATIONS AND TECHNIC.*

By Hudson D. Bishop, M. D., Cleveland, Ohio,
Professor of Obstetrics, Cleveland Homœopathic Medical College.

Obstetric practice, in recent years, has developed very rapidly along surgical lines. This is particularly true, so far as it pertains to the treatment of obstructed labor resulting from pelvic contraction. The principles of treatment in these cases have become fixed. The most important principle is that in order to secure the best results, operative means of delivery must be either primary operations or must be resorted to during labor before exhaustion of the mother or danger to the child have become complicating factors. This rule of procedure demands, as its fundamental essential, that ante-partum diagnosis of the degree of contraction be made. The general practitioner, who does by far the greater portion of the obstetric work, has, hitherto, failed to fully appreciate this important fact. Until he does appreciate it, he will be unable to secure the best results from operative procedures in narrow pelvis. With such ante-partum diagnosis, however, the treatment of labor in contracted pelvis is comparatively simple. It may be summarized in a few words, as follows:

1. Choose Cesarean section in all cases of absolute pelvic contraction (a true conjugate of 7.5 cm. in generally contracted and 7 cm. in flat pelvis) and in the cases slightly above these measurements, unless the head is small.

2. Choose spontaneous labor in all other cases, and if, after a fair test of labor, engagement does not take place, use high forceps (axis-traction), widening the pelvis by pubiotomy, if delivery cannot be made, easily, with forceps.

As pubiotomy is so little understood in this country and has been so severely criticized, mostly, by those who have had no experience with it, I wish to discuss the operation somewhat in detail.

It is a substitute for symphysiotomy, accomplishing the same result as this operation, *i. e.*, a temporary enlargement of the pelvic brim. It is believed by many to be a better operation than Cesarean section in all of the cases of contraction where an enlargement of the brim, within the limits of the operation, will permit of the passage of the head. Instead of separating the pelvic girdle at the symphysis, as in symphysiotomy, the pubic bone, near the sym-

*Read at meeting of the Ohio State Homœopathic Medical Society, Toledo, May, 1909.

physis, is severed with a saw, on the side to which the occiput points.

The operative technic is comparatively simple. With the patient in the lithotomy position, a stab wound, extending just through the skin, is made at a point midway between the pubic spine and the symphysis and directly over the upper margin of the bone. A specially constructed full-curved needle, having a blunt point, is then passed behind the bone and is brought out below, as near the outer border of the labium majus and as near the lower level of the bone as possible. The skin is nicked to permit the exit of the needle from the tissues. During the passage of the needle, its point should be made to hug the bone and it should be palpated throughout its course by a finger within the vagina. The danger in passing the needle is an injury to the bladder, but this is avoided by having the bladder empty and by keeping the needlepoint close to the bone. After the needle is passed, a Gigli saw is fastened to its point and is drawn in place as the needle is withdrawn. The bone is then sawed through, care being taken during the sawing process to hold the saw in the same curve so as to minimize the injury to the soft parts, especially below the bone. It is advised by most of the operators who have described the operation that from the time of complete separation of the bone, firm pressure upon the thighs should be made by the assistants, in order to prevent too wide separation of the ends of the bone. A better support is secured by passing a strong bandage about the pelvis, the assistants pulling upon the ends or twisting it as in applying a tourniquet. The danger of injury to the soft parts is directly proportionate to the amount of separation. With the firm support furnished by a bandage, the amount of separation is under the direct control of the assistants.

After the division of the bone, delivery is effected by forceps or version, preferably the former.

Much of the objection to pubiotomy has centered upon the annoying details of the after-treatment, the object of which was to prevent non-union of the bone. The danger of non-union has been found to be more imaginary than real. With the exception of the retention of the divided bone by means of a wide adhesive strap about the pelvis and the use of a Bradford frame to facilitate the placing of the bedpan, the patient's mobility is no more restricted than after an ordinary delivery. She can turn on her side after the second or third day, sit up on the fourteenth day and walk at the end of three weeks.

The complications of the operation may be as follows:

1. *Injury to the bladder.* A number of cases of such injury have been reported. Most of them must have been due to faulty technic in passing the needle. An extensive tear of the soft parts might extend to the bladder or involve the urethra. The real danger of a bladder injury is not the injury itself but failure to recognize it. The catheter should be passed both before the passage of the

needle and after delivery of the child. If blood is found in the bladder before passing the needle, the bladder should be irrigated so as to have the bladder free of blood when the needle is passed and delivery made.

2. *Hemorrhage.* The separation of the bone is followed by more or less profuse hemorrhage, but it usually yields to pressure. Should it persist or be dangerous in amount, it should be controlled by ligature. Drainage should be provided from the lower wound to carry off the extravasated blood and prevent the formation of a hematoma.

3. *Lacerations of the soft parts.* Too great separation of the divided bone may produce a laceration of the soft parts extending into the vagina. Such an injury should be repaired in the same manner as any laceration of the upper part of the vagina.

4. *Sepsis.* In most of the cases there is a temperature range up to 100 degrees F. for the first week. This should cause no alarm, but if it ranges higher or persists, search should be made for the infection.

5. *Injury to the child.* Injury to the child's head may be caused by the sharp edges of the divided bone. This can be guarded against by carefulness in extraction. The head should be made to pass the brim as nearly as possible with the sagittal suture in the transverse diameter.

The chief indication for pubiotomy is a mechanical obstruction from pelvic contraction that will disappear after an enlargement of the brim of the pelvis within the safe limits of the operation, *i. e.,* not more than 5 or 6 cm. The effect of widening the pelvis by separating the pelvic girdle at or near the symphysis is to add about two millimetres to the true conjugate for each centimetre of separation.

The choice of the case, in which pubiotomy is to be done, rests, in the last analysis, upon the judgment of the operator. Care must be taken not to resort to the operation in cases where the conjugate is too short or where, relatively, the head is too large. It should not compete with Cesarean section in the cases where the true conjugate approaches 7 cm. unless it is positively known that the head is small. This applies only to primary operations. After the woman has been subjected to the test of labor, the choice between the two operations should lean towards pubiotomy. The longer labor has been in progress, the less are the conditions favorable for Cesarean section, whereas they become more and more favorable to pubiotomy, at least so far as the passage of the brim is concerned, the more moulding has taken place.

Pubiotomy is indicated, also, in dystocias resulting from such faulty positions as persistent occipito-posterior and mento-posterior and in breech labors where there is difficulty in extraction of the head. In the latter cases, the saw can be placed in position, but the bone need not be divided unless the head is arrested at the brim.

There is no doubt but that pubiotomy will become widely used after its advantages are more fully understood. It is, of course, a surgical procedure, requiring perfect aseptic technic and ordinary operative skill, but no more so than version or high forceps. As a primary operation, it has its definite indications, and as an alternative in high forceps delivery, it eliminates the cases in which there is danger of a fetal mortality.

CHRONIC ILEO-COLITIS.*

By Josephine M. Danforth, M. D.,
Professor Pediatrics, Cleveland Homœopathic Medical College.

Any continued intestinal lesion in infancy or childhood is always a constant menace to its welfare. Chronic ileo-colitis, especially of the severe type, belongs to the more serious intestinal diseases, as certain pathological changes, destruction of villi and glands, even new connective tissue infiltration, and more rarely, ulceration, produce such an abnormal condition that to find food which will be assimilated sufficiently to restore health becomes a difficult and frequently impossible matter, for while we are trying to apply our scientific knowledge in the modification of milk, or giving many of the suggestions on the subject a trial, the little life, hanging by a thread, is snuffed out through some complicating intercurrent disease, as bronchitis or broncho-pneumonia, or wastes away and dies in a state of inanition.

Certain contributing factors add their weight to the seriousness of the case, for many of them develop under the most unsanitary conditions, and in poverty-stricken families huddled together in tenement houses. Contaminated milk is probably most frequently the cause of the acute attack of enteritis, from which the child really never recovers.

The balance is so nicely adjusted that the slightest indiscretion, a little too much, even of some food that is being fairly well digested, will aggravate the case, so that as one advances one step he finds that he has gone back two. It is hard to realize sometimes how little digestive power the child has. Those caring for the patient will constantly confront you with the rebuke that it is simply starving to death, which is of course the truth, but is hardly your fault, for starvation diet may be absolutely necessary in the beginning, and it is simply a waste of precious time to continue giving food which passes through the alimentary tract without being absorbed. It certainly takes nerve to hold a child to a certain amount of nourishment when it is most pitifully wailing for more, but just such nerve may be the means of saving its life.

The characteristic symptoms are stationary weight, or steady loss, no fever except during acute exacerbations, constant fretting,

*Read before the joint meeting of the Ohio and Michigan Homœopathic Medical Societies.

unappeasable appetite, half a dozen or more offensive stools a day, loose in character, undigested, varying in color, frequently containing mucus.

A female child, 15 months old, in this condition was brought to me last October. The attending physician had given it up. The marasmus was extreme. I can think of nothing which so well describes her appearance as pictures I have seen of children in the last stages of starvation. The abdomen was distended, the skin was dry and withered, hanging in loose folds in the groin; it also had a bluish cast, giving it the appearance of being unclean. The mouth was full of ulcers, one on the back of the tongue as large as a quarter. The incisors had been cut and the anterior molars were giving her trouble. The teeth were strong and white. Although too weak to walk, she could sit up and cry lustily, showing considerable vitality. The examination failed to reveal any signs of rachitis.

Three months before she had been a perfectly well and normally developing child. Her diet consisted of milk, full strength, from one cow, bread and potato. Then suddenly came vomiting and purging of so violent a nature that in a few hours the child was critically ill. I judge the attack to have been an acute gastro-enteric intoxication, due to milk infection. Teething and warm weather might have been contributing factors.

In two weeks she was removed from the small town in which the attack occurred and brought to Cleveland. Here her surroundings were most unsanitary, a reeking well-hole being a prominent feature of the tenement in which she lived. At this time she was taken to one of our well-known dispensaries. A routine treatment was followed. Castor oil, oatmeal water, addition of skimmed milk, then a little cream, gradually increasing to full milk. The baby would improve until full milk was reached, then would get decidedly worse. The method of feeding would then be repeated, beginning with castor oil.

For two weeks before coming to me the stools had been thin and light green, four to seven a day. Four days previously, upon the advice of the physician, a little mashed potato had been given. This made her very sick, and when I saw her the case indeed looked hopeless.

Inquiring into the family history I found it bad, on its father's side; its grandfather and father's sister had died with tuberculosis, on its mother's side its grandfather was then having hemorrhages, and died a little later. Through this grandfather it had been thoroughly exposed to tuberculosis. Was the child tubercular? There was no temperature, and never was any except during intercurrent attacks of bronchitis, which occurred later. At this time there was no cough and no sweating, no hemorrhages from the bowels. The only glands enlarged were those in the groin, and these but slightly.

For a three-months' illness, and considering the extreme marasmus, it seemed to me that the child had more vitality than it would have had had it been tubercular. The case conformed perfectly to

Holt's description of chronic ileo-colitis. I also believe that there was some ulceration present.

The terrible offensiveness of the stool deterred me from examining it microscopically at the time. Later I examined for tubercle bacilli, but did not find any.

The blood was examined, but did not show anything but a secondary anæmia. The red count was over 4,000,000, which was probably due to concentration.

Three things astonished me in the previous treatment: the giving of oatmeal water in such a relaxed condition, the persistent use of milk under the circumstances, and the omission of irrigations.

Starting out on radically different lines, I at once began with irrigations, using first slippery elm, later normal saline solution, giving them when there was considerable mucus and over three stools a day.

Deciding to eliminate milk for a time entirely, I had to find some suitable substitute. I do not use proprietary baby foods if I can possibly help it, but in cases in which milk, carefully modified, disagrees, I have had considerable success with Eskay's food, so I began with Eskay's in this case. I also allowed beef pulp, beef juice, albumen water and a very little bread and butter. Calc. phos. 6x and Ars. 3x were prescribed. Olive oil and later cocoa butter were used for inunctions. The beef pulp was at once discontinued, as it passed just as it was taken. I also thought it best to discontinue the bread. Everything went along nicely for ten days. She slept well at night, something entirely new; the mouth commenced to improve (we were using a boracic wash); she did not fret as badly; the movements improved and were reduced to three or less a day; then general œdema developed. This elicited the information that she had been œdematous once before. The urine was examined, but no albumen was detected. Although I believed it to be the œdema of anæmia, and not nephritis, I thought it best to discontinue the albumen water and Eskay's food, which contains albumen. Mellin's food made with rice water and later with barley water, was substituted. The œdema subsided, and was never as marked in the face, but would occur in the feet and remain weeks at a time.

Beef juice after awhile was thought to be too laxative, and panopepton was substituted. As soon as possible zweibach was permitted. Blackberry juice, pineapple juice and finally orange juice, were added to the list. Mutton and oyster broth were given for variety.

Every little while there would be an aggravation, which could usually be accounted for: too much rice which had been allowed in small quantities, well thinned, given by an anxious grandmother, who said we were starving the baby; too much zweibach in one day; oyster broth which was thought to be tainted; whey cautiously added to the Mellin's food, etc.; but by dropping everything but the Mellin's food, prepared with the panopepton, and blackberry juice, and giving Croton or China as indicated, with irrigations,

Phillips' milk of magnesia, and twice — the movements were so numerous—three drops of Opium in a few of the irrigations, we succeeded in controlling the condition. Calcarea phos. was continued as the constitutional remedy. Hydrastis was given for considerable time for the mucus. At last a cough developed, and then it began to look as though we would have to lose the baby after all.

Hearing of the beneficial effect of Keller's soup in cases of mal-assimilation, I decided to try it. It is a malted food bearing a resemblance to Mellin's food when that food is prepared with milk. The prescription is as follows: "Two ounces of wheat flour are gradually added to eleven ounces of milk, with constant stirring. In a second vessel three ounces of thick malt extract (I used Trommer's malt), to which is added two and one-half drams of eleven per cent. potassium carbonate solution are dissolved in twenty ounces of water at temperature of 120 degrees F. Finally mix the first and second mixtures and boil for three or four minutes." This was continued several weeks, two or three feedings a day. We could not give more because it proved too laxative, although we reduced the malt and increased the flour.

During this period a severe attack of bronchitis threatened the baby's life, but again she rallied. Phos. 6x was prescribed for the cough, which continued a long time. Iodine and small doses of pure Norwegian oil were also given. Following this, rice was again ventured, this time cooked in milk four hours, enough rice for twenty-four hours taking up about two-thirds of a quart of milk. We began by diluting the rice with water, then adding a little of the boiled milk; next plain milk and barley water. At last bread was substituted for the rice. For a while improvement became more rapid. Still she was doomed to another attack of illness. Early in March she was taken with broncho-pneumonia, I judge from report of symptoms (she was not in Cleveland at this time), complicating another very severe attack of acute enteritis. The doctor who was called in did not give them any hope, but to his surprise the child did not die. As far as possible, treatment that I had suggested was carried out. Since this last illness, which occurred the first week in March, her improvement has been steady. Her diet consists of bread and milk, eggs, beef pulp, and oranges. She is walking and learning to talk, and is a very happy baby. She is gaining at the rate of a pound and a half a week, weighing a week ago twenty-five pounds, which is about ten pounds more than when I first saw her.

RECOGNITION OF THE HOMŒOPATH IN BRAZIL.—We are glad to note that Dr. Joaquim Murtinho of Brazil, one of the well-known upholders of the homœopathic faith in that country, is receiving honors that we feel are well merited. Since the formation of the Republic he has served as deputy and as senator, and has at different times acted with much efficiency as minister of public works and as minister of finance. In the "Homœpathic World" of recent date we also hear of the possibility that still higher duties may await him and that he may receive the highest honor that it is possible for the State to bestow.

REVIEW OF SURGICAL PROGRESS FOR THE YEAR.*

C. T. Howard, M.D.,
Surgeon Massachusetts Homœopathic Hospital.

Ladies and Gentlemen:—The by-laws of your Society compel me as Chairman of the Bureau of Surgery to offer a review of surgical progress. I must of necessity, therefore, crave your indulgence for a short time and ask you to bear with me patiently if the subjects I present seem trite.

The Cancer Problem. No subject is of greater interest to the profession or to the world at large than the conquest of cancer. Laboratories for the investigation of its etiology are established in New York, Buffalo, Boston, Heidelberg and many other large cities. Many of our brightest pathologists are at work studying the problem in all its phases. As yet their labors have borne but little fruit, yet with so much attention being paid to it, the solution must inevitably come, and with the discovery of its etiology we may justly hope for a rapidly following discovery of its cure. At present we stand exactly where we did a year ago. The only hope of cure lies in early diagnosis, with early and wide extirpation by the knife.

For non-surgical treatment, the use of radium holds first place and is increasingly recognized as an instrument of value for cases beyond the reach of the knife. With it much may be done to check the progress of the disease, but cure is rarely possible, and because of its very potent action extreme care must be exercised lest deep ulcerations occur.

For the control of the foul discharges and the hemorrhages of inoperable cases of ulcerating cancers of the cervix, Dr. Gellhorn of the Skin and Cancer Hospital of St. Louis, in a recent article in the American Journal of Obstetrics on diseases of women, advocates the use of acetone in place of the commonly accepted caustics and escharotics. He advises first curetting away the necrotic tissue. Then, with the patient's hips elevated and the vaginal mucous membrane and surrounding skin protected with a layer of vaseline, the acetone is poured in and allowed to remain in contact with the cervix for twenty minutes. This treatment is repeated at varying intervals according to the demands of the case. His results in a series of cases seem eminently satisfactory and the method is one apparently worthy of trial.

Watson of the Boston City Hospital is advising the establishment of permanent lumbar fistulæ into the pelvis of each kidney with total extirpation of the bladder in cases of cancer of that organ. He has devised an ingenious reservoir for collecting the urine from such fistulæ and speaks hopefully of his line of treatment. The writer of this paper believes the method worthy of trial, but doubts very much if in the end results will justify the procedure being retained as a permanent addition to surgical methods. The necessity for frequent removal of the tubes, and the constant irritation of their presence in the pelvis of the kidney lead him to believe that

*Chairman's address at the Mass. Surgical and Gynæcological Society.

the dangers of a septic nephritis are very great and that because of this danger the patient's life could probably not be much prolonged.

This society as a whole might further the thorough understanding of the cancer problem if each case coming under the observation of its members should be fully reported, all details as to family and personal history of rheumatism, tuberculosis, syphilis and similar dyscrasias being carefully tabulated and compared. The writer feels that light is to be thrown upon the subject by such means.

Due to the line of treatment instituted by Fowler of New York and Murphy of Chicago, general septic peritonitis is no longer the generally fatal disease that it was in the past. Fowler pointed out that the pelvic peritoneum was much more resistant to septic inflammation than was the abdominal, and consequently advised that patients suffering from septic peritonitis be kept in a semi-sitting posture, thus allowing the pus to drain into the pelvis. Murphy advised in conjunction with this treatment a continuous flow of warm saline solution into the rectum at about the rate of fifteen drops to the minute. He maintains that osmosis occurs, the saline passing through the walls of the rectum, diluting the pus and passing out through the abdominal drain. Regardless of theory, it is a fact that the Murphy-Fowler method of treatment has saved many cases that undoubtedly would have been lost without it and deserves a permanent place in our armamentarium.

Surgery of the heart has made no marked additions and cannot as yet be considered of any great importance. Wounds of the heart have now been sutured upwards of fifty times with about thirty per cent. recoveries. This is the sum total of operations upon the heart and are of value for the vista of possibilities opened up rather more than for actual results. They show a tolerance of the heart for operative interference which augurs well for more complete and radical operations in the future.

Dr. Crile of Cleveland has done much experimental work upon the arteries and has perfected a very satisfactory method for direct transfusion of blood. He has shown that blood may be introduced into a patient suffering from any profound anemia as safely as we have in the past introduced saline solution and with far more satisfactory results. With the introduction of a normal saline solution, there is not infrequently a transudation through the vessels and an accumulation of the fluid in the tissues. Consequently much of the value of a saline transfusion is lost. With the introduction of blood, however, such a condition does not exist and the patient's condition is immediately and permanently improved.

His method is as follows: The radial artery of the donor is dissected out for a distance of four or five inches. The median basilic vein of the recipient is also dissected out, slipped through a delicate silver ring and turned back like a cuff. With the assistance of this ring the vein is inserted directly into the artery and

the intima of the vein is thus brought in direct contact with the intima of the artery and the fluid flows in from donor to recipient without danger of clot formation.

The usual period of time to allow the blood to flow is, on an average, thirty minutes. The blood pressure of the donor, however, should be carefully watched, and should he complain of dizziness, ringing in the ears, or any of the other symptoms of hemorrhage, the operation should cease.

During the past year, methods of combating septic processes have received more attention than ever before, and mention should be made of Wright's opsonic therapy, Bier's passive hyperæmia and the use of sodium citrate. The proper position of opsonic therapy is now, I believe, fairly well established. This method was at first received with unbounded enthusiasm, which was followed by an era of doubt and questioning. Now, however, I believe there are few who have had the opportunity of watching cases where this treatment has been properly carried out, who are not thoroughly convinced that the world owes a debt of gratitude to Sir Almoth Wright and that the field of usefulness for opsonic therapy will prove to be one which will continually widen with the years.

In order to obtain satisfactory results, the writer believes that Wright's method must be closely followed. It is not sufficient in his estimation to use stock solutions, but that each case must be individualized and a solution made from the individual bacteria present in each case.

Bier's passive hyperæmia treatment is much more than a year old. During the past year, however, it has proved itself time and time again to be a measure of great value in combating septic processes and in stimulating granulations in old, indolent fistulas and wounds. Wherever pus is present it is of course necessary to make a free incision and permit its escape. If pus has not formed, the employment of an elastic bandage at varying periods, according to the special indications of each case, or if it be a part where a bandage cannot be used, the employment of a suitable suction cup, will often abort septic processes and render it unnecessary to incise.

During the past year attention has been called to the use of one per cent. solution of sodium citrate in a four per cent. solution of sodium chloride as a means of cleansing wounds and stimulating granulation. From personal experience, the writer of this paper believes it to be a measure of great value. Strong antiseptic solutions in a suppurating wound, while they tend to destroy pus, hinder also the formation of healthy granulation of tissue, which is nature's method of closing sinuses and overcoming suppuration. Sodium citrate favors a hyperæmia of the raw area and the multiplication of the leucocytes at that point, thus being in proper line with the most advanced ideas of overcoming septic processes and of favoring granulation of tissue.

Since the introduction of the X-ray, more and more attention has been paid to the treatment of fractures, and attempts have

been made to achieve more satisfactory results in bad cases of fracture near to or involving joints. The open operative treatment is gaining in favor and will probably continue so to do.

Post-operative vomiting has been in the past one of the most serious complications of surgical work. With the improvements made in the administration of anesthetics, the percentage of serious cases was materially reduced. It was not, however, until the significance of acetone and diacetic acid in the urine was recognized that the problem was really solved. Today it is at last recognized that a very great majority of the cases of post-anesthetic vomiting are due to the presence of this toxin. I exclude, of course, cases of peritonitis and intestinal obstruction, where the vomiting is due to mechanical or reflex causes. To Dr. Blodgett, the urinologist of the Massachusetts Homœopathic Hospital, we are, I believe, indebted for the understanding of the proper line of treatment. He has pointed out that sodium bi-carb. in five-grain doses is almost a specific for counteracting the toxin of this condition. It was through Dr. Blodgett's means that the writer of this paper became much interested in the subject and decided to investigate it. In a series of seventy-four cases, where the anesthetic was ether, the urine was examined each day for the first three days subsequent to operation. In this number of cases acetone was present alone in twenty-three cases, acetone and diacetic acid together were present in thirty-five cases, and neither were present in sixteen cases. This shows that out of seventy-four cases either acetone or diacetic acid were present in fifty-eight cases, or 75.6 per cent. In a series of fifty-six cases, where the hyoscine, morphine and cactin tablets were used, supplemented by chloroform, acetone was found present in eighteen cases, acetone and diacetic acid in twenty-seven, and neither in eleven, making a total of forty-five out of fifty-six cases or 80.5 per cent. where either acetone or diacetic acid was present. With these facts in line, the writer determined upon the use of sodium bi-carb. on the day prior to operation, giving five grains three times a day, in the hope of modifying the action of the acetone and diacetic acid and thereby decreasing the frequency of vomiting. In a series of one hundred and thirty cases there was but one case of excessive vomiting and this finally yielded to large doses of sodium bi-carb. In a series of thirty-two cases an accurate record of vomiting was kept and it was found that in seven cases where acetone alone was present, the average of vomiting was three times. In seventeen cases, where acetone and diacetic acid were both present, the average was three and one-half times, and in eight cases where neither was present the average was one and one-half times. From these results the writer is convinced of the value of the administration of sodium bi-carb. for the twenty-four hours previous to operation.

Such have been the advances made in the past year. No startling record of achievement as in the first years of aseptic surgery, but we must remember that when so much has been already accomplished the pace of progress must necessarily be slower each year.

SOME HELPS IN SURGICAL TECHNIC.*

By Horace Packard, M. D., Boston, Mass.,
Professor of Surgery, Boston University.

We hear very much said about "Surgical Technic." It comes up for discussion in medical meetings, it appears frequently in the columns of medical journals. One operator is criticized as having a very poor technic and another is praised for having a very good technic. I have often soliloquized upon what excellence in technic means.

Does it mean getting through an operation with quickness and dispatch? Does it mean using the least number of instruments necessary for attaining a given object? Does it mean a well-trained corps of assistants? Does it mean excellence of results?

It seems to the writer that these do not fully express the thought either separately or collectively. Indeed, superior excellence in technic is difficult to define. Those who have seen Prof. Martin of Berlin operate or Prof. Kocher of Berne, or had the privilege of seeing Billroth in Vienna, or the late William T. Bull, realize that there is an indefinable something in every move and in every gesture which commands admiration, whether it be in the making of a wound or its closure.

No amount of assumed nonchalance, hurry or dash can compensate for the absence of the indefinable something which enables one operator to execute a fine technic and which makes the same impossible for another.

To those of us who are possessed of but mediocrity of natural endowments which go to make excellence in surgical technic, the studious cultivation of all the available helps will in a measure compensate.

I know of no one thing which shows defects more conspicuously nor which is of greater embarrassment to the operator, in the conduct of an operation, than inexperienced and inefficient assistants. All his efforts at celerity are negatived if an assistant persists in holding a retractor where it is not wanted, or the needle holder is passed with the needle the wrong way about, or a straight scissors comes to the operator's hand when a curved sharp-pointed is desired, or the anæsthetist leads the patient into a state of cyanosis and collapse, creating a panic and necessitating a pause in the operation for resuscitation.

Insufficient assistance may also be as productive of embarrassment and delay as inefficient helpers. On this score of simplifying technic some operators have reduced the number of assistants to the lowest possible number, believing that they thereby lessen the danger of conveying infection to the wound. I have repeatedly seen surgeons struggling through difficult operations aided by one

*Read before the Mass. Surgical and Gynæcological Society.

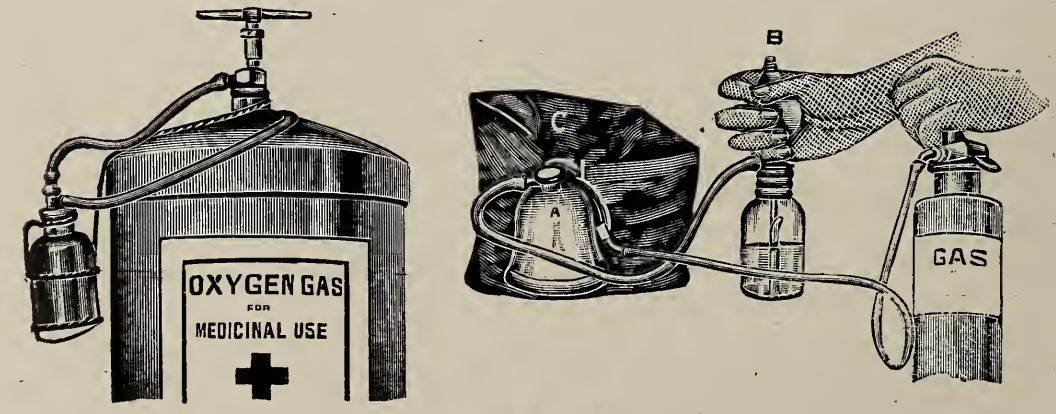
assistant only (exclusive of the anæsthetist), stopping the progress of his operation to do sponging, thread needles, and attend to other details which would seem better entrusted to an additional assistant. In the laudable effort to keep "mischievous hands" out of the wound it was forgotten that with each expiration the surgeon's breath was passing myriads of pathogenic microbes into the wound, forgotten that beads of perspiration bearing uncounted germs were dripping from the operator's face, forgotten that the ungloved hand, no matter how carefully scrubbed and disinfected, is still the bearer of pus-producing microbes.

Anæsthesia. How Shall It Be Conducted?

The patient's life during anæsthesia is a sacred trust. Any chemical agent administered to a human being which is potent enough to produce unconsciousness is capable of doing great harm, even to extinguishing life itself. Shall this sacred trust be delegated to other than an expert anæsthetist? It is not always possible to secure an experienced anæsthetist in an emergency, but in deliberately planned operations it seems to the writer that provision should always be made beforehand for such skilful conduct of the anæsthesia as the operator himself would want were he the patient. It is my observation that when physicians or any immediate member of their family must undergo anæsthesia the service of the most expert anæsthetist available is invoked.

Next to the skill of the anæsthetist the question of apparatus or method of administration is sure to come to the front. Patients like to be lulled into unconsciousness in the easiest and quickest possible way. No one can wonder at this. We all crave the little solace of having disagreeable things made brief.

Nothing in the way of general anæsthesia has proven so safe, comfortable and rapid as nitrous oxide gas and sulphuric ether—the gas to induce initial anæsthesia—followed immediately by the ether. Little by little a universal inhaler has been evolved suited to nitrous oxide, ether, chloroform, and all combinations of each with the other or any one of these with oxygen. The expressions of appreciation from patients who have been previously anæsthetized by older methods have been so enthusiastic that I venture



A Universal Inhaler.

to again call attention to the apparatus which I have used for the the past fifteen years.

In nitrous oxide ether anæsthesia the cylinder of gas is coupled on to an inlet tube at "a" and nitrous oxide administered to the point of narcosis, which takes about sixty seconds. Before the expiration of this interval, however, viz., at the end of about thirty seconds, the bulb of the ether bottle "b" is worked gently, thus carrying to the patient a little of the vapor of ether, which mixes in the bag "c" with the nitrous oxide, with the result that the patient for a little time is breathing both ether vapor and nitrous oxide gas. At the end of about 120 seconds the gas is cut off and ether vapor alone is reaching the patient's lungs. This transition has all come about so gently that no appreciable break, so far as manifested by the patient, has occurred in the progress of the anæsthesia.

It is interesting to observe how this method works out in actual practice. Anæsthesia is conducted for me on the accepted basis that it cannot be positively known beforehand just what anæsthetic or combination of anæsthetics is best adapted for each individual case; therefore it not infrequently turns out that a case which is begun on gas and ether is changed to chloroform or chloroform and oxygen.

The amount of anæsthetic consumed is an extremely interesting factor in this method. On the date of this writing I have operated upon a case of duodenal ulcer involving long and tedious dissecting away of adhesions and much intestinal suturing consuming something over two and one-half hours of time. My anæsthetist report to me at the close of the operation that the consumption of ether was six and one-half ounces.

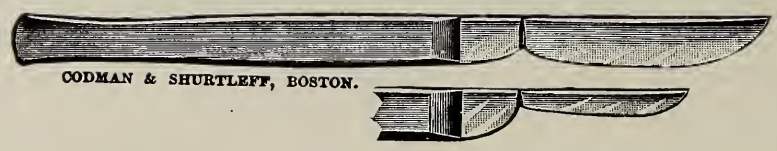
It is a common thing in cases when chloroform for some reason is selected as the anæsthetic, for an operation of an hour's duration to be conducted with the consumption of but three drachms.

A pertinent question arises as to the after effects of anæsthesia conducted in this way. As a rule, there are none. Post-anæsthetic vomiting occupies so small a place that the question of its treatment seldom arises. Years ago, when crude methods of anæsthesia were employed and a pound of ether was evaporated over nearly every patient's face, the management of post-anæsthetic vomiting was always a serious problem and at times the source of much anxiety. Happily all that is past and at the present day the shrinking patient may be assured that he will be lulled into the sleep of anæsthesia with scarcely an unpleasant sensation, and that his awakening will be with but the minimum of discomfort.

Choice of Surgical Knife for General Work.

A sharp, keen, well-balanced scalpel is a prerequisite for fine technical work in surgery. Tastes differ so materially among surgeons as to whether the scalpel shall be pointed and slender or half-bellied or full-bellied that the writer realizes that that which is

to follow is not likely to materially change the practice or tastes of his colleagues. Several years ago, while prowling about the clinics and instrument shops of Europe on a summer holiday, I came across the instrument house of Weiss & Sons, London, and there found the scalpel which I have used ever since to the exclusion of all others.



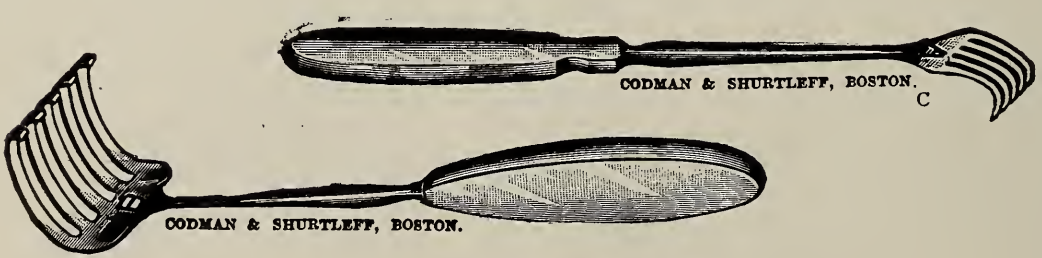
The Weiss Knife.

The lower cut shows the knife after much use and many sharpenings, but still useful.

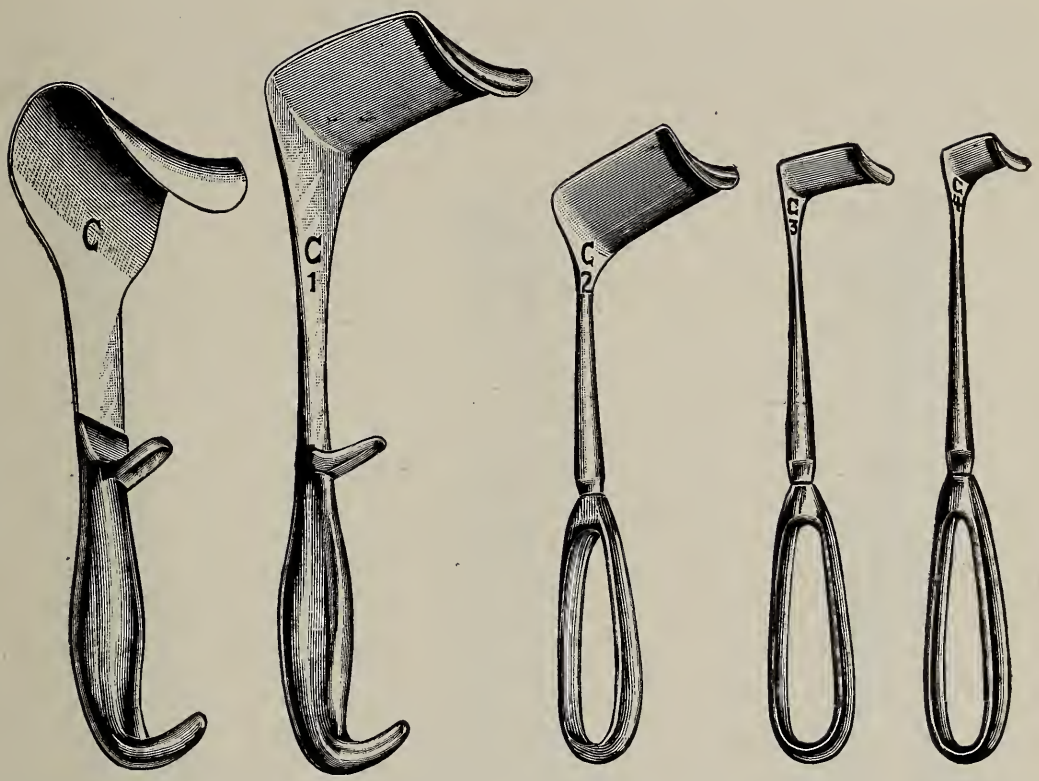
It is, as will be observed from the illustration, an exceptionally full-bellied knife. This makes it enduring beyond credence. We have some of these knives still in use in the Hospital which have been sharpened and resharpened so many times that all outline of the original form has been lost, nevertheless the cutting qualities remain unimpaired. In fact, one important quality of the knife is its endurance. This knife has been copied by Codman & Shurtleff, Boston, so perfectly that I cannot detect any difference from the imported original, and at a cost not much in excess of the cost in London plus the custom duty.

Retractors.

A glance at any comprehensive instrument catalogue will convince one of the multiplicity of design of retractors. The important role which retractors play in surgical technic is manifest if one happens to be obliged to try to make an abdominal operation without them or with poor ones. This reference to retractors is not intended to urge upon the reader any special design, nor anything materially original. It has been found, nevertheless, a great convenience to have some specific designation of a brief, terse character by which they are known by nurses and assistants, hence a set of retractors has been arranged as above designated. A, B, C,



etc. The A consists of a slightly modified Volkman sharp retractor with five points. The modification is so apparently trifling as to hardly merit mention, but it adds very materially to the usefulness of the instrument. It consists in an additional curve introduced



at C, thus making of it a universal retractor for both superficial skin retracting and also for retracting deeper tissues. This is particularly appreciated in operating upon adipose patients and in retracting muscular tissue.

Retractor B is an Israel model, but it is provided with five blades, made a little longer to better adapt it to use for retracting the whole depth of the abdominal wall. This model especially commends itself because of its lightness and because it occupies so little space.

Retractor C is a slightly modified Fritsch pattern and is of great value in retracting thick abdominal walls in all varieties of abdominal operations calling for long incision.

Retractors C1, C2, C3 and C4 are modelled after Langenbeck's blunt retractors and are valuable in meeting varying depths of wounds and lengths of incisions; e. g., C4 is efficient beyond appreciation in appendix operations in thin subjects and young children where the work is done through a short incision, while C1 is almost essential in deep operations, as, for example, on the bile ducts, the pancreas, or the duodenum.

What Are the Best Scissors for All-Around Use?

The same idea has been carried out in the matter of scissors. It is found in actual surgical work to be a great convenience to have scissors of unvarying size and design. Three pairs of scissors are desirable in every operation, straight blunt, curved blunt and curved sharp-pointed. A standard length of six and one-half inches has been adopted as meeting almost all requirements in abdom-

inal, gynæcological and general surgery. Smaller delicate scissors are sometimes advisable in working upon cervical glands and plastic surgery, but not often. These are plainly marked X. Y. Z. In the midst of an operation the curved sharp-pointed scissors are

wanted. Simply saying "Z" or "Z scissors" unerringly brings to the operator's hand the instrument desired without going through the long stereotyped phrase "sharp-pointed curved scissors."

This arrangement or simplification of this group of instruments has proved acceptable to all my colleagues with whom I am associated in the Hospital.

Nos. 1, 2 and 3 Hæmostatic Forceps.

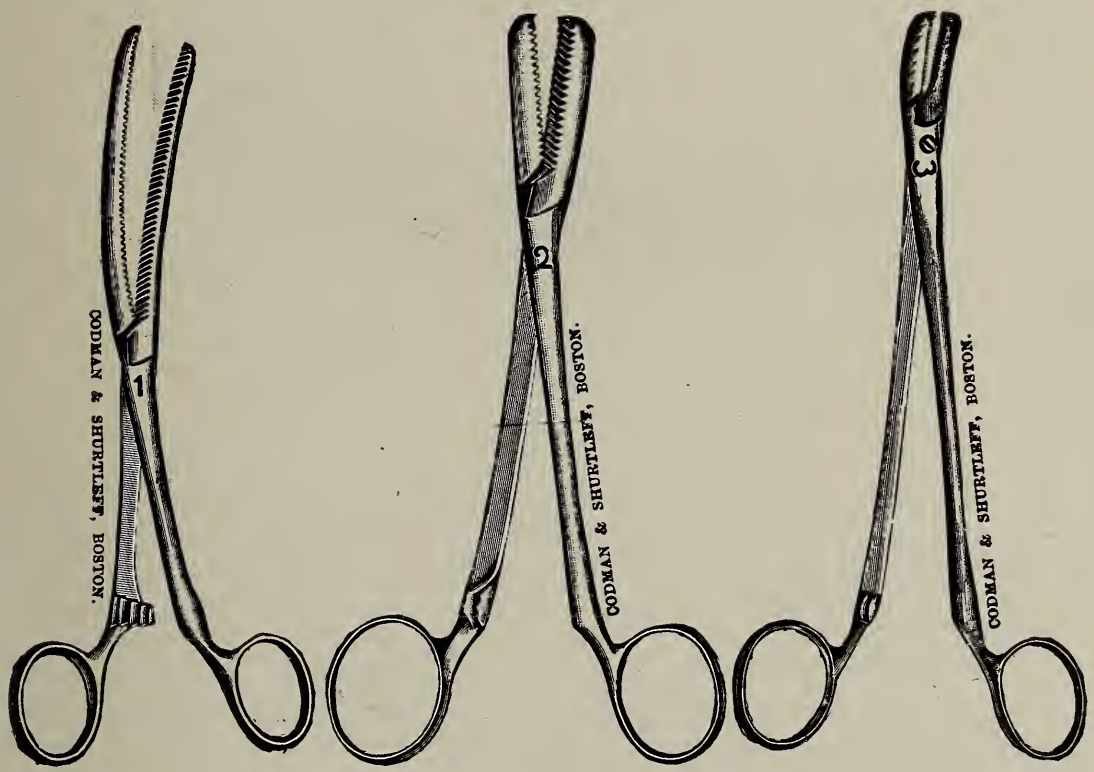
The same plan has been carried out in the matter of artery forceps, but the scheme was originally devised for abdominal hysterectomy. The No. 3 has, however, become so widely used for all purposes connected with abdominal and vaginal work that it far outstrips the others in general utility.

The pattern of forcep No. 1 was fashioned to clamp the broad ligament securely close up against the uterus preparatory to making an abdominal hysterectomy.

Forcep No. 2 was designed to clamp the outer portion of the broad ligament just outside the ovary and tube. This insures immediate hemostasis of the ovarian artery on both sides of the incision.

Forcep No 3, it will be noticed, has long handles and short jaws. Some of my colleagues have renamed it "short bite" in prefer-

ence to my christening, No. 3. The name, however, is of little significance. The main fact is that it has become invariably used by my colleagues and many dozens have been used up and replaced in the several years which have elapsed since their introduction. But



little originality is claimed in this design. It will be observed that they are the Phelps artery forcep, made longer in the handles and the jaws slightly curved. These two features make it slightly distinctive and of much greater service than the original.

A Drainage Tube Which Drains.

Drainage constitutes such an important element in surgery that the subject is of never-failing interest. We are now in the era of the "cigarette drain." A little while ago it was wick drainage without making it into a "cigarette," and before that rubber tubes and glass drains had their day. The drainage scheme which I have to offer combines, it seems to me, all the good qualities of all the others. It combines capillary drainage with tube drainage, cannot injure the most delicate structure, therefore can be used for abdominal drainage without danger of pressure necrosis of the intestinal wall, affords opportunity of irrigation, and when its usefulness is over can be removed without the slightest pain or dis-

comfort to the patient. My experiments were first made with small, soft rubber catheters bunched together with spiral turns of fine silk. These were at first cut off flush with the surface of the wound and did much better than anything that I had previously used. Afterwards they were left long enough to hang down over the side of the patient and protrude through the dressing. This

Combined Capillary and Syphon Drain.

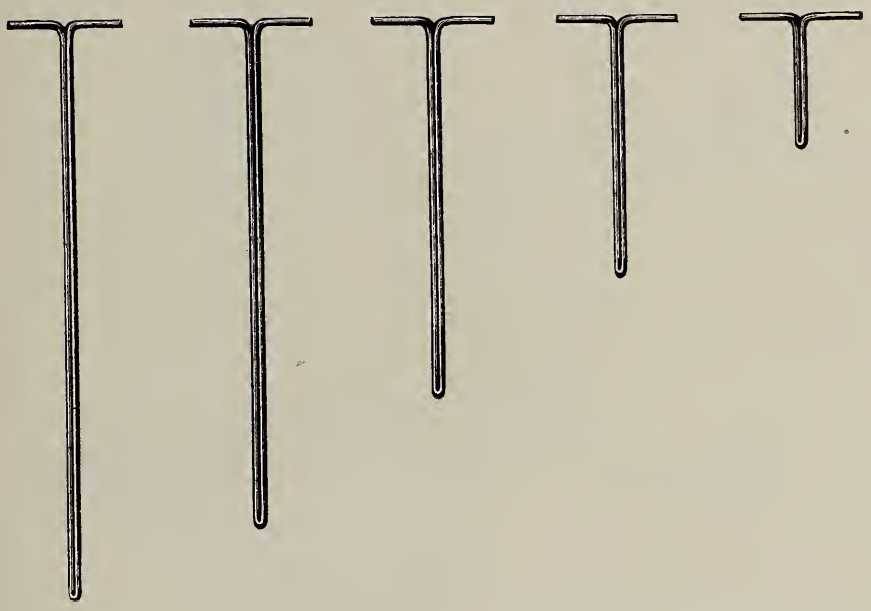
(Miller Rubber Co., Akron, Ohio.)

did still better in that the drainage fluid was brought entirely away from the vicinity of the wound and deposited over a wad of gauze outside or caught in a crook-neck nursing bottle. A drain of this kind will lift all the drainage fluid from the bladder after a supra-pubic cystotomy and keep the patient practically dry.

For pelvic drainage, drainage of the bile ducts, and all appendicular abscesses, or in fact any part of the abdominal cavity, this form of drain has given me greater satisfaction than any other. Its efficiency is explained, I think, by its peculiar shape on section. It will be observed that there are four drainage canals and there are three longitudinal furrows outside. I am led to believe from diverse experiments that these external grooves constitute a most efficient element in this drainage scheme. At any rate, the whole combination will more efficiently drain the abdominal cavity or any part of it than any other drain in use. It is desirable to have the protruding end long enough to hang out and down over the lateral portion of the abdomen so as to get the advantage of syphonage when once fluid has begun to flow. If extensive drainage is desired, several, in fact any number, may be distributed in various directions, all converging at one point of exit. If in the course of convalescence it becomes desirable to irrigate the cavity, such is most easily accomplished by syringing in through one segment while the other two provide for return flow, or the outside lateral grooves conduct the return.

An additional device of great simplicity for the capillary drainage of other than abdominal wounds and particularly designed for the removal of blood and serum which may accumulate in the few hours succeeding the operation, is the capillary wire drain which I here show you. It is made in the shape of the letter T with the

vertical limb such length as may be adapted to the depth of the wound to be drained. I find myself using this varying in length from one-half inch to two and one-half inches. In a recent large



goitre operation the drainage was entirely of this character and its efficiency was attested by the amount of bloody serum which was delivered to the gauze dressing in the first twenty-four hours.

These are slipped in between the stitches after the wound is closed.

Helps in Appendectomy.

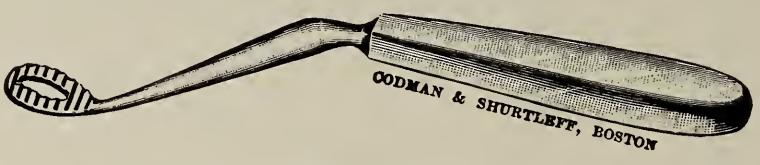
What is here suggested has no relation to unusual or difficult cases of appendectomy complicated by peri appendicular abscess or adhesions. Such conditions must be met according to indications as they develop in each individual case.

In these days of early diagnosis and early operation such complications as are above referred to are the exception rather than the rule, therefore the aids in technic herewith set forth are applicable in the majority of instances.

A word here as to incision where conditions permit of choice may not be amiss. It is always to the left of the right linear semilunaris, the *Kamera* incision. An experience with it in many hundreds of cases leads me to the conviction that it is the best. It opens the sheath of the rectus, both its anterior and posterior lamalæ; the muscle is retracted strongly to the left during the operation. After the appendix is removed the stump is dropped back and the peritoneum and posterior wall of sheath sutured, the muscle resumes its natural position, wholly covering the line of suture and thus reinforcing it and strengthening it in the most effective way possible. The suturing of the anterior lamella, the aponurosis of the external oblique and the skin completes the operation. No ventral hernia has ever followed the aseptic healing of this fashion of wound.

An Appendix Dipper.

It is well known that in favorable cases the appendix may be removed through a wound just large enough to admit the index finger. It is often a difficult matter, however, to deliver the appendix through such a small wound because of the obtrusiveness of loops of small intestines, omentum, or the transverse colon when the cæcum is the part most desired, for that leads unerringly to the appendix. The blind and prolonged gropings and vain endeavors to fasten on to the cæcum or descending colon and thus secure a lead to the appendix often consume as much time as all the rest of the operation. The simple device herewith portrayed has made delivery of the appendix possible almost instantly on completion of the incision.



Appendix Dipper.

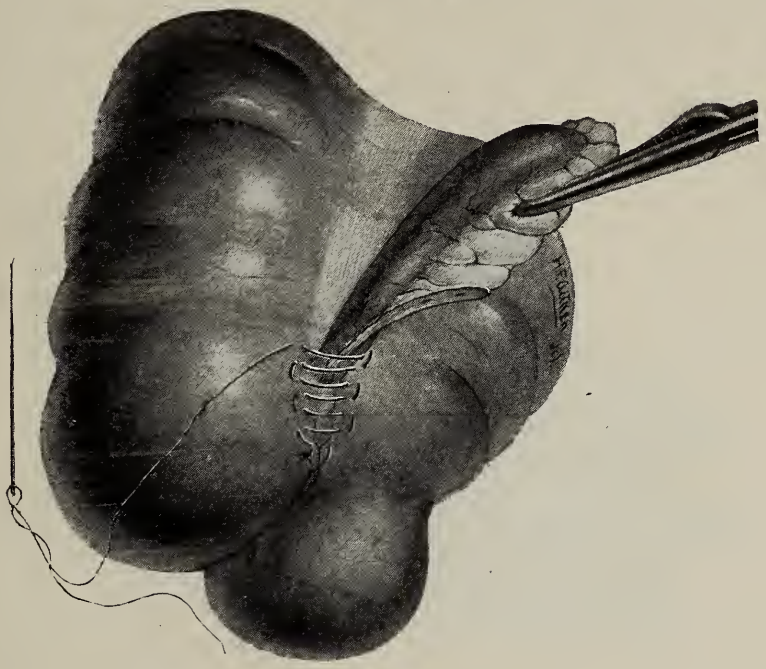
It is used in this way: The forefinger of the left hand is carried down through the wound, the tip hugging closely the wall of the inguinal fossa until the location of the cæcum is reached. It can usually be felt and rolled beneath the finger tip. The dipper is next carried down in the same way until the fenestrated tip is felt beneath or in contact with the cæcum. The cæcum is then pressed firmly into or onto the fenestra and all together lifted out. The longitudinal band of the cæcum immediately identifies it and a careful hand-over-hand extraction in a moment brings the appendix into view, provided it is free. All this is done in as little time as it takes to think it.

The further help in appendectomy which I shall mention is the treatment of the stump. An explanation is perhaps here in order for republishing what was printed as a separate communication something over a year ago. It is here introduced for the sake of continuity and completeness of the subject of this paper.

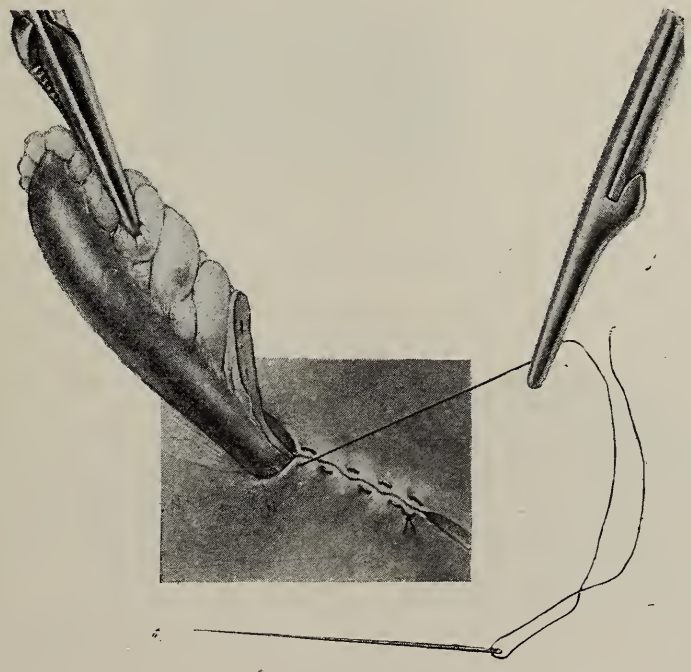
Details of Method.

After the appendix has been exposed and brought into the field of operation as far as circumstances will permit, the meso-appendix is ligated and divided in the usual way. An intestinal needle with fine silk, or Pagenstecher thread, is passed through the cæcal coats on the meso side of the appendix, including the edges of the peritoneum which have been severed in the cutting away of the meso-appendix. The needle then takes up a dip of peritoneum just outside the mesenteric wound, skips over to the other side, takes up a corresponding dip and is tied. This constitutes the first step in the suturing, the remainder being a continuation of the same in the form of a right and left continuous suture

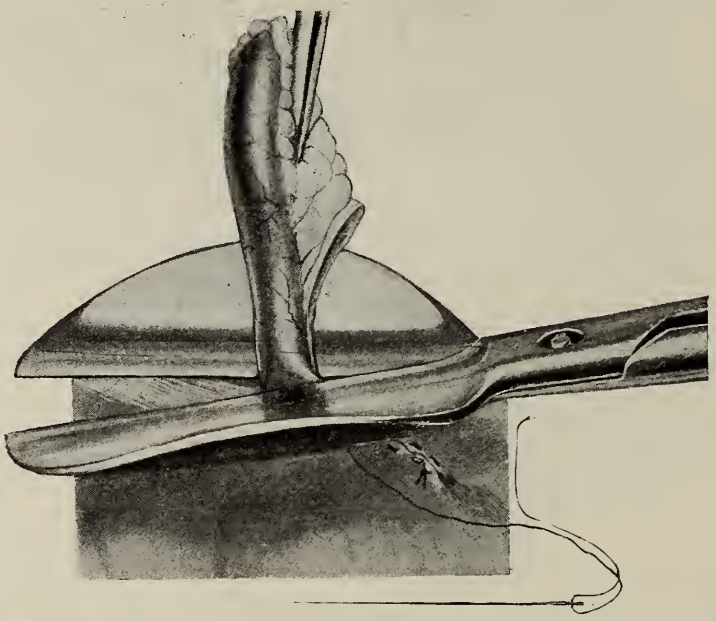
applied in such a way as to gradually embrace the circumference of the base of the appendix and at the same time bury it. After two or three passes of the needle, right and left, the

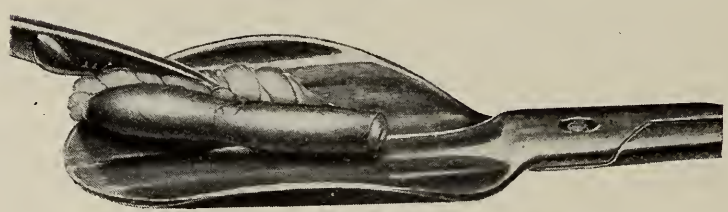


appendix will be found to have assumed somewhat of an upward turn, i. e., if left to its own inclination it will spontaneously turn upward along the longitudinal band of the cæcum. Seizing it with forceps and pulling gently, its base, or nearly the whole of the circumference of its base, emerges from the infolding portion of the cæcal peritoneum which the suture has gathered up about it.

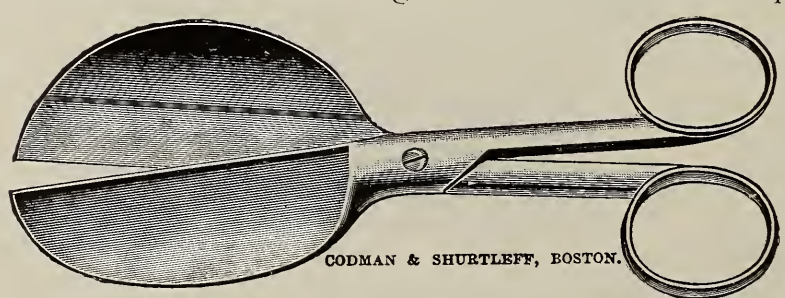


The next step is the amputation of the appendix, which is done as follows: The tip of the appendix is seized with a pair of forceps and traction is exerted sufficiently to put the part well on the stretch. With a pair of scissors the appendix is cut short off at the base. If the suture has been correctly adjusted, the





stump or circumference of the opening resulting from the amputation disappears at once—is buried. Two or three dips more of the needle in the same right and left manner completes the



Appendix Scissors.

suturing, and the operation is done so far as relates to the appendix. Any form of scissors will suffice for the amputation, but the writer has found specially made ones with broad dishing blades safer, in that the appendix, immediately on being severed, may be dropped into them and the whole—appendix, scissors and all—taken away from the operating table by the nurse.

The writer begs to submit that he has used this method of appendicular stump treatment in over 100 cases without a known instance of colon bacilli infection. In fact, it is so rare that pus has appeared in the abdominal wound that the question of source of infection has scarcely arisen.

Such rare instances as have occurred of bacterial infection have invariably shown, on culture test, to be from other origin.

The advantages of the method are as follows:

1. It is simple.
2. No thermocautery, nor carbolic acid, nor other antiseptic is required to sterilize the stump.
3. The stump is practically closed before the appendix is cut away.
4. No special instruments are required other than those provided in an ordinary surgical operation.
5. No circular suture nor inversion of the stump is required —it inverts itself.
6. One line of suture only is necessary.
7. More than 100 cases have been operated upon by this method without the slightest evidence in any case of imperfect closure of the stump or of infection of the abdominal wound from colon bacilli infection.

What Surgical Needles Shall We Use?

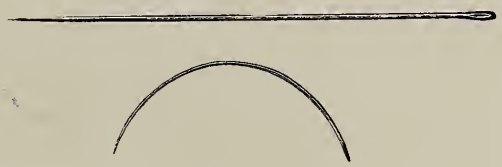
The needle question is not a very momentous one, for there are needles of almost all shapes and sizes available in all surgical instrument shops and any ordinary operation may be well and skilfully completed with almost any form of surgical needle designed for general use. Of special needles there are legion designed for every special operation from cleft palate to cervix and perineum. It is not, however, with needles for special operations that this paper is to deal, but the best needles for all-around, every-day use. When in Berlin, Germany, in 1883, studying the wonderfully clever work of Prof. A. Martin, I could not help noticing the great adaptability of the needles which he used for every phase of abdominal and gynæcological surgery. I found they were of his own design and made by A. Windler of that city. The supply which I brought home with me were, I think, the first introduced to this country. At least nothing was known of the Martin needle in any of our shops at that time. Since its introduction to the Massachusetts Homœopathic Hospital at that time it has been used continuously. The advent of the Hagadorn needle made a break in continuity on

the part of some of the surgical staff, but gradually the preference has reverted back to the Martin until now and for a considerable time in the recent past nothing else has been used for general suturing purposes. With the lapse of time and the purchase of fresh supplies from varying sources the original curve and diameter was lost and the three original distinctive sizes had been merged into four sizes. The original designation of "small," "middle size" and "large" also had to be dropped, or if still adhered to was likely to bring to the operator's hand a needle other than that which he wanted, since the difference in the two middle sizes was so slight as to frequently escape the eye of the assistant in charge of the instruments. The embarrassment became so great that finally the writer opened correspondence last summer with Windler of Berlin, the original makers, asking for samples of the Martin needles. It was found on receipt of same that while the number of sizes (three) was still maintained, the curve and diameter had with the lapse of years been lost. I still had in my private possession a set of the original samples, and forwarded them to Berlin for duplication. Here they are, and allow me to assure you it is a pleasure to use them, particularly the middle size, for cervix and perineal operations. The curve and radius are just as the master designed them. No one who saw Martin's wonderful dexterity in cervix operations can forget it. It was due in part to the curve and radius of his needles. Incidentally and as illustration of the cheapness of instruments in Germany, I will mention that these needles cost, made to order, 62½ cents per dozen. These are working needles and are universally used by all my colleagues in the Hospital. For fine skin suturing, either over and over or subcutaneously, the Keith needles are used; for intestinal surgery the round, straight or curved intestinal needle holds first place. With us the Hagadorn needle is no longer used.

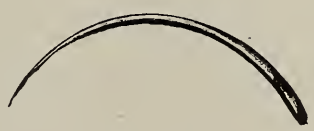
Approved by the Surgical Staff of the Massachusetts Homœopathic Hospital, January, 1908.

Martin.
A. Windler, 24 Friedrich-Str., Berlin, Germany.

Keith No. 2¾.
Kny Scheerer Co., 425 Fourth Ave., New York City.



Intestinal.
Maison Luer, Rue Antoine du Bois 6, Paris, France,
or Kny Scheerer Co., 425 Fourth Ave, New York City.



Half Curve.
Any dealer.

Common Darning Needle.
Any thread and needle store.

When ordering new supply always send stock samples. Do not accept unless exact duplicates.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only, and preferably to be type written—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.

ASSOCIATE EDITORS:
F. W. COLBURN, M.D. C. T. HOWARD, 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, if possible.

THE POTENCY OF DRUGS.

Much is heard in these days of ultra-scientific medicine concerning the demonstrable strength or potency of drugs. The consensus of opinion has been that unless a medicinal agent is present in amount capable of demonstration by our comparatively gross methods of chemical examination, it is entirely innocuous and completely inert. To the Council on Chemistry and Pharmacy of the American Medical Association in America and to similar bodies in England and on the Continent is delegated the power of examining all the various medicinal products that appear from time to time and of accepting them or of placing them under the ban as either inaccurate in their pretensions or inert in their formation. Not long ago it was reported that the British Council had subjected to examination some homœopathic remedies and after careful tests had reported them to consist of one hundred per cent. of milk sugar. As such they were not accepted by that learned body. This result is not, of course, other than would be expected by anyone familiar with the homœopathic potencies, as these substances depend less on the distinct concentration of the drug than do the medicinal agents of the dominant school. We feel that this adverse report in no way influences our principle of drug action or of remedial medication, or if it does influence it at all does so in a favorable manner by indicating that we have for years been in advance of our confreres of the other school in recognizing a fact that is only now becoming evident to them. We read with a smile the statement that certain enzymes, such as some of the digestive ferments, are capable, when brought into intimate contact with suitable substances, of bringing about specific changes in those substances, even when they are applied in indefinite amount. And further we are told that no matter how great the amount thus acted upon, the enzymes themselves suffer no loss in amount that is demonstrable by any known means. In other words, one substance can induce changes in another substance to an almost unlimited extent and

yet at the same time lose none of its original bulk, power or potency. Certain bacterial products possess similar powers. Not only is it true that substances in infinitesimal influence the human body, but in the present imperfect state of our medical knowledge we should be very careful to guard against positive statements concerning the innocuousness or virulence of various drugs or their value in medicine based merely upon chemical tests or upon a few animal experiments. The attitude with which such substances as carbo vegetabilis and natrum muriaticum are viewed by different physicians is a case in point. Why vilify or scoff at men who with honesty and sincerity and after careful study strongly uphold the idea that these are of medicinal value. They may be entirely inert or they may be quite potent; probably no one is at present able to give the definite answer. Let us not, however, depend too much upon the test tube and the laboratory for a decision, as in these biological questions they are very liable to error. An excellent illustration of this last is to be found in a statement by Dr. John Uri Lloyd, the eminent eclectic pharmacist, as quoted in the Medical Sentinel of recent date. This has to do with hamamelis, and is as follows:

"About forty-five years ago, Pond's distilled hamamelis was quietly introduced into the homœopathic school of medicine. With almost irresistible force it came gradually into the practice of eclectic physicians, creeping then into that of the allopathic physician. The chemist found little in that distillate other than traces of essential oil. He united with the laboratory scientist in asserting that the value of distilled hamamelis must, therefore, depend on the water and the alcohol it contained. But thousands of practitioners of medicine thought otherwise, and acted for themselves.

"Distilled hamamelis became an important article of commerce, being finally employed in immense amounts by the profession of medicine. It next crept into home use, the laity becoming acquainted with its name and its asserted qualities. Today, after practically four decades have passed, distilled hamamelis stands firmly intrenched as one of the most largely used remedies in America, and that, too, in the face of such authority as Drs. John Marshall and H. C. Wood, of Philadelphia, who, in 1886, gave hamamelis a strenuous scientific laboratory investigation, and decided that there was nothing in the distillate."

Probably any of the readers of this editorial could give other instances illustrative of the same fact. The writer has been for some time hoping that some one of the above-mentioned Councils of Chemistry would take up for investigation some of the tuberculin diluted to one to ten or one hundred million, as recommended by Trudeau and so many of his fellows in the older school in medicine, and now so widely used by all. It seems most probable that such a diluted material, if submitted as an unknown product, would with almost certainty be found to consist of saline only and be passed upon either as inert or as a fraud, depending upon the claims advanced with it.

What is the lesson to be learned from all this? It is that while we should give all credence to accurate and painstaking laboratory investigations, we should not accept the statements coming therefrom as the final word on the subject. If we do we will be in the same position in which our "old school" friends now find themselves. They have in the past pointed the finger of ridicule at the homœopath who uses his third or fourth dilution of a drug as at one who gives no medicine. But today they are themselves using and loudly proclaiming the efficiency of substances diluted to our fifth, eighth, or even tenth decimal. It will be by far the safer way for us to use those things in which we may believe, and at the same time not to cry against our neighbor because perchance he believes in something that may appear to us absurd and fanatical. The so-called absurdities of one generation too often become the creditable facts of the next. In this way we will traverse our own road of progress, doing our best to add our little to the world's good, and always secure in the feeling that at least we are not impeding the advancement of truth and the betterment of the human race.

THE CONQUEST OF THE TROPICS.

In his presidential address before the American Medical Association, Colonel Gorgas detailed in a very able manner the possibilities of the tropics in the future and the means now being employed to render them habitable. His paper was almost a revelation to many that had become familiar with the pestiferous cities of these torrid countries as they have existed for years and centuries under the French and Spanish regimes. Everyone knows of the notorious condition of Havana and of all Cuba prior to the Spanish-American War. And, if Panama, Colon and Manila were less heard from in this connection, it was merely because they were farther away and so of less relative interest.

Havana has now become a city with a mortality that will compare favorably with the average urban population of the United States. Manila has been rebuilt so far as its sanitary arrangements are concerned, with a resultant fall in the death rate that under the Spaniards would have been something little short of miraculous. These are merely the larger illustrations of the work constantly in progress that has as its ultimate aim and purpose the complete subjugation of the tropics to the white race.

Colonel Gorgas has been one of the foremost of the Americans in this aggressive work, first in Cuba, and now in Panama. His statements, therefore, are made with unquestioned authority, and his optimism is justified by the greatness of the results already attained. It seems that the conquest of the tropics really means in its narrow sense the conquest of the mosquito, and success against the latter almost of necessity presupposes success in the former. Typhoid fever, now being so thoroughly known and

understood, can almost be classed among the preventable diseases, and need not be very seriously considered as a menace. Yellow fever and malaria are the bane of all the people in the tropics, and particularly of all new comers.

Malaria is now known to be transmitted by the mosquito, and presumably by one variety of mosquito only, the anopheles. The exciting organism is well known, and has been thoroughly studied. Of yellow fever, unfortunately, less can be said. That it is known to be transmitted by the mosquito of one particular variety, the stegomyia, is due to the heroic devotion to duty of a group of American army medical men, among whom the names of Carroll, Reed and Lazear will ever form an enviable trio. These three gave their lives for the purpose of demonstrating that yellow fever is mosquito-borne. And by this sacrifice many thousands of others have since been saved.

Concerning the exact micro-organism that causes yellow fever we are almost as much in the dark as ever. In these two diseases, therefore, the contagion is carried probably exclusively by the mosquito. Eradication of the mosquito, accordingly, means eradication of the disease. This disposal of the pestiferous animals is the goal toward which our medical men in the tropics are striving, and the nearer they approach the goal the lower becomes the mortality. So successful have they been in Panama that yellow fever has become practically extinct and the incidence of malaria has fallen from 821 per 1000 in 1906 to 282 in 1908, and the mortality from 7.45 per 1000 in 1906 to 1.34 in 1908. This transition from a place where every tie of a railroad has been said to represent a life lost by disease in its construction is nothing less than marvellous. It certainly seems to justify the prediction made by Gorgas to the effect that within a few centuries centres of culture, health and prosperity will be as numerous in the tropics as in the temperate zones.

INFINITESIMAL DOSES.

There has recently appeared from the Department of Agriculture a bulletin, No. 112, that may be of interst to those readers of the Gazette who have been at all skeptical concerning the medicinal content of the homœopathic sixth and eighth decimal dilutions. This article is entitled "The Use of Suprarenal Glands in the Physiological Testing of Drug Plants," and is written by A. C. Crawford. In speaking of the active principle of the suprarenal glands he gives a number of tests for its determination. The most important of these are the physiological ones and among them probably the most delicate is the action on the eye of the lower animals. This paragraph may well be quoted:

"The action on the small blood vessels is well shown by dropping a dilute solution into the conjunctival sac of an animal, when

the conjunctiva becomes pale and bloodless and the pupil dilates. This action on the conjunctiva occurs even after the use of solutions as dilute as 1-120,000. The action on the pupil of the excised frog eye has been advocated by Ehrmann as a method for determining the amount of active principle present in unknown solutions, but the objection to this method is the difficulty in exactly measuring the size of the pupil and the uncertainty as to absorption through the eye membranes. In Ehrmann's hands, 0.000025 mg. could be thus determined with certainty, although 0.0000001 gram produced a distinct dilatation, while 0.00000005 grain was inactive. Cameron's results with this method were unsatisfactory."

Further on, the action of adrenalin upon animals as a whole is discussed, and this also may well be quoted:

"A second method of showing this vaso-constrictor action is by perfusion of the blood vessels in frogs. Läwen has obtained a response showing a decided constriction of the vessels with 0.2 per million adrenalin, but the method is tedious and frogs vary much in their response. Cameron obtained a feeble reaction with 0.1 per million. Details of this method may be found in English in Cameron's paper. Meyer placed sections of the beef subclavian arteries in Ringer's solution with the addition of adrenalin. He found that most of them responded with under 1-100,000,000, but not all. With increasing amounts of adrenalin the contraction was greater —usually 1-50,000 gave the maximum, although some gave the maximum contraction with 1-100,000. This method has not yet been controlled as a quantitative procedure by any other observer, but deserves investigation."

Comments on these quotations we consider to be unnecessary for our readers.

STERILITY OF ICE.

About twenty years ago Prudden of New York clearly demonstrated that bacteria incorporated into frozen water were not necessarily killed; in other words, that ice may be the means of transmitting disease. Since that time this statement has been accepted practically wtihout question and action has been taken in accordance. Recently, however, Dr. W. H. Park, the well-known New York bacteriologist, has shown that while Prudden's experiments were correct as far as they were made, nevertheless the conclusions are not entirely without question, as his experiments were not sufficiently extensive. Park agrees with Prudden that freezing does not necessarily destroy pathogenic bacteria in a short time. He finds, however, that after keeping for a period of some weeks the ice gradually purifies itself in that the bacteria finally die. He concludes that recent ice is not necessarily more free from danger than the water from which it is formed, but that ice kept for a

period of several months is sterile. Therefore, ice that is harvested in winter and consumed in mid-summer can be considered to be entirely innocuous as far as its bacterial content is concerned, provided these experiments are corroborated by further investigation.

AN OFFICIAL ECLECTIC MEDICAL JOURNAL.

The readers of the Gazette who have been intersted in the question of an institute journal will presumably also be interested to note the following: The annual meeting of the National Eclectic Medical Association was recently held in Chicago. At this meeting one of the most important questions for decision was that of an official organ for the national body. After considerable debate it was voted to establish a journal to be known as the National Eclectic Medical Association Quarterly. In this journal will be published the papers presented at the annual meeting, as well as other associated matters of interest. It will be issued on the first day of September, December, March and June, each number being composed of eighty or more pages. The quarterly will be mailed free to all members in good standing. The corresponding secretary of the association, Dr. M. N. Mundy, of Forest, Ohio, becomes the new editor.

The Gazette desires to extend in advance its best wishes to this journal, as we trust and expect that it will uphold the reputation of the Eclectic School in a manner as virile and able as some of the already existing Eclectic journals, particularly the Eclectic Medical Journal and Ellingwood's Therapeutist.

It will also be of interest to note that at the recent meeting of this association 367 new members were admitted, a fact that certainly does not seem to indicate the complete death knell of our friends the Eclectics.

The next meeting place will be Boston, from June 21 to 24, 1910.

TESTS FOR INVISIBLE INTESTINAL HEMORRHAGE.—In the Boston Medical and Surgical Journal for June 10th, 1909, White thus describes what he considers to be the most satisfactory, all-round test for the presence of blood in feces:

"Good results with the benzidin test depend on careful technic, the exclusion of oxidizing ferments in raw food, fresh material for examination, clean glassware and the quality, strength and proportion of the reagents used.

"A negative benzidin test has greater value than a negative guaiac test in ruling out hemorrhage, and if both tests are used as a control much time will be saved by using the benzidin test first, which takes only two minutes, and if negative, renders any further tests for blood unnecessary.

"It is wise to control the benzidin test with the guaiac test when positive results are found until the technic is learned and tested individually."

CORRESPONDENCE.

The two following are self-explanatory and are presented with much pleasure by the editors:

June 30, 1909.

The New England Medical Gazette,
80 East Concord Street, Boston, Mass.

Dear Doctor Sutherland:—The Loving Cup was finished and delivered some time ago to Dr. Walter Wesselhoeft. A few days ago two beautifully bound books were delivered to him. One of them contained the names of the one hundred and eighty-six subscribers to the Loving Cup. The other book was composed of one hundred letters addressed to him, and some of them to me, expressing their good will and affection for him. The enclosed letter is a copy of the letter that has come to me this morning from Dr. Wesselhoeft expressing his appreciation, and as he cannot write to each one acknowledging his personal letter, can his letter be printed in the Gazette and reach the friends in that way?

Yours very sincerely,

N. EMMONS PAINE.

Letter from Dr. Walter Wesselhoeft.

June 29, 1909.

Dear Doctor Paine:—I am late in acknowledging the receipt of the beautifully bound books containing the letters written partly to me and partly to you on the occasion of my late fiftieth anniversary, and the names of the subscribers to the Loving Cup then presented to me.

I do not know whether answers to the letters directed to me were expected. My sense of gratitude for all the kind words therein expressed would have prompted me to send my thanks at once and personally to the writers. Since they have only reached me now in their collective form I can do no more than to tell you how deeply I feel the marks of good will and affection I now possess in so tasteful and enduring a form.

I must leave it to you to convey—if you think occasion demands—my full sense of appreciation for all I have received, and I thank you once more for all the trouble you have taken to add so much to the satisfaction of my remaining years.

Very sincerely yours,

WALTER WESSELHOEFT.

THE DOCTOR'S BILL.—In the Medical Standard there appears the following upon the Doctor's bill, a suject that will doubtless be of acute interest to all readers of the Gazette:

"Did you ever notice, asks a Nebraska contemporary, how reluctant some people are about paying the doctor? When stricken with a severe pain in the epigastrium about 2 P. M. they cry out in affright, for they feel the damp of death upon their brows. Nothing to do but to telephone Dr. Sewemups to come at once. He has been to Cheney and back since the poolroom closed for the night, but he rubs his aching eyes, puts on his clothes and pulls into the frosty air for another three miles and back. He finds the patient suffering from gastric fermentation from having overloaded his stomach. The disorder is easily remedied, and the man soon gets about his business and forgets all about it.

"Thirty days later he gets a bill of $4 and it makes him angry. He forgets the pain (there's no such thing as pain), the doctor's six-mile ride in the dark of the moon when he ought to have been asleep, and he forgets to pay the bill or grumbles about it as though it were an extortion that ought to be punishable by legal process or otherwise. Moral: If you don't want to pay the doctor, don't send for him."—American Medicine.

OBITUARY.

JOHN W. WHIDDEN, M.D. Dr. John W. Whidden, who practised medicine for many years in Portland, Maine, died of hemiplegia at his summer camp at Highland Lake, on June 29th, after an illness of only nine days. Although it was known that his illness was serious, nevertheless, the news of his death came as a sad surprise to his near friends in Portland and vicinity.

The Gazette learns from the Portland "Telegram" the following facts concerning his early life: Dr. Whidden was born in Lancaster, N. H., February 4th, 1856. The son of a prominent lawyer and judge of probate, he was educated in Phillips Exeter Academy, and later studied for two years in the literary department of Dartmouth College. He then entered the Hahnemann Homœopathic Medical College of Chicago, from which institution he was graduated in 1879. He received a thorough training as assistant to the college professors and as resident physician in the hospitals. Following graduation he practised a year in Laporte, Ind., and later in Wellington, Kansas. On account of a severe attack of malaria he returned to New England and settled in Saco in 1881. In 1885 he moved to Portland, where he continued in active practice until the time of his death.

Dr. Whidden was a member and also an ex-president of the Maine Homœopathic Medical Society and of the Cumberland and York Medical Society.

In 1882 he married Miss Harriet E. Shaw, who with one son, Harold Franklin Whidden, survives.

His death comes to all who knew him as a personal loss, because through his unusual ability and professional devotion he had won the confidence and respect of all his colleagues.

PLINY RAND WATTS, M. D.

The following resolutions were unanimously carried at the last meeting of the Homœopathic Medical Society of Western Massachusetts:

Dr. Pliny Rand Watts of Sacramento, Cal., a former president and honorary member of this society, died of acute hæmorrhagic peritonitis June 1st, 1909.

In view of his intimate and continued connection with this society it is meet that some memorial of him be placed upon our records; therefore be it

Resolved: By the death of our colleague, Dr. Pliny Rand Watts, this society has lost one of its most faithful and distinguished members. During his residence at Stafford Springs, Conn., he was almost always present at our meetings and contributed freely of his thought and experience to their success. To his larger field at Sacramento he carried with him that courage and enthusiasm which marks the true physician. His success there was but the natural sequence of his attainments. The people trusted him; his patients loved him and the Homœopathic profession of California honored him by electing him President of their State society. He had hardly laid down the duties of his presidential office when he was called hence.

He was a man of spotless character, a generous friend, a devoted husband, a loving father, and had that kindliness of heart which made him dear to everyone he met.

Resolved: That these resolutions be spread upon the records of this society, and that a copy of them be sent to his bereaved family and to the leading Homœpathic Medical Journals of this country, to which he was a frequent contributor.

ERDIX T. SMITH, Secretary.

SOCIETIES.

MAINE HOMOEOPATHIC MEDICAL SOCIETY.

The 43d annual meeting of this society was held at Augusta on Tuesday, June 8th, and was notable not only for a good attendance but for enthusiasm manifested by all.

The morning was devoted to the business session and among the various reports it is noted that much work has been accomplished during the past year. Through the efforts of the legislative committee, led by Dr. F. A. Ferguson, of Bath, a law for the medical inspection of schools modelled after that in force in Massachusetts was passed by the State legislature last winter and is now in operation. The committee for the advancement of homœopathy in Maine reported that much work had been performed in searching for locations where homœopathic physicians were wanted, and in filling the same. At the present time over a score of such openings exist, and the committee will be very glad to enter into communication with anyone desirous of obtaining further information. At the present time there are in Maine two homœopathic hospitals, the Trull Hospital at Biddeford, just rebuilt after its second baptism by fire, better and more complete than ever, with a capacity of about forty patients, and the Jones Cottage at Union, Maine, with a capacity of ten patients limited to the treatment of insanity. At the latter institution Dr. H. A. Plumer is the attending physician.

The committee appointed at the 1908 meeting to consider the project of a Maine Homœopathic hospital reported progress. The Maine Homœopathic Hospital Association has been formed and incorporated. This association has for its object the securing of land and funds to establish a State hospital in Portland. Over two hundred prominent men of the State, lawyers, judges, clergymen, business men, capitalists, State senators and physicians are members of the association. The committee purposes to prepare a printed report showing what has been accomplished and what remains to be done, this report to be distributed to all who are interested.

Within the past few months a homœopathic physician, Dr. Annette Bennett, of Norway, has been appointed to the staff of the Insane Hospital at Augusta. This is the first recognition of a homœopathic physician by any of the state institutions, and we trust is a beginning of more liberal ideas.

The afternoon session was devoted to the presentation of papers and to the president's address. The program was as follows:

President's Address, J. T. Palmer, M. D., Portland

Diphtheria and Its Treatment.

E. S. Abbott, M. D., Bridgton

Discussion by

A. I. Harvey, M. D., Bangor.
W. M. Pulsifer, M. D., Skowhegan.

Surgical Treatment of Gallstones.

W. V. Hanscom, M. D., Rockland

Discussion by

W. Scott Hill, M. D., Augusta.

Whooping Cough.

E. S. Hawkes, M. D., Swan's Island

Discussion by

William H. Kennison, M. D., Madison.
George H. Rand, M. D., Livermore Falls.

Puerperal Insanity.

Annette Bennett, M. D., Augusta

Discussion by

L. A. Brown, M. D., Portland.

The annual banquet was served in the evening at the Augusta House.

A feature of the scientific part of the session was the presence of one of the leading members of the dominant school of medicine and his friendly discussion of the papers.

The officers for the ensuing year are as follows:

President, John T. Palmer, M. D., Portland; vice-presidents, William H. Kennison, M. D., Madison, George H. Rand, M. D., Livermore Falls; recording secretary, Luther A. Brown, M. D., Portland; corresponding secretary, Carrie E. Newton, M. D., Brewer; treasurer, William S. Thompson, M. D., Augusta; board of censors: C. M. Foss, M. D., A. I. Harvey, M. D., M. S. Holmes, M. D., Annette Bennett, M. D., E. S. Hawkes, M. D.; committee on legislation: F. A. Ferguson, M D., J. T. Palmer, M. D., J. F. Trull, M. D., W. V. Hanscom, M. D., L. A. Brown, M. D.

WESTERN MASSACHUSETTS HOMOEOPATHIC MEDICAL SOCIETY.

The regular quarterly meeting of the Western Massachusetts Homoœopathic Medical Society was held June 16, 1909, at Cooley's Hotel, Springfield. The President, Dr. Clara M. Sweet, presided.

Dr. R. F. Hovey, Chairman of the Bureau of Surgery, presented the following programme:

"Obstetric Surgery," De Witt G. Wilcox, M. D., Emerson Hospital, Boston; "Radium—Its Therapeutic Value, with Special Reference to Inoperable Conditions," William H. Dieffenbach, M. D., Homœopathic Medical College and Flower Hospital, New York; "An Unusual Case of Prostatitis," J. H. Carmichael, M. D., Wesson Memorial Hospital, Springfield, Mass.

The session was one of unusual interest and great profit to the large number present.

INTERNATIONAL HAHNEMANNIAN ASSOCIATION.—At a very successful meeting of the above association held in Pittsburg in June last the following officers were elected for the ensuing year:

President, Dr. L. H. Stanton, New York; vice-president, Dr. E. A. Taylor, Chicago; treasurer, Dr. P. A. Krichbaum, Montclair, N. J.; secretary, Dr. J. B. S. King, Chicago, Ill.; corresponding secretary, Dr. E. S. Miller; censors, Drs. C. M. Boger, R. F. Rabe, Lee Norman and R. E. S. Hayes.

OFFICERS AMERICAN MEDICAL ASSOCIATION.—At the last meeting of the American Medical Association at Atlantic City the following were among the officers elected: President, William H. Welch, Maryland; vice-presidents, Robert Wilson, Jr., South Carolina; C. J. Kipp, New Jersey, Alexander Lambert, New York, Stanley P. Black, California; general secretary and editor, George H. Simmons, Illinois; treasurer, Frank Billings, Illinois. The next meeting will be held in St. Louis.

INTERNATIONAL AMERICAN CONGRESS OF MEDICINE AND HYGIENE.—The government of the Argentine Republic and the medical profession of that country are planning to hold an International American Congress of Medicine and Hygiene in May, 1910, with which all the nations of America are invited to co-operate. The meeting will open on May 25th, 1910, this being the 100th anniversary of the birth of the Republic. The official languages are Spanish, English, French and Portuguese. Further information may be obtained by addressing the Faculty of Medical Sciences, Buenos Ayres, Argentina.

SPECIAL BUILDING FOR PHYSICIANS AND DENTISTS.—The Gazette much appreciates the circular recently received from Seattle, Washington, describing the Cobb building there in process of erection. This building is situated in the centre of the business section and is to be devoted exclusively to physicians and dentists. Only ethical practitioners will be allowed to be tenants. We only wish that the example thus set might be followed by other large cities in other parts of the country.

BOOK REVIEWS

Rademacher's Universal and Organ Remedies. Abridged and translated by A. A. Ramseyer. 104 pages. Cloth, $1.00, net. Postage, 5 cents. Philadelphia. Boericke & Tafel. 1909.

This small book describes a quaint method of treating disease introduced by Rademacher in the early part of the last century. His three universal remedies were copper, iron and saltpetre; his organ remedies were numerous. Anyone interested in historical medicine and particularly in its curiosities will do well to peruse these chapters, but to one searching for information and light they will be of no service and the time occupied in reading them can be better spent elsewhere.

International Homœopathic Medical Directory, 1909. New England Series. Fourteenth year of publication. London Homœopathic Publishing Company; 12, Warwick Lane, E. C. Price, 2s. 6d. net.

In this small book of one hundred and fifty pages is a presumably complete directory of the homœopathic physicians in the British Isles and on the continent of Europe together with a less complete one of Canada, India, Mexico, Australia and South America and a very brief list of a few homœopaths in the United States. It should prove useful as a reference book for those of our medical faith planning to go abroad or to anyone, whether belonging to the profession or of the laity, who may wish to learn of the homœopathic physicians in any given locality.

Progressive Medicine. Edited by Hobart Amory Hare, M.D., assisted by H. R. M. Landis, M.D., June 1, 1909. $6.00 per annum. Lea & Febiger, Philadelphia and New York.

The midsummer number of Progressive Medicine has for several years been notable, among other things, for the admirable summary that Clark gives of the latest researches along the line of the malignant tumors. The present is no exception in this connection. Under the limited gynæcological topic of cancer of the uterus the entire field of carcinoma and sarcoma is well covered, particularly that part having to do with etiology. Immunity and immunization are reviewed, as well as some of the more recent methods of diagnosis, such as by hæmolysis. It must be confessed, however, that the amount of real progress has been lamentably small. Coley, as usual, reviews in a very satisfactory manner the subject of hernia. In the section devoted to general abdominal surgery the topics of pancreatitis and of megacolon are probably the most deserving, although appendicitis is by no means neglected.

The authority of Stengel will surely be unquestioned on the diseases of the blood and certain others of cryptogenetic nature, particularly diabetes. His treatment of this last subject and of exophthalmic goitre are particularly commendable.

Jackson again covers the subject of ophthalmology.

Again we express our satisfaction at this comparatively brief résumé of the year's progress in these several departments.

Hand Book of Diseases of the Rectum. By Louis J. Hirschman, M.D., Fellow American Proctologic Society. Lecturer on Rectal Surgery and Clinical Professor of Proctology, Detroit College of Medicine. Attending Proctologist, Harper Hospital. Consulting Gynecologist, Detroit German Polyclinic, etc., etc. With 147 illustrations, mostly original, including two colored plates. Price $4.00. C. V. Mosby Co., St. Louis, 1909.

The subject herein discussed is one that is only too frequently neglected in the average college curriculum as one of relatively little importance. In many places the subject of Proctology is becoming recognized in its true merit. The present book consists of about three hundred and fifty pages, describing quite satisfactorily all phases of the

subject, such as the anatomy, methods of examination, diseases, symptomatology and operative technique. Numerous illustrations are freely provided that do much to elucidate the text. It is unfortunate that the author seems so desirous to insert his own personality in nearly all parts of the volume. The phrase, "the author," really becomes tiresome by repetition. Many good things can be said about it, and anyone who has the opportunity of studying it will learn thereby much that will help to make him a more truly successful practitioner of the healing art.

Vaccine and Serum Therapy. Including also a Study of Infections, Theories of Immunity, Opsonins and the Opsonic Index. By Edwin Henry Schorer, B.S., M.D., Assistant Professor of Parasitology and Hygiene, University of Missouri. Formerly Assistant at Rockefeller Institute for Medical Research, New York City. Price $2.00. Illustrated. C. V. Mosby Co., St. Louis, 1909.

This is, as far as the reviewer is aware, the first book to be published in America that deals exclusively with vaccine and serum therapy, and is preceded only by Allen's in the entire English speaking world. So much has been written concerning the opsonic index, opsonins and vaccines that a volume on these and the allied subjects of immunizing and curative sera is particularly seasonable. Where criticisms of any book are easy to make and frequently unjust, yet we cannot forbear to express our disappointment at the unsatisfactory treatment of Ehrlich's theory of immunity, and particularly that of Metchnikoff, upon which so much of the opsonic theory exists.

In most respects the book is very readable, well abreast the latest researches, reliable, and will bring to its readers in a safely conservative manner methods of treatment that seem to have a wide future before them.

THE MONTH'S BEST BOOKS.

Exercises in Education and Medicine. McKenzie. $3.50. W. B. Saunders Co.

Illustrated Medical Dictionary. Dorland. $4.50. W. B. Saunders Co.

HOSPITAL BENEFACTIONS IN NEW ENGLAND.—The Rhode Island Hospital receives $115,000 and the Butler Hospital of Providence $25,000 by the will of the late Mrs. Henry G. Russell.

A new free hospital is provided for in New London, Conn., by the late Sebastian D. Lawrence, who, by his will, leaves $100,000 for the erection of a building and $400,000 for its proper maintenance.

FLEXNER'S SERUM IN MENINGITIS.—Holt, in the New York State Journal of Medicine, gives in detail the treatment of 523 cases of cerebro-spinal meningitis, in which the serum of Flexner and Jobling was used. The method of use, the effect of the serum upon the cerebro-spinal fluid and the results of the treatment are all given in detail. In conclusion he summarizes as follows:

"Although the number of cases treated is not yet large, the evidence herewith submitted must, I think, convince anyone who approached the subject with a candid mind that the course of cerebro-spinal meningitis and its termination are distinctly modified by the injection of the serum of Flexner and Jobling. In all places where it has been employed the results have been much the same, and those who have had most experience with its use have become enthusiastic advocates. With improvement in the quality of the serum and a better understanding as to how it should be used, particularly larger doses and more frequent administration in the early stage we may confidently predict that the subsequent results will be far better than those here given."

PERSONAL AND GENERAL ITEMS.

Dr. C. Y. Wentworth, of Newton Highlands, is spending the summer abroad in a trip that combines both recreation and work. Part of her time will be spent in Vienna attending the clinics of that city.

Dr. Alice H. Bassett, of Boston, spends the summer abroad, her time being largely devoted to post-graduate work in Vienna.

Dr. L. H. Diemar, of Cambridge, sailed the latter part of June for Europe with Vienna as her objective point. She will spend the summer abroad in post-graduate work.

Mrs. Alice H. Flasch, superintendent of nurses of the Massachusetts Homœopathic Hospital, sailed on June 16th for Europe, where three months will be spent in recreation and sight-seeing.

Dr. W. R. Brinkerhoff, formerly of Boston, has resigned his position as Director of the Leprosy Investigation Station at Molokai, his place being taken by Dr. Donald H. Currie of the army staff.

At the graduation exercises of Boston University held in Tremont Temple, Dr. W. H. Watters of the Medical School received the degree of Ph. D. This is the first time that the degree has been awarded by this university in recognition of work done along distinctly medical lines.

The editor reads with some degree of wonderment the address of welcome recently delivered by Dr. Parmelee to the joint meeting of the Ohio and Michigan societies. Here, according to the Medical and Surgical Reporter, the doctor is credited with saying in opening: "Doctors, Gentleman of Ohio and Gentlemen of Michigan." We wonder who among our Ohio friends is thus selected for the unusual honor.

We learn with regret that Dr. H. C. Beebe has, after a service of thirteen years, resigned from the Ohio State Board of Medical Registration. During these years the doctor has served well and honorably. His successor is Dr. T. A. McCann, to whom we extend our congratulations.

The Gazette is pleased to learn that Dr. H. F. Staples was recently elected vice-president of the Ohio State Society. This, we presume, comes as a recognition, and certainly one that is well deserved, of the very efficient work performed by the doctor as secretary of that society, where during two years' time he was able to add over 200 new members to the list.

The Cleveland Medical and Surgical Reporter hints that still higher honors may be awaiting, with which hope the Gazette is in fullest accord.

The Free Hospital for Women, of Pond Avenue, announces the removal of its Out-Patient Department from its former location at 633 Massachusetts Avenue, Boston, to the main hospital building in Brookline. Clinics are here held daily from 9 until 11 A. M. and from 3 to 5 P. M. and on Tuesdays and Thursdays from 7 to 8 P. M.

The annual report of the Washingtonian Home for the year ending April, 1909, has just been received. This home was organized in 1857 and incorporated in 1859. Since that time it has performed a large and partly unrecognized work among those addicted to the excessive use of alcoholics. It is unfortunate that the limited endowment prohibits the extension of the work, as it seems to justly deserve. During the past year 825 patients have been admitted, of which 500 were married and 325 single men. Of this number 40 were physicians, 45 lawyers, 120 merchants and 210 clerks. Ninety-five patients were suffering from delirium tremens.

Dr. David A. Strickler has been unanimously elected Dean of the Denver College of Physicians and Surgeons in the place recently left vacant by the unfortunate death of Dr. Kinley. Dr. Strickler has also been reappointed by the government of the State as a member of the State Board of Medical Examiners. The term, when completed, will make fourteen years in which he has continuously held that position.

Locations of members of the graduating class of 1909, Boston University School of Medicine:

Boynton, George Ellwood, Massachusetts Homœopathic Hospital, Boston.

Butler, John Henry.

Cass, Frank Ozro, Ch.B., Emerson Hospital, Forest Hills, Mass.

Fay, Emma Hooker, M.B., Massachusetts Homœopathic Hospital, Boston.

Gammons, Herbert Francis, Cullis Home, Grove Hall, Dorchester.

Harmon, Gaius Elijah, M.B., Massachusetts State Sanitarium, Rutland, until October 1. After October 1, Newton Hospital, Newton.

Hunt, Harold Otis, Ch.B., Newton Hospital, Newton.

Kent, Edwin Mills, Haiju, Korea.

Leland, Leslie Phillips, A.B., Lowell General Hospital, Lowell.

L'Esperance, Oscar Raöul Talon, 100 Boylston St., Boston.

Lincoln, Winthrop Clinton, Massachusetts Homœopathic Hospital, Boston.

Martin, David Lorenzo, Ph.D., M.B., Massachusetts Homœopathic Hospital, Boston.

Nowmisky, Henry, 871 Cambridge St., East Cambridge.

Osgood, Gardner Holway, Massachusetts Homœopathic Hospital, Boston.

Patterson, William Leslie, A.B., Massachusetts Homœopathic Hospital, Boston.

Smith, Olive Ella, Insane Hospital, Fergus Falls, Minn.

Sternberg, Joseph Edward, 100 Boylston St., Boston.

Wright, Elizabeth Wiltshire, B.S., M.D., New York Woman's Homœopathic Medical College and Hospital, 17, 19 101st St., New York.

HONOR FOR DR. ELIOT.—At the annual commencement exercises of Harvard University held in June last, former President Eliot was not only made President Emeritus of the University, but in addition the degree of Honorary Doctor of Medicine was conferred upon him. This unusual honor was received with great enthusiasm by all present.

THE ODIUM MEDICUM.—We abstract from the British Homœopathetic Review the following translation that may be of interest to our readers as an evidence of the friendliness of the dominant school toward homœopathy in certain quarters and the absence of that feeling with others:

"The Stettin District Medical Society is at present very busy preaching a crusade against homœopathy and is sending out invitations to other district medical societies to join them in their pious task. An invitation was recently addressed to the Würtemberg District Medical Society and was read out by the President at a recent meeting, being given precedence of other business. The President then called upon the members present for their views upon the subject, but as there was no response, he gave it as his opinion that the invitation should be unanimously declined. 'We have associated,' he said 'for many decades past with homœopaths in our district society, without the least injury either to our professional position, our scientific culture, or our good fellowship. To attempt to create discord in the German medical world by such a campaign appears not only superfluous, but in view of our common interests and economic struggles, in which unity is a condition of our success, distinctly mistaken; nay, frivolous.'

"The meeting agreed unanimously that the invitation should be answered in this sense."

VACCINE THERAPY.—Much is heard both for and against the use of vaccines in infectious diseases and it is probable that the general practitioner at the present time is somewhat in a quandary concerning their official status. In American Medicine, Woglom, after examining the many articles that have appeared both from the clinical and from the laboratory standpoint, thus summarizes the question:

"In conclusion it can safely be said that a review of the literature leaves one under the impression that the general sentiment among clinicians is distinctly in favor of bacteriotherapy in suitable cases. Many desperate cases have apparently been benefited, or even cured, local infections have sometimes improved in a marvelous fashion, and no case has yet been reported in which harm has been done, when the doses have been properly repeated.

WHO ARE THE REGULARS?—Dr. M. L. Tyler, in the "Homœopathic World" thus relates her experiences along the line of prescription in a certain given case. She says:

"But in test of the assertion that Homœopathy is the only scientific system of medicine in the field, I will very briefly relate the results of an experiment that was carried out a very few months since. A child of nine years, after being under the very best 'Regular' treatment for four years, and being by that time in an absolutely deplorable state, came under homœopathic care, with the not-unknown result that a simply marvelous improvement set in at once—since maintained. A keen lay homœopath who had never seen the case, and who had no knowledge whatever as to what treatment she had received, made a number of copies of the symptons of the child as they were when she first came under homœopathic care nearly two years before, and sent the case, with a guinea fee enclosed, to a certain number of allopathic physicians of the very highest standing in the land and to an equal number of homœopathic physicians. Three medical baronets and one untitled Harley street physician were induced to prescribe for the case without seeing it and five homœopaths. These are the prescriptions:—

"Medical Baronet No. 1 prescribed Syrupus Ferri Phosphatis Comp., and also Bynol.

"Medical Baronet No. 2 prescribed Hydrarg. Perchl. (corrosive sublimate) with glycerine and distilled water; also Syrupi Ferri Iodidi, and also Ung. Hydrarg. Comp., with directions for rubbing it in.

"Medical Baronet No. 3 prescribed Sy. Ferri Iodidi and Vini Ferri.

"Allopath No. 4 prescribed Syrup Calcii et Ferri Lactophatis; while in University College Hospital, during one of her sojourns there, the child had had Ol. Morrhuae c. Vin Ferro and Mercury Ointment, and later Liquor Arsenicalis.

"So much for the 'Regulars!' Now for the homœopaths—the Irregulars!

"No. 1 prescribed Calcarea carbonica.

"No. 2 prescribed Calcarea carbonica.

"No 3 prescribed Calcarea carbonica, after four doses of Bacillinum.

"No. 4 prescribed Calcarea carbonica.

"No. 5 prescribed Calcarea carbonica, but said she might need Silica later.

"And the effete homœopaths who had undertaken the apparently hopeless case two years before, what had they given? *Calcarea carbonica* also, for months. And why were the Irregulars so regular in their methods? Simply because, according to the Law of Similars, it was a tpyical Calcarea case as portrayed by its symptoms, and no man who knew his Materia Medica Homœopathica could have been in doubt for a moment as to the medicine that was demanded by those symptoms—so long as they should persist."

THE NEW ENGLAND
MEDICAL GAZETTE

Vol. XLIV SEPTEMBER, 1909 No. 9

ORIGINAL COMMUNICATIONS.

THE DIAGNOSIS OF DISEASES OF THE HEART.*

By G. Harlan Wells, A. B., M. D., Philadelphia, Pa.,
Lecturer on Clinical Medicine in the Hahnemann Medical College; President of the Philadelphia Academy of Medicine.

A great deal of misunderstanding prevails among physicians regarding the diagnosis of diseases of the heart. In the mind of many practitioners cardiac disease and cardiac murmurs are constantly associated together, and it is assumed that one cannot exist without the other. As a result of this idea many errors in diagnosis are made, and a great deal of time and energy is spent in the all-absorbing effort to find a murmur, and give it a name, that might be more profitably spent in other directions. A diagnosis which consists merely of the name of a particular valvular lesion gives us scant data on which to base either our prognosis or treatment, and is of little value to the clinician. The practical point to be determined is whether or not the heart is in such condition as to enable that organ to meet the demands made upon it by the circulation, and if so, whether or not conditions are favorable for the maintenance of this state of equilibrium.

In order to answer these questions it is necessary for us to extend our examination far beyond the heart itself, and to consider carefully the totality of signs and symptoms present in the individual case, a point strongly insisted upon by the early fathers of homœopathy, and now generally recognized by all scientific diagnosticians. The several factors that must be considered in arriving at a satisfactory diagnosis in an individual suffering from an affection of the heart may be summarized as follows:

First. Conditions relating to the state of the heart muscle.

(a) the size of the heart.

(b) is hypertrophy or dilatation the predominating feature?

(c) the character of the cardiac contractions; whether strong or feeble, regular or irregular.

*Read before the New Jersey Homœopathic Medical Society.

(d) the condition of the peripheral circulation as indicated by coldness of the hands and feet, distention of the veins, etc.

(e) the presence or absence of signs of cardiac embarrassment (dyspnœa, precordial pain, vertigo, etc.), not only during rest, but also when extra demand is made upon the heart.

(f) if the heart muscle is diseased, is it the result of some temporary or removable cause, or the result of degenerative changes?

Second. Conditions relating to the valves of the heart.

(a) are the sounds produced by the closing of the valves normal in time, in intensity and in duration?

(b) are adventitious sounds (murmurs) present or absent?

(c) if a valvular lesion is present, (1) is it primarily a lesion of the valves or of the myocardium? (2) is it the result of some temporary or removable cause, or the result of degenerative changes?

Third. Conditions relating to the organism as a whole and especially those which have a relation to the nutrition of the heart muscle.

(a) the age of the patient.

(b) the occupation of the patient, especially as to his liability to excessive physical or mental strain.

(c) the temperament of the patient, whether hopeful or discouraged, cheerful or worrying.

(e) the general bodily nutrition.

(f) the state of blood vessels, especially the arteries.

(g) the condition of the digestive organs.

(h) the condition of the kidneys.

(i) the condition of the lungs.

(j) the hereditary tendencies of the patient, particularly in regard to cardio-vascular degeneration.

(k) the personal history, especially as regards syphilis, alcoholism, chronic toxemias and infectious diseases.

After these preliminary remarks, in which I have endeavored to indicate the nature of the data that must be sought for in order to formulate a rational and comprehensive diagnosis in a case of cardiac disease, I shall next proceed to a consideration of some of the more common forms of chronic heart disease met with in practice. For clinical purposes we may divide these affections into:

1. *Functional diseases.*
2. *Organic diseases,* (a) *of the valves,* (b) *of the heart muscle.*

1. *Functional Diseases.*

Under this head may be grouped the cardiac neuroses and the conditions giving rise to the so-called "functional" murmurs.

The cardiac neuroses most commonly met with are tachycardia, bradycardia, arrythmia and pseudo-angina pectoris. This classification is, as you will all observe, purely symptomatic, but it is the only practical one in the light of our present knowledge of the etiology of these conditions.

The differential diagnosis between functional and organic diseases of the heart is often difficult. In arriving at a correct opinion in this class of cases it is especially necessary to extend our examination beyond the heart itself. The mental state of the patient and the condition of the nervous system should receive special attention. If the examination reveals an abnormal state of the nervous system we must then decide whether or not the subjective and objective symptoms present in the case can be explained on the ground of a derangement of the nervous mechanism of the heart.

In such cases we commonly find a great disproportion between the subjective symptoms and the physical signs. Again, there is often decided and rapid variations in the rhythm and rate of the cardiac pulsations, as well as in the subjective symptoms. The absence of evidences of stasis or of impaired circulation in the lungs, kidneys or extremities also has a determining import from a diagnostic standpoint. Dilatation of the heart, if present, excludes the possibility of the lesion being purely a neurosis. The presence of a murmur cannot be considered as positive evidence that the cardiac disorder is organic, for we find a great variety of murmurs occurring in pure cardiac neuroses with perfectly normal valves. From what has been said it is evident that there are no arbitrary rules that will guide us, in every instance, in making a differential diagnosis between functional and organic diseases of the heart, and often the clinician arrives at a correct opinion by instinctive skill, the result of experience and judgment. As great an authority as Krehl recently made the statement that the physician will frequently be unable to decide this question with any degree of certainty, and occasionally the differential diagnosis must remain open even after extended observation. One practical lesson that can be learned from these facts is that the physician should not be too willing, on the basis of a single and often incomplete examination, to tell the patient that he is an incurable cardiopath, a statement that is sure to aggravate his suffering if his disorder is a neurosis and make him a typical subject for the demonstration of the curative virtues of the medico-religious comedy of the age, "Christian Science."

"Functional" or "accidental" murmurs are often heard over the heart in association with cardiac neuroses and abnormal states of the blood. No satisfactory explanation has yet been given as to the cause of these sounds. We know that they occur independent of any structural change in the valves. Personally, I am inclined to the view that many of them are due to loss of tone

and relaxation of the sphincter muscles surrounding the mitral orifice, resulting in a temporary leakage.

The following characteristics will, as a rule, readily enable us to distinguish functional from organic murmurs:

1. Functional murmurs are almost invariably systolic in time.
2. Functional murmurs are best heard, in the majority of cases, in the second left interspace, over a small area, and are transmitted in all directions.
3. They are soft and blowing in quality, often changeable or evanescent in character.
4. They are frequently associated with anemic states of the blood.

2. *Organic Diseases.*

Valvular Lesions. It would be manifestly impossible in the short time allotted to me today to enter into a detailed description of the various valvular lesions and the character of the signs and symptoms associated with them. I shall, therefore, content myself with emphasizing certain general principles that must guide us in this field of diagnosis.

First. The presence of a murmur alone is not diagnostic of an organic disease of the heart. This statement has been so abundantly verified by post-mortem examinations of cases presenting murmurs of various kinds during life that we will not discuss it further.

Second. In the presence of organic disease of the heart the study of the murmur alone is not sufficient in order to reach a satisfactory diagnosis. The accompanying signs and symptoms, both cardiac and general, must receive due consideration.

Third. In studying a murmur it is essential that the examiner should have in his mind an exact idea of the mechanism of the heart, the position of the various valves and the direction of the blood current during the different periods of the cardiac cycle, and the exact time in the cardiac cycle that the murmur is heard. Probably more mistakes in diagnosis occur from failure to correctly time the murmur than from any other one cause. I have frequently seen apical systolic murmurs diagnosed as mitral stenosis. It is, of course, mechanically impossible for such a murmur to be caused by a stenosis of the mitral orifice. Errors of this kind can be readily avoided by placing the finger on the apex beat or on the carotid artery while listening to the murmur. The radial pulse is not an accurate index of the cardiac cycle as the pulse wave is delayed in reaching the radial artery.

Fourth. The intensity of the murmur is not in proportion to its seriousness. Very loud murmurs, as a rule, indicate a favorable condition of the heart muscle, while a very serious valvular lesion may present a feeble murmur, due to the fact that the cardiac contraction is too weak to produce a decided sound. Of greater importance from a diagnostic and prognostic standpoint

is a gradual change in a murmur. A murmur of steadily diminishing intensity, in a chronic valvular lesion, denotes progressive failure of the heart muscle. The reappearance or gradual increase in a murmur in a case of cardiac weakness indicates, in the absence of an acute endocarditis, an improvement in the muscular tone.

Fifth. The point of maximum intensity and the direction in which the murmur is transmitted furnish important data in the differentiation of the various valvular lesions from each other and from functional disorders of the heart.

Diseases of the Heart Muscle. There is a large and important class of cases in which an examination reveals no disorder of the nervous or of the valvular mechanism of the heart which, nevertheless, exhibit evidences of circulatory failure varying from the mildest to the most severe degree. Pathologists have demonstrated that in these cases we have to deal with a diseased state of the heart muscle. Extended experience has shown that the heart muscle is subject to the same pathological states that affect other muscular structures, and our text-books are filled with descriptions of the various forms of myocardial disease, such as chronic interstitial myocarditis, fibroid degeneration, fatty degeneration and infiltration, etc. While of considerable scientific importance these differentiations are of little value in clinical medicine for the simple reason that the signs and symptoms they present are practically identical, and a correct differential diagnosis during life is almost impossible. A noted pathologist states that he has never seen a case of myocarditis correctly diagnosed before autopsy.

The diagnosis of chronic myocardial disease must rest to a large extent upon the history of the case and the clinical symptoms present. The age of the patient is of great importance, and we should always be on the outlook for disease of the heart muscle in cases of cardiac weakness developing past middle life. If the patient likewise gives a history of syphilis, chronic alcoholism, long continued physical or mental strain, chronic lead poisoning, arteriosclerosis or interstitial nephritis, the presumption becomes almost a certainty.

The clinical symptoms which appear in these cases are fairly constant and are all referable to one condition, namely, circulatory embarrassment. In the majority of cases dizziness or shortness of breath on exertion are first noticed. Frequently the patient will say that he is not able to walk upstairs without a sense of shortness of breath and fatigue. Physical exercise, that he formerly performed without discomfort, has become an effort. With the breathlessness he may notice a sense of fullness or aching in the precordium. If the coronary arteries are involved this may amount to severe pain at times. Palpitation is another common early symptom; this is often worse after eating, and the patient may refer his symptoms to his stomach. Gradually the

bodily strength begins to fail and the more noticeable signs of circulatory embarrassment develop, namely, dyspnœa, œdema of the lower extremities and cyanosis.

The physical signs of myocardial disease are often slight or confusing. A very valuable method of detecting evidences of cardiac weakness in its early stage consists in having the patient perform a certain standard amount of muscular exercise and note the effect on the rate, rhythm and tension of the pulse and upon the respiration. Jaquet and Gartner recommend certain movements of the arms and legs. If the physician's office is conveniently situated he may have the patient walk up a given number of stairs in a given time. My associate, Dr. W. M. Sylvis, has offered the ingenious suggestion that an ordinary air tank, such as is used with nebulizing outfits, and a bicycle pump, be utilized for testing the functional power of the heart. The patient is directed to pump the air up to a given pressure in a given time. Assuming the pump to be in proper order and the pressure gauge accurate, this would insure the expenditure of a constant amount of work in every case. After determining by a series of tests the effect this work has on the pulse and respiratory rate of normal individuals it is an easy matter to observe any deviation from this in cases of suspected cardiac weakness.

The ordinary methods of physical examination often fail to reveal any noticeable deviation from the normal, even in rather advanced states of myocardial degeneration. It is not wise, therefore, to delay the institution of proper therapeutic measures until demonstrable physical signs develop in instances where we can be morally certain, from the history of the patient and the symptoms that he exhibits, that myocardial disease exists. The most common and most reliable signs of myocardial change that can be elicited by the usual methods of physical examination are:

1. A diffuse, feeble impulse beat.
2. Enlargement of the area of cardiac dullness. (Dilatation of the heart.)
3. Weakness and irregularity of the cardiac sounds.
4. Accentuated aortic second sound.
5. The presence of murmurs. These may simulate those of any valvular lesion, but more frequently mitral regurgitation.

In closing allow me to briefly state the following conclusions:

1. A satisfactory diagnosis in disease of the heart can only be reached by a study of the patient as well as of his heart.
2. The majority of physicians attach undue importance to the study of murmurs alone in cardiac diagnosis.
3. The vital point that must be determined in the diagnosis of organic disease of the heart is whether the heart muscle is capable of meeting the demands made upon it by the circulation, and whether conditions are favorable for maintaining the nutrition of the myocardium. Our prognosis and treatment largely depends upon our findings on these points.

4. The differentiation between functional and organic diseases of the heart is often difficult.

1631 Arch St., Philadelphia.

SOME SIGNIFICANT PARALLELS BETWEEN PNEUMONIA AND RHEUMATISM.

By T. G. McConkey, M.D., San Francisco, Cal.

The text-books of today classify pneumonia and rheumatism with the acute specific diseases,—typhoid, typhus, relapsing fever, smallpox, scarlet fever, measles, etc. But in marked contrast with these true specific infections, in which one attack usually confers immunity, not only does one attack fail to produce immunity but apparently predisposes to subsequent attacks. This important clinical fact should arouse the suspicion that pneumonia and rheumatism are not true specific diseases. The only other acute infection which shows the same tendency to recur is erysipelas, and it is very suggestive that the exciting cause of erysipelas is none other than the *streptococcus pyogenes,* a normal inhabitant of the mouth and nasal cavities. Although it still goes by the name *streptococcus erysipelatis,* yet its separate identity has been disproved, for Petruschky has shown that streptococci derived from non-erysipelatous morbid processes were powerful to produce a typical erysipelas. Now it is known that the *pneumococcus* is a normal inhabitant of the mouth and nasal cavities and if not identical with the *s. pyogenes* is a member of the streptococcus family. It is variously called the *diplococcus pneumoniæ, micrococcus p. cruposæ,* and Chester in his recent classification calls it the *streptococcus pneumoniæ.* We know that other organisms can cause true lobar pneumonia, e. g., pyogenic staphylococci, Friedlander's pneumo-bacillus. The latter was once considered the specific organism of pneumonia, but it is now believed that it may cause a broncho-pneumonia and only rarely a true lobar pneumonia. Again, the *diplococcus pneumoniæ* may be found in many other conditions besides pneumonia. Osler says of it: "It has been found also in pleurisy, *pericarditis,* meningitis, peritonitis, *acute synovitis,* otitis, *endocarditis,* etc." I have italicized certain of these to call attention to the fact that the pneumococcus is perfectly adequate to cause the symptom-complex we call "rheumatism." Suppose a pneumonia patient had acute synovitis combined with endocarditis or pericarditis, perhaps, how would it be differentiated from rheumatism? By the bacteriological examination? No, for we shall see that the very latest teaching is that rheumatism itself is due to a diplococcus! If there happened to be an incidental consolidation of the lobe of a lung we would say it is a case of pneumonia complicated with synovitis or endocarditis or pericarditis as the case might be. If there were no such consolidation in the lung we would certainly

call it rheumatism. The same controversy over the bacteriology of pneumonia is repeating itself in the case of rheumatism. Poynton, who contributes the article "Acute Rheumatism or Rheumatic Fever" for Osler's Modern Medicine, feels sure that he and Paine have proved that the specific cause of rheumatism is a streptococcus which they named the "*diplococcus rheumaticus*" in 1901. But he says there are several views still prevalent and enumerates them thus: "(1) That there is no specific micro-organism, but the disease is a form of septicæmia which owes its origin to staphylococcal or streptococcal infections. (2) That the disease is due to a specific bacillus. (3) That the micro-organism is a diplococcus. (4) That the exciting cause is as yet unknown." Poynton insists that rheumatism is a specific disease and has but the one exciting cause, "variously called a diplococcus, streptococcus, or micrococcus." As may be seen, this terminology is identical with that applied to the pneumococcus. Culturally the diplococcus of rheumatism seems to exhibit the same characteristics as the diplococcus of pneumonia. If morphologically and culturally they seem to show the same character I do not see how we can escape the conclusion that they are identical. If Poynton noted this essential identity between the diplococcus pneumoniæ and his diplococcus rheumaticus he does not mention it. Indeed, he would find it difficult to harmonize the fact with his view of rheumatism as a specific disease. Even if there were differences culturally it would not negative the identity of the organisms, for we know that the same streptococcus may show cultural differences when obtained from different sources. If it can be shown that there are no such specific diseases as "rheumatism" and "pneumonia," as smallpox and typhoid fever are specific diseases, but that each is a mere symptom-complex caused usually by the streptococcus in its role of secondary invader, it would simplify and help to solve some perplexing problems in medicine. I shall try to do this. I believe that the underlying condition in both is usually tubercular vegetations or tubercular lesions which furnish a soil for the lodgement and multiplication of bacteria—usually streptococci—and that the symptom-complex pneumonia results if the multiplying bacteria reach the general circulation in great numbers, causing marked leucocytosis, and that the symptom-complex rheumatism results if the bacteria do not reach the general circulation in great numbers but remain localized in the tissues affected. In other words, it is the accident of the location of these vulnerable spots, these *loci minoris resistentiæ*, that determines what symptoms will result when infected with the secondary invader. What warrant have I for assuming that the patient with rheumatism or pneumonia has been previously infected with the tubercle bacillus? The following from Progressive Medicine of March, 1908, is to the point: "In older children and in adults a reaction is obtained in a very high percentage of the cases, as would be expected from the great frequency of tuberculosis at this period (97 per cent. according to Burkhardt)." We know that

tubercle bacilli are exquisitely infectious and that the opportunities for infection are far more numerous than are those for the acute infections, and yet few children escape the acute diseases of childhood. For two years I have been teaching my students that so far as infection is concerned tuberculosis is a disease of childhood. I was therefore much gratified to find the following in the New York Medical Journal of February 13, 1909: "Hamburger maintains that tuberculosis is a children's disease in the ordinary acceptation of the term. He says that just as nearly every man has had measles once during his life and usually during childhood, so almost every man has acquired tuberculosis once during his life and in most cases during childhood. In researches carried on with Dr. Monti he has found a frequency of tuberculosis of over 90 per cent. at the age of puberty." The chances then are as 9 to 1 that our pneumonia or rheumatism victim is infected likewise with tubercle bacilli. We know that the pleural surface is a favorite site for the lodgement of tubercle bacilli, and pleural adhesions at autopsy is a common finding regardless of the cause of death. We also know that in childhood the bones and joints in being tubercular are in frequency only exceeded by the lymph glands. Tuberculosis is found in all climates. Pneumonia and rheumatism are found in all climates. Tuberculosis is more prevalent in the city than in the country. Poynton says rheumatism is an "urban disease." Musser says "pneumonia is distinctly more prevalent in the city than in the country." There is a striking seasonal incidence in both pneumonia and rheumatism and in both it is the months of February, March and April in temperate climates. Unusual exposure, as a sudden wetting, may cause rheumatism in one and pneumonia in another. Does a mere wetting ever cause a true specific disease like measles or typhoid? The age incidence in the two diseases exactly corresponds, i. e., most prevalent from 15 to 40. Diminished chlorides is notable in pneumonia. Diminished chlorides is likewise found in rheumatism. Leucocytosis is common to both, but usually more marked in pneumonia. Fever is common to both, but with a difference in the temperature curve. The onset in pneumonia is sudden and with a rapid rise to 104-5 degrees, accompanied by a chill; but in rheumatism there is a gradual rise and the fever is usually commensurate with the local manifestations. The onset in pneumonia is that of a septicæmia or bacteriæmia, and this is exactly what we should expect, for as soon as the diplococci begin to multiply on the pleural surface they are absorbed along with the serous transudate and are thus carried into the general circulation. I quote from Modern Medicine, Vol. II, page 556: "That a pneumococcæmia analogous to the similar condition produced in rabbits experimentally, may occur quite constantly is indicated by a very extensive series of investigations of the blood during life. Prochaska, who found the pneumococcus in all of fifty cases examined, believes the invasion to be a constant condition in pneumonia, as does Rosenow, who obtained positive results in 160 of 175 cases

in which the blood was taken at all stages of the disease. Rosenow's results show that the pneumococcus may be obtained from the blood before any physical signs are evident, thus indicating that the solidification in the lung may be but the secondary localization of a primary blood infection." Although the writers (Drs. Musser and Norris) state that "such a view of the disease allows a clearer conception of the clinical symptoms and the complications," yet in the rest of the general article the subject is treated from the orthodox "inflammation of the lung" point of view. That the paragraph quoted was inserted after the general article had been written seems probable both from its radical departure from the traditional way of viewing pneumonia and from the fact that the bacteriological studies and findings had not been made, probably, when the article was being written. In the March, 1907, issue of Progressive Medicine, a quarterly journal giving a digest of recent discoveries, under "Pneumonia" we find: "Pneumococci in the blood. One of the most important discoveries concerning the nature of the disease is that the disease is a septicæmia with usually special localization in the lungs. The pneumococci are present in the blood of all cases." In a paper read before our State society eight years ago I took substantially this view of the disease. The title of the paper, "Croupous Pneumonia Not Inflammation of the Lungs" (P. C. J. of H., July, 1901), is significant, and I then stated in these words my conception of the disease: "The depraved condition of the blood as the result of the invasion of the diplococcus is the primary anatomical lesion in croupous pneumonia, and the consolidation of the lung is secondary in sequence and secondary in importance." At present I do not believe that the pneumococcæmia or bacteriæmia is the *primary* condition, but is secondary to a focus of infection where the micro-organisms find a suitable habitat for their multiplication and an easy entrance into the general circulation. In about three-fourths of the cases this focus is situated on the pleura and in about one-fourth on the endocardium. It is because these points are the sites of previous infection by the tubercle bacilli which have caused vegetations or tuberculous lesions of other nature that they are thus rendered susceptible to invasion by the acute bacterial (usually streptococcal) infection. In traumatic pneumonia following thoracic injury it is the traumatism that furnishes the site for the lodgement of the bacteria. It has puzzled clinicians to explain why a pneumonia may result even though the lung itself shows no evidence of injury. Souques, for example, has reported 49 cases of typical croupous pneumonia following contusions of the thorax without actual injury to the lung tissue (*Ibid.*, p. 546). Baeck, who found five such cases among 340, *noted a very high leucocytosis* (*Ibid.*). The solidification of the lung in all these cases is of course sequent upon the leucocytosis. An injury to the *thoracic* pleura furnished the site for the lodgement and subsequent multiplication of the streptococci and their easy entrance into the general circulation. Traumatic pneu-

monia is very eloquent collateral evidence of the soundness of the views herein presented. It is like a direct experiment in showing the secondary nature of pneumonia. The diplococci enter the general circulation along with the serum absorbed from the pleural cavity. We shall see that diplococci are also found in the blood in "rheumatism" with "endocarditis in which the micro-organisms are not destroyed in the tissues but multiply in the damaged valve and are then disseminated by the blood stream throughout the system. In the most severe form the vegetations on the valve are minute and yet there are immense numbers of them" (*Ibid.*, p. 683). We shall see also that these cases of "rheumatism" are likely to be complicated with "pneumonia." The *source* of the *bacteriæmia* is a matter of indifference, for it is the *fact* itself that invokes the leucocytosis which is responsible for the subsequent solidification in the lung. White blood cells furnish fibrin ferment (Metchnikoff's "plasmane"), which causes coagulation of blood, and the increased fibrin in the blood of pneumonia may be purely incidental to the destruction of large numbers of leucocytes in their role of phagocytes. Be this as it may, no one today doubts the value of leucocytosis itself as a curative reaction. In 1901 I ventured to suggest that the consolidation in the lung was due to coagulation first in the capillaries of the lung causing an obstruction which explained the classic stages of congestion, red and gray hepatization. This coagulation was not confined always to the lung, but it occurred there more frequently than elsewhere because of the loss of CO_2 and contact with the air. This, I believe, is the true explanation. I did not know then why there was increased fibrin factors, but while I cannot here go into all the proofs it is quite clear that the increased fibrin factors go along *pari passu* with the increased leucocytes. It is evident, then, that the so-called "inflammation of the lung" is not only secondary but is *secondary to the curative process itself.* In surprising confirmation of this we have the experiments of Wadsworth, who "has shown that to produce a true lobar pneumonia in rabbits their *resistance must be raised.*" How difficult of explanation under the orthodox view and how easy when we realize that the lung condition is merely incidental to the curative reaction in a bacteriæmia! A very large proportion of pneumonias (certainly three-fourths) begin with "a stitch in the side," accompanied with a typical *pleurisy* cough, and it is suggestive that this primary stitch may or may not be on the same side where the future consolidation takes place 36 hours or more away. So that the clinical onset in a large proportion of cases points to the pleura as the primary seat of the disease.

In articular rheumatism the diplococci are localized in the periarticular tissues and a few may be found in the synovial fluid, but there is not the same opportunity to be absorbed and thus reach the general circulation that there is from the pleural cavity. Hence the temperature is caused by the local inflammation and is commensurate with it. Poynton says: "It is difficult and exceptional

to succeed in demonstrating the diplococci in the blood, for they are localized in the various lesions. This can be done, however, when the disease is very severe and *generalized*." In explanation of this generalized form he says: "The malignant type is best exemplified by certain cases of rheumatic endocarditis in which the micro-organisms are not destroyed in the tissues but multiply in the damaged valve and are then disseminated by the blood stream throughout the system. In the most severe form the vegetations on the valves are minute, and yet there are immense numbers of bacteria in them; in those of less severity there are large fungating vegetations in which many bacteria may be present but in which many may be destroyed." Now vegetations, whether minute or large fungating growths, are chronic processes rather than acute, and no organism except the tubercle bacillus or the other chronic miasm, the syphilitic organism, has been found as a causative agent. But these wart-like vegetations are characteristic of the tubercle bacillus, and furthermore the tubercle bacillus has actually been found to cause them. Poynton incidentally remarks that "in man early endocarditis, whether pneumococcal, rheumatic, or staphylococcal or *tuberculous* in causation, has much the same superficial appearance; yet the diseases are widely different." Is it not plain that the chronic condition, i. e., the tubercular vegetations, is the nidus upon which the three acute processes become engrafted? While rheumatism is more frequently associated with endocarditis, pneumonia comes next; and pneumonia is said to be the cause of about 20 to 25 per cent. of all cases of endocarditis. But endocarditis may be found in septic processes of many sorts and in the specific diseases, scarlet fever, typhoid, dysentery, gonorrhœa, etc. The conclusion seems warranted that this localization in the endocardium in these specific diseases occasionally is due to a previous simple endocarditis which, like simple pleurisy, is doubtless always tubercular. In the endocarditis said to be caused by pneumonia we have hitherto mistaken the effect for the cause, for the consolidated lung is secondary to the pneumococcæmia. For we have already learned from Poynton that even though the vegetations are minute, "yet there are immense numbers of bacteria in them," and that they "are then disseminated by the blood stream throughout the system," and that in the "severe and generalized" cases the diplococci can be found in the blood. In those with a good reaction this pneumococcæmia or diplococcæmia would be followed by marked leucocytosis, which in turn would tend to cause coagulation in the lung as already shown. For the same reason we might predicate that "rheumatism" with such an endocarditis might be complicated with consolidation in the lung. "Pneumonia," says Poynton, "occurs in the severe type of acute rheumatism." In the absence of joint symptoms, suppose this case is seen for the first time after consolidation in the lung has occurred. Would it not be a case of pneumonia complicated with endocarditis? And if there happened to be joint symptoms also, it would be called

pneumonia complicated with acute arthritis. Musser says, "Acute arthritis, as a complication in pneumonia, has long been recognized, but was classed by the older writers as rheumatism." Further, Musser calls attention to the frequency with which endocarditis is overlooked in pneumonia and quotes the findings of twelve clinicians, including Osler, which aggregate 504 cases, 114 of which had endocarditis, or 22.6 per cent. From my point of view this is to be interpreted not as a complication of pneumonia, but endocarditis, followed with a solidification of the lung incidental to the bacteriæmia. Musser makes the interesting observation that "acute endocarditis may occur in animals experimentally inoculated with the pneumococcus, *but generally only if the valves have been previously injured.*" The italics are mine. The inference that acute endocarditis in man is secondary to a previous injury from a tubercular infection is thus corroborated experimentally, and it is all the more conclusive as evidence that the experiments were not undertaken to prove that fact. The question naturally suggests itself: Have we any actual evidence of these minute vegetations in the absence of rheumatism or pneumonia? I will answer this by quoting from Osler: "Simple endocarditis is characterized by the presence on the valves or lining membrane of the chambers of minute vegetations, ranging from one to four mm. in diameter, with an irregular and fissured surface, giving to them a warty or verrucose appearance. The vegetations are on the line of closure of the valves. . . . . As a rule no organisms are found in the simple endocarditis in many chronic diseases, as carcinoma, tuberculosis, nephritis, etc. . . . . The great majority of the cases are latent, and there is no indication whatever of cardiac mischief." Now, inasmuch as tubercle bacilli have actually been found to be the cause of these vegetations in certain cases, and they are found "in many chronic diseases," including tuberculosis, I do not see how the conclusion can be escaped that they are practically always of tuberculous origin. Fortunately I can quote experimental evidence concerning the joints: Schueller, in support of the tuberculous theory of joint inflammations, rendered guinea pigs and dogs tuberculous by the injection into the lungs of tuberculous sputa and by causing others to inhale the same material. He then wrenched and strained the knee joint, and in the greater proportion of cases a fungous synovitis, sometimes attended by suppuration, followed. The same wrenching and straining in the knees of healthy animals did not induce disease of the joint. Hueter demonstrated that tuberculous matter injected into the joint will cause a fungous hyperplastic synovitis, and Koenig, by introducing the fungous proliferations of synovitis into the general circulation of animals, caused general tuberculosis. Rosenberger has shown that tubercle bacilli are so frequently found in the blood that this may be used for the diagnosis of tubercular infection even early in the disease. Now the experimental wrenching and straining is easily paralleled in the vigorous play of childhood, e. g., the jumping from considerable heights on hard pavements might easily cause contu-

sions that would favor the lodgement of tubercle bacilli. But how account for the tubercular vegetations on the valves of the heart? Recall the fact that "the vegetations are on the line of closure of the valves." The rhuematic subject in contrast with the pneumonia subject has usually a high blood pressure. This implies an enlarged and vigorously acting heart. It is the increased violence of the closure of the valves, due to the high blood tension, that has the effect of a contusion and favors the lodgement of the bacilli. If this violent closure can be recognized as an accentuated sound by applying the ear (and of course it can) it would be surprising if the valves were not damaged. While this matter of blood pressure is of great importance in determining the location of tubercular infection I can only call attention here to the contrast between the two diseases under consideration. But this contrast is as significant as the analogies. High blood pressure increases the flow of serum into the pleural sac and conversely low blood pressure decreases this flow. When the flow is copious the tubercle bacilli can not get a lodgement, but when the flow is diminished, shallow, as it were, the bacilli that are carried in by the serum become stranded, and especially at the apex of the lung, for gravity carries this downward immediately, and this would be the shallowest spot on the whole pleural surface. I am confident that this is the real explanation of the apex being the point of election in tuberculosis of the lung. (While in cattle the point of election is the caudal lobe, yet in them it is the *highest point.*) The pneumonia subject is very prone to tuberculosis of the lung, while there is a well-founded belief that rheumatism is antagonistic to pulmonary tuberculosis. The explanation is obvious in the light of the above. The mortality from acute rheumatism is from 2 per cent. to 3 per cent., and usually from endocarditis. The rheumatic subject is very likely to die of chronic heart disease, and we know that the mortality from heart disease is increasing, thus paralleling the increase in the mortality from pneumonia. These questions are puzzling the medical world, but I believe the explanation lies in this: Fewer people are dying of tuberculosis of the lungs, which would leave more to die of other manifestations of tubercular infection.

How does this view of rheumatism square with the clinical facts? Poynton, who believes he has found the specific cause in the diplococcus rheumaticus, is evidently not entirely satisfied with his own view of the disease as one of the specific diseases. For he says: "Neither the term acute rheumatism or rheumatic fever is satisfactory, and we clearly need a general term corresponding to tuberculosis." This shows how near he was to solving the problem of the nature of rheumatism and yet just missed it. "The onset of rheumatism," he says, "especially in childhood, differs widely in its characters. Thus it may be insidious and preceded by a period of indefinite illness which can be but compared to the gradual failure of health that so frequently precedes acute tuberculosis." Why he failed to suspect that these symptoms which "can only be compared"

to the early symptoms of tuberculosis may actually be due to tubercular infection would pass understanding if we did not know how blinded we all may be to the most obvious truth by reason of false preconceptions. I could adduce other quotations equally significant as finger boards pointing to tubercular processes as the underlying factor in "rheumatism," but this paper is already too long to permit.

To recapitulate: (1) Pneumonia and Rheumatism are not specific infectious diseases, but both are usually dependent upon and secondary to tubercular vegetations or lesions on the pleura, pericardium, endocardium or periarticular tissues.

(2) The streptococcus normally present in the mouth and nasal cavities is the most frequent secondary invader of this abnormal tissue, but staphylococci, and the specific micro-organisms of typhoid, diphtheria, gonorrhœa, etc., may also cause acute conditions as secondary invaders.

(3) Whether occurs the symptom-complex called "Pneumonia" or the one called "Rheumatism" depends upon the accident of the location of the tuberculous tissue.

(4) If situated on the pleura, "Pneumonia" is the diagnosis, provided consolidation occurs; otherwise it is called pleurisy.

If situated in the joints alone or in connection with the endo- or peri-cardium, it is diagnosed "Rheumatism."

If on the endocardium alone, and is not followed by consolidation of the lung, it is called endocarditis, but if consolidation follows it is erroneously called "Pneumonia," complicated with endocarditis.

1156 Sutter Street.

CANCER OF THE MOUTH AND TONGUE.—In a series of cases taken consecutively from the records of the Massachusetts General Hospital, 112 operations upon cancer of the tongue and mouth resulted in sixteen cases free from recurrence over three years after operation (14.2 per cent.) (all supported by pathological examination of the tissue.) Of 57 cases of cancer of the tongue, ten, or 17.5 per cent., were cured by operation. Local recurrence of the disease occurred more frequently than recurrence in the lymphatic glands alone. In only one case did recurrence make its appearance at a period of more than three years after operation.—Warren. Annals of Surgery.

PROGNOSTIC VALUE OF CUTANEOUS TUBERCULIN REACTION.—"If in a healed case the last outflow of toxin from the tuberculous focus into the serum had occurred within a year's time, it is likely that the cells of the body would still be sensitive and capable of responding by local reaction to tubercle toxin applied locally. If, however, more than a year had elapsed since the last outflow of toxin from the focus, the cells will have lost this condition, or, in other words, have returned to their normal condition, in which state there would be no reaction to the local application of the specific poison. In apparently healed cases, then, that give positive reaction to one hundred per cent. O.T., we may conclude that there has been activity with outpouring of toxin within one year, and that with apparently healed cases giving no reaction to one application of one hundred per cent. O.T., there has been no activity within one year. The test, therefore, in these cases becomes of prognostic value."—White and Graham, The Journal of Medical Research.

TRAUMATIC INSANITY.*

By J. Richey Horner, A.M., M.D., Cleveland, Ohio.

Mr. B., a strong, healthy man of fifty-four years, a teamster for a lumber company, was struck by a rapidly-moving train and thrown a distance of thirty feet, more or less, alighting on his head. He was taken to a hospital where he lay unconscious for several days. During this period, he was at times wildly delirious but finally regained consciousness with no recollection of what had happened.

The surgeon in charge had diagnosed a fracture at the base of the skull but was unable to demonstrate the presence of other injuries. There was no external evidence of cranial injury. The patient was discharged from the hospital apparently well but immediately began to show a considerable change in his character and habits. He became careless in his dress, very active and restless, excited in speech and very often talked to himself, his talk at times being incoherent.

After a time he reported at the lumber yards for work and was given light jobs about the yard. He was not satisfied with this and soon became obstinate. Because of his obstinacy and suspiciousness, he took offense at the foreman of the yard, charging that he was in a conspiracy to keep his horses away from him. At times he became very abusive and quarrelsome, so much so that the men became afraid of him. This continued for a number of months, gradually becoming worse.

At the time I first saw him, some six or seven months after the injury, he had developed distinct hallucinations of sight and hearing. He said that he had frequently seen his dead daughter in the stove and that she had talked to him very distinctly. He said that Jesus Christ had talked to him, and described his dress and appearance. He complained that his wife had tried to cut off his head and take out his brains.

His actions in the house were unusual. He would not help himself to food at the table. He was quarrelsome and eccentric. One time he kept putting wood into the stove until he had the whole top red hot. When his wife remonstrated, he attacked her with the poker. His whole conduct was directly contrary to what it had formerly been, for he was a most careful, kind and frugal man, attentive to the wants of his family.

Physically, he was in a normal condition. Neurologically, he showed some changes. The pupils were unequal as was also the response of the patellar reflex. He had some ataxia and some few tremors. His memory became poor and his mental action slow.

His suit for damages from the railroad resulted in a verdict in his favor for eight thousand dollars. His condition since the trial of his case is steadily growing worse.

*Read before the American Institute of Homœopathy, 1909.

Mr. U., an engineer on a tugboat, was violently struck upon the head by a large piece of a broken iron cleat. He was rendered unconscious for a short time but shortly regained consciousness and seemed but little the worse for the injury.

After a few days, however, he developed epileptic seizures which continued with great severity for some months or until his skull was trephined, after which he had them no more. From the Marine Hospital, where the operation for trephining was done, he was taken to the State Hospital for the Insane. His medical certificate says "he has delusions of grandeau; is incoherent; has insomnia; has muscular twitching, etc."

Upon admission to the hospital, neurological examination showed "marked tremor of the facial muscles and hands. Knee jerk exaggerated. Sluggish reaction of the pupils to light, left more affected than the right."

Mental examination: "Patient is in very much enfeebled physical condition; confined to bed part of the time, but is restless and disturbed, getting out of bed, destroying clothing, etc., except when under constant observation of the nurse. Appetite fair, sleep undisturbed. Habits tidy with the exception of being destructive. Facial expression confused. Disorientated as to time and place. Consciousness clouded and has no insight into his condition. Shows marked amnesia for recent and remote events. Talks in slow, hesitating manner and in whispered tone most of the time. Answers questions unsatisfactorily, apparently unable to comprehend them, but will answer in an unintelligible and incoherent manner. Attention very much impaired and presents general mental symptoms of progressing dementia. Manifests no particular delusions of grandicose character other than feeling of well-being physically. No hallucinatory disturbances present. No history of alcoholism or syphilis obtained. The demented condition of patient, with facial expression, speech defect, tremor of facial muscles and reflex disturbances are suggestive of General Paresis. Prognosis unfavorable."

The last report on the clinical chart of the hospital says: "November 18th, 1908, still continues restless; almost impossible to keep him in bed. Is apparently exhausting. Marked dementia."

At the time I saw him, he was very restless, trying to get out of bed, talked incessantly, incoherently, could not answer questions, was much emaciated, in fact seemed about to pass into the last stage of paresis.

Trauma has long been recognized as a possible factor in the production of insanity, though it has been concluded that there is no particular psychosis resulting. The so-called Post-Traumatic Dementia is no longer recognized as a distinct form. By many authorities, the blow on the skull is simply recognized as reducing the personal resistance of the patient to disease. This opinion, however, is by no means universal among alienists. Some twenty years ago, observers reported definite histological changes following trauma, consisting of marked sclerosis with local hyaline and fatty degenera-

tion in the entire arterial system, particularly in the brain and spinal cord. Ten years later, there was described a clinical symptom-complex following severe trauma, characterized by memory defects, irritability and seizures similar to those of dementia paralytica.

Mickle, in Tuke's Dictionary of Psychological Medicine, cites four varieties of mental disorder which may result from cranial injury. These are, Functional, (melancholia, acute, hallucinatory, stuporous), Paranoiac, traumatic and organic brain disease as traumatic dementia, general paralysis of the insane, organic epilepsy and functional neuroses with mental symptoms.

In many cases we will note a febrile disturbance preceding the outbreak of mental symptoms. Or the attacks may develop as a circular form of insanity.

The pathology is not definite in character. The pia mater may be torn from the cortex and by thus disturbing nutrition, we get death of that area of the brain. Or there may be diffused clots under the pia, the bruise of the substance of the convolutions affecting the small vessels and the myeline sheathes of the nerve fibre. In the attempt of the tissues to remove morbid products of traumatism, the tissue is increased in quantity; then follows local sclerosis extending some distance from the seat of the injury.

In the operation noted in the second case quoted, there was found quite extensive adhesions at the seat of the injury.

Quite different opinions prevail as to the frequency of the prevalence of this form of insanity. Clouston says that only one-third of one per cent. of the admissions to the Royal Edinburgh Asylum are due to trauma, while a leading German authority estimates that the percentage is 4 3-10 in trauma alone and 5 8-10 when complicated with other cases.

An interesting fact is that alcohol aggravates the mental symptoms of this class of cases and also that there are many cases which have no history of alcoholism preceding the accident while there develops afterwards the desire for that beverage.

Cases also are on record of the development, after a cranial injury, of distinct paresis but lacking the usual progression of the motor symptoms. The mental symptoms alone are in evidence.

LUDWIG'S ANGINA.—The condition known as Ludwig's Angina is a rapidly spreading cellulitis, beginning in the region of the submaxillary salivary gland as a perilmphadenitis, and extending to the floor of the mouth and pharynx. The primary focus is some neighboring surface lesion, as a carious tooth, tonsilitis or ulcer in the mouth.

The infecting organism is, usually, the streptococcus, alone or mixed with other organisms, as the staphlylococcus, pneumococcus, or bacillus of malignant œdema; but it may be the staphlyococcus alone or any organism capable of producing a rapidly spreading cellulitis.

Death results from invasion of the larynx in most cases. In a considerable number the lungs are also involved. The associated septic intoxication is, probably, no more severe than that which results from streptococcus infections of the same grade in other parts of the body —Thomas. Annals of Surgery.

A PATHOLOGIST'S VIEW OF HOMŒOPATHY.*

By W. H. Watters, A.M., Ph.D., M.D.,
Professor of Pathology, Boston University.

Many persons have in the past answered with varying degrees of success the self-propounded question, "What is homœopathy" The subject has been discussed from many different viewpoints, by both the layman and the physician. One of the most able of the answers to the query will be found in the presidential address delivered by Dr. Sutherland at the Niagara meeting of the Institute in 1904. More recently, Dr. Copeland, now of New York, has covered the field in a very comprehensive manner by his numerous addresses on "the scientific reasonableness of homœopathy." The majority of the answers to the question have been along lines distinctly clinical, although not a few have gone into the realms of philosophy, and some almost into mysticism. Clinical results are certainly the crucial tests of all systems of cure and upon these a method of treatment must stand or fall. Along these lines it would be presumptuous for me to speak to this audience except by giving those old and oft repeated facts with which you are all so familiar and where any original ideas could not be introduced with authority by one who is not a clinician.

It not infrequently happens that various persons in approaching the same object by convergent routes see that object in different ways and are able to portray to others phases that from their position would be otherwise unseen. The question of homœopathy, therefore, has been approached from many sides in the past, but unless a mistake has been made, the viewpoint of the exclusive worker in pathology has never yet been given. It has seemed wise, therefore, to look at the question from such a point and to inquire how much of the subject will appeal to the pathologist as capable of demonstration or as in accordance with demonstrable facts.

As an introduction to the subject may a few personal notes be pardoned explanatory of my early attitude toward the entire matter of drug therapeutics. As the son of a physician who graduated from a non-homœopathic college but who early became a homœopath by conviction, my early training gave familiarity with the medicines used according to the law of similars. As a graduate of an university where all teaching and traditions never favored homœopathy the reverse side of the picture was exposed. Later, during a course at an homœopathic university where all possible spare time was passed in laboratory work, not a great impression was made by materia medica or its clinical application, in spite of very excellent courses of instruction. As a graduate, therefore, never having tested and never intending

*Read before the American Institute of Homœopathy.

to test the clinical application of drug therapy, an honest skepticism was the attitude reached. During the past twelve years of exclusively laboratory work it has been necessary to keep in touch with the results of other investigations along the line of my particular specialty and its allied subjects in various parts of the world. In these years the principles of homœopathy have been more and more brought to the front as discovery after discovery has shed enlightenment on some of its contentions that formerly had been obscure. The result is that the skepticism has entirely disappeared to be replaced by a firm and steadfast belief that the statements made by Samuel Hahnemann scores of years ago are in their essential features not only true but are now becoming capable of actual laboratory demonstration. In other words, I have by laboratory and allied study become convinced that the phrase *similia similibus curentur* stands for a great principle not only in connection with drug therapy but probably applicable to many other remedial agencies as well. I believe that the production of immunity, that goal so ardently striven for by the dominant school in medicine, has been, is now, and will be in the future attained largely, if not entirely, by application of the same principle that underlies the homœopathic faith.

I do not claim that there are no errors in homœopathy, nor that we have in our ranks no fanatics or faddists. No mortal is omniscient in his interpretation of the facts of nature. We must always make mistakes. What I do believe, however, is that all classes of medical thought are insensibly growing together and that the new product of this growth is very closely approximating in its principles the ideas of homœopathy that are so familiar to you all.

In presenting my reasons for these beliefs it seems advisable to examine the various associated peculiarities of homœopathy and to see how far they are now capable of defense upon distinctly scientific grounds. These, it seems, are capable of division into five groups:

The single remedy.
The proving of drugs.
The size of the dose.
The frequency of repetition.
The law of cure.

The Single Remedy.

Taking these *seriatim,* let the single remedy be first considered. When Hahnemann, disgusted with the medicine of his day, introduced his famous law, polypharmacy ran riot throughout the world. Medicines of the most repulsive and nauseating materials were compounded, often including fifteen, twenty or more ingredients in varying proportions. One of his first acts was to insist on the use of but a single remedy at any one time, claiming that only in this manner could we know of

the curative powers of the drug. Since then homœopathy has firmly and steadfastly opposed combinations of drugs. The result is familiar to you all; polypharmacy is practically a thing of the past, its folly is admitted by adherents of all schools of medicine. Modern laboratory research shows that while we may know the effect of three or more drugs given singly, there is no way of definitely knowing from this what will be the result when they are combined in any of the various ways. This result will not be the combined effect of them all, neither may it be that of any one, but is frequently something quite unlooked for. The tenableness of this ground, so strongly held by Hahnemann and his followers, is, in this day, certainly amply proven, and the most strenuous defenders now come from the very sect that in early years so actively derided the idea. Let any who question this statement refer to a paper recently read before the Suffolk County Society by one of the professors of the University of Pennsylvania, in which a very strong plea was made for the single remedy as opposed to combinations. Time forbids further reference to it. Here, then, there can be no debatable ground.

The Proving of Drugs.

In the next section there may be opportunity for discussion. This section has to do with the proving of drugs. It is an unnecessary task to recall to this audience the classic studies of Peruvian bark that opened the door to the construction of an entirely new materia medica. Homœopathy has always advocated as one of its most important beliefs the proving or testing of drugs on the well and the systematic recording of the symptoms thereby induced. True, there are some among us that carry this symptomatology to what many others of our number consider an extreme, and in this way have filled our materia medica with much that is of questionable value or authenticity. But on the general principle we are all agreed, that for the successful use of medicines on the sick we must first know their action on the well. This principle has not yet been generally admitted by the whole of the dominant school, although many influential individual members are coming to recognize its value. Formerly all such tests were made under ridicule, but during the past decade great concessions have been made in this respect; that is, it is now generally admitted that animal experimentation cannot be carried on too extensively in our study of drugs prior to using them for therapeutic purposes.

Much could be said concerning the uselessness of the old empirical methods of drug study. Any materia medica will show it in practically all parts. The vagaries, the fashions, the vogue of certain drugs, here today, gone tomorrow, resurrected the next in a never ending circle of change, form spectacles that must be disconcerting to any honest seeker after truth. So unsatisfactory is the condition that one of the most distinguished

of the clinicians of that school has recently stated in public that "he knows his materia medica best who knows what to distrust"; also that with the exception of about half a dozen drugs, the remainder is probably largely useless or worse. Compare this helter-skelter pursuit of the will-o'-the-wisp with its yearly and almost monthly changes with the fixed, uniform guide to drugs that we find in our homœopathic materia medica. True, here also much is still wanting, but we have at least a clearly defined plan that we follow year after year.

This cannot fail to produce, not continual vacillations like the continual, quivering Brownian motion, always moving but never progressing except by accident, but a steadily improving and more complete knowledge of drugs and their action. Looking at this phase of the question from the standpoint of the laboratory worker to whom order, regularity and accuracy must be paramount, but one attitude seems possible: that which indorses to the fullest the aims, but perhaps not always all the published results, of those who strive to ascertain the exact effects of these medicinal substances on the human body. In other words, the exact scientific manner of determining the effect of drug action seems to be by that means that we know as drug proving or drug testing, never omitting, however, animal experimentation and any other form of study. By this means we avoid the criticism that one of the dominant school physicians recently made of his own methods when he said that the use of drugs at present consists in putting substances of whose action we know little into bodies of whose action we know less.

The Size of the Dose.

The next division of the subject has to do with the size of the dose. Granted that this in its correct sense has nothing to do with homœopathy, yet we must confess that in actual practice it has divided our school into two widely separated camps. Years ago it was common to hear the joke about the absurd dilutions of homœopathic drugs, a drop in a bucket, in a barrel, in a lake or in an ocean being favorite illustrations. Today one seldom hears this criticism used by any intelligent physicians. You ask why? For the very simple reason that these intelligent physicians are now themselves using the drop in a bucket or in a barrel, and are wondering if even this is to be the limit to their dilutions. Those who came to scoff have remained to pray. What ardent homœopath of a decade ago would have ever anticipated hearing Trudeau, Wright, Denys, Pottenger, Baldwin and a host of others advocating and using potencies corresponding to our 6x, 8x or even 10x. Such is the case, however, at the present time. Almost without exception the dosage of a half century or less ago has been very greatly reduced in size. To such an extent is this true that where was formerly given grains or grams of a drug, now tenths, hundredths or thousandths of that amount are loudly lauded. Employment of dilutions cor-

responding to our third or fourth decimal is now by universal consent accepted by all, the world over, for many drugs, while in the various forms of vaccine work now offering such a hopeful future there are daily used amounts corresponding to the 6x, 8x, sometimes even the 10x. The dilution of tuberculin is a practically perfect illustration of the adoption of an homœopathic method. So accurate is this that a recent writer in the Cleveland Medical Journal (not homœopathic) openly advocates calling the various strengths 3x, 4x, 5x, etc.

Time again forbids further elaboration of this matter, although many authorities could be quoted at length in corroboration. Let me merely add in this connection one word of caution for our benefit. For ten or fifteen years the dominant school honestly believed that the 6x of any material could not contain any demonstrable substance. Now they are just as certain that it may, and are compelled to retract the many arrogant statements then made, much to the amusement of others. Let us not make a similar mistake. We believe in our low dilutions, but many cannot honestly accept the statements of our friends who are called the "high potentists." We cannot conceive, perhaps, that any substance diluted to the 200th or 1000th centesimal can be effective as a therapeutic agent, and if we cannot, well and good. But let us not try to force almost with physical violence our opinions upon those who happen to think otherwise, as it may be that time will prove that we also have been mistaken in our ideas and that we have done something to obstruct progress just as has been undoubtedly the case with our friends of the opposite school.

The Frequency of Repetition.

The frequency of repetition of the dose, our next topic, needs but brief consideration here. The homœopathic principle is to repeat the dose when we think that the action of the preceding one weakens, or when we wish to add accumulative action by giving frequent small doses. It would have been a surprise to us ten years ago to read in non-homœopathic journals articles advocating the use of medicaments in 4x, 6x, or even higher dilutions at intervals of one, two or three weeks. At present, nevertheless, tuberculin is seldom given at more frequent intervals than once in five days, and in some instances once a month may suffice.

The Law of Cure.

The crux of our entire subject will be found in the last section of the division made in the early part of this paper, the law of cure. The other matters are merely subsidiary, but homœopathy depends for its very existence on the truth or fallacy of the phrase *similia similibus curentur.* When first entering laboratory work my personal opinion concerning this phrase was very hazy with a probable tendency to consider it applicable in a number of cases, but very far from universal in its appli-

cation. It was accepted as being the best rule at that time known. Gradually and almost imperceptibly its application has been demonstrated to be wider and wider until at present it is not safe for anyone to say where the limit can be set, or in fact whether there is any definite limit.

My own belief is that the principle underlying the efficacious administration of drugs as used by the homœopath is identical with that law that the dominant school now admit to be their guide, the production of immunity. Probably the work that has given to our friends of the other school in therapeutics greater respect for homœopathy than they have heretofore manifested is that which has originated from one of their own members, Sir A. E. Wright, of England. (Not only respect has been the result, but it has strengthened our own feeble ones, and is undoubtedly partly the cause of the present reaccession of enthusiasm for homœopathy that is spreading over the entire world.) So important is this work that I will consider it in some detail, particularly as it is seen through homœopathic glasses.

Let an illustrative case be taken. A man comes to my laboratory suffering from furunculosis. Specimens of pus are taken and are found to contain staphylococcus in pure culture. A specimen of blood is taken from the patient and tested for its resistance to staphylococcus. This resistance may be found to be .5 (the normal being 1); or in other words, the patient possesses just half the amount of immunity that he should. We therefore say that he is suffering from the disease because his resistance to the causative micro-organism is deficient. My object now is to increase the amount of resistance or the opsonic index, as it is called. I take a culture directly from the patient, incubate it, emulsify, sterilize and standardize it. A small amount of this material, in amount corresponding about to our 5x, 6x, or 7x, is then administered. The result is that for a few hours the opsonic index falls, but soon rises to its former level and rapidly reaches .7, .9 or perhaps 1. Here it stays for a few days, then begins to fall. If when it is at its height a second treatment be given, it will, after another slight fall, reach 1.2, 1.5, 1.8, 2.5 or higher. Coincident with the rising index the clinical symptoms improve or disappear and the patient recovers. The technique is theoretically the same in all the various forms of infection except tuberculosis, where a stock preparation of tuberculin is used for the treatment. Practically, however, we do not now often determine the index, as it is a cumbersome process and can only be made by especially skilled workers. Allow me to say, in passing, that I do personally believe that the opsonic index determined by a careful, skilled laboratory man is comparatively accurate and is capable of giving much information. The clinical symptoms are usually fairly satisfactory indications of the condition of the patient, and as such are carefully watched in every case.

From the theoretical standpoint the beneficent action of vaccines lies in the fact that each treatment makes a very mild but similar disease to that with which the patient is suffering. Convalescence from the mild one confers immunity from the more virulent, just as cow pox is followed by immunity to small pox. The reason for this lies in the well-known biological fact that nature, when injured, repairs that injury in excess whenever possible. When, therefore, this slight form of the disease is introduced she overcomes it by a production of neutralizing or opposing substances called anti-bodies. These anti-bodies very quickly dispose of the disease itself, but in so doing only a very few of them are used, the great majority or the excess produced remaining free in the blood. These free bodies are then carried to various parts of the body, and if at any place they find more of the similar disease, immediately begin to attempt to dispose of this also.

Let it be remembered that this has nothing to do with any school of therapeutics, but is common to all. I use it as a pathologist in common with all laboratory men of all schools. Kindly now look with me for any data bearing on homœopathy. In the first place the medicament is obtained directly from the patient himself and is then, after preparation, reintroduced into his body. This is surely suggestive, at least, of our *similia similibus curentur.* Frequently a stock preparation is employed similar to that producing the disease. Occasionally we get a slight aggravation from the vaccine; this does not mean that the wrong remedy has been selected, to my mind, just the reverse, but is an indication for giving a smaller dose in future, or in words familiar to some of you, "an aggravation from any one dose is an indication to go higher." The fact that if the doses are too large the opsonic index or degree of resistance will be steadily lowered, is also familiar to us in our work with drugs. It has been stated that certain vaccines seem to have special selective powers for certain parts or organs, which will, if proven true, be still another step toward our ideas. This is merely advanced as a possibility, however, for I have not yet found opportunity to test it, and am indeed inclined to question it. The innocuousness of the treatment and the very minute doses are features for which homœopaths have suffered much ridicule in past years.

Without doubt, the most vital question to solve is the possibility that drugs are capable of influencing the resistence, just as do vaccines, too large ones reducing it, too small ones having no effect. If this can be proven the law of similars will rest upon a base that no one can move. The question is unfortunately a difficult one and suitable opportunities for study are few. With vaccines we immunize against very similar organisms where the resistance of the patient to these organisms can be measured. With drugs we immunize against the manifestations of disease, but as yet possess no universal way of estimating the amount of resistance thus produced. Sometimes this can be done in a satisfactory manner, however.

For instance, our drug, hepar sulphur, possesses a reputation of being able to hasten suppuration when taken in the lower potencies. It seemed to me accordingly, that it did so by reducing the opsonic index, and was so tested. The result is that I have been able to find repeatedly a fall in the staphylococcus index following the use of a single dose of hepar 1x, or after several doses of 2x, 3x and 6x. A number of experiments by Wheeler of England, Burrett of Michigan and myself have well demonstrated that phosphorus, echinacea and hepar are able to influence the index in a manner identical to the effect of vaccines. Detailed description of these will not be here given, but the charts will be thrown upon the screen later. In my laboratory in Boston we have also watched the effect of drugs given to patients suffering from infectious disease and found the opsonic index to be influenced just as it has been by the use of vaccines. These studies are merely introductory, but are mentioned to show that as far as they go they agree with our preconceived notions of drug action. If, as seems possible, we can show that suitable persons manifest demonstrable increase of resistance to certain infections after the use of the proper drug in the proper strength, our claim that in those other diseases where we as yet have no means of measuring the degree of immunity the homœopathic remedy is similarly beneficial, will be greatly strengthened and our ground more secure.

Immunization by drugs against large doses of the same drug is comparatively readily induced probably by rendering more resistant the part or parts that are injured when the large dose is used. In order to find what the symptoms that the large dose produce are it must be tested both on animals and on man. Then when a case presenting such symptoms is encountered we can say "blank is a drug capable of producing these symptoms; therefore, if we use it in small amounts we can produce immunity to the particular disturbance by the production of these special anti-bodies."

In the laboratory we immunize by using a small amount of the poison, or a similar one, against which we desire to protect. Why is not the same rule applicable in the clinical realm? If it is scientific in one it must be in the other. Time forbids the elaboration of other allied lines of thought that come to the attention of the pathologist. They can be merely mentioned.

Probably one of the most satisfactory illustrations of the law of similars is seen in connection with the X-ray. Let anyone first make a list of the disturbances that over-exposure to this may cause, such as eczema in its various forms, and all the varieties of skin lesions, even including cancer itself and other manifestations. Then let him compare his list with that for which the X-ray in short exposures is able to cure, not even excluding cancer. The similarity of the two columns will be striking to even the most hurried glance, and well illustrates our

contention that a substance in large amount is able to cause the same or a similar condition to that for which it is curative when used in a less concentrated form. Similarly certain exposures to sunlight act as aids to cure, particularly in tuberculosis. But over-exposure will produce aggravation. Such could also be said of foods, some stimulants and a number of other articles, or to express it concretely, small amounts are beneficial, larger ones deleterious.

The question may now be asked, "After all this discussion what is your idea of homœopathy?" It will be answered as follows: Homœopathy is the term given to a distinct method of using medicinal agents, a method that is based upon sound theories, and one that is yearly becoming more demonstrable by exact science. It is perfectly consistent with known facts, and is probably merely a way of expressing the means employed in reaching the goal of all medicine, the production of immunity. Or in other words, the production of immunity is the name given to the end attained, homœopathy to the means of attaining it. This means, therefore, that the goal of all physicians is the same and the roads to it are very similar. In one, drugs are recognized as important (possibly by some, too important), in the other, hygienic measures exclusively, drugs being practically discarded. Where lies the truth? As usual, somewhere between the two. In the past it is possible that some of our associates, in their ardent and continuous study of the drug immunization, have lost sight of what we might call hygienic immunization. If such has been the case it has been most unfortunate and unwise. It has been, I believe, very limited, however.

It is also not only possible, but certain, that the dominant school in its work with drugs has met with almost uniform failure. So nearly complete has this been that we are now said to be in an age of drug nihilism, merely because the drugs have been incorrectly used. It is not unlike the introduction of tuberculin. This agent was supposed to be the long-looked-for specific for tuberculosis. In the first few years it was widely used in large doses and was found to be often not only useless, but actually unsafe. It was accordingly cast aside as valueless and the nihilistic period came on. Later, after careful study, the dose was reduced to an almost infinitesimal amount, and in this form it is now recognized as a distinctly beneficial agent. In a similar manner, but very slowly, is general medicine progressing. Gradually a more correct appreciation of the sphere of drug action is coming, and the size of the dose and the principle of action are being more accurately determined.

And as this progress in our knowledge becomes greater and greater we see, as never before, that it tends to substantiate the claims advanced many years ago by Hahnemann.

Homœopathists have been reproached by their opponents for being narrow and sectarian, for accepting all things that agree with

their dogma and for overlooking all that tends to refute it. Why was Hahnemann sectarian? Why were Talbot, Chase and the other New England homœopaths in 1876 sectarian? Why are we all sectarian? Was it the wish of the earlier pioneers in the profession? Is it our own wish now? Hahnemann attempted to reform the medicine of his day, but that profession refusing to be reformed, expelled him from its midst. But one thing remained to do, to live and act in accordance with what he thought was right, and if companionship was refused him, to live alone.

Talbot, Chase and those others who, having become convinced of the truth of the homœopathic use of drugs, were expelled from the Massachusetts Medical Society in 1876, after practically no opportunity for defense, did not become sectarian by their own desire, but by stern necessity. The Medical School of Boston University, as well as all other homœopathic medical schools, was founded merely because in no other way could homœopathy be taught. Privileges of such instruction that these men believed to be vital were entirely denied in the then existing medical institutions. Hence there was only one thing possible, to establish their own schools of instruction. In this manner these schools were also compelled to teach all the other branches of medicine in order that their graduates be truly well equipped physicians in all departments. Thus, homœopathy was forced to the change from a specialty in therapeutics (where it did then and still does belong) to a sectarian aggregation.

What more natural than that some of those exiled practitioners, fighting earnestly for their beliefs and with their eyes constantly fixed on their motto of similars, should place undue emphasis upon that motto to the exclusion of all other forms of treatment. This is merely what always happens to those who introduce any new idea in medicine. It is but a temporary attitude which time always safely cures. It is true that we have faddists and fanatics still with us. Where can we not find them in any forms of study? These do not, or at least should not, influence one for or against a cause.

We are asked by the "old school" society whether we practise any exclusive system of medicine. At the present time, with our knowledge of sanitation and hygiene, of dietetic measures, of thermo-therapy, electro-therapy, serum therapy, vaccine therapy, hydro-therapy, of surgery, gynæcology and of preventive medicine, as well as of the action of drugs, how can any honest and intelligent physician in general practice claim that he practises any one exclusive method?

Not every case can be treated homœopathically any more than can every one be subjected to surgical procedures, or to treatment by vaccines or serum. Just as by surgery, however, or by vaccines or various forms of sera, certain conditions can be brought about that will increase the resistance of the patient, so by the proper use of drugs can this resistance be raised in

those diseases where the other means are inadequate, or where for one reason or another they cannot be used. To repeat, then, homœopathy is a specialty in medicine, not a sect, and should be so considered. It differs less from other forms than do many of the specialties from each other. Its aim is the same as is that of the others, the production of acquired immunity to disease, by a definite law, *similia similibus curentur.* This law first applied to drug action is now recognized to be of even wider application, and to include that which we otherwise denominate the production of immunity. When these ideas become accepted by our friends across the line, when they will allow us to hold them ourselves and to treat them as something of which we should not be ashamed, and when they are willing to accord to them the same recognition as is received by other specialties, in which many of their own number may not believe, then, and not till then, let us consider the possibility of amalgamation. It is an indication of gross ignorance to assert that we retain the name merely as an advertisement to the public, no longer believing in the principles of our faith, for while this might be true in some few instances it could not hold good in the thousands of honest, earnest and conscientious practitioners who today hold the banner of Hahnemann. Our belief rests on a base formed by long and successful clinical experience.

This foundation is now being tested by the laboratory investigator and thus far, at least, has not been proven to be anything other than what is claimed. However, all of us are fallible and must expect to make some mistakes in our application of truth. Let us not have undue assurance that in homœopathy we have all the truth, for we certainly have not. Let us also not claim that every feature of our claims is beyond criticism and consider that everything is definite law, for undoubtedly we are making mistakes, as are all others in this world. Let us, however, be assured that in our law we have a good and reliable guide for the use of drugs, a guide that is now being verified in the laboratory by the pathologist, even as it has been verified at the bedside by the clinician for the past many years.

And in closing let me borrow a quotation from the paper of Dr. Sutherland, already referred to: "The separated sect of homœopathy as such, will have fulfilled its purpose when the truths of homœopathy have received the world over explicit and honorable recognition and acceptance at the hands of traditional medicine; and when Samuel Hahnemann, with all his human fallibilities seen and admitted, shall be assigned by traditional medicine his true place as a scientific thinker and experimenter and a benefactor to the cause of medicine. This day has hardly dawned; yet here and there the watchers on the walls see a lightening in the skies of opposition and misrepresentation that have been for a century so dark, and cry to us who listen: 'The morning cometh!' So far as this faint dawn foretells the true

morning, in whose light all men shall fearlessly see the truth, and by whose light all men shall fearlessly follow the truth till all division is merged in brotherly co-operation for the healing of mankind, speed that dawn! For in the day it heralds,

"When no man shall work for pleasure, and no man shall work for gain,
But each for the joy of the working, and each in his separate star
Shall lift the truth as he sees it to the God of Truths as they are."

ALCOHOLISM.

By J. H. Sherman.

At the last meeting of the Boston Homœopathic Medical Society, Dr. Douglass gave us a paper on the above topic, but I failed to get much enlightenment on the treatment of this malady, particularly remedial. The doctor told us that he made use of the well-known nerve sedatives without particularizing or specifying dose.

In 1862 I took up my residence in San Francisco, California. I had an office in a building with several other physicians and among them was one who was physician to the Home of Inebriates. He had "struck it rich" in a gold mine and so resigned his position at the home and introduced me to the trustees as a would-be successor. As the service was gratuitous I had no difficulty in securing it and thought it would serve to help me in making acquaintances and be a stepping stone to something better. And let me say *en passant* that of all the places I was ever in, San Francisco took the lead in the consumption of stimulants. The climate was enervating and stimulants seemed necessary. There was very little intoxication noticeable; the first indication you saw of alcoholism was an attack of delirium tremens. These patients had eaten but little food for some days, were weak, nervous and could not sleep. I began treatment with a full dose of morphine to secure sleep. Sleep is the *sine qua non* for the alcoholic and must be secured or he will die. At that time chloral hydrate was not discovered or I should have used it, for I believe it to be an efficient remedy for securing sleep, but must not be long continued or the chloral habit will be formed, which is worse than the alcoholic. After securing a good long sleep, I began feeding them on strong beef tea or soup with a liberal supply of salt and cayenne pepper. This treatment was followed by a saline purge and a warm bath. I did not cut out the stimulant wholly at first, but gradually reduced the amount so that by the end of a week they got none at all. Why not cut out the stimulants at once? Because many a patient cannot stand it; he will die. This will do for the vigorous young man,

but subjects him to an unnecessary amount of suffering. This suffering, however, may be salutary and for the best good in the end, for the remembrance of it will be likely to act as a restraint upon him in preventing indulgence in the future on the principle that "a burnt child fears the fire." When you get your patient so he can eat and sleep he is practically cured. But to stay cured he needs an immense amount of good moral advice from the physician and friends of the patient and I know of no better place for the patient to get this moral uplift than to go into our Washingtonian Home on Waltham street of an evening and listen to the told experiences of men who have been cured there.

GULLIBLE GUZZLERS.

Special Report of Proceedings of Patent Medicine Guild.

One of the "hits" of the occasion at the annual banquet of the Massachusetts Surgical and Gynæcological Society, held recently, consisted of abstracts from the report of a meeting of "The Guild for the Development of Gullible Guzzlers," presented by Dr. DeWitt G. Wilcox, one of the new members. The full report seems most worthy of reproduction and is here given in full by the courtesy of its author, Dr. Wilcox.

A MEETING OF THE GUILD.

"Fellow members of 'The Guild for the Development of the Gullible Guzzlers,' I greet you. [Great applause.] One year ago I challenged the entire membership of the Guild to a testimonial writing contest. We are here today to enter the contest and crown the victor."

The speaker was the great Dr. R. Free Purse, of Bison, the discoverer of Purse's Favorite Deception and other home-made but profitable discoveries. With a sweeping glance which seemed to say, "I am the discoverer of the great deception; tell all your troubles to me and my clerks will reply to them," he continued: "If there are no suggestions, we will begin the contest:

Rules of Testimonial Contest.

"First—All members of the Guild will be supplied with pencils and paper gratis, but it must be distinctly understood each contestant must use his own imagination and supply his own gall.

"Second—Fifty points will be allowed the contestant who writes the greatest number of testimonials in the allotted time of two hours.

"Third—Fifty points will be allowed for the testimonials which are most ingeniously worded; that is, so written that the gullible guzzler will be impressed with the similarity of his case to the one cited in the testimonial.

"Fourth—If at the end of the two hours' contest, I, Dr. Purse, of Bison, have not won the greatest number of points, I will present to the entire membership of the Guild one year's free subscription to the 'Ladies' Truth Journal.' Are we ready?"

Puffy's Tommy Rot Whiskey.

The contest was about to begin when a little old man in large goggles and a skull cap arose and feebly addressed the chair in a squeaky, tremulous voice: "Mishter President—(hic)—I am Mishter Puffy, the man—(hic)—the man-yer-facter of Puffy's Tommy Rot Whiskey. I wan' ter asch—(hic)—a—a questshun. Are we allowed—(hic)—any points fer produchin' portraits? Portraits is my specialty—(hic)—partic—(hic)—ularly portraits of old folks—(hic). Makes great impreshun on temperance people if you—(hic)—can show 'em portrait of some dead guzzler an' say—(hic)—'He's ninety or a hundred and ten shears old—(hic)—and reached that advanced age by drinking my Tommy Rot Whiskey.' You'll ketch 'em—(hic)—every time."

The President reminded Mr. Puffy that this contest was before the Guild and not before the gullible public, hence portraits would not be admitted in the contest.

Lydia Sinkum's Eagle Eye.

Again the be-whiskered President rapped for order, when a well-preserved old woman, whose age might have been anything from eighty to two hundred years, adjusted her spectacles, straightened her New England bonnet and arose with a jerk, as though impelled by a jack-in-the-box spring. She fixed her eagle eye on the Tell-Your-Troubles-to-Me President and jerked out these sentences:

"Mr. President, as yer allus a-advertisin' what a genuwine friend you be to the women, I am a-goin' ter say a few words before this yere Guild whether you like it or not. P'raps you don't know who I be. Well, I'll tell ye. I am Lydia Sinkum, of New England. I manufacture the vegetable 'goo' for them modest women who don't like ter purchase their highballs and cocktails of male bartenders. When I heard this yere testimonial writin'-bee I jest cum, 'cause I knowed I could do somethin' myself at writin' testimonials. Course, I knowed I couldn't never beat our unselfish President as his testimonials have such a fetching way that the Stature of Liberty would feel sick after readin' 'em stories in the evening papers. I jest have ter cry ter think how self-sacrificin' he be ter spend so much time telling women how many different things is ailin' of 'em, and how many kinds of a father he is willin' ter be ter 'em if they'll only let him, at a dollar a bottle.

"But say, 'Gentlemen of the Guild,' do you know that when it cums ter writin' testimonials offhand, I kin beat the old Golden Recovery man all holler? Why? 'Cause I am a woman and he ain't; leastwise, folks think I am, and I ain't sayin' what I be."

Lydia Was Out of Order.

The President rapped with his golden gavel and said, "Lydia, you dear old humbug, you are out of order."

"Yes, Mr. President, I know I am out of order; that's how I cum ter discover my vegetable 'goo' fer sufferin' women."

The contest then began in earnest. In just an hour President Purse had written ten thousand testimonials, showing what the Golden Goo Recovery had done for him, the newspapers and the undertakers.

At the expiration of two hours the contest was declared closed and the reading of testimonials began. Mr. Hood Wink Sassaprilla, because of his age, was the first to be allowed to read a sample of his self-made testimonials:

Hood-Wink Sassaprilla.

"Dear Dr. Hood Wink:—Last spring while out hunting I was chased by a grizzly bear. I was a great sprinter and felt confident that I could outrun any bear in the Rockies. We ran for ten miles, at the end of which I felt all run down. Had that early spring tired feeling; did not want to eat; legs ached; felt sleepy, but did not dare to go to sleep; had a feeling that something was going to happen. My hair, which is usually very smooth, would not lie down. I sweat easily; the bear touch of anything against my skin was abhorrent. Took two bottles of your Hood-Wink Sassaprilla, which gave me such an expression of distress that the bear mistook it for defiance, turned tail and fled. In two hours I felt like myself. Yours gratefully, NIMROD GREATSHOT.

"P. S.—Have since caught the bear, who will gladly corroborate the above testimonial."

Baldman Hair Restorer.

Mr. Baldman Hair Restorer was then called upon and read as follows:

"Dear Baldman:—I am a rich man, have but one child, a son, whom I intend making my sole heir. Last fall he was cruelly kidnapped; spent thousands of dollars to find him, but to no avail. Friends offered me all kinds of advice. I followed it, but nothing produced the lost boy. I was heartbroken. The detectives gave him up. At last an old woman who used to know the boy's grandmother's aunt by her first husband, advised me to take Baldman's Hair Restorer. I took twenty-five bottles. In the morning I found him in the attic, where he had been playing Captain Kidd. I regard yours as the greatest Heir Restorer in the world. Believe me, a grateful parent, MILLION HEIR BALDHEAD."

Sudden Death to Microbes.

Just then Mr. Puffy sobered up sufficiently to read a few testimonials which showed beyond question the delight which temperance lecturers, eminent divines, editors of religious publications

and members of the W. C. T. U. took in his highly temperance drink, the Tommy Rot Whiskey:

"My dear Mr. Puffy:—Words cannot express my feelings toward you for producing such a glorious temperance drink. (I have had many a 'jag,' but this beats them all.) I am eighty-seven years old and have been married three times. Last month kind Providence again bereft me of my helpmate and thus I was given an opportunity once more to venture upon the matrimonial sea. Most men at my age would have hesitated in taking so dangerous a step, but thanks to your Tommy Rot Whiskey I was able to go through the ceremony with as little thought as heretofore. I now feel confident that with the aid of your whiskey and kind Providence I shall, like that great man, Henry the Eighth, live to meet my sixth wife.

"I am, respected sir, your obedient servant,

"Right Rev. Dr. Slopover."

(To be continued.)

CESAREAN SECTION—McPherson, in the Journal of the American Medical Association, gives what he considers to be the main points brought out by the study of a series of cases of Cesarean section:

1. Cesarean section is the operation of choice when the obstruction to delivery is such that a viable fetus cannot be delivered by the normal passages, and the mother offers a fair chance of recovery.
2. This obstruction need not of necessity be a deformity of the bony pelvis, but may be caused in several other ways, as indicated above.
3. While elective Cesarean section just before labor or at the very beginning is desirable, the fact that the patient has been for some time in labor does not in itself preclude the possibility of doing the operation.
4. The operation requires a particular technic, with skilled assistants, to get the best results, which makes it undesirable to undertake it unless the conditions are satisfactory.
5. These special points in technic are: (a) The high incision. (b) The non-delivery of the uterus from the abdominal cavity. (c) The absence of any method of constriction to prevent bleeding, this not being necesary. (d) The method of suture described.
6. Where the conditions here described exist, and excluding patients who would die whether they had a Cesarean section or not, the results would show a material mortality of not much more than 4 per cent. of the cases, and a still-birth percentage of almost nothing.

The Arlington Chemical Company, in a pamphlet sent to the profession, give some rather critical statements concerning the aspect that various people take of physicians, which seem to be well worth preserving:

If he charges good fees and enforces collection—he's a "Robber."
If he works cheaply and trusts often—he's an "Easy Mark."
If he advertises himself occultly—he's "Prominent in the Profession."
If he's caught doing it—he's a "Quack."
If he sticks to the Pharmacopœia—he's "Ethical."
If he doesn't—he's "Deluded and Deceived."
If he writes all his own prescriptions—he's "Scientific."
If he doesn't—he's an "Ignoramus."

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only, and preferably to be type written—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.
ASSOCIATE EDITORS:
F. W. COLBURN, M.D. C. T. HOWARD, 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, if possible.

HAHNEMANN THE MAN.

When the name of Hahnemann is mentioned in any assemblies of physicians at the present time, what varied mental images are produced! In a meeting of the older school in medicine it will give rise to smiles, possibly ridicule, or at best to an appearance of patient forbearance and toleration. Among our eclectic friends it will suggest a man of ability who introduced into the medical world an important but not universal rule, called the law of similars. To certain societies in the homœopathic ranks the name indicates one, little short of idolized, from whose lips every word, sentence and thought comes as from one inspired and not mortal. In fact, every statement of his that is recorded is taken as the utterance almost of infallibility, irrespective of the fact that it was uttered nearly a hundred years ago concerning a scientific subject and entirely oblivious of the stupendous strides made by that science since then. In short, the attitude is that of one who says: "If the facts are not in accordance with the statements of our founder, so much the worse for the facts."

And then there is another class of societies, led by the American Institute of Homœopathy, where the name of Hahnemann brings up the image of a highly educated man, brilliant in advance of his time, and possessed of unusual analytic and synthetic powers, but one who, nevertheless, because he was a man, was subject to the same possibility of error that all other men are. By them he is recognized to be one of the most brilliant of the earlier physicians but this recognition in no way blinds them to the fact that others of much merit have existed both before and since and that the principle that Hahnemann enunciated by no means includes all that there is in medicine.

In view of these varied images it may be well to look for a few minutes at Hahnemann, the man, apart from his ideas of medicines. in order to measure him by the standard of other men, both those of his own time and others of more modern times.

No one that we know has better summarized the salient facts in a more comprehensive manner than has Platt in a recent number of the Hahnemann Monthly. He says:

"Hahnemann began his education in the schools of Meissen where he studied, and mastered, along with the ordinary school subjects, Latin, Greek, Hebrew, history, physics, and botany. Mastered them, I say, to such a phenomenal degree that at the age of twelve he was teaching a class in elementary Greek.

At Leipsic, his first university, he supported himself by teaching French and German, and by translating from the English, at the same time contributing poems in Latin to the papers.

From Leipsic he went to Vienna, but, for financial reasons left, before taking his degree, to accept the post of family physician and librarian to the Governor of Transylvania, cataloging the governor's famous collection of ancient coins, as well as his vast library, and studying always. Hahnemann in his autobiographical notes says, quaintly, of this period: 'Here I had the opportunity to learn several other languages necessary to me and to acquire some collateral knowledge that was pertinent and still seemed to be lacking in me.'

When he left this employment to obtain his degree, from the University of Erlangen, he was but twenty-two years of age, and was now master of Greek, Latin, English, Italian, Hebrew, Syriac, Arabic, Spanish, German and some smattering of Chaldaic. Hardly what one would style an ignorant man, as he has been represented, when you consider that these languages and their literature were merely added on to his regular studies in medicine and the sciences!"

Following this is given an extensive list of the many translations and writings, mostly dealing with chemical and allied subjects and all requiring extensive laboratory study. His improved methods of analysis in arsenic poisoning, his routine method of analysis for metals and his method of separating arsenic, lead, antimony, silver, mercury. etc., from the metals of the iron group, all attest his originality and genius, for many of these methods are still employed in the original form and unimproved. He had won the respect and friendship of such men as Lavoisier and Berzelius, both of whom spoke of him with high praise.

Such was Hahnemann, the man, a person of exceptionally wide education and of unusual ability. He it was who by his study, investigation and research finally promulgated the law, similia similibus curentur. And he it is whose precepts are still followed at the present day by thousands. Are we, his heirs in medicine, proving worthy of the heritage he left us? Are we progressive, eager to welcome new truths as they are from time to time discovered, willing and anxious to take advantage of all new knowledge and trying to do our share toward reaching the goal of all medicine, the prevention as well as the cure of disease?

In the same article already quoted is another section giving the

author's answer to this question, an answer that, we believe, should well be pondered by all:

"Have you ever come across one of these homœopathic physicians who boasts that he is a true Hahnemannian, that he gives his patients nothing but the single remedy in high potency, who sneers at local treatments, and palliatives, at vaccination, at antitoxin, at antisepsis, almost; who, in short, will have nothing to do with anything more modern than Hahnemann himself? If you have, let me warn you not to accept such a man at his own valuation. He *says* he is a Hahnemannian, you tell him he is not! Such a man represents the class of men against whom Hahnemann fought all his life. Such men made up the medical profession of Hahnemann's day—men who would have nothing to do with the laboratory-working, investigating, experimenting Hahnemann. Hahnemann was almost the first to honestly seek for medical truth by scientific experiment. The men of his time, like the self-styled Hahnemannians of today, were content to rely upon textbooks written a hundred years before, they would have nothing to do with Hahnemann, because he, taking what was good from these books, insisted upon a utilization of later gained knowledge, and the raising of therapeutics, by laboratory work, from chaotic art to a science.

It is not then the man who follows, to the letter, Hahnemann's writings who is a true Hahnemannian, it is the man who, acknowledging Hahnemann's greatness and the truth of his therapeutic law, goes on studying and investigating, adding to his knowledge and discovering new ways and better ways for the alleviation and cure of illness and pain. If Hahnemann were alive today, do you suppose that he would be thumbing over his books of a hundred years ago? The great principle of cure he discovered then, he would be working, with all his wonderful mind, to perfect and develop. He would be living in the laboratories, a laboratory worker, a research student, reveling in the advantages supplied by the new physiologic chemistry and by the microscope."

This idea of Hahnemann is, we confess, the one that we prefer to possess, to think of him as a preëminent student, ready and willing to acknowledge that he was not omniscent, not to consider him a sort of mystic, god-like person who was beyond human frailties and who never was in error. Hahnemann was a great man, an intellectual giant, who if he were living today would be working, toiling, laboring to penetrate more and more deeply into the mysteries of nature and to bring to mankind the boons resultant upon the best of our most recent research.

The Gazette is very glad to learn that Dr. J. Richey Horner of Cleveland has finally consented to act as associate editor of the Journal of the American Institute of Homœopathy. We understand that Dr. Horner will have charge of the editorial part of the Journal. This information gives us much pleasure as we are familiar both with the Doctor's personality and with his pre-eminent ability along journalistic lines.

HOSPITAL MANAGEMENT.

For a considerable length of time our homœopathic fellow-workers in Cleveland have been passing through the most discouraging trials in connection with their hospital. These trials have been of insidious onset, have been bravely borne and now have been finally overcome. As the same or similar conditions are possible elsewhere when circumstances conspire together, it may be wise for other cities to take note of them lest they too encounter similar vicissitudes but unlike our friends in Ohio, prove less virile in the combat.

Dr. H. F. Biggar, one of our most respected associates, was one of the original founders of this hospital and is accordingly in a position to fully understand the true phase of the matter. In a letter printed in a recent number of the Medical Counselor, he clearly explains the entire question, showing that it has nothing whatever to do with any decline in homœopathy or its adherents. The trouble seems to lie entirely in a lack of sympathy and co-operation between the Medical Board and the authorities of the hospital.

The Superintendent was, it is stated, a man who although perhaps qualified as a steward or perhaps as a money-saver, was entirely unqualified to hold with dignity and skill the position of full power. By inference we assume that he was persona non grata to the members of the medical profession and to his associates. Continual friction, both private and public, was the result, with the natural loss of efficiency along professional lines. This man was apparently sufficiently strong to secure the support of the Trustees. It shortly happened that these authorities decided to change the form of the hospital from one strictly homœopathic to one where the dominant school would have the ascendancy; accordingly a medical board was appointed with the members of that school constituting a majority. This the homœopaths strongly resisted. They finally, after vain attempts at amicable settlement, took the matter to law. Judgment was given in favor of their contentions and it is now hoped that all will soon be happily settled.

It is well to note in passing, the ill effects that may result to all concerned when there is continual friction between the professional part and the business part of the management. It further suggests that in selecting new men for trustees, it is not always wise to consider the pocket book only but the fact of the person's inclination and sympathies as well. In this way will be avoided the existence of an institution controlled by persons who are not merely not interested in it but who are even inimical in an active sense. As from many hardships good often comes, so here we trust that not only will ultimate good come to Cleveland but that other similar institutions may take heed of such possibilities and govern themselves in accordance.

UNREASONING FEAR.

Mention has already been made in preceding numbers of the Gazette of the unreasoning fear manifested by the public against leprosy. Thanks to an imperfect knowledge of the disease in earlier years there has been instilled into the minds of the multitude a horror of it probably equalled by no other one malady, with the possible exception of small pox. The results of recent study have disproven many of our old ideas concerning it and have in particular demonstrated that it is contagious to but a relatively slight degree. It would seem that those representing the boards of health of the various states would be, of all others, the ones to fully appreciate its comparative inoccuousness and act in accordance. On the contrary in a number of instances these very boards have demonstrated an almost insane fear or a culpable ignorance of the contagion. Witness, in particular, the death of the Syrian leper due directly to unnecessary exposure caused by the efforts of two state boards each to unload the burden on the other. A later and even more inexcusable instance of apparent blundering has recently occurred. In the present case the patient is a man, a native of the South and a soldier. During his term in the army he served two years in the Philippines and one year in Cuba. He never came into contact with lepers, in fact never saw one. Leaving the army he procured employment in a pulp mill where his work brought him into contact with a very irritating poisonous liquid that caused a severe dermatitis. Going to Washington, D. C., for treatment it is reported that he somewhat jokingly said to the doctor: "I wonder if I have leprosy." A word to the wise is sufficient, so it is said. The physician sent for the health authorities. The first one of these had never seen a case of leprosy, the second had seen some few cases, years ago. They thought it strongly suspicious. They then took a section of skin for pathological examination. The report returned that bacilli of the size and shape of those of leprosy were found. Upon this very imperfect diagnosis the man was quarantined for nearly a year. Early in the spring of the present year a well-known New York dermatologist became interested in the patient and gave him very thorough examinations. As a result he concluded that it was a case of dermatitis induced by the poisonous substances encountered in the mill. He petitioned for release, or failing that, that the patient be transferred to the New York Skin and Cancer Hospital. Instead of cordial co-operation on the part of the health authorities, it is stated that obstacles of all possible kinds were prepared and that they even went so far as to put an increased guard about the man. Finally justice won and he was sent to New York in a baggage car. Here we now learn, convalescence is progressive under proper treatment.

It is inevitable that all of us make mistakes, yet such gross ones as those in connection with this case seem have almost lead us to wonder if the inherited fear of a name so dreaded did not tem-

porarily or even more permanently unsettle the judgment of some very panic stricken officials. It is, to say the least, anything but a credit to the education and dignity of an ordinarily conservative, fearless and upright profession.

AS OTHERS SEE US.

It is always interesting and usually instructive for a person or a nation to temporarily be separated from their personality and to look at one's self through the eyes of some disinterested person. Something of this nature has recently been made possible to the American medical profession. Not long ago the centenary of ovariotomy was celebrated in the United States, to which came representatives of other countries as special guests. Among these was Dr. Pozzi, professor of clinical gynæcology in the College of Medicine in Paris. He has now returned to France and has recently given to the Société de l'Internat des Hospitaux de Paris an account of the impressions derived from his tour and visits to the several cities. Some of these impressions may be of interest. In the first place he locates the surgical centre in Rochester, Minn., where the work of the brothers Mayo receives his highest praise and commendation. He was favorably impressed with the architecture of our hospitals, both the exterior and the interior, but particularly the interior arrangement. The ventilation, the heating and the size and arrangement of the wards are considered an improvement over those of France.

The methods of making appointments to the staffs is deplorable as personal or social affiliations here frequently outweigh true worth or skill. Surely all of us will agree with this most just verdict, as who has not seen the unfortunate effects of our system? Pozzi also considers the rank and file of our men with our four years' course to be inferior to his own with their five years of medical training. He does admit that there is a large proportion on a high level of excellence and some, our leaders, who will give way to none in any part of the world in their respective lines. The spirit of personal interest in our hospitals manifested by the laymen is, he thinks, one well worthy of commendation. Emphasis is placed on the need of more intercourse between France and America in order that the benefits of each be better known to the other. On the whole the report was one with which we may well feel contented.

SIGNIFICANT!—Truly the tide is moving not only toward the Law of Similars but toward infinitesimals as well. In an editorial comment on an article by Dr. Spengler, of Davos, the Lancet (without apparently an editorial tremor) quotes the statement that the antitoxic body described by the Doctor can be recognized in a dilution of 1 in 100,000,000,000. Further, we are told that action in such a dilution is something apart from ordinary chemical action and that Dr. Spengler speaks of an "atomic dissociation" which liberates "specific electrons." Marvelous!—Homœopathic World.

BOOK REVIEWS

The Theory of Ions. A Consideration of Its Place in Biology and Therapeutics. By William Tibbles, M.D. (Hon. Causa), Chicago, LL.D., L.R.C.P.E., M.R.C.S., L.S.A., etc. Rebman Company, New York. 1909.

During the past few years there has been frequent reference in medical literature to ions and ionization As the frequency of such references will probably increase in the near future, a comprehensive knowledge of the subject is essential to the intelligent study of such articles. In the little book now under review one is able to obtain just such an idea in a comparatively short time.

After a preliminary discussion on ions in general, their relation to biology, and to the evolution of organic matter is taken up. Following this is described the influence of ionization on bacteria and other living matter and on growth.

Chapter VI. is of particular interest, dealing, as it does, with the relation to the action of the enzymes, to the antibodies and to the whole broad question of immunity and immunization. It is unfortunate that the author tries at the same time to bring forth arguments for his belief in the possible transmutation of the inorganic into the organic along purely material lines.

In the concluding chapter will be found the following quotation that will not be without significance to an homœopathic audience: "There are forces at present only vaguely understood, forms of matter so subtle that it is almost impossible to say they are material. There are forms of matter like radium, from which inconceivably minute particles radiate at a velocity of two thousand miles a second, and the exhaustion of a minute grain of which would occupy millions of years. The energy radiating from such matter is exceedingly great; and our knowledge of such substances is very recent. As knowledge progresses other forms of force not yet known or understood may come within our cognisance and help to make clear the subject of vitality. It is inconceivable that matter is energy in another form."

While somewhat technical, we believe that the careful perusal of the book will result in a very clear insight into its subject, the theory of ions.

THE MONTH'S BEST BOOKS.

Vaccine and Serum Therapy, Schorer; $2.00. C. V. Mosby Co.
Diseases of the Rectum, Hirschman; $4.00. C. V. Mosby Co.
Studies on Immunity, Muir; $3.00. The Oxford University Press.
Legal Medicine and Toxicology, Emerson; $5.00. D. Appleton & Co.
Diet in Health and Disease, Friedenwald; $4.00. W. B. Saunders Co.
Diseases of Children, Kerley; $5.00. W. B. Saunders Co.
Myoma of the Uterus, Kelley; $7.50. W. B. Saunders Co.

RENAL HEMATURIA.—Unilateral renal hematuria may be due to many causes—as calculus, tuberculosis, new growths, etc.,—which are demonstrable before or at an operation, less often to some obscure condition not ascertained even during an operation, and, in a few insances, the cause has not been found after the extirpated kidney has been subjected to careful microscopical examination.

Such instances of bleeding from apparently normal kidneys have been termed idiopathic or essential hematuria. These cases, however, on microscopical examination usually show some pathological condition sufficient to explain the hemorrhage. The lesions most frequently present in this class of cases is one of isolated patches of chronic nephritis. —Haynes. Annals of Surgery.

ABSTRACTS

DIET IN TYPHOID.—The "Post-Graduate" for July contains a very interesting article upon "Diet in Typhoid" by Houghton. From this the following abstracts are taken: "As typhoid patients are ordinarily fed —with milk, peptenoids and similar preparations—they get less than half enough to produce the required amount of heat, and largely in the form of protein. As a result, we see in a large majority of 'normal typhoids' a mixed toxemia. . . . Does cow's milk, plain or fermented, meet the requirements of the typhoid patient? I do not believe that it does. . . . . The following suggested diet will conform to the former of these requirements. It can be varied according to the taste of the patient, or the desires of the physician. It is composed of one-tenth protein, two-tenths fat, and seven-tenths carbohydrate, and has the dynamic value of about 2700 calories. It is given in hourly doses or every two hours, so that the digestive powers are not called upon for much at any one time. A ten hour rest is given at night.

6 A. M. Two thin slices, well toasted stale bread, with crust cut from ordinary sized loaf. Coffee, 2 flat teaspoonfuls sugar and 2 tablespoonfuls cream.

8 A. M. Oatmeal gruel, containing 2 oz. (before boiling) strained. Small handful of crackers or a Huntley and Palmer biscuit.

10 A. M. Soup containing 3 oz. (before cooking) well boiled rice. Sugar of milk, 2 flat teaspoonfuls.

12 M. Moderate sized baked potato, thoroughly cooked, mashed and creamed, 2 slices of toast, butter to taste, and tea with sugar and cream.

2 P. M. Tapioca pudding containing 2 oz. tapioca (before cooking) and 2 teaspoonfuls milk sugar.

4 P. M. Soup containing 3 oz. (before cooking) well boiled rice and 2 teaspoonfuls milk sugar.

6 P. M. Two slices toast and butter or zweibach, half cup tea and teaspoonful of sugar.

8 P. M. Cornstarch pudding containing 1 oz. of cornstarch (before cooking) and small handful of crackers.

It is quite obvious with such a liberal diet as this, there will be times when the patient will not desire so much, particularly at the height of the disease. To force them to eat is not desirable either for their comfort or welfare. There are many other starch foods which can be substituted to make variety, and in endeavoring to meet the taste of these patients, their appetite is encouraged.

THE PER-CUTANEOUS TUBERCULIN REACTION.—This reaction, otherwise known as Moro's test, seems to be steadily gaining in favor in the eyes of the general practitioner. It shares at the present time with the cutaneous test the popular esteem and is probably of rather more general application on account of the comparative simplicity of its use. The material consists of an ointment prepared as follows:

Tuberculin (old) 5 c. c.
Lanolin (anhydrous) 5 grams.

The inunctions are made on the arm, the chest or elsewhere. After an extensive use of this test Wetzell concludes that the test is not satisfactory in adults as it responds positively in about 70% of these cases that are not clinically suspicious. In children under ten years of age, however, a positive reaction indicates with much probability the presence of some active tuberculous focus. Negative results in patients that are clinically tuberculous is of bad prognostic significance. The degree of reaction in no way correspoonds with the severity of the disease.

SUDDEN DEATH.—It is obvious that emotion, exercise, and exertion are very frequently the exciting cause of sudden death. And a moment's consideration reveals the fact that these are precisely the conditions preceding and accompanying the average surgical operation. The apprehension and fright are very obvious, while the effect of the anæsthetic upon pulse, respiration, skin, and kidneys is precisely that of moderate exercise; furthermore, the effects of long-continued and very serious surgical interference are again pecisely analogous to very severe exertion. We have, therefore, in the routine of modern surgery, reproduced with considerable accuracy the precise conditions under which a majority of sudden deaths occur. Is it not a fair inference that many of the all too frequent deaths said to be due to anæsthesia, are simply coincidental, and would have occurred with equal certainty under any other procedure which reproduced these precise conditions?—Blake. Annals of Surgery.

THE OLD SURGERY.—In the Annals of Surgery, Mears has prepared a long and in most parts a very interesting article comparing the old surgery with the modern. Some parts may be abstracted with advantage:

The sponges, which were universally employed in the wound cleaning, were those gathered from the sea and found in the apothecary shops. Those known as surgical sponges were usually of finer texture than the ordinary bathing sponges. Frequently they were charged with calcareous particles and prickles that were almost microscopic which proved to be irritating to the wound surfaces as well as to the fingers of the assistants using them. The sponges, if of good quality, were very enduring, and did duty for a long period of time. One distinguished ovariotomist was accustomed to replenish his stock of *three* sponges at the beginning of each year. He never used more than that number, and they were always accounted for after an abdominal section, in order to prevent the untoward accident of permitting one to remain enclosed in the cavity when the operation had been completed, an accident which has happened in several recorded and some unrecorded cases. It is known to the writer that after operations the sponges have been used to remove blood from the table, and even from the carpet or floor.

In no way was the absence of regard for cleanliness more forcibly illustrated than in the use of the catheter in hospital and in private practice. In the former the unwashed instrument was frequently used after lubrication with olive oil or simple ointment contained in vessels which had been in use for long periods of time, affording in this way easy access into the bladder of septic germs. In private practice the metal case carried in the pocket case, and lubricated in the home with lard or butter, was used. When the soft or rubber instrument was introduced the walking patient was instructed how to use it, and carried it conveniently coiled up beneath the sweat-band of his high hat, and when used in inconvenient places, lubricated it with spittle.

OPERATION PUNISHABLE AS A BODILY INJURY.—The following is abstracted in toto from the Medical Review of Reviews:

"In 1894 the Imperial Court, the highest court in Germany, decided that it constituted an illegal and criminal bodily injury if a physician performed an operation without the consent of the patient or his legal representative, and in such cases it was immaterial whether the purpose or even the results of this bodily injury were shown to be rational and beneficial to the injured person. A short time ago the court in a similar case confirmed the former decision in spite of the fact that meanwhile serious objections had been raised against this opinion both by jurists and physicians. According to this, surgeons must be very careful in their procedure if they do not wish to come in conflict with the courts and to pay for their good intentions and the success of their art by fines.

They can feel absolved from the duty of asking the consent of their patients or their relatives before undertaking an operation only in cases of unconsciousness or insanity or when there is danger in delay; moreover, there is the danger that many patients will suffer injury on account of this judicial opinion because an operation will not be undertaken at the right time in consequence of lack of consent or will be entirely omitted."

TRYPSIN IN CANCER.—Bainbridge has, in a very comprehensive paper in the Medical Record, given his final report concerning the enzyme or trypsin treatment for cancer. After discussing the subject in much detail, he summarizes by giving a number of deductions. Among these the most important are the following:

That the internal medication with Holadin and oxgall aids digestion and increases elimination.

That lotic pancreatis applied locally clears the ulcerating surface by removing organisms, thus aiding in diminishing the absorption of their products.

That the regime by increasing resistance may in some cases decrease the rapidity of the malignant process.

That control cases given injections of glycerin and water or sterile water alone, plus the regime, did as well as those on the full enzyme treatment.

That injectio trypsini, in some cases, seems to cause more rapid disintegration of (to "liquify," according to Beard) cancerous tissue.

That because of the tendency of injectio trypsini to disintegrate the tissues, it may be a direct menace to life (a) by eroding large blood vessels (when the disease is contiguous to these structures, as when deep in the neck or in the pelvis), thus causing death from hemorrhage; (b) when given in large doses, over considerable periods of time, by overwhelming the system with toxi products (tumor toxin), thus, in some cases, hastening death.

That injectio amylopsini seems to diminish cachexia in some cases, in accordance with the claims of Beard and others.

That the enzyme treatment as administered in the cases herewith reported, and according to the suggestions of Dr. Beard, plus important details of regime, does not check the cancerous process.

That it does not prevent metastasis.

That it *does not cure cancer.*

DIPHTHERIA CARRIERS.—Cohen in the Journal of the A. M. A. draws the following conclusions concerning this subject:

"1. Persons coming in contact with a diphtheria patient frequently have virulent Klebs-Löffler bacilli deposited on their mucous membranes.

"2. Such infected 'contacts' may later develop diphtheria or, remaining healthy, may act as diphtheria 'carriers,' transmitting the bacilli to others who thereupon may develop the disease or may themselves become diphtheria 'carriers.'

"3 To prevent their becoming a source of danger to others, diphtheria 'carriers' should be isolated until bacteriologically clean.

"4. Recognition of the infected 'contacts' must precede their control. This can be brought about only by taking cultures of the throats of all inmates of a house where diphtheria exists.

"5. Little progress need be expected in the prophylaxis of diphtheria so long as we neglect the animate carriers of the contagion."

TUBERCULIN THERAPY.—So much is now heard concerning the value of tuberculin as a therapeutic agent that an abstract from an article by Wright appearing originally in the London Lancet may be of interest:

"In view of the very favorable and, what is almost more important,

uniformly successful results which can, as will have appeared, be obtained even in the most tractable cases of localized tubercular infection by the therapeutic inoculation of tuberculin carried out under the safeguards explained above; and in view of the fact that not less favorable results can be obtained in connection with the treatment of other localized infections by the aid of the corresponding bacterial vaccines I do not hesitate to contend that we have, in the power of raising the anti-bacterial power of the blood with respect to any invading microbe, out of all comparison the most valuable asset in medicine. I would, in view of this new asset in medicine, fain induce the surgeon to abate something from his conviction that extirpation and the application of antiseptics offer in connection with bacterial infection the only possible means of cure. I would have the surgeon resort to extirpation only when the physician tells him that all other means have been exhausted; and I would have the physician assume everywhere the role of immunisator; and I would have him defer handing his patients over to a surgeon before he has tried in every case of localized bacterial infection which is unassociated with immediate risk to life the therapeutic inoculation of the appropriate bacterial vaccine."—Journal of the A. M. A.

VENEREAL DISEASE.—"Of the two diseases, gonorrhea and syphilis, I think it is now conceded by most observers that the injurious effects, immediate and remote, on the person suffering with the disease, are greater from gonorrhea; while the evil results to the offspring are greater from syphilis. Seventy-five per cent. or more of the male population suffer at some period from gonorrhea, and from 5 to 18 per cent. from syphilis. . . . And when the sum of the knowledge of these statistics is placed before us, what is the lesson it teaches? To my mind it is this: Educate the young men and young women, arouse in practitioners a livelier sense of their responsibilities and a desire in them to treat more conscientiously and follow up more diligently their cases of venereal diseases, until they know a cure has been obtained. When I say educate the young men and women, I do not mean to proclaim a subject so unclean from every housetop, but at every proper time and opportunity it should be brought before them with all the force of argument of which we are capable. One of the most reprehensible practices of which medical men in the past have been guilty is the minimizing of the immediate and remote effects of venereal diseases. . . . Young men should be taught that a continent life is not detrimental to health, and to avoid the unclean woman as they would pestilence or plague."—Baker. Medical Record. July, 1907.

THE GONOCOCCUS.—In the discussion of a paper presented last year to the American Medical Association, Dr. J. M. Beffel is credited with the following concrete remarks:

"I believe that the subject of this paper is the most momentous problem we have before us at this time. When we consider that fully 80 per cent. of the abdominal operations performed on women are due to gonorrhea contracted almost invariably innocently on the part of the women; that throughout this country almost 50 per cent. of the men between twenty and forty have had gonorrhea; that it is almost incurable, and that these men are constantly having this morning drop, and are not cured at all; when we look into the structure of the urethra, and realize that it is not a simple tube, but has folds and crypts in it, into which an antiseptic cannot reach at all; that it has twenty or more openings, and that the whole tract may be affected, from one end to the other, and that antiseptics can never reach those recesses, then it seems to me that this problem becomes one of the most important problems we have to meet. I am convinced that the general practitioner is not treating gonorrhea correctly."—Journal of the A. M. A.

GASTRIC AND DUODENAL ULCER.—In the discussion of a paper upon this subject at the recent meeting of the American Medical Association, Dr. Wm. J. Mayo said that "Acute ulcer is not of itself a surgical condition. It is only when such complications as perforation, hemorrhage or obstruction occur that the physician should call the surgeon. In regard to chronic ulcerations, while the improvement between the attacks, which may last for days, weeks, months, and even sometimes for years, is not by any means complete, it is sufficient to give the internist a wrong idea in regard to the cure of the patient, just as in the early days of appendicitis or gallstone disease. The surgeon considers chronic ulcers only those ulcers with thick callus, which can be demonstrated to the bystander within a distance of six or eight feet from the operating table. As a result of operations, it has been shown that chronic ulcers are more frequent in the duodenum than in the stomach, and that at least two patients out of three operated on are males.—Journal of the A. M. A., August 22, 1908.

UNITED STATES PHARMACOPOEIA.—In view of the varied discussions in homœopathic ranks concerning the form of pharmacopœia and the value of various medicinal preparations, the following abstract from an editorial appearing in the New York State Journal of Medicine may be of interest. This will show that among the ranks of the dominant school the same question is being agitated and is apparently provocative of even more discussion than our own:

"The pharmacopœia needs simplification, but this can only be done by co-operation. The medical profession and the pharmacists must come into closer touch if anything in this direction is to be accomplished.

"We are carrying on our shoulders the burden of the past. A text-book of our student days recommends powdered crabs' eyes for infantile diarrhœa and we keep on the pages of our text-books long lists of remedies obsolete this many a day. Students are made to painfully wade through an account of the properties of drugs with their dosage, which no one ever uses. Scientific Pharmacology is still in its infancy, and it is to the medical profession and the laboratory to which pharmacy must look for reform. Our pharmacopœias are too much like the little book of Valerius Corduus. They had to take things on faith in those days, but we have a better way. We have standardized a very few of our more powerful drugs and gained an intimate knowledge of their physiological properties by animal experimentation. The same method might well be invoked for all drugs kept on the active list of the pharmacopœia. Drugs can be proved by actual administrations in our branch of the profession as well as by the homœopaths.

"Therapy, which ought to be the ornament of medicine, as it is its chief function, is still little else than a reproach, and this will always be so until we place the science of pharmacy and pharmacology on a scientific basis and cease to cumber our work with tradition and a mass of useless simples whose vaunted properties are mere nullities and old wives' tales."

It is certainly gratifying to realize that slowly but surely other branches of materia medica are coming to realize that our formerly much-ridiculed methods of proving drugs on the well has much to commend itself to the attention of modern science.

INDICATION FOR ARGENTUM NITRICUM IN NASAL DISTURBANCE.—Coryza with chilliness, sneezing, lacrimation, sickly appearance and stupefying headache over the eyes, obliging her to lie down, in the afternoon; debility; sneezing, then tingling in the nose and posterior nares. Obstruction; at night, with itching, in the room; but in the open air a flow of thin mucus; upper part of nose obstructed. Itching in the nose; smarting; bruised pain in left nasal bones. Sense of smell blunted. Smell of pus before the nose, at night.—Moffat, The Homœopathic Eye, Ear and Throat Journal, June, 1909.

PERSONAL AND GENERAL ITEMS

Dr. H. G. Wells was recently appointed Professor of Pathology in the University of Chicago.

Dr. H. F. Morin, Assistant Superintendent of the Hospital, visited by a circuitous route nearly all of the large cities in the east and in the west as far as San Francisco, also including British Columbia, the Canadian Rockies and eastern Canada.

Dr. M. P. Ravenel, Director of the State Hygienic Laboratory in Madison, has been appointed to direct the only established Wisconsin Pasteur Institute.

Dr. J. P. Sutherland has spent his vacation in camping in the Yellowstone Park and in various parts of California.

Dr. Clarence Crane and family returned early in July to the Doctor's old home in Oregon where the summer will be spent partly in the city, partly in camp.

Dr. M. J. Roseneau, who has for a number of years served with so much acceptance in the Government Medical Department in Washington, has been elected to the position of Professor of Preventive Medicine in Harvard University. Dr. Roseneau has accepted the position, and will probably enter upon his duties in the early fall. His well-known work along the lines of prevention of diseases renders his selection a peculiarly appropriate one, and one that should redound to the credit both of the university and the man.

The Massachusetts Charitable Eye and Ear Infirmary held a formal opening of the Nurses' Home on Thursday, August 5th, at 170 Charles St. To this the profession was invited in large numbers, and a very agreeable reception was enjoyed.

The Bacteriological laboratory that has recently been provided by the Lawrence Health Department is now ready for work. Dr. H. W. Nevers has received the appointment of pathologist and announces that outfits for sputum, cultures, the Widal reaction, etc., may now be obtained in various places throughout the city.

Dr. Charles H. Cooke of Natick has been appointed a member of the State Board of Registration in Medicine, filling the position formerly occupied by Dr. A. C. Walker of Greenfield, who declined reappointment.

Dr. J. E. Sternberg announces that his office is in the Colonial Building, 100 Boylston St. Office hours: morning by appointment; afternoons, 1 to 4 o'clock. Ophthalmology exclusively.

Dr. E. Z. Cole, a graduate of Hahnemann Medical College of Chicago 1879, and Professor of Gynecology in the Atlantic Medical College of Baltimore, died in Baltimore on June 29th from heart disease, supposed to have been aggravated by heat prostration while in Detroit at the meeting of the Institute.

RESEARCH LABORATORY.—The College of Physicians & Surgeons of New York have prepared plans for the erection of a private research laboratory in physiology. This will be built on the roof of one wing of the present college building and will include about twelve rooms for the various lines of research as well as for other operative experiments.

Dr. Anna T. Loring, 10a Park Square, Boston, librarian of Boston University School of Medicine, has resumed confidential collaboration in literary work with physicians preparing papers for societies or for publication. Necessary data furnished, manuscripts revised and typewritten, proof sheets corrected. Especially favorable arrangements can be made during September.

Splendid opening in an University City.—Owing to ill health a large practice among university people requires immediate disposition. A well-equipped man can gain a foothold at once in a well-established practice. Apply at once to Charles P. Beaman, M.D., Ithaca, N. Y.

OREGON HOMOEOPATHIC MEDICAL SOCIETY.—The new officers of this society are as follows:

President, D. O. Webster.
1st Vice-President, A. L. Caulfield.
2nd Vice-President, H. C. Jefferds.
Secretary, A. W. Vincent.
Treasurer, Charles Billington.

Drs. Webster and Billington are both Boston University alumni, of the Class of 1903.

MEDICAL EXAMINATION REQUISITE FOR MARRIAGE.—A law has recently gone into effect in the State of Washington that provides that all applicants for marriage licenses must undergo medical examination to demonstrate their soundness of body. During the first day it is stated that ten couples were discovered possessing physical defects that prevented giving them a license.

TYPHOID MARY.—The woman who has for the past two years been the object of so much interest to the medical world on account of being a typhoid carrier, is still confined at the Riverside Hospital in New York. It will be remembered that during 1907 she was the supposed cause of twenty cases of typhoid fever occurring in seven families in which she worked as a cook. Recently she has petitioned the judge for release. The petition has been refused as follows: "While the court deeply sympathizes with this unfortunate woman, it must protect the community against a recurrence of spreading the disease. Every opportunity should, however, be afforded her to establish, if she can, that she has been fully cured, and she may after further examination renew the application."

The July number of the "Annals of Surgery," which is the first number of the 50th volume, is almost unique among American medical journals. It contains twenty-six articles representing the best selection of papers recently presented at the meeting of the American Surgical Association held in Philadelphia. It is more a book than a magazine, containing as it does, 366 pages with numerous illustrations, charts, etc. The editor, Dr. Pilcher, and the publishers, J. B. Lippincott Company, are certainly to be congratulated upon this issue.

MEDICAL CUSTOMS IN SHANGHAI.—Shattuck, in the Boston Medical and Surgical Journal, gives some interesting "random medical notes of travel." Among these he speaks of the customs in Shanghai. There, instead of charging the family for each call, they are charged a certain fixed rate per year for each member of the family, regardless of the number of calls. The only extra charges are for operations. This, from the patient's standpoint, seems to be a success, as he then knows just what his medical bills will be, and is not compelled to incur heavy expenses from time to time. From the physician's standpoint, it is also desirable, as he is able to receive an assured income, thereby escaping many of the worries incident to professional life in America.

THE NEW ENGLAND
MEDICAL GAZETTE

Vol. XLIV OCTOBER, 1909 No. 10

ORIGINAL COMMUNICATIONS.

A REPORT OF A CÆSARIAN SECTION FOR PLACENTA PRÆVIA.*

By Florence N. Ward, M.D., San Francisco, California.

The patient, Mrs. B., presented the following history: American, age 36 years, married eight years, nullipara. Had always been very well and strong, puberty at 12 years, menstruation had been normal and painless until 21 years of age, when she sustained a severe fall while decorating a church for a wedding. She fell from a stepladder, striking the lower part of her back upon the edge of a pew. She was ill in bed for a long time following the accident and was unable to stand erect for four weeks. After this accident she developed a most intense form of dysmenorrhœa, accompanied by severe premenstrual symptoms, extreme nervousness and insomnia for two or three days preceding the flow, and a severe supra-orbital, left-sided headache lasting for 24 to 48 hours.

When the menstruation appeared the pelvic pain was of such intensity that she was obliged to remain in bed two or three days. The menstrual pain began in the right ovarian region and extended toward the middle of the pelvis and down the right leg, sharp, knife-like in character, accompanied by deep heavy pain in the pelvis and bearing down sensation.

After having suffered this for nine years, with no diminution in the intensity of pain, she came under my care December, 1902. She had been married for two and a half years when I first saw her, but had never been pregnant.

Pelvic examination revealed a retroflexed uterus bound down by adhesions, and an enlarged and prolapsed right ovary imbedded in a mass of adhesions and exquisitely tender to the touch.

Considering the long continuance of the trouble and its severe type, operative measures were advised and accepted. On April 15, 1903, the operation was performed. The operative record reads as follows:

There was first a dilatation and curettement of the uterus, followed by an abdominal section. The right ovary had degenerated

*Read before the California Homœopathic Medical Society.

into a multi-locular ovarian cyst firmly bound down by many adhesions. It was removed, together with the right fallopian tube. The left ovary, which contained a number of cysts, was resected and a hysterorrhaphy was performed, using two sutures of No. 3 chromacized catgut through the fundus of the uterus. Before this was completed a number of small fibroids were removed from the anterior wall of the uterus.

The patient made an uninterrupted surgical recovery, and through the months that followed the operation came the relief of all her pelvic symptoms and the disappearance of her menstrual headache. Occasional examinations of the pelvis showed the uterus in normal position.

Her menstruation appeared regularly until August, 1907, over four years after the operation. Menstruation did not appear in September and clinical symptoms of pregnancy were soon manifest. Pelvic examination confirmed the diagnosis of pregnancy.

Pelvic measurements showed a pelvis above the average: interspinal, 27 c.m.; inter-crestal, 29 c.m.; external conjugate, 22c.m. Through the early weeks of pregnancy there was considerable tenderness and soreness through the abdomen and pelvis, and occasional sharp paroxysms of pain tearing in character.

As pregnancy advanced, these pains disappeared and a normal development of the uterus progressed. The patient was kept under close observation throughout pregnancy to note any abnormality that might result from the suspension of the uterus, but none was observed.

The uterus enlarged as under ordinary conditions. The position of the child was L. O. A., fœtal heart sounds 144, heard to the left and below the umbilicus.

On the 25th of May, 1908, the date of the probable time of labor, she began to have premonitory pains of labor, with the backache and usual pressure symptoms accompanying.

In the evening, while standing upon her feet, without warning, she was suddenly taken with a very profuse hemorrhage. She was immediately taken to the Memorial Sanatorium, and I was hastily summoned.

On making an examination, the cervix was found high up in the hollow of the sacrum. Slight dilatation to admit a finger and a boggy mass could be felt within. Very free bleeding followed the examination. Fœtal heart sounds good and strong.

Dr. Spaulding, Chief Obstetrician of the San Francisco Lying-In Dispensary, was called in consultation. He agreed in the diagnosis of placenta prævia and also that Cæsarian section would give the best results for both mother and child.

The condition was that of an undilated, rigid cervix in a primipara of 36 years with placenta presenting, in whom an alarming hemorrhage had already occurred and where the slightest manipulation brought on a renewal of it. Operative measures were decided upon and preparations were immediately made for Cæsarian section.

Operation.

Dr. Alice M. Goss administered the anæsthetic, Drs. Spaulding and Cameron assisting.

10:03 P. M.—Abdominal incision to the right of the old cicatrix and extending well above the umbilicus.

10:06 P. M.—Longitudinal uterine incision in the median line.

10:06½ P. M.—Membrane ruptured.

10:08 P. M.—Child delivered, cord clamped and cut.

10:10 P. M.—Placenta delivered.

10:23 P. M.—Uterine incision closed by two layers interrupted linen thread sutures.

10:24 P. M.—Uterus replaced in abdomen, omentum drawn down behind the fundus of the uterus.

10:45 P. M.—Abdominal incision completely closed.

The child, which was a girl, weighed six pounds eleven ounces, placenta one pound and two ounces. Both mother and babe progressed normally, the mother having no rise of temperature; milk came freely the third day, and a normal convalescence took place.

It was of interest to note that on entering the abdominal cavity no trace of the previous suspension could be discovered. The uterus was entirely free from the abdominal wall and there was no evidence of the previous suspension ligament. There were a number of small sub-peritoneal fibroids studding the anterior wall of the uterus, but no evidence of adhesions, either on the uterine or abdominal wall, could be found.

Sutures were removed on the tenth day, and the patient sat up in two weeks. Post-partum examination showed the uterus in normal position and well involuted.

This case is reported not only on account of its many unusual points of interest, but also as illustrating the results of primary Cæsarian section when clearly indicated, as compared with the doubtful results under other lines of treatment.

The generally accepted method of treatment in these cases of placenta prævia is the rapid dilatation of the cervix either by manual or instrumental methods, followed by the combined version of Wright and Braxton-Hicks, and either slow extraction of the child according to Fry and DeLee, or else the direct podalic version and immediate breech extraction.

The mortality rate for both mother and child is so high that it yet remains one of the most formidable complications of labor. Most authorities give the fœtal mortality as 50 per cent. or over, Zwiefel's recent statistics placing it at 70 per cent. So gloomy is his prognosis for the child that he advises that in all procedures only the mother's life be considered.

Hammerslag* always tells the family that the child is doomed; he saves only 16 per cent. of the children. In Johannes Füth†

*Medinssche Klink, Berlin, April 26, 4, No. 17.

†Zent. f. Gyn., March 23, 1907.

report of 726 cases, 383 children were born alive and 367 were dead; out of 726 mothers, 143 died.

The maternal mortality has been reduced under aseptic methods to 8 per cent. Edgar's statistics in his 9 cases, which are representative of the best modern work, show a maternal mortality of 11.11 per cent. and a fœtal mortality of 27.23 per cent.

Ross McPherson's statistics‡ are 18 per cent. mortality for the mother and 40 per cent. for the child. "While mortality, on account of hemorrhage, laceration and possible subsequent infection, is very great, it would seem that any method of delivery which offered as a result 40 per cent. of fœtal deaths was open to a good deal of criticism."

When it is considered the many dangers to which both the mother and the fœtus are exposed by the low implantation of the placenta, it is not to be wondered at, the high mortality which ensues at the time of its separation.

Should the child survive the initial maternal hemorrhage it must meet the trauma of the version and rapid extraction, while the mother must pass through the dangers attending uterine hemorrhage, the shock of the version and extraction of the child with the trauma and lacerations usually attending them and, surviving these, the grave danger of sepsis that is so apt to follow manipulations so close to the low placental site. By what method can these dangers be lessened and the mortality rates be diminished? In the treatment of placenta prævia, whenever the symptoms are urgent, the indication will always be *to empty the uterus*—and the more urgent the symptoms, the more rapidly must this be done.

In the lateral, and many forms of the partial implantations, nature will be able to deliver the woman unaided, particularly if the uterine contractions are good and the child's head is driven down as a plug against the bleeding sinuses.

In the central implantation and the partial, when the internal os is more or less covered by the placenta, Cæsarian section presents the ideal route by which the uterus may be emptied with the least danger to both mother and child. As we know, Cæsarian section is one of the simplest abdominal operations, and under aseptic conditions, should give no higher mortality than an ordinary laparotomy. As for the child, it carries no risks whatever, even fewer possibilities than delivery by the ordinary route.

Too long have we regarded the birth canal as the only route by which delivery could be accomplished and have planned all our procedures upon this basis. The perfection of modern abdominal surgery opens a far safer route and one that will yield much better statistics.

Let us consider the conditions that confront us when the placenta lies to a greater or less degree over the internal os. As

‡Journal of American Medical Association.

soon as labor begins, every uterine contraction means a more extensive separation of the placenta with ever-increasing risk to the life of the fœtus. When the area of separation has reached a certain point respiration is cut off completely and the child dies. As for the mother, each contraction opens more bleeding sinuses, which can only be effectually closed when the uterus has emptied itself and obliterated its own sinuses by its muscular contraction.

The mechanical conditions presented are that the child is within the cavity of the uterus, the placenta lies between it and the lower birth canal through which the fœtus must pass to be delivered. Can the life of the fœtus and mother be maintained while this is being accomplished? The more rigid and unyielding the cervix, the longer the process and the greater the danger to both mother and child.

The only rôle the accoucher has played has been that of attempting to hasten the process, to cut short the time involved in passing through the "danger zone." Anyone who has attempted rapid dilatation in these cases knows the furious bleeding that attends each step and the lacerations of the maternal soft parts involved in the rapid manipulations.

By contrast, Cæsarian section offers a much better method; it is rapid, clean-cut and surgical and avoids completely the "danger zone," the lower uterine segment, and if promptly applied in properly selected cases will do much to lower the maternal and infant mortality in these serious complications.

The time is not far removed when the indication in these cases of Cæsarian section will be generally accepted, and it will be considered unjustifiable to inaugurate manipulations upon a cervix with a placenta implanted upon it. Immediate Cæsarian section will be as imperatively indicated as an abdominal section for a ruptured tubal pregnancy.

But these results can be obtained only in maternities where perfect asepsis can be obtained and competent assistants are at hand. The laity must be educated to the idea of the hospital for obstetrics just as they have been trained to the necessity of the hospital for surgical work.

Each obstetrical case requires the same surgical care as does an abdominal section, and there are the possibilities of surgical necessities in every obstetrical case. Dr. E. Gustav Zinke* in his presidential address at the last meeting of the American Association of Obstetrics and Gynæcology, ardently and persistently advocates the hospital care for parturient women if the mortality and morbidity of obstetrics is to be reduced.

In considering the relative values of abdominal and vaginal Cæsarian section for placenta prævia, though some authorities advise Dührssen's method, the advantage of the classic Cæsarian must be apparent.

*American Journal of Obstetrics, November, 1908.

In the vaginal Cæsarian the incisions are made directly in the vascular area, and the manipulations for the delivery of the child must be made directly into this area or the "danger zone" with its tremendous possibilities for septic absorption.

In the classic Cæsarian, which can be done just as rapidly, the incision is made in the body of the uterus and away from the vascular and cervical placental site. Besides which, in the classic Cæsarian, the child is spared the trauma of delivery which must be met in the vaginal route.

Cæesarian section is indicated in all cases of placenta prævia where the internal os is more or less covered by the placenta. Its early recognition and prompt application will save the lives of mothers and children that would be otherwise sacrificed by manipulation through the birth canal.

THE HOUSE-FLY AND TYPHOID.—The Merchants' Association of New York City has recently published a pamphlet upon the house-fly in its relation to the transmission of disease. This pamphlet will be most instructive to all who are interested in general sanitary affairs. A chart which is appended shows the almost exact incidence in time of the greatest prevalence of the house-fly and the appearance of the greatest number of cases of typhoid fever and of intestinal disturbance. These investigations cover two years in time and are most convincing.

The pamphlet also includes an article by Dr. L. O. Howard, of the Department of Agriculture, an abstract from which is well deserving of notice:

"The name 'typhoid fly' is here proposed as a substitute for the name 'house-fly' now in general use. People have altogether too long considered the house-fly as a harmless creature, or, at the most, simply a nuisance. While scientific researches have shown that it is a most dangerous creature from the standpoint of disease, and while popular opinion is rapidly being educated to the same point, the retention of the name house-fly is considered inadvisable, as perpetuating in some degree the old ideas. Strictly speaking, the term 'typhoid fly' is open to some objection, as conveying the erroneous idea that this fly is solely responsible for the spread of typhoid; but considering that the creature is dangerous from every point of view, and that it is an important element in the spread of typhoid, it seems advisable to give it a name which is almost wholly justified and which conveys in itself the idea of serious disease. Another repulsive name that might be given to it is 'manure fly,' but recent researches have shown that it is not confined to manure as a breeding place, although perhaps the great majority of these flies are born in horse manure. For the end in view, 'typhoid fly' is considered the best name."

AMERICAN PROCTOLOGIC SOCIETY. At the eleventh annual meeting of this Society held in June last, the following officers were elected for the ensuing year:

President, D. H. Murray, Syracuse, N. Y.; Vice-President, T. C. Hill, Boston, Mass.; Secretary-Treasurer, Lewis H. Adler, Jr., Philadelphia, Pa.; Executive Council, G. B. Evans, D. H. Murray, Louis J. Hirschman, Lewis H. Adler.

The place of meeting for 1910 will be St. Louis, Mo.

A number of very practical and interesting papers were presented to the Society by its members, the most important of which was perhaps the address by the President on "Progress in Proctology."

HOMŒOPATHY'S DEBT TO REPERTORIES OF THE MATERIA MEDICA.*

By A. H. Tompkins, M.D., Jamaica Plain, Mass.

It was with no little dismay that I learned, some eight or ten years ago, that the Homœopathic Materia Medica was so full of errors that it was of little avail in combating disease, and the various repertories were of no use whatever, as they had been made by men who had simply allowed their fancies to run riot in them. Strange to say, this opinion was not drawn from an opponent of our faith, but came from a graduate of one of our medical schools, who had been so recently within its walls that he spoke with much confidence; and withal his words had such a tone of friendly desire to serve me and bring me later information on these matters than I might then have that I did not feel it would be quite civil to oppose this information by expressing my old-fashioned notions.

He went on, however, to say that he was working into surgery, from which I surmised that a bias in that direction might have made him an indifferent listener to the Materia Medica lectures, all through his course, and the more ready to adopt as truth casual remarks unfavorable to this study and to repertories.

But this incident has dwelt in my mind ever since as an available introduction to a paper on Repertories, should the misfortune of being given the task of preparing such ever overtake me. Doubtless the graduate just quoted was not alone in his poor opinion of repertories to the Materia Medica. On the contrary, there may be many veterans even among us who are as innocent of using such things as they are free of any sense of need of them. Yet I cannot feel sure that our good faith, as practitioners of homœopathy, should not bind us to the use of repertories and to the making of good ones if those we have are held to be unworthy of confidence.

For what is the obligation imposed upon us by good faith when we offer ourselves to the public as homœopathic physicians?

We stand, do we not, as exponents of a system of medicine so different from and so superior to any other that we hold ourselves justified in having founded another medical school upon that difference alone? Should we not then give our patients the utmost advantage of that difference?

Are we not thereby put under bonds to be not merely homœopathic in our professions, but in truth as well, and, that, at least with rare exceptions, we make it evident to our patients that, outside of good care for hygiene, our confident dependence is upon the homœopathically indicated remedy and not upon adjuvants and measures borrowed from another school?

Is not as much as this involved in our position in the medical world?

If you grant so much, and to concede less would not fully

*Read before the Massachusetts Homœopathic Medical Society.

satisfy you I am sure, you grant the duty on our part of faithful striving to bring all the resources of our Materia Medica to the relief of such as seek relief at our hands.

Let us see what this duty toward our patients means for us. Let us observe what is demanded for a true application of the law of similars when these requirements are reduced to their minimum. From the homœopathy of Hahnemann we may subtract every feature regarding which there has ever risen dispute; his doctrine regarding psora and that which teaches the increase of curative power in drugs by dilution or attenuation by other means. This we may do in fact without in the least lightening the labor of an honest effort to practise homœopathy; to practise it according to its basic principles, I mean, and as it must be practised to be efficient. In so doing we shall have a chance to judge whether or not it would be reasonable to expect to handle our Materia Medica efficaciously without repertories.

They, then, who seek to satisfy the needs of the sick through real dependence upon the homœopathic law, have this problem to meet, namely, that every case of true systemic disease be matched with a drug which has proven its power to produce upon the healthy human body closely similar symptoms; similar as to their nature, the part or organ of the body affected, the conditions under which they are made better or worse and, finally, as to mental or other disturbances appearing at the same time with the main disorder.

And not only a similar remedy must be chosen, but the ideal, to the achievement of which our position in the world pledges our utmost endeavor is, that from our list of nearly two hundred proven drugs we should in all cases select the most closely similar one. But for this task, who among us has an adequate familiarity with the recorded provings? Who of our number is capable of drawing what he needs, in the time available to him, from the thousands of printed pages which compose our larger works, or even from the many hundred pages of our condensed Materia Medicas; or who carries enough of these records in his memory to enable him to meet successfully the infinitely varied groups and modalities of symptoms which sickness is daily presenting to us?

No, I am not forgetting that a very considerable proportion of our work in general practice is done where neither time nor place permits extensive reference to Materia Medicas or to repertories, and I am by no means prepared to deny that many in our ranks may carry enough Materia Medica in their heads to enable them to make fairly efficient application of our therapeutic law in a large share of the acute and self-limited sicknesses which it falls to them to treat. But lest we esteem such achievements too highly, as evidence of our accuracy in prescribing, we should remember that in this class of cases Nature herself is doing so much toward an early restoration of our patients that no close tally on what our medicines contribute to that end can well be kept either by ourselves or by others.

Quite otherwise is it in the treatment of chronic diseases, how-

ever, where I hazard small chance of error in saying there is no one of us who really depends upon the law of similars as his sole guidance, so far as the use of medicine is concerned, but makes an every-day use of both repertories and the Materia Medica for reasons which I have just indicated.

Nor indeed in acute cases can one be sure to do his patient complete justice while depending solely on what knowledge of remedies can be carried in the mind, for even in these is the therapeutic sailing often beset by snags and reefs of constitutional vices which prolong the acute disease and can be removed only by the utmost precision in prescribing.

Precision in prescribing! In no sphere of human endeavor can it be truer than here that what is worth doing at all is worth doing well, for about everything here waits on accuracy. Between the *best* remedy for our patient and another, which may at its first contemplation seem nearly as well indicated, may exist a difference to him as wide as that which separates life from death.

Every page of Hahnemann's Organon, by explicit teaching or by implication, teems with insistence upon this truth. Over and over again he declares that great cures of chronic disease follow only upon the exact fulfilment of the law, and witness to this has been borne by every faithful worker in this vineyard from Hahnemann's day to our own.

But how shall we attain accuracy or how take the first step toward finding the drug whose provings afford the most closely similar symptoms to those of our patient? It is as impracticable to hunt through the entire mass of our Materia Medica for each patient's similimum as it is impossible to carry all of those provings in the mind. What then? Why, if there be any proper place in the affairs of men for an index, why would one not be due here? And if in making an index to the symptoms elicited by provings some of these symptoms had already been found true and valuable in clinical use, what could be more reasonable than to make the index show these verifications? And finally, what are our better repertories but just this?

What is Boenninghausen's "Therapeutic Pocket Book" but this, or in our own day Kent's Repertory? And, if we had brought ourselves to the point of approving of indexes to the Materia Medica, could we have entrusted the work to better hands than these, all master minds in the homœopathic world, and all working primarily to lighten their own labors at the bedside, we may be sure? Can we scorn the work of such as these or lightly neglect to avail ourselves of their labors? We know at least that Hahnemann did not scorn Boenninghausen's work, in the repertory line, but enthusiastically commended it, though he did not live to see the "Therapeutic Pocket Book" published.

If now you will pardon a few words of personal testimony from one who, though wishing still to be regarded as a young man, yet has his third of a century of practice behind him, I will say that to

these I have mentioned, and to the special repertories like Allen's "Therapeutics of Fevers," Lee and Clark's "Cough and Expectoration," Bell's "Therapeutics of Diarrhœa," Morgan's "Repertory of the Urinary Organs," Lutze's "Facial and Sciatica Neuralgias," King's "Headaches," and some others, my own debt is so great that it is with no small compunction of conscience that I am now reminded how late I have been in making due acknowledgment.

More than to any other circumstance, I thank my early espousal of repertories for whatever professional success I have had, for what familiarity with Materia Medica I have acquired, and, finally, for this, that as age and experience have increased I have not learned to expect less of our medicines, but more. And this preservation of faith has not been purchased, either, by shutting the eyes to my many failures or to the numerous errors and deficiencies of our recorded drug-provings. Who, indeed, should know so well the faults of the Materia Medica and its repertories as those who make most use of them? And, on the other hand, none *can* know so well how good a fruitage they are of the heroic toil through which they have been produced.

Yet it is with repertories as with all other tools, however well adapted they may be to the work for which they are designed, the first wielding of them can hardly be expected to yield the finest results of which they are capable. With tools of any complexity of mechanism there usually come instructions for use which it is the would-be-user's part of wisdom carefully to read. So with the repertory, which is far from simple in what is required for its best employment; it has its rules for use, which appear as preface or introduction to the volume. In the case of some, no small education in the groundwork of homœopathy is provided for in such prefaces. Notably is this done in the first thirty-nine pages of Allen's "Therapeutics of Fevers" and in the first half dozen pages of Boenninghausen's "Characteristics and Repertory" (translated, brought up to date by additions and published by Dr. C. M. Boger in 1905). Few there can be among us who in an equal length of time could do more to increase their value to the sick than to read these two introductions once a month for the rest of their professional lives, for therein are condensed very much of the philosophy of homœopathy as well as much incitement to the mixing of brains with the use of repertories.

Who will gainsay that if all that Hahnemann brought us of wisdom in the healing art is not destined to perish out of the minds of men it will be only by reason of the timely turning of our medical body to faithful discipleship and, in our medical schools, to the teaching of the transcendent value of precision in prescribing and the use of repertories as an indispensable means thereto?

DIPHTHERIA AND ITS TREATMENT.*

By E. S. Abbott, M.D., Bridgton, Maine.

This disease which has proved itself to be one of the most fatal and dreaded of all our epidemic diseases, especially during the last one hundred and fifty years, until the introduction of antitoxin about fifteen years ago, which has apparently greatly modified the disease and made a marked reduction in the death rate as compared with the treatment of the disease that was given by the allopathic school of medicine prior to that time, and to find out whether there had been such startling results and such a marked reduction in the mortality of this disease under its treatment by antitoxin as compared to its treatment by homœopathic medication has been one of the objects of this paper. While my data is of necessity very limited, it has proved so interesting and instructive to me that I hope it may not be without interest to the members of this Society; and this is my chief reason or excuse for taking so much of your time, rather than that I can tell you anything that you do not already know as to the care or treatment of your diphtheria cases. While this disease is mentioned and poorly described in the early medical history of the world, and it is claimed that Asclepiades performed laryngotomy in connection with it, still there is but little written in regard to it until the seventeenth and eighteenth centuries.

The first case on record in New England was in Roxbury, Mass., in the year 1659, and in the year 1789 Samuel Bard, an American, wrote several good papers on this disease, but the modern history of it begins with the Bretonneau first paper in 1821, and from that time till the present moment the literature is very voluminous, which you will fully realize an hour later. The name "Diphtheria," meaning "resembling wash-leather," was first given to the disease by W. Farr. It is now universally conceded to be a disease caused by and always due to invasion of the individual by the Klebs-Loeffler bacillus, and it is probable that this invasion generally occurs through some irritated, inflamed or abraded condition of the mucous membrane on or about the tonsils or in the pharynx, while the false membranes and local manifestations of the disease are most often first seen on one or both tonsils and spreading rapidly from these until it may almost completely cover the whole of the pharynx, including the uvula, and may extend to the larynx and nasal mucous membranes. While these three localities furnish a great majority of the cases, still it may invade any mucous surface or wound or abrasion of the skin, the latter being very easily infected. Thus we may find it occurring in the eye, the ear, mouth, and some observers claim the œsophagus, cardiac orifice of the stomach and intestines, although extremely rare in the last three localities. It is found in the vulva, vagina, bladder, placenta and

*Read before the Maine Homœopathic Medical Society.

circumcision wounds. It is classed as an acute, infectious and highly contagious disease, whose chief local manifestation is in the deposit of fibrin on the pharyngeal or some other mucous membranes. The disease is essentially one of childhood, most of the cases being in children between the ages of four and fifteen years, which is probably due to the tonsils and pharynx being especially susceptible to any inflammatory diseased condition at this period. Adults are by no means exempt from the disease, and though the cases generally are of a milder type, still this is not always true. The disease is more apt to prevail in the cold weather of fall, winter and spring, so it would seem that dampness and cold combined are favorable to its development, and we find that the average mortality is greater during the first and last quarter of the year, so that the majority of deaths occur between the months of September and April. Personal or external filth have a marked influence in lowering the natural immunity of a state of perfect health and so favors the invasion by the bacilli; particularly is this true where bad sanitary conditions produce a sewer-gas poisoning.

While diphtheria is considered one of the most contagious of the epidemic diseases, and when it finds a foothold in some of our large institutions will often baffle the skill of our best physicians to stamp it out, it seeming in some way to sneak by what is ordinarily considered the most effective quarantine and will sometimes develop after a supposedly thorough disinfection; on the other hand, we will often see cases from which many people are exposed and from which few, if any, cases develop, and this would lead one to feel that the danger of contagion was over-estimated. Here also comes the question as to whether one attack of the disease furnishes immunity from future attacks, and this seems to be a very debatable point, for while some of our best physicians claim that they have never seen a recurrence in a patient who has had a severe or even a well-marked case of diphtheria, we find others equally as good observers taking just as strong a position on the other side of the question. The period of incubation probably varies considerably in different cases, but ordinarily is between two and seven days. The duration of the disease is generally from ten to fourteen days, though in very mild cases the symptoms will often be entirely gone in a week, but even in these mild cases the throat is rarely clean, as shown by cultures for from fifteen to eighteen days after the disappearance of the membranes, so that a quarantine to be at all effective should at least last twenty-one days unless a clean throat can be shown by at least two successive cultures before that time.

Symptoms.

The prodromal symptoms are usually slight and ill-defined, especially in the milder cases, and rarely last longer than twenty-four to thirty-six hours, while they may be entirely absent. They consist of lassitudes, headache, muscular pains, fever and pains on swallowing. In severe cases there may be chilliness or even rigors,

but very rarely a well-marked chill, nausea, and vomiting, and if these symptoms are severe it means a severe attack of the disease. In infants the first symptoms may be a convulsion. Except in severe cases the fever does not run high, temperature being often not above 101° or 102°. Even in mild cases there is commonly a nasal quality to the voice which may become more marked as the disease progresses. An examination of the throat shows the fauces to be red and somewhat swollen, generally more so on one side than the other. The uvula is increased in size and of a bright red color, while on one or both tonsils will be observed a gray or yellowish-white opaque patch which seems to be plastered onto the mucous surface. While this patch may be round or oval it is much more likely in the very beginning to appear in streaks, and this tendency of the membrane to appear in streaks is one of the strong diagnostic symptoms of diphtheria. These spots or streaks rapidly coalesce into an opaque and tough pseudo-membrane which seems set in the mucous membrane like a watch crystal in its case. In the first few hours of the disease the exudate may be filmy and transparent in character, but it soon becomes tough and leathery and dips down into the mucous membrane so that it cannot be detached except by the use of considerable force. In case force is used and a portion of the exudate removed, it shows a raw, ulcerated surface below, which bleeds easily and over which the membrane speedily re-forms as firm and adherent as before. The tenacity with which the membrane clings to the deep tissues is another strong diagnostic symptom, as the exudate, which is seen in simple or follicular tonsilitis, can be wiped off with little effort, while that of diphtheria must be actually torn away. As the disease progresses the membrane spreads rapidly until it may cover both tonsils, the pharynx and its pillars, even portions of the hard palate and the uvula; and here is another pathognomonic feature of the disease, that is, any false membrane on the uvula, as it is never seen in tonsilitis. In only very mild cases is the membrane confined to one tonsil or one side of the throat. In a certain proportion of cases the skin shows an erythematous eruption resembling scarlatina, but it is not so diffuse, does not extend over the surface of the body in the regular way in which it does in scarlatina, and is not followed by desquamation. The cervical glands are early involved in most cases and become swollen and tender, this swelling being bilateral and symmetrical. The constitutional symptoms are by this time well marked, pulse rapid, 120 to 140, and weak, the first sound of the heart is weakened and there is a sense of extreme prostration, the patient feeling ill and looking pallid. In some cases there is but little if any pain in deglutition, the nerves of the throat being in a partial state of anæsthesia and when pain is felt is usually more on one side than the other, and generally most severe on the side where there is the least exudation. In mild cases the membrane loses its tough, leathery character in from two to four days and becomes darker, loosening about the edges, which curl up like a parchment. It becomes thinner and softer, so that it melts

away day by day or is hawked up in shreds or pieces, and if the membrane has been especially tough and thick it may come away as a complete cast of the parts. If the membrane reaches to any great extent into the vault of the pharynx it is very apt to invade the posterior walls and work forward until it fills the nasal cavities, in which cases the fact is evidenced by a thin, acrid discharge from the nose, of a muco-purulent matter which often excoriates the septum, the alæ and upper lip. This discharge is very offensive and may be mixed with blood. The exudate and discharge block up the nasal passages and render mouth breathing necessary, which in young infants prevents suckling and requires that they be fed with a spoon. Nearly all cases of nasal diphtheria are attended by swelling of the glands at the angle of the jaw, owing to the close connection with the lymphatic vessels of the Schneiderian membrane. The swelling of the parotid and sub-maxillary glands may be the first signal that the disease has invaded the nasal passages or as the disease may originate and be confined here to the exclusion of the throat, it may help in the diagnosis. Epistaxis is common and may be very severe. The breath is offensive in most cases unless they be laryngeal, where it is not as marked, and the bad breath may be enough to make the diagnosis. If the case approaches the gangrenous form the membrane is infiltrated with blood, giving the dark or black color, and there is often a very marked necrosis which may extend into the deep tissues. These cases may show a high temperature of 103° to 105° and the prostration is very marked, the patient being delirious or in a state of coma, and living but a few days. Anorexia is pronounced in nearly all cases, and especially in the most severe ones becomes so complete that the nourishing of the patient becomes one of our most serious problems; and where other means fail the nutrient enemas should be used. In these more severe forms of the disease the general condition and mental condition remind one much of typhoid fever. The urine is scanty and high colored, and in about two-thirds of the cases you will find albuminuria after the fourth or fifth day and often casts, the amount of albumin being proportionate to the amount of the exudate. This condition nearly always rapidly subsides with convalescence, and it is extremely rare that you find it leaving any chronic kidney trouble. An early appearance of albumin in the urine, that is, within the first 48 hours, is only found in severe cases. In cases which terminate favorably the false membrane begins to separate in from three to six days and does not re-form, the other symptoms gradually subside, appetite returns, and unless there are complications, a slow convalescence begins. In the fatal cases the patient often succumbs at the end of a week, if not before, from exhaustion, weak heart or extension of the membrane to the larynx. Apathy is one of the characteristic features of diphtheria, the patient complaining not so much of pain as of being tired.

Complications.—Laryngeal Diphtheria.

While the disease may originate in the larynx, this is comparatively rare, and most cases come from the extension of the

membrane from the throat to the larynx, and this extension often takes place very unexpectedly, even in mild cases of the disease, when suddenly the breathing becomes stridulous or a croupy cough sounds the first danger signal, and then the symptoms, which have been considered characteristic of membranous croup, develop with startling rapidity; the hoarseness which may quickly be followed by aphonia. The breathing becomes quick and shallow or noisy and stertorous, the countenance cyanotic and anxious, while the patient sits up or tosses in bed, gasping for breath, the alæ nasi working vigorously with all the accessory respiratory muscles called into action. The breathing is superficial, rapid and irregular, each inspiration being prolonged and high pitched, and the expirations shorter and harsh, with the cough hoarse or whispering. Owing to the obstruction to the entrance of air the supra-clavicular spaces as well as the lower intercostal spaces are sunken by atmospheric pressure during inspiration. The patient may cough up pieces of membrane and thus secure temporary respite from impending death, but the dyspnea soon returns from re-formation of the membrane. Even when the membrane is not coughed up the dyspnea is paroxysmal, lasting from a few minutes to a quarter of an hour or longer. During the periods of respite the child's terror disappears, the respiration becomes less noisy and stridulous, the respiratory movements less laborious, and for the time there is comparative comfort. It is rare that enough membrane is coughed up to afford more than partial relief. The dyspnea occurs at short intervals, and each recurrence seems more severe than the last, so that the sufferer is speedily exhausted in strength or passes into a state of semi-asphyxiation. The forehead becomes clammy and the extremities cold, lips purple and face livid. In this condition often our only chance of relief is in intubation, tracheotomy or laryngotomy.

Nasal Diphtheria may exist in conjunction with or independent of pharyngeal diphtheria. In some instances the presence of a nasal membrane may not be observed, and a purulent or bloody discharge with obstructed respiration being the only manifestation. These cases may show a chronicity and the contagion may be conveyed to others by close association for many weeks. It may assume a malignant form, in which the membrane is liable to extend to the nasal orifices, giving rise to serious local complications, such as purulent conjunctivitis and otitis media. The other most serious complications are broncho-pneumonia, dysphagia and cardiac exhaustion. There are also many sequelæ, notably anæmia, which may persist for a long time and require constant medical attention. Chronic naso-pharyngeal catarrh is often persistent and post-diphtheric paralysis may affect the muscles of deglutition, the ocular and ciliary muscles, or it may involve the limbs to the extent that locomotion is interrupted. These conditions are usually amenable to remedies and the use of electricity. A single or multiple neuritis may continue for some time and prove obstinate. Cardiac paralysis, due to involvement of the cardiac nerves, may give rise to trouble-

some tachycardia, terminating often in sudden death by over-exertion.

Diagnosis.

The most positive diagnosis is made by bacteriological examination whenever it is possible to get a piece of exudate or swab the suspected part, but do not let one negative report of such a specimen settle your diagnosis. In well-marked or severe cases there is no trouble in making a diagnosis, but in very mild cases, or in cases where there may be no deposit in the throat, as in nasal or laryngeal diphtheria, it is sometimes very hard to make a positive diagnosis, but always give the disease the benefit of the doubt, and so call all suspicious cases diphtheria until sure to the contrary. The greatest danger of not recognizing the disease is in the very mild cases, but this is just where the culture from the throat may decide the question. When a child presents a sore throat with spreading patches, especially if such patches first appear in lines or streaks, glandular enlargement, moderate rather than high temperature, fetid breath and drowsiness, together with weak and rapid pulse and marked prostration, it is safe to diagnose it diphtheria and treat it as such. A differential diagnosis may often be made by a careful study of the symptoms, but a culture from the case makes it doubly sure. A streptococcus infection of the fauces or pharynx is frequently met with. These cases of pseudo-diphtheria often very closely simulate true diphtheria, but in these cases the temperature is higher, the breath not as fetid, nor the toxemia so marked. The exudate, while it tends to spread, does so slowly and very often remains stationary. In these cases antitoxin has no beneficial effect. Follicular tonsilitis may be absolutely differentiated by culture from the throat or clinically diagnosed by the following symptoms: In tonsilitis the membrane is usually confined to the tonsils, showing in the early stages the exudate coming from the tonsillar crypts, and never seen on the uvula, while in diphtheria the membrane covers the tonsils and spreads to the fauces and uvula, it is of a more dirty yellow color and bleeding takes place where it is detached. In tonsilitis the febrile manifestations are much more sudden in their onset, and the temperature for a day or two may be much higher than in diphtheria. Albuminuria is rarely present in tonsilitis. The disease runs a short course and the exudate can be quite easily wiped from the tonsil. Scarlatina generally offers but little difficulty in diagnosis, as the eruption is usually present and typical, while a similar rash may appear in diphtheria, but if so, has more of an erythematous character, and later the desquamation will positively settle the diagnosis.

Prognosis.

While under the treatment of today the death rate of diphtheria is not high as compared with twenty-five years ago, still the prognosis should always be guarded, as occasionally in very mild cases that seem to be convalescing nicely, the patient may die sud-

denly from weak heart. Some cases seem so malignant from the start that they go rapidly from bad to worse under any form of treatment. Laryngeal diphtheria is always very serious and the prognosis should be grave (no pun intended). While we are having fairly satisfactory results in the great majority of cases, still it is such an uncertain disease that we will often be doomed to sudden disappointment when everything seems to be progressing favorably.

Prophylaxis.

Diphtheria is, to a large degree, a preventable disease, and the first and most important measure of prevention is isolation, not only of the person known or suspected of having the disease, but also of all who have been exposed, and this quarantine should last at least five days and better, for a week. Our present quarantine of three weeks for the disease is probably not long enough to be entirely effective in all cases, as several authorities claim that in about one-third of all cases the throat is not clear of the bacilli till from thirty to ninety days from the disappearance of the membrane, and while the bacilli after the third week are generally not nearly so virulent, still this is not always the case, and undoubtedly the infection occasionally slips by us in this way. Mild antiseptic solutions should be used in the throat and nose, not only of the patient, but of all persons exposed and all who have the care of diphtheria patients. Among the best are Dobell's Solution, Glyco-Thymoline, Listerine, saturated solutions of boracic acid and peroxide of hydrogen, but I think the peroxide capable of doing much harm by its irritating effects on the mucous membranes if used too strong, and I think the average physician is apt to use it too strong. I quote the following from Hare's Practical Therapeutics, Vol. 2, page 219, in an article on Diphtheria by Floyd M. Crandall, M. D.:

"Peroxide of hydrogen is capable of doing great harm by irritating the mucous membrane. It often causes the formation of a thin membrane, which may be mistaken for the diphtheritic membrane, and will last as long as the treatment is continued. It should not be used in the nose in a strength greater than one to twelve, and in the throat one to eight; it should not be combined with other drugs, but should simply be diluted with water or lime water and glycerine. Lime water counteracts the acid reaction and renders the solution less irritating. Such a solution, however, is unstable and should be made fresh every day."

The nurse is more liable to contract the disease than any other person and should be instructed to disinfect the hands frequently and to change the outer dress often, using only one that can be easily washed and boiled. The attendant contracts the disease commonly through germs carried into the mouth by the hands or food, and if possible should have a room adjoining the quarantined one in which to eat and sleep. In severe epidemics it is wise to give the nurse and all others who have been exposed or come in contact with the patient an immunizing dose of antitoxin of from 200 to 500

units, according to the age; this will protect for about twenty days. After all cases the room or rooms that have contained the patient and all its contents must be most thoroughly disinfected or destroyed by fire. All soiled clothing and bedding from the sickroom should be boiled at once and put in some disinfectant solution, as 5% carbolic acid; and all dishes should be washed with this solution. All discharge from throat or nose should be on bits of cloth that can be burned at once.

Treatment.

While, personally, I am not as yet fully convinced that in the milder types of diphtheria the use of antitoxin is any improvement on our remedies, still with our friend the enemy making such strong statements as this: "That every physician who does not use antitoxin on every case diagnosed as diphtheria, should be prosecuted for malpractice," we must do many things for our own protection and to prevent criticism, but leaving public sentiment out of the question entirely I should certainly use antitoxin in all severe or laryngeal cases, as this class of cases is so serious and often fatal in so short a time that it is necessary for us to use every means known to us and control the disease at the earliest moment possible. I find in gathering data that the physicians who have used antitoxin the most extensively are the most enthusiastic as to its use, though I find one Portland physician who says he was forced into using it by the strong public sentiment, but that he could not see that he obtained any better results after using it than he did before. I sent out fifty-four circular letters on March 1st to members of this society and received replies from thirty-six. I wish to thank those members who replied so promptly, and I am extremely sorry that I can't extend my thanks to the whole fifty-four. Of the thirty-six answering, seventeen reported having had no cases of diphtheria in the last three years, and of this number only four or five were not in active practice, leaving some twelve physicians in active practice who had not had a case in that time. The number of these physicians practising in our coast cities and towns strikes one at once, and nearly all of these report the disease very rare with them. Portland and Bath being the only coast cities reporting any cases, and these reports coming from so large a per cent. of the physicians reporting, would lead one to infer that the disease is not as prevalent near the coast as in the interior. Of the nineteen physicians reporting cases I find only two reporting a total of nine cases, with no death, who have not used antitoxin on any of the cases during the last three years. For the local treatment peroxide of hydrogen, diluted one-half or more, is preferred by the great majority; second comes alcohol, and third, permanganate of potash, while Dobell's solution, listerine and persulphate of iron, are also mentioned. As an internal remedy one physician thinks he has seen especially good results from one part of a 5 per cent.

solution of carbolic acid in nine parts of glycerine. Of this mixture he takes a few drops in one-half a glass of water and gives two dessertspoonfuls every two hours. Two physicians strongly urge the use of calomel in the beginning of each case. The one who is most explicit says his rule is one grain for a child two years old, and increase this one-fourth grain for each year. While he places no age limit, I suppose this applies to only young people as, if one should happen to see a case in an eighty-year-old person, the twenty grains of calomel would seem a little large to some of our members. Of the homœopathic remedies the several preparations of mercuries seem to be in most favor, and of its many preparations Merc. Cyanide, Merc. Proto-iodide and Merc. Biniodide are used most frequently, and besides these the others most commonly mentioned are Arsenicum, Apis, Arum, Lac Caninum, Kali Bich., Phytolacca, Lachesis and Diphtherine. I will not take up the time to give you the indications for the remedies, as you probably all know them as well, if not better than I do. There is one very important factor in the care of every case, no matter what the treatment, and that is the putting the patient to bed at once and keeping him there as quiet as possible until you feel sure that all danger of weak heart is passed and to watch the heart carefully all the time, using stimulants whenever necessary, the best of which are alcohol, given generally in the form of whiskey, and next comes strychnia. This keeping the patient in bed is often extremely hard to do in the light cases, but if insisted upon will save you many fatalities. There is another class of local remedies for the destruction of membranes, and they are the various animal and vegetable digestive ferments; but these have been largely abandoned, though I quote the following from the California Medical and Surgical Reporter: "In diphtheritic sore throat and croup. pineapple juice has come to be very largely relied upon in countries where the fruit is common. The false membrane which causes the closing of the throat seems to be dissolved by the fruit acids and relief is almost immediate." From Hare's Therapeutics I take the following from their treatment of Laryngeal Diphtheria: "After antitoxin, Calomel fumigations have proved the most effective, and there seems no reason for not combining the two methods. This treatment consists of vaporizing over a spirit lamp, ten to fifteen grains of chemically pure calomel, the child being placed under a tent to prevent dissemination of vapor. It is repeated every two, three or four hours, according to the severity of the symptoms. It does not cause salivation as might be expected, but that accident has occurred to attendants who have inhaled the fumes. The sublimation should not be done too rapidly, for the fumes, if too concentrated, cause choking and frighten the child. The effects of the treatment are sometimes very marked and are seen at once."

This brings us to the question of antitoxin. In all cases

where antitoxin is used make your diagnosis early and use the remedy as soon as possible, remembering that every twenty-four hours that it is withheld increases the death rate over one per cent., till the third day, after which it is practically useless. The treatment by antitoxin reminds me of a patient who has taken a fatal dose of poison and in which case you must rely on an antidote to prevent a fatality. The diphtheria is the poison, the antitoxin the antidote, consequently the quicker you can inject the remedy before the poison has had time to do its deadly work, the better will be the results. In the words of the immortal David Harum, "Do unto others as they would do unto you, and do it first." As to the dose, if the child is eight years or more of age, three thousand units is small enough dose; if the case is at all severe, this dose may be increased to four thousand or even five thousand units, which should be administered under strict antiseptic precautions, and this dose should be repeated in six, twelve or eighteen hours at most, according to the urgency of the case, if there is not marked improvement, remembering that we are trying to counteract a poison and that it may take large doses. The California State Journal of Medicine, September, 1908, reports the case of a woman operated on May 18, 1908, for ruptured extra-uterine pregnancy. Four days later, on the 22d, diphtheria started in the throat but soon infected the wound, and from May 23d to June 8th, or nineteen days, antitoxin was used in daily amounts of from 11,000 to 80,000 units, while the total amount given was 555,000 units, and the patient recovered.

Szontagh, after using antitoxin on 1,000 cases of diphtheria, says its local action is established, but he cannot accept an antitoxin power. In the Journal of the American Medical Association, October 24, 1908, another observer says that antitoxin is so very slowly absorbed when injected subcutaneously that it takes several days for a single dose to be absorbed, and that even in this length of time the whole dose is not absorbed, and he very strongly advocates the injection of it into the muscles of the gluteal region as the effect is much quicker, and in very severe cases where a very quick action is necessary, suggests the intravenous injection. I believe that before another fifteen years have passed we shall see the treatment of diphtheria by antitoxin practically abandoned, and if I am alive in twenty-five years I shall expect to see our friends, the allopaths, "right about face" again, as they have so many times in the past, and saying that "anyone using antitoxin as we use it for the treatment of diphtheria should be prosecuted for malpractice."

Preventive medicine is the medicine of the future, and I believe before that time we will either have remedies that will kill or destroy the bacilli, thus preventing the generation of toxins in the system and consequently doing away with the necessity of antitoxin, or what is more probable, that we will be able to so increase the natural resisting force of each individual

that we can render them immune. On the line of the first of these theories comes the treatment of diphtheria and other infectious diseases by pyocyanase. I quote the following from the Journal of the American Medical Association of December 14, 1907, entitled "Enzymes from Cultures of B. Pyocyaneus in Infectious Diseases." The Journal has previously mentioned Emmerich's claims in regard to the prophylactic and curative action of a substance derived from B. Pyocyaneus in the treatment of various infectious diseases, and in this article he relates further experiences with it. A thick bacterial film forms over the top of the fluid cultures of the B. Pyocyaneus, and on shaking the dish the film sinks to the bottom and a new one gradually forms. The film forms again six or seven times when the culture is thus shaken at intervals of three or four days. By the end of the third week the proliferation of bacteria in the culture medium has entirely ceased. The arrest of the growth of the bacteria cannot be due to lack of nourishing elements in the culture medium, nor to the products of metabolism of the bacteria for reasons he enumerates. The fluid as it sinks to the bottom of the dish forms a thick mass, but it rapidly disintegrates and disappears. The complete dissolution of such a large mass can be the result only of some powerful bacteria-disintegrating enzyme contained in the bodies of the bacteria. It is evidently an unsoluble Zymogen and passes into the culture fluid as a soluble enzyme when the bacteria die. The bacteriolytic enzyme thus formed in the culture fluid can be obtained in a pure and concentrated form by passing three weeks' old cultures of B. Pyocyaneus through a Berkefeld filter and reducing to one-tenth the volume in a vacuum. The substance thus derived, to which he has given the name Pyocyanase, not only dissolves the bodies of the bacilli, but also of various other bacteria, especially those of diphtheria, cholera, typhoid, plague, streptococci, staphylococci, and gonococci, killing and dissolving large amounts of these micro-organisms in a very short time. The tubercle and hay bacilli are not affected by pyocyanase, probably owing to their resistant capsule. This remarkable bactericidal action of pyocyanase has been utilized in therapeutics, and results have been obtained in diphtheria and other infectious diseases which seem to justify the assumption that pyocyanase is destined to play an important part in the causal treatment of these diseases. Guinea-pigs injected with a fatal dose of diphtheria toxin recover after subcutaneous injection of pyocyanase. It seems to bind the diphtheria toxin and also dissolves diphtheria false membrane. In the reagent glass three c.c. of the solution of pyocyanase will completely dissolve three gm. of blood fibrin in four hours. Pyocyanase destroys enormous quantities of diphtheria bacilli in a remarkably short time, and also kills and dissolves any pus cocci that may be present. It has still another important property, namely the favoring of

restitution of the mucosa, probably due to a chemotactic action. In the treatment of diphtheria Emmerick insufflates 3 or 4 c.c. of pyocyanase into the throat through a hand atomizer operated by blowing into the connecting tube. The spraying is repeated four times at a sitting with intervals of from five to ten minutes to allow the pyocyanase to act on the bacteria and membrane in the throat. The diphtheria process is arrested at once and rapidly retrogresses, the promptness depending on the energy with which the throat is sprayed. He has thus cured 32 patients with diphtheria, and other observers who report similar favorable results, even without the aid of diphtheria antitoxin. Zucker's report of 35 cases emphasizes the rapid disappearance of the fetor and subsidence of the fever, and the dissolving away of the false membrane. Emmerick's article is to be continued; the second part is to contain detailed reports of some of the severer cases, especially those with pus cocci complications. He adds in conclusion that "omission to use pyocyanase now in diphtheria always in connection with antitoxin treatment seems to him as criminal as omission of antiseptic measures in the case of infected wounds and threatening sepsis." In the Journal of December 21, 1907, a week later, is the following: "Pyocyanase as Prophylactic and Remedy for Certain Infectious Diseases."

Emmerick continues his official report on pyocyanase, the first part of which was summarized in these columns last week. He here described the details of six cases of diphtheria and croup with complicating streptococcus and staphylococcus infection. Notwithstanding repeated injections of diphtheria antitoxin the disease continued a progressive course, showing merely transient improvement after the injections. Under pyocyanase treatment the course promptly took a turn for the better and the patients all recovered. This was also the history of thirty-two patients with diphtheria treated with pyocyanase, an infant with complicating croupous pneumonia succumbed to the progress of the latter. The most important advantage of the pyocyanase treatment, he adds, is that the complicated cases which formerly led to gangrene or other severe lesions or general sepsis, can now be kept under control and the patient cured without serious after affections. In conclusion he remarks that "such manifest and unquestionable life-saving measures as diphtheria antitoxin and pyocyanase will contribute immeasurably to enhance the prestige of the medical profession in the eyes of the laity and anchor and strengthen the confidence in scientific medicine." Excuse his throwing bouquets to himself.

Again, in the Journal of September 19, 1908: "Pyocyanase in the Treatment of Diphtheria," Fackenheim has applied pyocyanase as adjuvant to serum treatment in forty-eight cases of diphtheria, including six cases with signs of sepsis. This has convinced him that the local spray of pyocyanase is an important aid in severe cases. It seems to destroy the bacteria in

the throat and thus prevent further formation of toxin. The action is shown in the rapid subsidence of the throat lesions, the disappearance of the bacilli and the rapid improvement in general health. Experiments are now under way to test the efficacy of subcutaneous inoculation of the pyocyanase. Again, in the Journal of October 10, 1908, "Pyocyanase in Diphtheria, Scarlet Fever and Tonsilitis," Saar reports experiences with pyocyanase in forty-two cases of these infections, mostly in young people at the Bertin Charité. The result confirmed the efficacy of pyocyanase for the local treatment of affections caused by streptococci, staphylococci and diphtheria bacilli. As the pyocyanase has no antitoxic properties, serum treatment is indispensable with it in the young but might perhaps be dispensed with for adults." This makes me feel now almost as though I heard afar the shout, "The King is dead! Long live the King!"

That we might know just what the treatment of diphtheria by antitoxin has done in our State, I tried, through the State Board of Health and Bureau of Vital Statistics, to obtain the total number of cases of diphtheria reported to the Board of Health each year since 1892, but found that they did not have them tabulated and that it would require so much work that it could not be done, but they did send me the number of deaths from diphtheria each year, and the death rate. Antitoxin was used but little in this country until 1895, and in December of that year the State Board of Health sent out a circular letter to physicians strongly urging its use, and while it was used to a certain extent in the year 1896, still the total number of deaths from diphtheria were thirty-five more this year than in the year 1894, when antitoxin was not used. Consequently I have grouped this year of 1896 with those where it was not in use. In the years from 1892 to 1896, inclusive, there were 874 deaths from this disease in the State, an average of 175 each year, with an average death rate of 2.59. For the next four years, from 1897 to 1900, inclusive, when antitoxin was in very general use, the total number of deaths was 823, an average of 206 per year, as against 175 for the five years before antitoxin was used, while the death rate was 2.99 instead of 2.59. There was no marked change in the death rate until the year 1901, where it decreased till the close of 1907, the last year available. In these seven years there were 870 deaths, an average of 123 a year, with a rate of 1.75. Now I cannot believe this reduction is all due to antitoxin, because if it were, it should have been noticed several years earlier. Another reason is that either from good luck or better care in preventing the spread of the disease, there has been a marked decrease in the total number of cases in the State, and consequently decreased number of deaths. My reason for this is that during the last three years 36 physicians from all over the State report a total of only 125 cases, while three years ago 44 physicians reported for the three previous years a total

of 319. Now to compare the two periods we find that in the five years prior to the use of antitoxin there averaged to be 175 deaths per year, with a death rate of 2.59, while in the eleven years since, that is, from 1897 to 1907, inclusive, the average number of deaths is 165, just ten less per year, with an average death rate of 2.37, and this with a marked decrease in the total number of cases during the last few years of this later period and consequently fewer deaths. I fail to see any wonderful claims for antitoxin in these figures. But now to compare the cases reported by members of this society for the last three years under the two forms of treatment. As I said before, the whole number of cases is much smaller, but the death rate is much higher under both modes of treatment than it was for the three years previous. For the last three years there were only 34 cases reported as treated with homœopathic remedies alone, with four deaths, or a death rate of 11.76%, while there were 81 cases reported as treated with antitoxin and our remedies, with eight deaths, or a rate of 9.88%, or an advantage of 1.88 in favor of the combined treatment. While in the three years before this period and previously reported, there were 114 cases treated with our remedies, and eight deaths, or a rate of 7.02%, while under the combined treatment were reported 205 cases, with sixteen deaths, or a rate of 7.80%. For the last six years there have been reported 148 cases treated with our remedies alone, with 12 deaths, or a death rate of 8.11%, while for the same period there were reported 286 cases under the combined treatment, with 24 deaths, or a rate of 8.39%, an advantage of .28% in favor of straight homœopathic treatment. If we still add to these figures the 383 cases treated with our remedies and reported previous to the last six years, with ten deaths, or a rate of 2.61%, and the 76 cases under the combined treatment, with one death, or a rate of 1.32%, we shall have a grand total of 531 cases treated with our remedies alone, with 22 deaths, that is, with a rate of 4.14%, and a total of 362 cases under the combined treatment, with 25 deaths, or a rate of 6.92%, which shows a rate of 2.78% in favor of our remedies.

In "Critique" we find the following aphorism, "Look not upon the combination tablet":

"Look not thou upon the combination tablet as it sitteth upon the shelf in the drug store, for at last it deceiveth thee and maketh thee a mongrel.

"Crude drugs are a back number; specifics are raging, and whosoever is deceived thereby is unwise.

"When thou forsaketh the straight and narrow ways of Homœopathy, then will the A. M. A. take thee up!

"Cast thy nauseous drugs into thine own stomach and after a short time they will return again."

CHOLELITHIASIS.*

By Dr. W. V. Hanscom, Rockland, Maine.

I have taken as the topic of a few minutes discussion today a subject which comes very near to us all in the performance of our daily duties. It is a condition which presents so many manifestations, such a maze of symptoms, both direct and indirect, that one is often lost as to what diagnosis to make in certain cases. Many of the symptoms are so direct and positive that we are made certain as to the condition present, but on the other hand, there are many times when the conditions are so indirect and obscure that we must of necessity own ourselves beaten as to making a positive diagnosis. It is in a few of these obscure forms that this effort is made to turn on a little light and this in the way of practical experience not only in the making of a diagnosis, but in backing that diagnosis up by operation. In these cases the diagnoses have been confirmed by the finding of the calculi.

Etiology.

We cannot say that the etiological factors are at all well understood nor can we definitely state their origin. Biliary calculi are composed in large part of cholesterin. This substance is found in normal bile in solution and is maintained in this form by the alkaline salts and the compounds resulting from their union with sodium and potassium. It is found in all tissues of the body where active changes are going on. It is generally regarded as an effete product of the bile. When it is present in the fluids in excess, either relatively or absolutely, or the flow of fluids is retarded, it is apt to be precipitated.

Age and sex are important predisposing factors, the majority of cases being observed in elderly people and females. Whether the bile of elderly people contains a relatively large proportion of cholesterin and lime, or there are changes in the bile of such people, is imperfectly understood. Pregnancy, sedentary habits, dress, a floating right kidney, a wandering liver are particular predisposing causes in women.

All conditions which lead to imperfect oxidation, such as excessive indulgence in animal food, fats, etc., together with lack of exercise, are said to bear strong relations as predisposing causes. Those conditions which bear the strongest relations as predisposing causes, however, are those which in any way interfere with the normal rate of discharge of the bile. The consequent stagnation brings about a separation of the elements normally held in solution. Yet this does not explain why gall stones differ so materially in their constituents from the substances which are normally held in solution by the bile.

*Read before the Maine Homœopathic Medical Society, June 8, 1909

Catarrhal conditions of the bile-ducts, foreign bodies, intestinal parasites or their ova, blood coagula, are all favorable to the formation of calculi, forming as they do a nucleus about which the cholesterin and other elements which enter into their formation may readily attach themselves.

Morbid Anatomy.

It is said by authorities that gall stones are about 75% pure cholesterin. They contain more or less bile pigment, also the carbonate of lime and earthy phosphates. Calculi consisting of pure cholesterin are pale in color, and crystalline in structure, while others are homogeneous and dark. Still others are of a greenish or light yellow hue, these variations in color depending on the amount of bile pigment contained in them. Thudicum expresses the opinion that the nuclei of gall stones consist of molds of the finer hepatic ducts. Some contain more than one nucleus. When stones are fresh they are heavy and sink in water, while those that are dried out, float. Stones of pure cholesterin have but slight consistency, are translucent and are seldom present in numbers. If containing much lime, they are usually hard and small. Pigmentary concretions, if pure, are usually small, presenting a coarse sandy appearance.

Location.

Calculi may be found in any part of the biliary apparatus, but they occur with especial frequency in the gall-bladder. Those found in the ducts do not originate there, but are there *en route* to the intestine. They have been arrested in their progress by reason of their size or by compression of the ducts by growths in other organs. Such calculi are referred to as "impacted." At the points of lodgement of the concretions the ducts become dilated. They often act mechanically, setting up purulent inflammation and even ulceration, extending to the surrounding hepatic structure.

The number of calculi ranges from a single stone to many thousands. The size of stones is always in inverse ratio to their number. When many of them occupy the gall-bladder, they present facets resulting from compression and attrition. Single stones may be as large as a good sized hen's egg and are oval, roundish, polyhedral or mulberry-like in shape.

Symptomatology.

Gall stones do not necessarily present symptoms. They may be contained in the gall-bladder for years without giving any evidence of their presence, or in other cases may give rise to only slight symptoms of a very indefinite character and even these in many cases being referred to the epigastrium. This is often the type of case in which we are misled. In still other cases the first symptoms are those of obstruction and consequent jaundice and without pain. In other cases there are signs of inflammatory involvement of the gall-bladder or of destructive changes

therein. Any one of these conditions or a combination of two or more of them may give rise to symptoms of the most variable character. The possible presence of calculi without symptoms is forcibly demonstrated by the fact that more than one-fourth of the women dying in advanced life have calculi in the gall-bladder.

In many cases, prior to the passage of calculi all the complaint that is raised is one of an indefinite character referred to the liver region or fully as frequently to the epigastrium. In many cases aching, dragging, tenderness in the right hypochondrium and inability to lie comfortably in certain positions are indicative of calculi. It is undoubtedly true that small and soft calculi may pass the ducts without exciting special attention, i. e., pain or jaundice. In the majority of cases, however, the first symptoms commence when the stone engages the duct. Pain is the most important symptom and is almost always sudden in onset. It may, however, be preceded by a variety of prodromes. The pain is exceedingly sharp and severe, reaches its maximum very quickly, is continuous but given to acute paroxysmal aggravations. It is referred to the right hypochondrium and the epigastrium, often radiating to the back and shoulders, especially the right. Vomiting is a more or less constant symptom and a high temperature is not uncommon. Prostration during an attack is often pronounced, pulse small and feeble, and there are often symptoms of collapse.

The duration of the pain is variable, lasting from a few hours to two or three days. Cases are on record where the pain has lasted several weeks. In the majority of instances, however, the pain lasts from three to eight hours. The region of the liver is tender and the overlying muscles are more or less rigid. One of the most characteristic symptoms is the appearance of jaundice. This comes on in a few hours after the inception of the attack, if the hepatic or common ducts have been plugged. This will not occur if the cystic duct alone has been occluded. The jaundice varies in intensity according to the completeness of the blockade and the length of time that it has existed. When the calculus drops into the intestine the pain stops, usually quite rapidly. Sometimes the cessation of the pain is due to the calculus slipping back into the gall-bladder. Palpation may reveal a swollen and engorged liver and a distended gall-bladder or both. Attacks vary in their frequency from an interval of a few days to intervals of months or even years. It is not at all uncommon for the first attack to be the last.

If jaundice persists in greater or less degree it is suggestive of obstruction of the hepatic or of the common duct. If there is no jaundice the impaction is in the cystic duct. If there is complete occlusion of the cystic duct the gall-bladder gradually becomes distended with mucus, the contained bile is absorbed and the sac finally becomes filled with mucus or a muco-purulent fluid. If the gall-bladder is sufficiently distended it may be felt through the abdominal wall. If the obstruction is not complete the jaundice may

almost or wholly disappear. Permanent obstruction leads to inflammatory and destructive changes attended by a variety of local and general symptoms.

Obstruction of the Common Duct.

In obstruction of the common duct the number of stones varies from one, which usually occupies the pouch-like section just within the papilla, to a number sufficient to fill the duct throughout its entire length. The result is dilatation and cholangitis of a catarrhal or suppurative type. The biliary tubes become dilated from backward pressure of the contained bile. The calculus may escape or be contained in a diverticulum and the passage of the bile again become possible. The bile is replaced with a mucous secretion with little color. The liver is affected little if at all. There is no evidence of cirrhosis. If suppurative cholangitis is set up the gall-bladder and ducts become filled with pus. The gall-bladder sometimes ruptures and abscess in its neighborhood results. Foci of suppuration are often set up in the liver and that organ becomes riddled with abscesses. Attending these destructive changes there are usually repeated paroxysms of fever accompanied by chills, oftentimes resembling malaria. Biliary fistulæ may result, those communicating with the surface being the most frequent, but they have been known to communicate with the duodenum, ileum, jejunum, colon, stomach, kidney and urinary bladder. Ulcerations have occurred between the gall-bladder and hepatic duct and between the common duct and the portal vein. It is in these cases that the jaundice is the most pronounced and persistent.

Obstruction of the Cystic Duct.

This duct is the one most frequently plugged. The duct may become entirely obliterated except at the point of lodgement of the calculus. There is distension of the gall-bladder and replacement of its contents with mucus or a muco-purulent secretion with an alkaline reaction. The degree of distension may be enormous, so much so indeed that the distended gall-bladder has been mistaken for an ovarian cyst or other forms of abdominal growth. It has a peculiar pear-shaped outline which can be easily determined in persons of a spare build. In these cases jaundice is not present unless there is coexisting disease of the other biliary ducts, or liver.

In cases of suppurative disease of the gall-bladder (empyema) the enlargement is sometimes enormous, even beyond belief, the contents of the sac being purulent. Perforation in this variety, as well as abscess external to the gall-bladder, is not uncommon. In case of recovery the walls of the sac may undergo calcification or may atrophy into a small bundle of fibrous tissue. The shrunken and thickened gall-bladder may be found closely applied to a large calculus or to a number of smaller ones. The gall-bladder has been found with diverticula containing calculi.

Diagnosis.

The sure evidence that a person is afflicted with Cholelithiasis is the finding of the calculi in the feces. Persons may, however, pass masses of such consistency as to break up readily in the gut and not be detected by the ordinary means. Again attacks closely simulating biliary colic, even with jaundice, may occur and mislead the observer, only the future progress of the case making the diagnosis clear. Any foreign body which may obstruct the common duct or any growth external to the duct may so compress it as to give rise to conditions simulating biliary colic. Biliary colic may be mistaken for gastralgia, intestinal colic, neuralgia, pleurodynia or pleurisy. Again, the passage of the calculus is not invariably painful, and such passage or even impaction with accompanying jaundice may occur, and the true nature of the case not be understood.

Differential Diagnosis.

The majority of cases of Cholelithiasis give a history of having been treated for a long time for "dyspepsia." Repeated attacks of indigestion, not obviously due to other causes, should awaken a suspicion of gall-stones. In an attack of gall-stone colic the vomiting, as a rule, is not attended by a relief of pain. The contrary is true in gastric ulcer. If pressure in the right hypochondrium gives rise to a referred pain in the region of the shoulder, the offending area is probably the gall-bladder.

In differentiating between gastric ulcer and gall-stones, the association of chill usually points to Cholelithiasis.

Tuberculosis and Cholelithiasis are but rarely associated.

In catarrhal icterus the pulse is usually slow; in jaundice from gall-stones this is not usually the case.

Gradually increasing jaundice without previous pain or at least with very slight pain is very suggestive of malignancy.

I wish to cite three cases which are typical of the different classes of obstruction of the biliary ducts.

Case 1. Mrs. A. E. H., aged 65.

This serves as a typical example of that large class of cases where there are all the earmarks of biliary disturbance, with gall-stones, but where there is not complete obstruction.

This patient had been a victim of so-called "dyspepsia" for a period of thirty years or more. She exhausted the resources of the local physicians, took "treatments" from various advertising fakirs, ran through the subtleties of Christian Science, finally going to Boston, where she consulted "specialists." She was pumped out by stomach (and otherwise), had test breakfasts and more pumpings, her blood was examined, urine analyzed, feces searched, etc., *ad infinitum, ad nauseam* (for she had the means to pay), and yet she had a stomach and knew all about it. Practically all her symptoms were referred to the stomach. The recital of her symptoms

would only be a repetition of that large class of cases with which you are all so familiar, and from which you would all like to be delivered. She finally fell into the hands of the writer. I had a very strong suspicion that there were gall-stones in her interior and told her so, advising operation. She consented, and was operated upon September 25th, 1908. The result was magical. Her dyspepsia disappeared at once. From a nervous, irritable dyspeptic she has become in these few months a fat, well woman, who sleeps well, knows not the meaning of nerves, has an appetite which she says she "would not sell for a thousand dollars," and the digestion of an ostrich. I found 153 stones, which are here for inspection.

Case 2. Obstruction of the cystic duct.

Mrs. M. M. Y., aged 32. Has always been well except for an extra-uterine pregnancy for which I operated upon her some five years ago and from which she made an uneventful recovery.

I was called to see her on the 15th of September last and found her with all the regular and classical symptoms of a simple gastric fever. There is no need to enumerate them. This ran on till the middle of October with the usual fluctuations of such a condition and the progressive weakness incident to it. On the morning of October 16th I was called very hurriedly and found her in a state of collapse; cold, wet skin, almost pulseless, etc. She had awakened from sleep with an excruciating pain referred to the epigastrium. There had been no vomiting. The conditions were so evident that there was some abdominal leakage that I decided to make an exploratory operation and locate the difficulty if possible. After some recovery from the collapsic state, I opened the abdomen over the region of the gall-bladder, when that viscus poped up into the wound. It was badly distended. On incision into it there was an escape of a large quantity of muco-purulent material, and buried in the sulcus at the opening of the cystic duct was this stone which I have here. This patient was very fat and the abdominal wall was so tense that I was misled as to the amount of distension of the gall-bladder. There was no jaundice. The operation showed a small amount of this muco-purulent material in the abdomen which had escaped through a small rupture near the opening into the cystic duct. The result was a perfect recovery as quickly as nature could do it.

Case 3. Obstruction of the common duct.

Mrs. L. B., aged 49. Had been sick for a period of five years with "liver trouble."

This patient had the most remarkable degree of jaundice that it has ever been my opportunity to see. She was of a peculiar greenish yellow, the deepest staining I ever saw, and was so all over. The condition had been gradually coming on for a period covering five years, but was at its height during the six months prior to my seeing her. There was no pain to speak of, but a constant feeling of uneasiness and heaviness, as she described it. There

were periodical attacks of vomiting which gave no relief and which brought up only disintegrated stomach contents and bile. The stools were decidedly clay-colored. The urine was heavily loaded with bile coloring matter and was slightly albuminous. She was dopy and partially comatose. Could be aroused easily by speaking to her or shaking her gently. Her condition was one of profound systemic poisoning. Pulse was slow (40) and the temperature subnormal.

She was operated upon November 28th, 1908. The stones were all found in the common duct, the large one occupying the pouch just within the papilla and the others packed down upon it. The gall-bladder was practically empty except for mucus which was badly disorganized. There was a large zone of inflammatory deposit about the ducts which made manipulation very difficult. We succeeded, however, in getting the stones out. The duct was closed and the wound closed without drainage.

This patient was in a practically hopeless condition and the operation was undertaken only at the earnest solicitation of herself and family. The post-operative condition was like that prior to the operation, only more so. She made good recovery from the ether and could be aroused at all times till near the close of the third day. The kidneys refused duty practically from the first, all the urine we succeeded in getting being about six ounces in 72 hours. This was a badly neglected case.

The deductions to be drawn from these cases are obvious and they all point to an increased endeavor toward making an early diagnosis and in instituting radical treatment. I do not mean to suggest that every case of indigestion or stomach trouble is one of gall-stones, but I do suggest that in many of these obscure cases it is well to bear in mind the possibility of their presence.

GULLIBLE GUZZLERS.

By DeWitt G. Wilcox, M.D., Boston, Mass.

(Continued from September.)

Snap-Shot Kidney Energizer.

At this juncture a man in the rear of the room shouted vociferously for recognition. Having obtained it he came forward and introduced himself.

"I am," said he, "Dr. Doan of Bison, the manufacturer of Doan's Kidney Fry. With the least possible expenditure of money and less of intelligence I have hit upon a plan, which works most marvelously and which has made me rich.

"I want to say, first, that I do not regard it quite honest in you gentlemen to put so much harmful dope into the 'goo' which you are inducing the generous, gullible public to drink. The matter appeals to me in this way, and I trust I will not be regarded as

hostile to the grand purposes and ultimate aims of the Guild in stating it, that 'A generous guzzler killed is a rich patron lost.'

"I have always, since launching upon this gold mine of philanthropy, kept that ennobling sentiment before me. 'Keep the guzzlers alive, but sick, just as long as you can, and when they show signs of getting well, paint them such a picture of their diseased condition as will scare them into invalidism again. This is my way to do it, namely:

Every Picture Tells a Story.

"First, of course, you must secure the aid of our trusted and richly paid ally, the public press. Picture therein a human face so convulsed with agonized distortion as to make one believe the owner had been strangled by Mr. Hyde or Frankenstein, and label it, 'Every picture tells a story.' Then proceed to recite graphically a lot of symptoms, which every healthy man, woman and child experience every day of their lives, and say, 'If you have those symptoms you are doomed; there is no hope for you, unless perchance you can telegraph or take a lightning automobile to the nearest drug store and get a sample bottle of Doan's Kidney Fry.' Let me show you how to scare them into buying quarts of 'goo.' Buy a whole page of a family newspaper and in big type say:

"Everybody Has Kidneys."

"'Have you a sleepy feeling at night? Are you hungry at meal-time? Have you shortness of breath after chasing a car six blocks? Are your hands and feet cold when you get your plumber's bill? Do you perspire when putting up a stovepipe in mid-summer? Does your nose bleed after being hit with a baseball? Do you have vertigo and dizziness after falling ten stories in an elevator? Do you fail to take notice of things at 3.00 A. M.? If so, you have a well-developed and almost fatal case of kidney disease.'

"Gentlemen, such a recital as that, I observe, makes even Mr. Puffy and Lydia look frightened."

Fried Flees for Fretful Folks.

Then came forward the only real handsome man in the audience, whereat Lydia, Mrs. Swindle and Mrs. Kopp took front seats. The President seemed to know him at sight and introduced him as the celebrated Mr. Willing, the maker of those dainty little wafers called "Fried Flees for Fretful Folks." He said: "The only claim for originality which I make in this great selling 'goo' is the name. Without that great intellectual discovery I should still be tramping bark in the tannery, where I was brought up. The world is full of fretful folks and nearly all of them think their fretfulness a disease for which they are not to blame. Hence they jump at a remedy, and my Fried Flees seem to catch them quickly."

Killmore Swamp Root.

The last speaker to occupy the floor from the side of the Guild was Mr. Killmore Thancure Swamp Root. He said he merely

wished to ask a modest question. The President declared that anything modest in the Guild would be out of order. Mr. K. T. S. R. persisted and got permission to ask his question. It was: "Suppose I should present a bona fide testimonial from a live patient, who was actually sick with a real disease and who was truly cured by taking my 'goo,' would it be admitted?" There was a moment of hysterical silence; then the audience burst out into such uproarious laughter, with derisive yells of "Hayseed," that poor Mr. Killmore sat down covered with confusion and shame.

People's Favorite Deception.

The judges now called for the Favorite Deception President to read a few selections from his testimonials, after which the successful winners would be named. Amid the greatest silence and reverential awe, the mighty man arose and was about to speak when he noticed Lydia, Mrs. Kopp and Mrs. Swindle still sitting on the front seats. He requested them to move to the rear, lest the graphic portrayal of woman's suffering which he was about to relate, should cause them to collapse and result in their suing him for personal damages.

"First, fellow-members of the Guild," said he, "I am, as you know, a great botanist; I can tell a tree from a shrub as far as I can see it. One day, while in the woods, I found the little plant Lady Slipper. The delicacy of the flower impressed me and I thought how tiny must be the foot of her who could wear such a slipper. Immediately it occurred to my analytical mind that the plant 'Lady Slipper' taken internally would be good for swollen feet. And I saw the little Foxglove, and the same great inspiration came to me again; this would be good for swollen hands. Of course I added Bleeding Heart in case my victim should accidentally shoot herself; Stone-root went in for stone bruise; Boneset for fracture, and there I was. I did not name it 'Golden' until afterward, when I discovered how well it had paid me.

"I will give you a sample of one of my 'universal testimonials,' such as you see in all the newspapers, which still bow down to my gold:

First Prize Testimonial.

"My dear Dr. Purse:—It seems so honorable of you to write on the bottles the names of the ingredients which make up your wonderful medicines so we poor women can see just what we are taking. Of course I never heard of any of those drugs, but I feel sure YOU have. When I read of all the ailments for which your medicines are recommended it makes me think of a monkey-wrench which my father used to own. You could use it for a hammer, a screw-driver, a gimlet, gas-tongs, tack-puller, hatchet, tooth-pick, squirt gun or corn cutter. I noticed there is one disease which you fail to mention as being cured either by the Favorite or the Golden Recovery. I felt badly at that omission, fearing I might some day have that disease and not know just what to do. Couldn't you add more ingredients

to your great medicine, so that it would cure this remaining disease? I must tell you what the Favorite has done for this entire neighborhood. One of my friends had a baby born with a hare-lip. I told her if she had taken the Favorite it would have prevented it; so she took it next time and the baby not only did not have a hare-lip, but it looked just like you, Dr. Purse. They called it the Favorite child. I notice you recommend your medicine for women who have weaknesses because of over-work and bad air. I gave a bottle to a poor, hard-working woman and next day her husband got a better job, and now they are living in a flat and keep a parrot. I did not know there were so many diseases which women could have until I read your book. I thought I had had them all, but I am sorry to find I have not. However, I am perfectly willing to have them, for two reasons: First, your medicine will cure them all. Second, I would then have so much more to talk about at the Sewing Society. Yours most gratefully, MRS. HADAM ALL."

Kind Regards to the Press.

While the judges were deciding the merits of the contest, Mr. Killmore Thancure Swamp Root offered a resolution, which was unanimously carried:

"Resolved: That no newspaper bearing our yoke be allowed to accept any advertising matter, print any news, local or telegraphic, accept any news, local or telegraphic, accept any new subscribers, change editors, or otherwise conduct their business without consultation with and permission of the Guild for Developing the Gullible Guzzlers."

A further resolution was about to be offered when it became whispered about that a reporter for an unmuzzled newspaper was present, which caused a precipitant adjournment, *sine die*.

LEPROSY. Brinckerhoff, of the Leprosy Investigation Station of Hawaii, has recently published a second study concerning the disease. This latest study was directed particularly to the determination of the possibility of diagnosis by examination of the nasal discharges. He draws the following conclusions:

"I. The routine examination of the nasal septum and the nasal secretions of individuals of a race with a high incidence of leprous infection did not reveal as many cases of leprosy as would be expected from statistical data, had the method been an efficient one for establishing a diagnosis of the disease in the incipient stage.

"II. The examination of the nasal septum and the nasal secretions is not of dominant value in confirming a diagnosis of leprosy in the early stages of the disease.

"III. The conditions found in the noses of non-leprous children of leprous parents do not differ in important respects from those found in the descendants of non-lepers.

"IV. When it is not practicable to make a complete physical examination of all individuals of a class suspected of leprosy, the examination of the nasal septum and the bacteriological examination of the nasal secretions will prove of value by permitting the recognition of the most dangerous type of the disease, and is therefore worth while even if it does not reveal all cases of the disease in those who come under observation."

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only, and preferably to be type written—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.
ASSOCIATE EDITORS:
F. W. COLBURN, M.D. C. T. HOWARD, 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, if possible.

MORE CONFIRMATION OF HOMŒOPATHIC TENETS.

One of the cardinal features of homœopathy is its insistence upon the two-fold action of drugs. We assert that every drug has opposite effects upon the animal body depending upon the amount of the substance used, or, in other words, that a drug taken in small amount acts in just the reverse manner to that following the introduction of the same drug in large amount. For many years the idea was considered by the medical world at large to be not only fallacious but even ridiculous. During recent years, thanks to the results of laboratory investigation, there has gradually developed an idea that perhaps there might be some truth in the theory, at least in some instances. This has been strengthened by the study of the effects of certain drugs on the blood, small amounts increasing the number of red cells, larger amounts decreasing it. It has received the greatest help from the introduction of the vaccine method of treating infections and the brilliant successes there often attained.

The *Gazette* has also claimed that in the X-Ray an excellent illustration of this same feature could be found, the stimulating and the inhibiting effect of the emanations being readily demonstrable. Indeed we believe that in the therapeutic action of this ray is found an excellent illustration of the entire homœopathic principle. We did not, however, expect so soon to see that fact so clearly demonstrated and from such an eminent source as has recently occurred. In another column notice will be found of the report of the Cancer Research Laboratories of the Middlesex Hospital under the direction of Dr. Lazarus-Barlow. In the course of his investigations the Director determined to ascertain the effects of radio-activity on animal cells. In this report he first quotes from the work of Perthes as the most satisfactory. Here it was noted that authorities differ concerning this radio-active effect, some claiming an acceleration of growth, others an

inhibition. Perthes noted that no regulation of amount of exposure was made and accordingly introduced a method of determining the "dose." Cattley is then quoted.

A paper presented to the Pathological Society of Great Britain and Ireland demonstrates that the X-rays have a stimulating effect upon the growing root-tip of certain plants when short exposures are given, but inhibit the growth of the same varieties when the exposure to the rays is prolonged.

Dr. Lazarus-Barlow used for his experiments the ova of the Ascaris as the test. The detailed results cannot here be given on account of lack of space. His work included the X-rays, radium, thorium and uranium. The results can best be summarized in his own words with which he concludes the article: "As a result of the facts indicated above, we conclude that the action of X-rays, radium, thorium and uranium upon the animal cell as exemplified by the ova of *Ascaris megalocephala* of the horse is two-fold. In small doses or continued for a short time it causes division to proceed at a faster rate than normal; in larger doses evidence of an inhibitory power is given which may lead to total arrest of development at some varying period after the cycle of changes leading to the formation of the embryo has commenced."

When these data are considered in association with our present knowledge of anti-bodies and their formation and of the beneficent action of bacterial vaccines it must impress the homœopathic practitioner that the time for the complete vindication of his claims is not far distant.

MEDICAL SCHOOL STATISTICS.

Editorial reference has been made from time to time in the pages of the *Gazette* of the work being performed by the American Medical Association in compiling statistics concerning medical education and the status of the various medical schools. Although the figures as given last year for the homœopathic institutions were shown by our own Educational Committee to be incorrect in many essential features, yet the results are upon the whole of decided interest. In the entire country there were 22,145 matriculated students, a loss of 457 over 1908 and of 2,131 over 1907. The homœopathic division was the only one showing an increased registration. Here the number was 9 greater than last year, while with the eclectics the decrease was 66, and with the dominant school 382 less students were reported.

Among the graduates there was a decrease of 6 among the homœopaths against a decrease of 280 in the larger school. Even here, however, the percentage decrease of the so-called regular school is more than double that of homœopathy. These figures seem to indicate the increasing confidence and trust being given to homœopathy and the advancing wave of enthusiasm for a

principle that is now becoming capable of distinct material proof. From these statistics we much regret to note that in both matriculants and in graduates the eclectic school suffers severe loss; in the latter amounting to more than 30 per cent. The Gazette believes that this sect stands side by side with homœopathy for freedom of thought in therapeutics and for open-mindedness to all modern discoveries. Certainly the motto from which the name is derived is an ideal one, and in this sense every true physician should be an eclectic. There is foundation for future optimism for the school in the fact that the only new medical school to be founded during the year was an eclectic one.

Statitsics show an increase of 86 in the number of women in medicine, although 23 less graduates are reported. The number attending schools exclusively for women show a steady decrease for the first three years as follows: 1906, 22.6 per cent.; 1907, 22.3 per cent.; 1908, 18.4 per cent.

Homœopathy has to report the loss of two schools, one from disbandment, the other by being dropped by the American Institute as not deserving of recognition. This will doubtless make stronger the remaining institutions and will certainly give to others a greater respect for homœopathy as upholders of a belief in properly equipped establishments of medical education.

THE 1910 MEETING OF THE INSTITUTE.

It has been decided to hold the next annual meeting of the American Institute of Homœopathy in Los Angeles, Calif., July 11th to 16th. We trust that many New England physicians will already begin to make their plans in such a way as to allow them to attend. Even at this early date the transportation committee is making plans for a special train direct from Chicago to the Pacific coast, some tentative details of which have already been received. This suggested train will consist of buffet, library and dining cars as well as a sufficient number of modern, high-class Pullman sleepers. A projected route will be from Chicago by way of Rock Island, Davenport, Des Moines, Omaha, Lincoln, Denver, Colorado Springs, Pueblo, Salt Lake City and Los Angeles, providing for a stop at Denver and one at Salt Lake City. For the return other routes could be selected as the delegates might desire; by the southern route, taking in the Grand Canyon of Arizona, or the northern route by Portland, Seattle and the Canadian Rockies.

The *Gazette* sincerely trusts that sufficient interest may be manifested in this matter to justify the special train as planned, as it would give to the members an excellent opportunity of becoming personally acquainted, and of having that intercourse that is so valuable among the members of the medical profession. One would further like to see one or more special cars from

New York and Boston, or from Albany, where the two delegations meet, to Chicago, thereby adding still more to the pleasures of the journey.

To New England, Los Angeles may seem far distant, but we should remember that our Western friends have always been willing to come far east, even to Boston, and we can certainly do no less in return than to reciprocate.

Under the presidency of Dr. Ward and the chairmanship of Dr. Nichols of the local committee, we are already assured of a most hearty welcome, and the prospects of a meeting of unusual interest and size are already excellent.

LAYING THE CORNERSTONE OF THE TYLER EXTENSION.

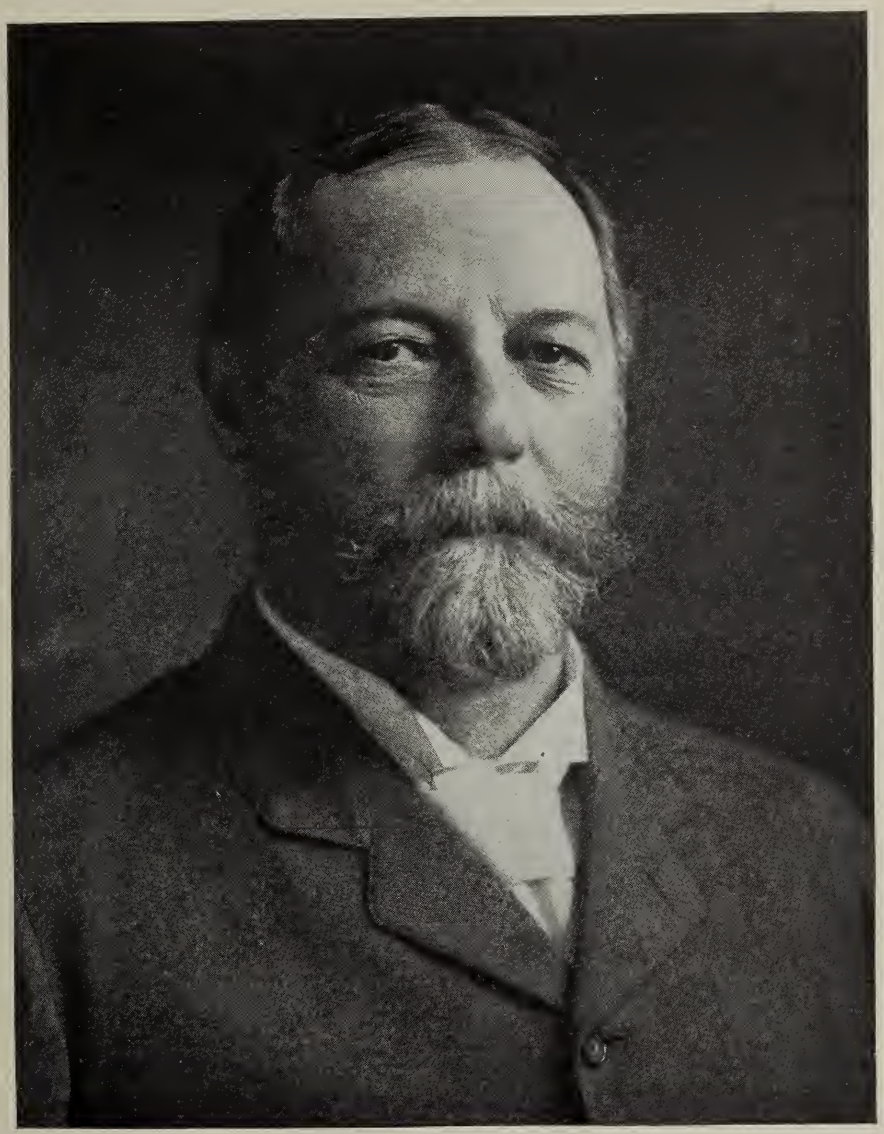
The homœopathic profession and its friends in London, and indeed throughout all England, are at the present time very jubilant over the favorable future of homœopathy. On June 30th of this year a notable event for them occurred in the form of the laying of the corner stone of the Tyler Extension to the London Homœopathic Hospital. This extension is to be erected at a cost of $150,000, one-third of which was generously donated by Sir Henry Tyler. The corner stone was laid by the Lord Mayor of London in the presence of a distinguished number of guests, many of whom represented the nobility.

This new wing will contain space for seventy-five additional beds, of which a number will be provided for paying patients. In addition there will be a new operating amphitheatre, an esthetizing room and three consultation rooms, together with accessory dressing rooms. This will bring the total capacity of the hospital to nearly two hundred beds. At the present time about $12,000 is needed to furnish the building when completed, and of this over $5,000 has been already donated.

Following the formal exercises of laying the corner stone came a reception by Earl Cawdor at Chalmers House, 43 Russell Square. To this were invited all the members of the British Homœopathic Association and their friends. A very enjoyable evening was passed and increased enthusiasm for homœopathy was evidenced.

Dr. Susan Abbott-Wooldridge, B. U. S. M., 1902, has been spending the summer at her old home in Andover, accompanied by her two children. In a brief visit made to the editor excellent reports were received concerning the progress of the new homœopathic hospital in Pittsburg. The present plans provide not only for the occupation of the new buildings at some distance from the centre of the town, but also for the continued occupation of the old hospital buildings as an emergency and charity department. When these plans are completed our friends in Pittsburg will possess one of the most complete institutions in the country.

OBITUARY.



DR. WILLIAM PALMER WESSELHOEFT.

Another marked figure, prominent in homœopathic ranks, has passed from among us. We are called upon to record with sincere sorrow the death of Dr. William Palmer Wesselhoeft, so long the foremost representative of Hahnemannian homœopathy in New England. He was born in Bath, Pennsylvania, October 8, 1835.

His father, Dr. William Wesselhoeft, one of the young German patriots who succeeded in escaping the persecutions of the Prussian government after the first abortive attempt to unite Germany under one head, on returning from the equally abortive attempt to liberate Greece from Turkish rule, first settled in Pennsylvania. Attracted there mainly by the German element, he practised in the region of Bath, Bethlehem and Allentown, where he married Sarah Palmer, a lady of enlightened mind, strong character and clear intellect.

Imbued with the spirit of reform, his impatience with the destructive and wholly unscientific practice of the day led him early to become an enthusiastic follower of Hahnemann. Joining Dr. Hering and others he aided with his means and active work in founding the first homœopathic medical school, that of Allentown, but soon the higher culture of New England induced him to move to Boston, where he found a more congenial sphere and superior advantages for the education of his children.

His eldest son, the subject of this sketch, after attending the then famous school of Dr. Ellingwood and later that of Mr. William Atkinson, was sent at the age of fifteen to Germany. There at the St. Thomas Gymnasium of Leipzic he continued to pursue his classical studies until his twentieth year, when, returning home, he entered the Harvard Medical School, from which he was graduated in 1858.

Eager and well fitted for work, overflowing with vigorous vitality and full of enthusiasm for his profession, he at once joined his father in practice, then at No. 12 Bedford Street. His prepossessing personality, genial manners, devotion to his duties, and quiet perceptions, soon gained for him a wide circle of friends and paved his way to the large and desirable practice which even during his last long and most trying illness he did not wholly relinquish.

Few men have enjoyed a more steadfast loyalty or warmer attachment on the part of their friends than he, and few have more richly deserved these strong supports to the hard-working physician. His intelligent and unfailing interest in his patients; the minute care with which he studied his cases; the laborious individualization of his remedies; the foresight and patience with which he confidently awaited their effects, and the wisdom with which he ordered the lives entrusted to his care, proved him to possess in the highest degree the essential attributes of the true Hippocratic physician.

Without pursuing in detail the varying aspects and uncertain results of modern pathological research or adjusting his mind to the latest physiological or bio-chemical theories, he was yet a practical and efficient diagnostician. The selection of his remedies strictly in accordance with the rules laid down by Hahnemann remained with him throughout the paramount aim and duty of his professional life. So conscientiously did he accept this obligation that not infrequently, as many can testify, he arose at night to drive long distances in the most inclement weather, to assure himself at the patient's bedside of the correctness of his drug diagnosis. Holding fast to the observable phenomena of disease rather than following the current speculative inferences regarding them, and well read both in general and scientific literature, he stood firmly on strict Hahnemannian ground, on which he found abundant support, not only out of his wide experience, but also from the modern study of the effects of imponderables.

Viewed impartially and from a purely human or practical standpoint this is not without distinct significance. It must be conceded that his undeniable successes in both acute and chronic cases of the gravest and most baffling character were the real foundation of his great popularity. Held over against his occasional failures resulting from his interpretation of Hahnemannian pathology and therapeutic rules, they bear incontrovertible witness to the fact that the art of healing when practised by an enlightened and conscientious observer is by no means dependent for brilliant and lasting results solely on minute pathological elucidation. His were the gifts of the true clinician. His rare powers of observation, his almost intuitive insight and strong common sense gave him an unmistakable advantage over those who too readily grasp at the rapidly changing and too often conflicting theories evolved from the laboratory. It was by the possession of these sterling qualities that he was enabled to follow steadily and to apply with judgment and a decision that brooked no querulous objection, those truly humane and rational hygienic and dietetic principles of which it may be truly said that they

gained for homœopathy quite as many adherents among both physicians and the laity as the more special homœopathic principles themselves.

It was a pronounced trait of Dr. Wesselhoeft's character that what he thought to be right and good he seized upon with a hold not easily to be shaken. His absolute conviction of the unchangeable truth of every paragraph of the Organon, therefore, afforded him a degree of self-confidence and confidence in his methods which not only inspired a corresponding degree of trust and security in his patients, but also carried him lightly over countless doubts and difficulties which beset the paths of more sceptical minds. It was this firmness of conviction, too, and self-confidence which gave him so marked an ascendency over all who sought relief at his hands and by means of which he was able to hold them under strong control while they followed his advice and directions. At the same time these characteristic traits so shaped his course as to make his professional activities a constant source of joy and satisfaction to himself and a compensation in large measure for those losses and afflictions which the strongest and most successful do not escape.

Outside of his extensive practice he enjoyed the friendship and esteem of many men and women of high standing throughout the country. His sanguine temperament, forceful mode of expression, ready wit, and sincere interest in every liberal and progressive movement, together with his native joyousness in living, gentle ways with children and those in trouble and pain, made him not only a blessing in the sick room, but also a welcome guest everywhere and a strong influence for good in the community. W. W.

SOCIETIES.

HOMOEOPATHIC MEDICAL SOCIETY OF WESTERN MASSACHUSETTS. The quarterly meeting of the Homœopathic Medical Society of Western Massachusetts was held in Springfield on Wednesday, September 15.

After routine business the following scientific program was presented by the chairman of the Bureau of Materia Medica and Practice, Dr. Grace Stevens, of Northampton:

1. "On the Study of Chronic Diseases," Frank W. Patch, M.D., Framingham, Mass.
2. "Primrose Poisoning," Burleigh Parkhurst, M.D., Amherst, Mass.
3. "The Law of Similia: Does It Bear the Light Thrown on Therapeutics by Modern Scientific Investigation?" Frances M. Morris, M.D., Boston, Mass.
4. "Vaccines in Therapeutics," W. H. Watters, M.D., Boston, Mass.

The paper by Dr. Morris proved to be of particular interest, consisting, as it did, of a comparison between the principles of therapeutics as introduced by Hahnemann and those now advocated by the latest modern investigators. The Gazette is pleased to announce that it will be privileged to publish this paper, as well as the very excellent one by Dr. Patch upon "Chronic Diseases."

X-RAY AND CANCER. In an editorial in the "Medical Record" of recent date the introductory sentence is one that will be of undoubted interest to those who contend that the law of similars can be extended beyond the sphere of direct drug action:

"Although it has long been known that undue exposure of the integument to the X-rays may result in carcinoma, and also that exposure of a superficial cancer to the action of the X-rays and of radium may cause the disappearance of the neoplasm, it is only recently that a serious effort has been made to determine the relation of radioactivity to malignant growths."

COMMITTEES OF THE AMERICAN INSTITUTE OF HOMŒOPATHY FOR 1910.

On account of the absence of one of the editors during the summer the communication sent by Dr. James Ward, of San Francisco, the new president of the American Institute, was received too late for earlier publication in the Gazette. It is now given space, however, as we desire to have all our readers learn the names of those having charge of the various departments.

Chairmen of Bureaus.

a. Materia Medica and General Therapeutics,
Chairman—H. H. Baxter, M.D., Cleveland, O.

b. Clinical Medica and Pathology,
Chairman—Joseph P. Cobb, M.D., Chicago, Ill.

c. Homœopathy,
Chairman—John P. Rand, M.D., Worcester, Mass.

d. Pædology,
Chairman—C. S. Raue, M.D., Philadelphia, Pa.

e. Sanitary Science and Public Health,
Chairman—Eugene H. Porter, M.D., New York City, N. Y.

Committees.

Organization, Registration and Statistics.
Chairman—Thomas Franklin Smith, M.D., New York City.
Wm. O. Forbes, M.D., Hot Springs, Ark.
Daniel A. MacLachlan, M.D., Detroit, Mich.
Augustus Korndoerfer, M.D., Philadelphia, Pa.
Gardner A. Huntoon, M.D., Des Moines, Ia.

Hahnemann Monument.

Chairman—J. H. McClelland, M.D., Pittsburg, Pa.
J. B. G. Custis, M.D., Washington, D. C.
Wm. H. Van Den Burg, M.D., New York City.
Burton Haseltine, M.D., Chicago, Ill.
Wm. Tod Helmuth, M.D., New York City.

Congressional.

Chairman—Edward B. Hooker, M.D., Hartford, Conn.
C. E. Sawyer, M.D., Marion, O.
John L. Moffatt, M.D., Brooklyn, N. Y.
T. L. MacDonald, M.D., Washington, D. C.
W. B. Hinsdale, M.D., Ann Arbor, Mich.

Homœopathic Pharmacopea.

Chairman—Thos. H. Carmichael, M.D., Philadelphia, Pa.
J. W. Clapp, M.D., Boston, Mass.
Lewis Sherman, M.D., Milwaukee, Wis.
Stuart Close, M.D., Brooklyn, N. Y.
E. Harper, M.D., New Orleans, La.

Resolutions and Business.

Chairman—Alonzo C. Tenney, M.D., Chicago, Ill.
Frederick A. Faust, M.D., Colorado Springs, Col.
Willard A. Paul, M.D., Boston, Mass.
A. B. Morton, M.D., New York City, N. Y.
Wm. E. Cramer, M.D., Kansas City, Mo.

International Bureau of Homœopathy.

Chairman—George B. Peck, M.D., Providence, R. I.
James Searson, M.D., London, England.
Richard Haehl, M.D., Stuttgart, Germany.
Alexander R. Griffith, M.D., Montreal, Canada.
P. C. Majundar, M.D., Calcutta, India.

Francois Cartier, M.D., Paris, France.
Ernest Nyssens, M.D., Brussels, Belgium.
Leon Brasol, M.D., St. Petersburg, Russia.
Prof. S. de M. Saturnino, Rio de Janeiro, Brazil.

Medical Examining Boards and Medical Legislation.

Chairman—John Tuller, M.D., Philadelphia, Pa.
Lincoln Phillips, M.D., Cincinnati, O.
A. E. Smith, M.D., Freeport, Ill.
Wm. A. Keegan, M.D., Rochester, N. Y.
E. Weldon Young, M.D., Seattle, Wash.

Transportation.

Chairman—Charles E. Fisher, M.D., Chicago, Ill.
Thomas E. Costain, M.D., Chicago, Ill.
Wm. H. Watters, M.D., Boston, Mass.
T. Drysdale Buchanan, M.D., New York City.
Clarence Bartlett, M.D., Philadelphia, Pa.
Sollis Runnels, M.D., Indianapolis, Ind.
Henry C. Aldrich, M.D., Minneapolis, Minn.
Grant S. Peck, M.D., Denver, Colo.

New Members.

Chairman—Homer V. Halbert, M.D., Chicago, Ill.
Joseph Hensley, M.D., Oklahoma City, Okla.
M. A. Royal, M.D., Des Moines, Ia.
Lamson Allen, M.D., Worcester, Mass.
Henry C. Jefferds, M.D., Portland, Ore.
Franklin A. Ferguson, M.D., Bath, Me.
Richard F. Tomlinson, M.D., San Francisco, Cal.
Charles F. Adams, M.D., Hackensack, N. J.
E. P. Mills, M.D., Ogden, Utah.
L. P. Posey, M.D., Philadelphia, Pa.
E. C. Williams, M.D., Hot Springs, Va.
N. A. Pennoyer, M.D., Kenosha, Wis.
H. B. Stiles, M.D., Waco, Texas.

National Society Clinical Research.

Chairman—James Krauss, M.D., Boston, Mass.

Press.

Eastern Chairman—Wm. Rufus King, M.D., Washington, D. C.
Western Chairman—W. E. Nichols, M.D., Pasadena, Cal.
Gilbert FitzPatrick, M.D., Chicago, Ill.
Henry R. Stout, M.D., Jacksonville, Fla.
Elmer D. Olmstead, M.D., Spokane, Wash.

Necrologist.

George T. Shower, M.D., Baltimore, Md.

Memorial Services.

Chairman—J. W. Mastin, M.D., Denver, Colo.
E. L. Mann, M.D., St. Paul, Minn.
C. F. Menninger, M.D., Topeka, Kan.
C. E. Lane, M.D., Poughkeepsie, N. Y.
Dale M. King, M.D., Detroit, Mich.

Auditing Committee.

Chairman—C. E. Walton, M.D., Cincinnati, O.
A. J. Bond, M.D., Adams, Mass.
S. S. Salisbury, M.D., Los Angeles, Cal.

Election Inspectors.

Chairman—George D. Arndt, M.D., Vernon, O.
M. H. Watters, M.D., Terre Haute, Ind.
Wm. O. Forbes, M.D., Hot Springs, Ark.

Thos. Franklin Smith, M.D., New York City.
H. L. Obetz, M.D., Detroit, Mich.

Council of Medical Education.

John P. Sutherland, M.D., Boston, Mass.

Los Angeles Local Committee of Arrangements.

Honorary Chairman—W. J. Hawkes, M.D., Los Angeles, Cal.
Chairman—F. S. Barnard, M.D., Los Angeles, Cal.

San Francisco Entertainment.

Chairman—Wm. Boericke, M.D., San Francisco, Cal.
As Heretofore.

Trustees of Drug Proving.

Chairman—J. B. Gregg Custis, M.D., Washington, D.C.
Benj. F. Bailey, M.D., Lincoln, Neb.
Willis A. Dewey, M.D., Ann Arbor, Mich.
Geo. Royal, M.D., Des Moines, Ia.
John P. Sutherland, M.D., Boston, Mass.
J. H. McClelland, M.D., Boston, Mass.
Edwin H. Wolcott, M.D., Rochester, N. Y.

OPEN LETTER.

Dear Doctor:—

A meeting of physicians and surgeons interested in Scientific Clinical Research is called for Wednesday, October 27, 1909, at John Ware Hall, Boston Medical Library, No. 8 Fenway, Boston, Massachusetts. The meeting will come to order at 10 A. M., and carry its sessions through Wednesday, and, if necessary, through Thursday and Friday.

The object of the meeting is,

First, to establish an American Association of Clinical Research;

Secondly, to establish clinical research on an incontrovertible scientific basis in hospitals; and

Thirdly, to institute an American Journal of Clinical Research, in which the work of members of the American Association and of others doing clinical research work in a scientific manner shall be published.

You and your friends are herewith cordially invited to participate in this meeting and in the proposed movement of scientific clinical research.

This invitation is extended to all physicians and surgeons whose interest goes beyond the immediate case work of ordinary clinical societies; and it is hoped that the invitation will be accepted by all medical practitioners, irrespective of their present medical affiliations, who can appreciate the necessity for establishing on an incontrovertible scientific basis the certainties and limitations of the present practice of medicine and surgery before attempting to add to the already large and cumbersome field of medicine.

The American Association of Clinical Research is not intended to disturb the present medical affiliations of its members nor to interfere in the very least with the duties they owe and the privileges they enjoy by virtue of their affiliation with any existing national medical body.

The American Association of Clinical Research is to take cognizance of the fact that the clinic requires cold facts and conclusive methods, and upon these fundamental requirements, the structure and the work of the American Association of Clinical Research are to be built.

It is of the utmost scientific importance to establish conclusively all that is at present true in medicine and surgery, and only upon such proved knowledge, to base any further advancement. The clinic deals with clinical entities and not, like the laboratories, with parts as entities. Therefore, clinical research differs, and must differ, from experimental laboratory researches. Clinical research must consider clinical entities, and when considering parts, it must consider them only as parts and

not as wholes. All that subserves the object of obtaining and investigating clinical facts and principles belongs to clinical research and the laboratory is a part of the means of clinical research, but only a part.

The crux of the matter appears to be that experimental laboratory proof is not sufficient clinical proof. In order to advance in an irresistible line, clinical research must be based on a conclusive form or method of clinical proof. In experimental proof, we dislocate a part from a whole and attempt to prove the whole from the part, as though a dislocated part could always prove the whole. Or, we attempt to prove facts in one species by facts in another species, as though the two species were identical. For instance, the experiments made on animals to elucidate certain elements of fever bring out a fact of almost insurmountable difference between man and the lower animals, the fact that man has associated with the nakedness of his body a highly perfected power for regulating his temperature, a highly developed vasomotor system and a vast array of sweat glands, a characteristic complex of things which apparently no other species of animal life presents. Experiments made on animals to prove febrile or other clinical phenomena in man, may be suggestive, but for obvious reasons cannot be conclusive. To prove observations in man, the observations must be made on man and not on animals. But observations on man even are not necessarily conclusive. Individual observations on man cannot be conclusive, because the same experience cannot be repeated, and when we prove by numbers, we compare similar but not identical experiences. Analogy is not conclusive proof. Identity alone is conclusive proof; but since, in medicine, identical experiences cannot be repeated, we must provide simultaneous identical experiences in order to have proof by identity. Clinical proof is conclusively established when all observations and experiments are made conjointly by at least two competent men, preferably of opposite ideas, at the same time. Conjoined critical observation and experiment, at the bedside and in the laboratory, as may be required, furnish simultaneous identical experiences, the proof proceeding on the principle that a whole can be proved only by the whole and not by dislocated parts.

These and other weighty questions await your assistance for a necessary solution. The benefit that will accrue, both to medicine in particular and to the medical profession and humanity at large in general, from a satisfactory establishment of scientific clinical research can be easily surmised. Come prepared, yourself and your friends, to give to this matter your mature convictions and your personal assistance. Only from a critical interchange of critically acquired opinions can we hope for clearness and for the clarification of the medical atmosphere now charged with confusion and indifference.

Your communication, indicating your interest and your expectation of being present at the meeting in Boston on October 27, next, is eagerly awaited, and on receipt of the expression of your interest, further developments will be communicated to you personally in due time.

Please address your communications at the earliest possible date directly to James Krauss, M.D., 419 Boylston Street, Boston, Massachusetts.

Yours fraternally,

Signed: JAMES KRAUSS, M.D.,

Chairman Committee American Association Clinical Research.

419 Boylston Street, Boston.

August 18, 1909.

SANITARY DRINKING CUPS. It is reported that the Pennsylvania Railroad has installed in the Broad Street station in Philadelphia and on some of its trains, modified slot machines whereby individual drinking cups may be obtained at the expense of one cent. These cups are made of paraffin paper, and are presumably very similar to those so extensively used at the recent Tuberculosis Congress in Washington.

BOOK REVIEWS

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 of Philadelphia, etc. Assisted by H. R. M. Landis, M.D., Visiting Physician to the Tuberculosis Department of the Philadelphia Hospital, etc. Vol. III, September, 1909. Lea and Febiger. Philadelphia and New York.

In the September number of this quarterly will be found the usual very able review of the work of the year in obstetrics, dermatology and syphilis, and diseases of the nervous system, and diseases of the thorax and its viscera. In the opinion of the reviewer the pages devoted to tuberculosis are well worth the price of the entire volume, and this is only a comparatively small section of the subjects covered. The diseases of the heart and blood-vessels receive very careful attention at the hands of Ewart, of England. Gottheil writes the section upon dermatology and syphilis.

The use of adrenalin in skin diseases is perhaps one of the most notable additions. Syphilis, as would be expected, receives abundant attention, particularly the serum diagnosis of that disease, the so-called Wassermann test. To pregnancy and its complications Davis devoted fully fifty pages and an equal amount to obstetric surgery. While the diseases of the nervous system may not be of as general interest as the others, they are, however, certainly well covered and the knowledge of this is as certainly necessary to the physician. The Gazette has already spoken in no uncertain terms concerning its high opinion of this publication, an opinion which the present volume well continues to justify.

Naval Hygiene. By James Duncan Gatewood, M.D., Instructor in Naval Hygiene, United States Naval Medical School, Washington; Medical Inspector, United States Navy. Prepared by direction of the Bureau of Medicine and Surgery and published by permission of the Navy Department. With eight colored plates and 105 other illustrations. Price, $6.00. P. Blakiston's Sons & Co. Philadelphia. 1909.

In not many departments of medical work are we now able to say that a book "fills a long-felt want." This threadbare expression might, however, be used most appropriately and truly in this instance, for there is not at present an American book covering in detail the subject here treated. Coincident with the rapidly increasing navy comes increased need for protecting the enlisted men of all stations, hence the very vital need of a full knowledge of naval hygiene.

The author begins with a very able section on vital statistics of the navy for the past decade. The causes, methods of infection and prophylaxis of tuberculosis and of venereal diseases are described with particular clearness and detail. The havoc they make among the sailors is clearly demonstrated, and, what is more important, the various forms of prophylaxis are carefully and fully given. Following this comes a chapter on air, ventilation and allied problems on shipboard. Then in succession the subjects of light, water, drainage, food, clothing and disinfection are all discussed in detail. The book concludes with a section upon naval recruiting, and a very complete general index.

In the chapter on "the navy's food" we find material arranged somewhat similar to that most excellent book of Wiley's on "Foods and Their Adulterations." Numerous tables of food values are given and even the same or very similar colored illustrations of various cuts of beef are given. This comparison of the two books is by no means a criticism other than favorable, as for them both we now have much regard.

In the last few pages we find what a complicated machine a modern

battleship really is, as sectional cuts of one is given showing more than four hundred and fifty separate parts to be named. We believe that the author has prepared a volume that will be for a long time a standard in marine lines and as such we gladly recommend it.

Confessions of a Neurasthenic. By William Taylor Marrs, M.D. With original illustrations. F. A. Davis Company. Philadelphia.

It can be asserted as an unquestioned fact that this little book runs in an unusual course. It takes up the experiences of a neurasthenic from childhood to middle life, describing his thoughts, feelings and sensations. In the earlier chapters, those describing the early life, much will be found to commend. The same can be said of the later ones, except that too many experiences of diverse varieties are crowded together into them, rendering them highly improbable.

Taken as a whole the book is written in a very clear, readable style and will well repay the comparatively short time required for its perusal. As it is adapted for the layman as well as for the profession, it should be very suitable for the table in the doctor's reception room.

The F. A. Davis Publishing Company has just prepared its classified catalogue of medical publications. In this catalogue are included authoritative books upon practically every phase of medicine. Many of the authors occupy positions unequalled by any others in their respective fields. We feel that the medical profession owes much to this company for the numerous and excellent publications that it brings forth, and bespeak for it an abundance of continued patronage from the medical profession.

The well-known publishing house of W. T. Keener & Co. of Chicago has recently entered into a combination whereby its own individuality is lost and the Chicago Medical Book Company appears. We trust and expect that this new company will well continue the traditions of the former one in the publication of medical material of excellent worth.

THE MONTH'S BEST BOOKS.

Special Pathology, Beattie and Dickson; $5.00. P. Blakiston's Sons & Co.

Surgical Diagnosis, Johnson; 3 vols.; $18.00. D. Appleton & Co.

Bier's Hyperæmic Treatment, Mayer; $3.00. W. B. Saunders Co.

Diseases of the Ear, Politzer. Lea & Febiger.

Chemistry, Simon. Lea & Febiger.

Operative Surgery, Treves. Lea & Febiger.

Obstetrics, Evans. Lea & Febiger.

Medical Jurisprudence, Forensic Medicine and Toxicology, Whittaus; Vol. 3. Wm. Wood & Co.

Minor and Operative Surgery, Wharton. Lea & Febiger.

Surgery, Senn. F. A. Davis Co.

Confessions of a Neurasthenic, Marrs. F. A. Davis Co.

Diseases of the Skin, Shoemaker. F. A. Davis Co.

Naval Hygiene, Gatewood; $6.00. P. Blakiston's Sons & Co.

Handbook of Obstetrics, Cadwallader. F. A. Davis Co.

Studies on Immunity, Muir. Oxford University Press.

Diseases of the Personality, Ribot; $1.00. Boericke & Tafel.

The Food Tract, Blackwood; $1.75. Boericke & Tafel.

Diseases of the Eye, May; $2.00. Wm. Wood & Co.

Laboratory Diagnosis. Faught. F. A. Davis Co.

Materia Medica and Therapeutics, Cowperthwaite; $6.00. Boericke & Tafel.

We are very glad to learn that all the graduates of Boston University who took the July examinations before the State Boards of Maine and Massachusetts passed readily and with much credit to their alma mater.

PERSONAL AND GENERAL ITEMS

Dr. Eugene S. Eastman, class of 1904, B. U. S. M., has removed from 476 Columbus Avenue to 444 Massachusetts Avenue, Boston.

Dr. Florence H. Tresilian, class of 1895, B. U. S. M., has removed from Somerville to 16 High Street, Easthampton, Mass.

Dr. and Mrs. Orville R. Chadwell of Jamaica Plain are receiving congratulations upon the birth of a daughter.

Dr. Deborah Fawcett of Newton is spending her vacation in Dakota on a ranch.

Dr. Luther G. Eastman, B. U. S. M., '06, has located at 244 Cabot Street, Beverly, Mass.

Dr. Emily H. Barker, for many years resident physician at Wellesley College, has removed to 149 Centre Street, East Aurora, New York.

By the terms of the will of the late Col. Emmet Annis, Grace Homœopathic Hospital of New Haven, Conn., is to receive a legacy of $100,000. The internes at this hospital for the year ending June 1, 1910, are Drs. Arvid T. Wismark and Frederick H. Lovell, class of 1909, Hahnemann Medical College, Chicago.

Dr. Florilla M. White, B. U. S. M., 1908, has received appointment at West End Hospital, 365 West End Avenue, New York City, for the year beginning October 1, following a year's service at the Massachusetts Homœopathic Hospital, Boston.

Dr. Elinor Van Buskirk, class of 1907, B. U. S. M., has removed from 123 East 112th Street to 605 West 111th Street, New York City.

Dr. J. Walter Schirmer, B. U. S. M., 1908, has located at 4 Highland Avenue, Needham, Mass. Hours: 2 to 4 P. M.

Dr. Everett Jones, B. U. S. M., 1898, announces the opening of an office in the Warren Chambers, 419 Boylston Street, Boston. Office hours: 12 to 1, and by appointment. Diseases of the nose, throat and ear receive special attention.

Dr. Anna T. Lovering, 10a Park Square, Boston, librarian of Boston University School of Medicine, has resumed confidential collaboration in literary work with physicians preparing papers for societies or for publication. Necessary data furnished, manuscripts revised and typewritten, proof sheets corrected.

On account of an unfortunate oversight the title of M.D. was omitted from the name of Dr. J. H. Sherman in connection with his paper upon "Alcoholism" in the September number of the Gazette. The Doctor is so well known among all New England homœopaths that the title is by no means necessary, but the editor feels, nevertheless, that the oversight was extremely unfortunate.

Dr. Edward Beecher Hooker of Hartford, Conn., was compelled through illness to make a short stay at the Massachusetts Homœopathic Hospital early in September. While we regret the cause that necessitated this visit, we much appreciated the Doctor's company and are very glad to be able to report a prompt and satisfactory recovery.

Dr. Gertrude E. Heath of Gardiner, Maine, calls the attention of the editor to an error in the last number of the Gazette when we stated that Dr. Bennett was the first woman physician to hold a position upon any of the Maine State institutions. Dr. Heath has held such a position for the last eight years, a correction that we very gladly make.

WANTED.—Assistant and partner in a well-established sanitarium in New England. Address "Sanitarium," care of New England Medical Gazette, 422 Columbia Road, Boston, Mass.

THE NEW ENGLAND
MEDICAL GAZETTE

Vol. XLIV NOVEMBER, 1909 No. 11

ORIGINAL COMMUNICATIONS.

EXHAUSTIVE PSYCHOSIS DUE TO TUBERCULOSIS.*

By Frederick C. Robbins, M.D., State Hospital, Gowanda, N. Y.

Exhaustive Psychosis is a term used to designate certain conditions occuring in an individual whose mental symptoms follow and are concomitant with some serious physical disease, generally of long standing, where there has been some great drain on the system and where the mental symptoms begin with a hazy or dreamy state.

Tuberculosis, as we all know, is an attack against the resistance of the body, and all the agencies and powers are brought to bear on the invasion of the tubercle bacilli. This disease, whose attack on the system is the most subtle and insidious and which may be of long or short duration, shows in either case a much lowered vitality and a much lowered resistive force which, of course, grows less as the period of duration lengthens. The condition of mental exhaustion which develops quickly at a certain stage of the disease is more often observed in the neglected cases when the signs of tuberculosis are clean cut, and where the condition of the patient has been such that he has been able to be about attending to his duties and using the strength which should have been reserved to resist the disease until the former has been exhausted.

This physical exhaustion no doubt accounts to some extent for the suddenness of the psychosis, and the reluctance of the family and, incidentally, the family physician to call the alienist to advise in the case. The mental condition may also be due to the great amount of toxin developed by the bacilli, a long continued leucocytosis or the attendant anemia especially of the cerebral tissues. These cases come to the hospital generally with little history, the onset being recent and seldom of more than a month's duration, and usually after they have been through a number of hands with indifferent benefit. They come or are sent to the hospital as a last resort with little expectance of recovery on the part of the family, and almost always with the statement that they (the family) can see no reason

* Read before Society of Neurology and Psychiatrics, session of the American Institute of Homœopathy, Detroit, Mich., June 22, 1909.

for the mental breakdown, especially in view of the absence of insanity in the family history. They evidently consider the tuberculosis as something outside the range of their vision and as the most remote factor in the causation of the psychosis.

The similarity of this mental condition to the other psychoses is puzzling from the diagnostic standpoint. There may be a pseudo-flight of ideas with psychomotor restlessness or a difficulty of thinking which suggests a manic-depressive; an apathetic condition with foolish response to questions might make one think of dementia præcox, but on closer analysis certain marked symptoms stand out prominently, leading one to a diagnosis of exhaustive psychosis. There is always present a more or less complete disorientation, a haziness or clouding of the consciousness generally of a dreamlike nature, and an inability to grasp the surroundings. One or two things may impress themselves on the patient, such as the uniformed nurse and the physician whom he sees at frequent intervals. He loses all sense of time, and mistakes of identity are frequent. The patient at irregular intervals may rouse himself from this lowered mental condition and develop casual hallucinations generally of hearing; he may become noisy, restless, wandering about the ward in an aimless manner, or he may lie in bed muttering and talking disconnectedly. This last condition, however, is more prominent and pronounced in cases of exhaustion following typhoid and septicemic conditions. These cases react slowly to external impressions; are indifferent to their surroundings, and usually lie a greater part of the day in a semi-stupor.

The physical signs are in common with moderately advanced tuberculosis, capacity for work diminished; general condition is one of poor nourishment with a history of a loss of weight and insomnia; hemoglobin is lowered; night sweats are present; dermographia is prominent; temperature is sub-normal; usually râles are heard over upper portion of lungs; there is a history of alternate constipation and diarrhea; soft cardiac valvular murmurs are audible; blood pressure is lowered, and albumin and casts are found in the urine.

The prognosis depends on the degree of the physical exhaustion, the severity of the mental condition comparing with the physical symptoms. The greater the aggravation of the symptoms the more serious the result on the mind. Mental exhaustion following tuberculosis is of a more serious nature and longer lasting than the other exhaustive psychoses. Should there not be an improvement in the mental condition in a few weeks the case will be of long duration and of doubtful permanency of recovery, and should the case begin with a low form of delirium, sub-normal temperature, and accompanied by a corresponding physical exhaustion the outlook is discouraging. The recoverable cases mend quickly, and the hazy, confused condition which is not of the deep-seated type is seldom of more than two to four weeks' duration.

Treatment consists of good nursing and watchful care. These

cases must be under close observation, that any unfavorable symptoms may be quickly combated and also that they may not wander about and harm themselves. They may require some mild form of restraint, as sheets or blankets fastened at the bedrail, but no form of hypnotic or sedative may be used. The need of a strictly supervised nourishing diet is necessary and paramount, at first liquids and later semi-solids and solids, care being taken that the elimination is excellent. High saline enemata are of great value in keeping the lower bowels clean and as a stimulant in anemic conditions. If patients can be on a quiet, sheltered veranda, they will derive much benefit thereby. Of the remedies used, arsenicum, belladonna, ferrum et strychnia citrate, ferrum metallicum, cinchona, and small doses of strychnia sulphate, have been found to be of much value.

Three cases of special interest have been recently under my observation.

The first was:

Admitted May 31, 1907. Aet. 43. Single. Drygoods cleaner. United States.

Family History. Mother insane and committed suicide; father and three maternal aunts and two sisters died of tuberculosis.

Patient's History. Born in Clarksville, N. Y., August, 1863, she began to attend school at four years, and after going through the High School was graduated from Alfred University, after which she taught at intervals, worked in a newspaper office, did clerical work, and her last occupation was dry-cleansing ladies' garments. She has lived alone for many years.

Psychosis. Patient had nervous prostration eight years ago, lasting for two years; two and one-half years ago she had another attack, and has had grippe several times. For some time past she has been nervous, imagining that terrible figures and grotesque shapes which fill her with fear move about her, and that she has committed some sin against the people with whom she lived.

Abstract of Legal Commitment. "The patient is of the opinion that she is two or three persons and that she is not well balanced and is insane. Talks irrationally, says that she has dual personality, was mesmerized and could not control her mind, thought that she had committed some awful sin against all the people in the house. Very nervous, continual jerking of the muscles. Picking at her clothes, staring eyes, general appearance of an insane person. Asked to sleep on the verandah so that she could walk in the garden. Asking everybody to forgive her for saying imaginary injurious things about them."

On admission her physical examination showed a tall, thin, emaciated, middle-aged woman, height 5 feet 8¾ inches, weight 98 pounds; hemoglobin 60 per cent.; palate high and narrow with longitudinal torus; thyroid slightly enlarged; headaches and neuralgia in head; exophthalmus, with Graefe's and Stellway's symptoms; more or less profuse perspiration; deep reflexes increased; tongue deviating to left; flexion and extension of forearms and toes weak;

slight twitching of side of tongue; coarse twitching of widely spread fingers; dull areas at upper portions of right side of chest and posteriorly above spines of scapula, with diminished respiratory murmur and slight whispering bronchophony on left; mitral second sound churning in character; pulse 100 standing; arteriosclerosis of radial artery and arcus senilis; poor digestion; teeth irregular; blood pressure 125 systolic, Janeway; slight trace of albumin in urine.

She came to the hospital quietly, and at first was quiet but soon became restless and confused, wandering aimlessly about the ward at night. She talked slowly, answering questions with hesitation as if groping for words; at times she was rambling in speech, there being some flight. She said, "Mr. C.... came to the house and the telephone bell rang, I wanted to speak to him and I heard him say 'What shall I do?' I heard him up there (points to the ceiling) and I knew it was something important, he kept saying 'What shall I do?' and no one answered the telephone, he is my dearest friend and lives in Cuba. .... The thought chasing through my mind is that there is someone here, or some place, being punished for me, it is often so, I don't know why, for I haven't done anything to be punished for, there is no reason more than anything. There's that Mr. C. Yes I know the voice. (Noisy patient overhead.) I hear people say that my tongue bothers them. I haven't been to the house today. I wanted to and intended to. I ought to but couldn't. I haven't been there in several days. Miss Danforth and Miss Munson were there to call this morning. (How do you know?) Let's see who told me .... I don't know whether two others were there or not, the Riley girls are there. Now see here I am not the one." She attributes her inability to do things and to work to nervousness, lack of sleep, and she imagines all sorts of things, among them that a noisy patient on an upper ward is a friend and that he is suffering and calling her but she is afraid to answer him. She gives date correctly, recognizes physician as such but says that she is in some house, "maybe a sanitarium." She was hazy about events of admission after a few days but was able to give after much questioning a fair family and personal history. Her retention and school knowledge were excellent; her calculation was correct although a little slow. She shows good insight into her physical condition, but does not recognize the fact that she is mentally ill. She said that she was not able to work and wished to stay here to be taken care of.

She continued restless and confused, but gained gradually in weight and became much clearer mentally. During August she had improved to such an extent that she was up and dressed a short time daily and was cheerful and contented. She had alternating periods of constipation and diarrhea, tired easily, and in October, 1907, her hemoglobin was only 70 per cent., and a re-examination of the lungs showed that the tuberculosis had extended to the left lung. During the summer of 1908 she did not appear as well physically, although her weight was 103 pounds. It was difficult for her to make any connected mental effort; she cried easily; complained of ringing and

roaring in ears. She has always menstruated quite regularly and has menorrhagia, at which times she becomes weak and exhausted. Any unusual stir in the ward or excitement brings on an exhausted condition which lasts several days. During the winter of 1908-9 she remained practically unchanged except for the increased frequency of the faint attacks, and in the spring when she was overtired dark shapes passed before her eyes and objects appeared distorted, although she realized that they were as usual and tried to exert enough self control to make them appear as they were.

The second case was:

Admitted October 5, 1908. Aet. 41. Married. Farmer's wife. Seneca Indian. United States.

Family History. Negative as far as known.

Patient's History. Patient was born on the Cornplanter Reservation, Penn. She has been married twice and has had three children and one still birth. On August 10, 1899, she was operated on at the Erie County Hospital for ventral fixation. She was again admitted September 22, 1908, with neurasthenia, and discharged September 30, 1908. Her husband states that for two years she has not been well, and has been gradually running down physically. She has also been doing much church work.

Psychosis. Abstract of Legal Commitment: "Her father is dead, but she says she has talked with him and seen him today. Says she sees visions in which the ocean appears to her and says 'Double-T, double-F, double-T. Goose on top of the hill, I see nearer my God to Thee.' She assumes the attitude of prayer, kneeling before a chair, while in this position she begins to sing. At other times she sits motionless casting her eyes downward and clasping her hands together."

On admission, physical examination showed a poorly nourished and emaciated female adult; hemoglobin 50 per cent.; weight 79 pounds; loose rattling cough; dullness and diminished respiratory murmur over both upper lobes of lungs with coarse râles; cardiac impulse felt all over left breast; trace of albumin in urine.

She lay quietly in bed with eyes closed, seemingly exhausted, and answered questions in monosyllables, gradually becoming restless however, continually getting out of bed to go to water section, but not being able to find her way would, when restrained, become irritable and noisy and emit Indian war-whoops. She wraps the bedding about her, goes to the door and demands to be permitted to go home, and preaches and sings in Indian. She is stupid and confused, poorly oriented and makes constant mistakes of identification. She says "For two years I have seen Christ, so plain in the sky, especially when we have dinner, always in the daytime,—looked like Himself, like a spirit—said 'come to me, come to me,—come home, nearer home.' I wish I was a bird on a high place to fly, hit me with a baseball club—doc, doc, doc, doctor, the ice-cat—fish—he called them, never was in the river, the lake, that's all, something they don't know, I slow, little bird, pigeon, the bottom of hell-fire,

to Quaker Bridge, to Red House,—there's another one, looks at me all day time, tells me patiently wait, you lie down there where you are, all the way my Savior leads me."

In three months her hemoglobin had increased to 90 per cent., weight to 109 pounds, but she continued to have confused periods daily. During February and March she cleared materially; the disorientation ceased; she began to call physicians by name and to inquire about her family. Her cough diminished; her appetite was excellent; she was up and about daily, and read magazines and wrote good letters home. April 27, 1909, patient had improved to such an extent both mentally and physically that she was paroled home. Inquiry a month later revealed that she was in fair mental condition but that she was suffering more or less privation, and a few days after inquiry she returned to the hospital voluntarily, weighing a little less with temperature normal. Efforts were made (June 2, 1909,) to have her sent to her mother in Pennsylvania, where she went June 10, 1909.

The third case was:

Admitted March 16, 1909. Aet. 50. Farmer's wife. Separated. Seneca Indian. United States.

Family History. Negative as far as known.

Patient's History. She has been a hard-working woman, infected by a drunken husband and abused by a half brother. For the past year she has not been well, and has had difficulty in supporting herself, especially since some uninsured houses she owned were burned last fall (1908). A few weeks ago she was taken to the Erie County Hospital on account of ill-health.

Psychosis. Abstract of Legal Commitment: "I am rotten inside, I don't know how I came here, I don't know who brought me, I am afraid, I feel sick." Sat with dejected appearance, and would not pay any attention to us. Has been at Erie County Hospital for some time, but it is not safe to keep her there, as she is too depressed to be safe in an open ward.

On admission to the hospital her physical examination showed an emaciated Indian woman; recent scars on left side of neck, shoulders, left side and arm; expression of eyes dull and languid; indifference to pin-prick; all reflexes exaggerated; an incontinence of urine and feces; dulness and râles over whole right lung and apex left lung with coarse râles; hemoglobin, 70 per cent.; blood pressure 102, Janeway; trace of albumin and granular and hyalin casts in urine.

She sleeps but little, and is inclined to be restless, getting out of bed, saying "going to kitchen." She says little, replying generally in monosyllables, and when questioned through an interpreter recognizes that she is in a hospital, and is being treated by physicians, but does not know where. She takes no interest in her surroundings; never speaks unless spoken to, and then in an almost inaudible voice; she has no delusional or hallucinatory condition, and when questioned

as to whether or not she wished to stay here said that she was "willing to stay here and have same food as others."

During the latter part of March she began to recognize the ward physician and talked more. In the early part of April it was noticed that she was failing physically, and did not talk as much as formerly or recognize those about her, and could not understand even in Indian. She died April 26, 1909.

At autopsy the right lung was found full of pus; pus was seen pouring into the apex of left pleural cavity from a sinus leading from cervical abscess, and small glands of mesentery were enlarged.

ON THE MANAGEMENT OF CHRONIC DISEASE.

By Frank W. Patch, M.D., Framingham, Mass.

Definition.

Approaching the study of chronic disease purely from the standpoint of the philosophy of Samuel Hahnemann, we are confronted with his theory of a series of three great miasms acting as foundation causes for practically all chronic disease. Sycosis, syphilis or psora, he found to be the underlying features through which there developed in the human system the many and varied groups of symptoms which had previously defied classification.

Looked at from the point of view of the practical modern physician the study of chronic disease becomes, largely, an investigation into the most intimate relations of personality, the symptoms exhibited by different individuals and the environment in which they live. Nothing is too remote, nothing too sacred to escape the enquiry of the investigator, and whether the disease is one of physical or mental origin, he will often find good ground for the exercise of his greatest talents and patience before arriving at a satisfactory solution of the complex problem before him. It would certainly seem difficult, today, to encompass all of what we now understand as chronic disease within the bounds of Hahnemann's three great miasms, though they undoubtedly still figure very largely among the causes of the various morbid states with which we have to deal.

What, then, are we to understand as included under the head of Chronic Disease? Not necessarily miasmatic disease, mental disease, nervous disease, skin disease, or disease of any especial organ or function. It may, however, include any of the above or many others. In fact, in the broadest interpretation any protracted morbid condition of the system may be legitimately spoken of as a chronic disease. In the last analysis chronic disease must be understood to include also a long and somewhat indefinite list of nondescript cases, often spoken of as functional nervous diseases, though frequently presenting some pathological basis, physical, emotional, or mental. For lack of better classification these might be thought of as diseases

of personality. It is not always easy to group their symptoms into recognized classes, as their strongest characteristics are purely individual, differing one from another in every instance, yet always abnormal in some feature.

Etiology.

The scope of this paper must of necessity be very general; to go into details would mean to write a series of monographs entirely uncalled for at the present time. The causes of chronic disease are as already noted, many and varied. They may be thought of as primary and exciting, and in arriving at a just estimate of the true cause of an individual case one must be untiring in his investigations. The results obtained in treatment must be largely dependent on the care and judgment with which we attack the problem at the beginning.

Primarily miasmatic cause is undoubtedly the largest factor with which we have to deal. Psora, thought of as a generic term, is a "hydra-headed monster," and looms large as an underlying factor in a great number of cases. The investigation of a chronic case should compass first:

Heredity, through a knowledge of which we may learn something of the resistance and limitations of our patient. We know, for instance, that if several members of a previous generation have succumbed to tuberculosis the general resistance of our patient may be expected to be below normal, even though we have no reason to think of tuberculosis involvement. If there has been a series of mental disasters preceding the life of our patient, we shall certainly have reason to guard him from conditions liable to prove excitant to a weakened nervous system.

It is a self-evident fact that every human being has certain limitations, many limitations, in fact, and our investigation into causes should bring these into relief, not only to help us in getting at the initial impulse of disease, but also to assist as an intelligent estimate of prognosis.

Environment: a. Family relations; b. Business or professional association.

Among the immediate or exciting causes of chronic disease there is perhaps no element needing more careful inquiry than the family relations of the patient. Before going into detail it will be well to emphasize the fact that inharmony is an irritant in the emotional life corresponding to some of the more active poisons considered from a physical standpoint. No sensitive individual can develop a perfectly normal life among sterile surroundings any more than a tropical plant can thrive in a frigid atmosphere. Inharmonious married life, for instance, combined with a bad hereditary influence form a combination capable of producing the most disastrous results. It is not always easy to discover the exact source of the irritating causative factor. Women, especially, will often conceal to the last, the inner history of an association which they rightly hold most sacred, and it may be only after the closest questioning,

careful observation and the establishment of confidence based on an evident disinterested desire to be of service, on the part of the physician, that the truth can be ascertained. As a direct cause of neurasthenia in women of diminished resistance, errors of the married state may be placed first on the list. As a rule these women have few general resources outside the home life to absorb their interests, and the constant wear of daily friction where there should be only sympathy and love sooner or later brings them into the hands of the physician. But it is not in the married state alone that we find inharmony of home life. Brothers and sisters of opposite temperaments thrown constantly together in the intimacy of the home, often develop serious difficulties that, while usually of a petty nature in themselves, may result in such a state of emotional disturbance as to call for radical interference.

In business or professional relations similar causative factors arise though usually of a less serious aspect, but when parents attempt to coerce children into occupation for which they are totally unfitted by nature trouble not seldom results.

Those who are physically and mentally strong, who have a really normal development of all faculties can get on. They are able to fight for themselves and will usually make things so uncomfortable for those about them that conditions are changed, but with the unfortunates who have not this ability and who start in life handicapped by a debilitated resistance the outlook is very different, and in many instances great misery follows.

In occasional instances the environment of climate is a factor to be considered, but this plays a comparatively small part in the causation of chronic disease.

Occupation, on the other hand, may, aside from the ethical relations above mentioned, often prove an important factor. Indoor occupations in general are less hygienic than out-door, and those callings requiring close application with but little change of position are especially unfortunate. Sewing or other purely sedentary physical occupation, stenography, bookkeeping, school-teaching and kindred callings involving either excessive attention or constant mental routine bring many patients to our doors; while on the other hand, idleness and want of regular occupation, are, in another walk of life, equally detrimental.

History.

In the investigation of chronic disease, closely following in importance the broad general outline above noted, we may consider the history of the immediate morbid influences that have been a part of the experience of the patient himself. These may be divided as follows: a. Disease influences; b. Religious influences; c. History of the affections; d. Employment.

a. Disease influences. What diseases has the patient been afflicted with? their nature and probable influence on the life? Has there been miasmatic disease? and especially has there been suppression of any miasm by external applications or other crude measures?

Did disease in childhood show any unhealthy tendency in the patient as an hereditary influence? Was there ever a skin lesion present, and how was it cared for? Is there any evidence of unfortunate hereditary? Which parent does the patient resemble? Where did she come into the family? Is there reason to suspect deficient vitality on account of any prenatal influences? Has there ever been an attack of intermittent fever, and was it suppressed or not? Has there been gonorrhea or other venereal complication? Scabies, and so on. Suppression of disease by means of crude medicines is responsible for many difficult chronic conditions. An intermittent fever, for instance, treated strictly according to the law of similars never leaves an unpleasant trace in the system; it passes through its various phases and the patient recovers in a perfectly orderly manner as he would from any other uncomplicated disease without unpleasant after effects or recurrence. Suppressed by large doses of quinine it often becomes one of the most intractable things with which we have to deal, exerting a bad influence on the whole after life. Nature, in sickness as in health, works always in a perfectly orderly manner, and wherever we can profit by her example we should strive to do so. It is natural for many internal diseases to seek the surface of the body in external manifestations; it is natural for certain paroxysmal diseases to spend themselves in periodical external explosions. When we attempt to improve on nature and change the course of these things by the administration of crude drugs the result is usually chaos which it may take half a lifetime to overcome.

Has there been serious rheumatic disease? Gallstones, renal calculus or anything to indicate over nutrition? Do the excretory organs function well or is there evidence of auto-intoxication through the retention of poisonous waste in the system? [Very few of our patients and, I fear, not a large proportion of physicians, have a clear understanding of the many-sided question of nutrition in its relation to the human body, and while the scope of this paper prevents its discussion here, it is not out of place to say that the closest possible relation exists between nutrition and chronic disease. Without an adequate understanding of the former subject it is impossible to properly grasp the treatment of the latter. Over consumption of proteids is undoubtedly a direct cause of much of the suffering with which we are brought in contact and Diseases of Prosperity, if we may so denominate them, are everywhere abroad. Better general and external hygiene have led to a lessening of the grand totals of infections and contagious diseases, but neglect of internal hygiene has brought about an increase in deaths from nutritive diseases so that the space of human life lengthens but slowly and we suffer needlessly in our seeming luxury.] The mental state should be carefully inquired into; the temperament observed; is there a tendency to either depression or excitement? Is the patient over-anxious, irritable or self-centered? And so on. The above is by no means a complete list of questions to be asked or observations

to be made, but it is sufficient to show in a small measure the scope of examination in chronic cases.

b. Religious influences surrounding a patient sometimes have an important bearing on the life of the individual before us; especially may inquiry along this line help us to determine the mental stability. Of more importance, however, is

c. History of the affections. The close relation existing between the affections and the sexual life of every individual makes it of the utmost importance that we go carefully into those very personal matters. We may find that most of the trouble from which the patient suffers dates from some emotional or affectional experience in early life which has been carefully concealed over a long period of years. Again the more immediate family relations, are they productive of happiness or suffering? Is there harmony or inharmony? for harmony and health are not far separated and unhappiness is productive of many severe and protracted states of ill health. Find out if there are especial anxieties with or without just cause.

A patient came to me some time ago, in a broken down, nervous state; she had a happy home, was in comfortable circumstances and her husband was devotion itself. I made the usual careful inquiries into the history of her condition, elicited what I thought at the time was sufficient evidence to account for her illness. After nearly a year I learned that a short time before she had come into my hands a favorite son had become insane while travelling abroad and was then confined in a hospital in Germany. She had carefully concealed this important fact from me, though it was undoubtedly the real cause of her nervous breakdown. The fault was mine, not hers; she had followed a natural maternal instinct. I should have been able to uncover all facts connected with the case by judicious questioning. Suppression, in the emotional sphere, may do as much injury in some instances, as in the physical life.

d. Employment may be an important factor in the cause of disease, as we all know. It goes without saying that an individual's work should be adapted to his especial talents, but this is not always thought of. Aside from the need of properly hygienic qualities in all work, an occupation should as far as possible be adapted to the physical and mental powers, the likes and dislikes of the individual, else it may be productive of a constant irritation that will in time bring about a true state of disease.

Lastly, we may investigate the daily habits of our patient. At what hour does he rise and retire, the daily regime of work and recreation; the output of energy; the influx of power through food; just what does he eat and when, mastication, his habits in regard to stimulants, tobacco, etc. It is important here to get accurate accounts from patients of the specific things they take and do, as they are often prone to put off as unimportant generalities, things that we might consider of much value in our study. The amount of sleep also is important, and the ability to obtain relaxation at will.

We should understand that symptoms arise along lines of least

resistance. We must always endeavor to ascertain the probable point of attack. By a thorough acquaintance with the individuality of our patient we shall be able in a large measure to forecast the especial form of trouble that will be most liable to come to him when the days of stress appear.

Treatment.

In so general a discussion of chronic disease as is here presented it will be readily understood that it would be out of place to specify especial remedies or methods of treatment for particular disease. It will be the purpose, rather, to call attention to certain principles which ought to govern the management of such conditions, and doubtless much of what I can say has already been suggested in the preceding pages. As to the cure of these conditions, if we accept the ordinary meaning of this term, we must be very guarded in our statements. We are dealing largely with the imperfections of nature augmented by the indiscretions of man. We as physicians may modify disease, guide over the most difficult places and lift the fallen, but, even with the wonderful assistance of homœopathic remedies, I am convinced that we seldom cure.

In the life of every human being there are periods of exaltation and like periods of depression of both the physical and mental forces as well as the fortunes, indeed they are not seldom coincident. We physicians are most fortunate when our patient happens to consult us at the beginning of a period of exaltation. We shall then gain the everlasting gratitude of the sufferer. Yet experience teaches us to be very modest in self gratulation. None of us can accomplish all we would like for this class of sufferers, but with painstaking methods, systematic investigation into all aspects of each case, and the application of sane and simple remedial measures, it is often possible to bring greatly increased comfort and a large degree of usefulness into many otherwise purposeless lives.

We must remember that few people even among chronic invalids are ill from choice. We must find the reason.

At the outset of treatment it is well to emphasize to ourselves the fact that as before noted inharmony is an irritant that frequently serves to keep alive the smouldering fires of chronic disease that otherwise might remain dormant, hence, the first duty of the physician should be an endeavor to adjust, as far as may lie in his power, whatever incongruities he may find in the daily life of his patient. If the source of trouble lies in the past it must be brought to the light of day by judicious questioning, then given its true value by means of wise explanation and suggestion. If wrong is immediately present that cannot otherwise be taken care of, it may be better to remove the patient to different surroundings, especially is this necessary in the many nervous states so common at the present time, when the sensitiveness of the patient makes it impossible to accomplish any lasting good until we can control the very atmosphere she breathes.

To be sure all chronic disease is not nervous disease. In many instances treatment may involve the question of surgery, and when the indications are clear, we should never hesitate to apply the remedy as speedily and completely as possible. We must remember, however, that in only a small proportion of cases does surgery cure. It is often a wise emergency measure, the best means to the only end in view, a measure of relief, but we should not hold out false hopes to the sick individual who will frequently be found after a perfect surgical recovery, a sick individual still, though probably with an entirely new group of symptoms. Yet conservative surgery is a blessing. Aside from what has already been said perhaps the most important factor in the management of chronic conditions is the quiet and perfectly systematic daily life. This is important for two reasons, first it is the only means that will allow opportunity for competent observation of a case. We must get down to "hard pan," so to speak, put the patient to the test under absolutely normal conditions in order to see exactly what he is able to do and what symptoms are presented; give him a simple, varied diet; opportunity for necessary rest, occupation, and amusement. We shall then be able to gauge the abilities of our charge, separate the fleeting symptoms from those of significance and determine what advice we can offer that will be of permanent service. We shall also be able, in some measure, to decide if we may expect to get any results from medicines. In the beginning cases are often in such a state of confusion that medicine of any kind is worse than useless. We cannot estimate the value of symptoms or select a remedy with assurance. In such instances our only course must be one of patient waiting for indications that will be of value, meanwhile, depending on our simple, normal regime and Nature's recuperative power to do all that can be done for our patient.

It may not be out of place here to speak of two methods of treatment, largely in vogue in certain sources, as contraindicated in most chronic cases, these are suppression and stimulation. The forcible suppression, for instance, of an itch or an eczema is not a cure; it is not even good practice; it opens the door to a long list of disagreeable possibilities of metastasis.

Stimulation, in chronic disease, by whatever means, is dishonest. If it is followed by a seeming improvement and the patient's hopes thereby raised he is under the delusion of false pretense and must suffer a relapse in the course of time. The only improvement worthy our effort must be an honest one, based on a foundation of physiological simplicity and absolutely normal conditions.

Our final duty, the selection of the remedy from our materia medica, by aid of which we hope to accomplish still further service, is an art in itself and time forbids its discussion here. The use of the repertory, and the study of materia medica do not differ materially in chronic and acute disease, and there is no royal road to success in the choice of medicines other than everlasting patience and persistence in study.

NEUROTIC CONDITIONS OF THE EYE.

By J. Miller Hinson, M.D., Boston, Mass.

When our chairman informed me that he should expect me to prepare a paper on Ocular Neuroses I endeavored to outline some sort of working synopsis by which the subject might be presented. On looking over the material at hand I was overwhelmed with the vastness of the subject and had to content myself with gleaning a few facts here and there, trying to present them in a way that might prove of interest.

Probably the most frequently discussed neurosis, from an ocular standpoint, is headache. These may be frontal, occipital, temporal, rarely vertex, or a combination of any or all of these regions. Frequently the distress will extend to and involve the nape of the neck down to sixth cervical vertebra, and occasionally well down to base of spine. The statistics of one writer show that of 1000 consecutive eye cases 50 per cent. complained of headache. Another found that in 2000 patients 71.3 per cent. suffered from headache.

Previous to 1850 and 1858 the symptoms of the various forms of headache from eyestrain were recorded, but it was not until 1858, after the discovery of the farsighted eye and the publications by Donders, that ocular problems were placed upon a scientific basis. In 1879, Dr. William Thompson, in a paper on "Astigmatism as a Cause of Persistent Headache and Other Nervous Symptoms," states "that more than ten years before, he became aware that persons who consulted him for defective sight presented symptoms which he enumerated as pain in the brow, temples and occiput, a sense of fulness in the head amounting to vertigo and nausea, insomnia, loss of appetite, fear of impending apoplexy or epilepsy, general nervous prostration, choreic twitching of the muscles of the head and face, all of which he had seen relieved by correcting their eyes." At the present time no physician of experience or matured judgment considers the study of a case of severe headache, or of obscure nervous disease, complete without a careful and thorough examination of the eyes.

Epilepsy is a symptom expressive of an organic or functional derangement of the nervous system. It is not a disease *per se,* but a symptom complex. H. C. Wood defines epilepsy as "A disease of unknown pathology in which at irregular intervals, and without obvious existing causes, an abnormal disturbance of nerve force occurs, in most cases accompanied with loss of consciousness and very frequently with convulsive disturbance." Landon Carter Gray states that much confusion has been injected into the subject by the failure to recognize that epilepsy is only a symptom, just as is fever or cough, and that in every case the question of diagnosis is resolved into the further one of what is epilepsy the symptom of. Hansel suggests

the divisions: "Epilepsy from organic disease of the nervous system" and "Epilepsy from peripheral irritation." Under the second division we must place such cases as have their origin or exacerbation in some ocular defect. It has been assumed, and abundantly verified, that reflex epilepsy may be the result of eyestrain, accommodative and muscular. The epileptic symptoms may be the result of disturbance of the intra or extra ocular muscles, or both combined. The relative importance in the etiology of nervous affections is difficult to determine. Some authors discard the muscular element, others the refractive. MacAllister, R. H., analyzed 250 cases of epilepsy and does not *even mention* ocular defects among the etiological factors. Galezowski records the history of a man, age 40, whose right eye had been injured six years before, and for which the anterior portion of the eye had been removed. The stump was very sensitive. For six months before he came under the care of Galezowski he had frequent epileptic seizures. After enucleation of the stump the epileptic attacks disappeared, and vision in the left eye improved.

Other cases might be cited. There are abundant statistics to sustain the claim of curative results by the correction of refractive and muscular errors, but time will not permit details. The report of the following case has but quite recently come to my notice. (September "Ophthalmic Record.") The patient, a lawyer, age 35, native of West Indies, was referred to Dr. Charles A. Oliver by Dr. S. Weir Mitchell. His attack was right-sided, migrainous in character, followed at times by epileptic seizures—the aura being visual in character and consisting of a gladiatorial dwarf, who rapidly approached from a distance, increased in size and felled the patient to the ground. They took place in warm weather and had increased in frequency and severity. The patient had a low amount of near sight and a high degree of astigmatism in the right eye, with a low amount of near sight in the left. The correction was made ten years ago, since which time he has worked hard at his profession and has had no further trouble.

So far as Chorea is concerned we can argue pro and con, and our deductions will probably be more unsatisfactory than those under Epilepsy, but there can be no question that choreaic-like twitchings of the eyelids, face and head have been relieved and cured by the correction of ocular defects.

Ocular Vertigo occurs in about 12 per cent. of the cases of asthenopia, or eyestrain. It is a frequent complication of inaccurately fitted lenses, or poorly adjusted frames. It is usually consequent upon the use of the eyes for near work. It is purely subjective. The patient becomes dizzy and feels as if he would fall. Objective vertigo, or the apparent movement into unnatural positions of stationary objects is rare. Ocular vertigo is usually associated with nausea and frequently with vomiting, indicating the close relation between eyestrain and functional stomach disorder. Whether these attacks

are due to cerebral anæmia or hyperæmia the circulatory disturbance is momentary and probably limited to a small area. To differentiate from other forms of vertigo the eyes should be rested either by their non-use by paralysis of accommodation, by atropine or some similarly acting drug.

The relation of the eye to gastric disturbance is demonstrated daily and need only be emphasized by the following case: Mrs. A. P. N., age 40, had suffered for a number of years from attacks of intense neuralgic pains over the left eye, involving the frontal and temporal regions. After a time the pains would pass downward into the gums of the upper and lower jaw, the pain being more severe in the upper jaw. From the jaw the pain would travel to the left chest, where the pain was very severe, of a neuralgic or pleuritic character. These attacks would culminate in the gastric region and terminate in a violent attack of nausea and vomiting. The average duration was four days. An examination of the eyes revealed a slight muscle imbalance and farsightedness with astigmia. Glasses were prescribed in October, 1902, with relief until December, 1903. A change in glasses resulted in relief until February, 1905. A further change effected a relief until January, 1906, when lenses were again changed, since which time, to the best of my knowledge, there has been no return of the trouble. The change in lenses was an increase in the farsighted element, the astigmatism remaining the same.

Facial expression and head posture frequently afford visible evidence of eye defect. Wrinkles and "crows-feet" are frequently indicative of eye strain. In aggravated cases the facial muscular contraction may amount to deformity or simulate idiocy. The head may lean toward either shoulder, the chin may be brought down toward the chest, or a condition of pseudo-torticollis may be present. I recall the case of a Maine farmer who came under my care in November, 1907. He was very tall and correspondingly thin. He complained of poor vision and some general symptoms of which I did not take particular note. His head was thrown back in a most uncomfortably appearing attitude. At the time of his first visit I attributed it to some individual peculiarity and gave it no especial thought. An examination of the eyes revealed a slight cataractous change in one eye, with a farsighted astigmia of one dioptre in the right eye, and one and one-quarter dioptre in left (axis horizontal). At the time of his second visit, which was made a few hours after receiving his glasses from the optician, as he entered my office, I was immediately impressed by the change in the man's attitude and expression. There was a restful expression of countenance and the head had assumed a position adapted to things terrestrial rather than heavenly. The change in his feelings was commensurate with the physical change.

The absence of the eyelashes may be a sign of hysteria, Alopecia hysterica being a recognized condition, the result of the patient's having surreptitiously removed them. The size, or inequality of the palpebral fissures is often indicative of disease. One must take into consideration the size of the eyeball and the general adipose condition. Inflammatory thickening of lids and cartilages from syphilis or trachoma may mislead one. Everyone is familiar with marked ocular phenomena of Exophthalmic Goitre or Grave's Disease, the Græfe's, Möbius', Dalrymple and Stellwig's signs.

The Græfe's sign consists in the impairment of the consensual downward movement of the upper lid with the eyeball. The Dalrymple sign refers to the peculiar stare occasioned by the abnormal widening of the palpebral fissure.

Stellwig's sign is the name applied to the infrequency and incompleteness of the act of winking. The unusual size of the palpebral fissure, together with infrequent winking, admits of dryness of the cornea, and the easy admission of dirt and infectious materials which may occasion ulceration of the cornea with perforation and loss of the eye.

According to Möbius, unilateral convergence is normal while bilateral convergence is diminished, giving rise to troublesome asthenopic symptoms.

Nictatation, or frequent rapid movements of the lids, short spasmodic closures of the lids, and twitchings of the individual muscle fibres are common ocular neuroses and usually have their origin in refractive errors.

Ptosis, or dropping of the upper lids, may be a functional disturbance or the result of deep organic disease.

A high degree of refractive error, notably astigmatism, may produce a condition simulating true paretic or an hysterical ptosis.

A few words in regard to the neurotic affections of the cornea. We will merely make mention of the anæsthesia of the cornea occurring in connection with glaucoma.

Recurrent erosions of the cornea may occur as the result of a superficial injury, as the scratch from a finger nail or twig of a tree. Attacks of severe pain, with or without loss of epithelium, may occur for months. Injury of the peripheral nerve endings is probably the cause.

Neuropathic Keratitis is the name applied to those cases of corneal inflammation and ulceration which occur in connection with injury or disease of the fifth nerve. This condition is the result, partly of an obscure irritative influence and partly by favoring traumatism and infection. This definition is one given by

Jackson and seems to be formulated to cover and admit of the numerous theories and hypotheses advanced by different writers.

Magendie observed that section of the trigeminus in rabbits was followed by inflammation and destruction of the cornea.

Careful protection of the eye after section has prevented ulceration.

Snellen suggested that lack of sensibility of the cornea permitted injuries followed by ulceration to occur, yet we know that destructive inflammation and ulceration of the cornea is extremely rare in glaucoma, yet anæsthesia of the cornea is almost a constant symptom.

Jackson clinically recognizes two forms: First, true neuropathic keratitis and, second, exposure keratitis. In true keratitis it is the central portion of the cornea that is first and most seriously affected, the centre of the cornea showing a deep, dense opacity which may or may not be followed by ulceration.

Exposure keratitis begins with dryness, ulceration and infection in the lower part of the cornea. It has the appearance and runs the course of an infective ulcer. The latter description covers the cases, probably a dozen, which I have personally observed and watched. So far as I can recall, syphilis has been the initial causative factor. I have two cases under my care at present. One is progressing favorably without mechanical closure of the eyelids. The other resisted all forms of treatment until the lids were closed by means of adhesive strips. [Note—Since preparing this paper I have found it necessary to resort to closure of the lids by adhesive strips in this case.]

Herpes zoster is a condition I feel should be noticed. In spite of the fact that much has been said and more written on this subject, I believe I am correct in saying that I have yet to see a year go by without having one or more cases of herpes zoster, with corneal involvement, come under my care which have been diagnosed and treated as erysipelas.

I have now more than consumed my allotted time and the subject is hardly introduced. Hysteria, with its endless train of eye reflexes and symptoms; the various ocular paralyses of deep and peripheral origin; opthalmic migraine; post operative disturbances, more especially those following ovariotomies and hysterectomies; the various pupillary phenomena; the myosis or contracted pupil of meningitis; cerebral apoplexy; tobacco emblyopia, etc.; the paralytic myosis of spinal lesions and the general paralysis of the insane; the irritative mydriasis, or dilatation, of various irritative and paralytic affections; visual hallucinations; visual aphasia; phosphenes; photophobias, and the numerous reflex conditions arising from nasal and accessory sinus

troubles, which I expect Dr. Rice will touch upon in his paper, must all of them be omitted.

To those wishing to follow up the subject by careful and thorough study I would suggest the work on the eye and nervous system by Posey and Spiller, and Swanzy's "Hand Book of Diseases of the Eye."

NITRIC ACID TEST FOR ALBUMIN.—Weinberger in the Journal of the American Medical Association, writes and quotes the following concerning the advantages of the nitric acid test for albumin in urine:

"In this research the test was applied as follows: 5 c.c. of concentrated nitric acid were poured into a test tube, the tube was then inclined and, with the aid of a pipette, urine was directed slowly down the side to prevent mixture of the liquids. In this way two sharply defined strata are obtained. Along the line of contact a ring appears if the urine contains albumin or globulin or certain other substances.

" 'In a urine rich in urates a complication may occur, due to the formation of a ring produced by the precipitation of uric acid. The uric acid ring does not lie, like the protein ring, between the two liquids, but somewhat higher. For this reason, two simultaneous rings may exist in urines that are rich in urates and do not contain very much protein. The disturbance caused by uric acid is easily prevented by diluting the urine with from one to two volumes of water before performing the test. The uric acid now remains in solution and the delicacy of Heller's test is so great that, after such dilution, only in the presence of insignificant traces of protein does this test give negative results. In a urine very rich in urea a ring-like separation of urea nitrate may also appear. This ring consists of shining crystals, and it does not appear in urine previously diluted. . . . If a faint, not wholly, typical reaction is obtained with Heller's test after some time with undiluted urine, while the diluted urine gives a pronounced reaction, the presence is shown of the substance which used to be called mucin or nucleoalbumin.' "

He further emphasizes the limitations of the use of excess of formaldehyd as a preservative:

"The value of formaldehyd as a preservative is well known, but as a urine preservative it has its limitations, particularly if not used in proper quantity. The chief danger is in using too much. . . . Perhaps the most objectionable feature of this preservative is its reducing action on Fehling's solution. This occurs when several drops of the formaldehyd solution have been added to a small specimen of urine (4 ounces). The copper test for sugar cannot, therefore, be used, but other tests must be utilized. Formaldehyd reacts in a peculiar manner with phenylhydraz in producing an abundant noncrystalline deposit, which, of course, is readily distinguishable from phenylglucosazone by the fact that it is noncrystalline."

SOME NEUROLOGICAL CASES.

By Arthur H. Ring, M.D., Arlington Health Resort, Arlington Heights, Mass.

It is good for us all occasionally to take a retrospective view of our work. There are always a few interesting cases during the year in every one's practice, and it is good for him to describe them and for others to read and compare them with their own results in similar cases. In this way only can we grow. In the past year we have had at our Resort a few cases of especial interest which are briefly described below. For the sake of completeness all the cases are put in tabular form.

Qualification by clinical diagnosis is always a difficult thing, especially in mental and functional nervous diseases. However, for the purposes of description our cases have been grouped thus:

Summary.

	M.	F.	T.
Functional Neurosis	1	5	6
Mild Mental States	5	13	18
Drug Addiction	0	2	2
Constitutional Disease	0	3	3
Heart and Arteries	2	2	4
Abnormal	0	1	1
For Rest	0	2	2

The Neurosis.

In this group were five cases of psychasthenia and one of epilepsy, the latter verging toward the mental. Of the psychasthenics three would be classed under the head of neurasthenia, while two were distinctly obsessed. The former recovered, one entirely, and two sufficiently to take up their home duties. The latter were much more persistent, and the results less satisfactory. One, the case of a woman 55 years old, with marked obsessions, returned home with a fair degree of poise and has been since an acceptable member of the home. Her case was reported in detail in a recent paper on the subject. The other (Case I.) was that of a man 55 years old, of German birth, but American upbringing and education. His father was of nervous temperament, and for the last thirty years of his life was a semi-invalid, having in the first half of this period peculiar epileptiform attacks which cleared up in the latter half. The mother was also "nervous." The patient was a sensitive, wiry boy, subject to severe headaches. As a business man he was of the over conscientious dyspeptic type; very domestic and a clean liver. His only habit was tobacco, which he used excessively up to the time of his illness. When 50 years of age, after five years of consecutive work and worry without a vacation, he had severe palpitation, and an attack of vertigo in which he fell. There was no other sign of

apoplexy. He gave up business and remained home for three years fearing to go out of the yard alone. Then he gained twenty pounds and seemed better, but the fear persisted—fear that he would die suddenly, that he would fall on the street, etc. The following year he tried osteopathy and lost weight, but gained sufficient confidence to go to the city alone for treatments. This, however, was transient, and he remained housed with his fears for another year.

In the summer of 1908, he had enteritis, and when convalescent, got up one morning feeling unusually well. In the forenoon he had suddenly a sense of the heart stopping, followed by severe palpitation, arrhythmia and dyspnœa, flushed face and vertigo. These lasted into the afternoon, but he was able to walk up stairs to bed. There have been several similar though less severe attacks since. Examination on admission revealed a well built, fairly muscular man, gray, weight 140 pounds. Everything negative, with the exception that the heart had periods of arrhythmia, especially from emotion. Urine had some oxalic acid crystals; otherwise normal. Blood pressure, 110 (Janeway), hemoglobin, 100. Intellectually, he was normal, save for his obsessions, and these he often realized, were unreasonable. His emotional tone was one of depression and fear, with a desire for sympathetic reassurance. The association test yielded interesting results which assisted in explaining away his fears.

The treatment was tonic and symptomatic, and while under care he gained sufficient confidence to go to the theatre and into the city several times. No pains were spared in logically explaining away his symptoms, and this laid the foundation for improvement which has steadily progressed until he is now living a life of comparative comfort, though not yet able to resume regular occupation.

It is most difficult in this case to give due value to the physical and psychic factors. There certainly is a "smoker's heart" added to a naturally introspective type of mind. Whether or not there is more—perhaps a slight arteriosclerosis of some of the smaller basal arteries affecting the nutrition of the cerebellum, or merely a periodic vaso-motor instability affecting especially the cerebral vessels as part of the general nervous instability—it is difficult to say. The fact remains that the attacks of vertigo, etc., have practically disappeared, and as long as there is some one near by in whose skill he has confidence, they do not recur.

Alienation.

Half of the patients referred to us this year have suffered from some form of mental disease. Several have been too acute to be cared for in so small an institution, and have at once been committed to the larger hospitals.

The mental cases have been classed as follows: Dementia 3, Manic depressive insanity 6, Involution melancholia 3, Dementia præcox 3, Paresis 1, Paranoia 1, Epilepsy 1.

Of these the most satisfactory are of course the cases of manic

depressive insanity. One of these in particular proved of much interest:

Case II. Mr. X, age 69, was received in his fifth attack. He had eaten almost nothing for four weeks, believing that his bowels were stopped and would never move again. He was, therefore, very weak. He also believed that he had committed some sins for which God would not forgive him. He was of a very stubborn nature and difficult to manage, but was persuaded to have some enemata. After a low cleansing enema each day a quart of saline milk with egg and other nutriment was thrown slowly up in the bowel with a high tube and retained. To assist absorption the 300 c.p. incandescent lamp was then applied to the abdomen. After a week he began to eat and gain flesh, and in nine weeks returned home entirely well.

Another, Case III, of interest psychologically, was that of Miss C., age 29. Ill for three years prior to coming under treatment. She was much emaciated, and sat all day picking at her fingers and biting her nails. She would take food if fed, but would not feed herself. If made to walk she was stiff and awkward (psycho-motor retardation) and said she felt hard. She said repeatedly, "I want myself." "Where can I find myself?" "I have lost myself." "I am so stiff and hard." The interest in this case centers about this sense of personal unreality. Otherwise, she was perfectly orientated. This sense of unreality was limited to self, everything else seemed real and normal. The interesting question arises was not the stiffness of the joints the source of this loss of self? Text books on psychiatry do not touch on this subject satisfactorily, but mostly teach that consciousness of self is the result of the sum total of all the bodily stimuli reaching the brain. Some psychologists, however, would make self consciousness depend upon the muscle and joint (kinesthetic) sensations. Dr. Peterson[1] thinks it possible that the corpus striatum may be the local seat of self consciousness. Putting these deductions together we have a third, namely, that the striate body may be the organ for the reception of stimulii generated in the joints and muscles, and we may also surmise that in Miss C.'s case this nucleus was at least involved by the irritative process. This offers to the physiological psychologist much food for thought.

Case IV. A case of epilepsy presenting peculiar symptoms was that of Mrs. Y., age 51. Up to the age of 36 she was a fairly well woman. Her family history was entirely negative, as was her own early history. She had one healthy child living. At 36 years she developed a peculiar type of petit mal which has persisted interspersed with an attack of grand mal once or twice a year. The attack consists in a sudden loss of consciousness and muscle tonus, so that the patient falls instantaneously to the ground. After an interval of from one-half to five minutes, usually the shorter space, she would sit up dazed, but would not realize that she had had an

[1] Journal of Abnormal Psychology, January, 1909.

attack. At times amnesia for all but the simplest associations would last for hours. It seemed as if the organ of consciousness (or the corpora striata) had been numbed by an explosion of nervous force which had also momentarily affected the projection fibers close by, causing the temporary paralysis. The motor paths rapidly regained their conductivity, but the association paths were more completely benumbed and regained their function more slowly once a week or so. The usual attack would be replaced by an unreasoning outburst of temper which was followed by an even more prolonged period of amnesia. It was most interesting to see the awakening of successive thought systems as the search light of attentive consciousness, still burning dimly, passed from one isolated memory to another, gradually associating them into connected thought. Surely here is more material for the psychologist.

Drug Addictions.

This year there were only two habit cases, but each presented unusual problems. Both were women. One used alcohol periodically in great excess, and was verging on alcoholic insanity, exhibiting a violent temper, especially toward her family; yet so normal was she when she chose, that she could not be committed and no restraint could be secured, thus keeping the family in a state of constant worry.

The other patient used both alcohol and morphia, and was for some time markedly hallucinated; the visual and auditory predominating. She made a complete recovery.

Constitutional Disease.

Of these, one referred for probable early mania turned out to be typhoid fever, and after running a somewhat stormy course made a good recovery. Another was a case of irregular gout with paroxysms of renal colic. Careful urine analysis and radiographs failed to suggest stone. The electro-thermaphore relieved the acute attacks, and a careful diet, with much rest and indicated drugs, brought about much improvement.

Case V. The case, however, which was of most interest was that of Mrs. E., age 54. She had been a healthy girl, but after marriage had meningitis (?). She has had two healthy children, and has been operated upon for hemorrhoids and for floating kidney. In August, 1907, she began to have sore, gouty fingers and knees, and periods of great restlessness. In the summer of 1908 she developed neuritis in both arms, doubtless of the same origin. One morning in January, 1909, she arose with a dull headache. In the forenoon on getting up from her chair she staggered and fell on the floor, unconscious. This lasted an hour or so. On coming to herself she had distressing headache lasting about two days. Similar attacks recurred about twice a week. The sequence was that of headache appearing gradually, increased until unconscious-

ness resulted. As unconsciousness approached there was usually a muttering delirium and spasmodic twitching of the right fingers and hand. After some hours she would awake with severe headache, occipital and extending to vertex, which wore off in about two days, leaving the head sore and sensitive to jars and light. On admission her physical condition was good. She was slightly gray and weighed 140 pounds. The heart sounds were snappy and metallic; pulse, 90; blood pressure, 90. The knee jerks were exaggerated and there was a suggestion of Babinski's reflex on the left. The tongue protruded straight, and there was no paralysis or disturbance of sensation or speech. Her mind was clear, rational and well orientated, and the emotions well controlled. The urine was but 27 ounces in twenty-four hours, and frequently contained a heavy pinkish sediment of urates. The urea, which was much reduced before the attacks, increased sometimes to 3 per cent. afterwards. All the joints were more or less sore and puffed, especially those of the fingers, which were so stiff in the morning after remainin the same position through the night that massage was necessary. They were pale and the veins stood out as blue cords.

There were then three more or less distinct states. 1. The nervous spells of uremic nature accompanied with vertex headache, subsultus tendinum and unconsciousness, diminished urine and urea. 2. Occipital headache of excruciating character accompanied by thickenings at the insertion of muscles, usually at base of occipital, but occasionally involving other tendons, as the sartorius at its insertion of the pubes and the left serratus magnus; when this latter muscle was involved there was partial suspension of respiration for nearly five minutes, necessitating artificial respiration; the heart remained strong. This is the typical indurative headache.[2] These two states frequently occurred together, making a clinical picture difficult to analyze. 3. The third state was of arthritis, which for a time bid fair to cripple the patient. Doubtless all of these states were of the same basic origin. The first thought was that the condition was apoplectic or epileptic, but it was soon apparent that the involvement of consciousness was secondary. Assuming that the whole clinical syndrome was the result of a faulty physiological chemistry, treatment was directed to the large intestine, which was flushed every other day with a quart or two of hot (110° F.) saline containing a dram of sodium bicarbonate. Salicylic acid was given by mouth and sodium phosphate one gram morning and night. Vibration, massage, and galvanism were given to reduce the joint and tendon deposits, and during the acute attacks the 300 c.p. incandescent lamp and the electro-thermophore. These methods with a careful diet have succeeded in bringing about a relative cure. The only thing now remaining is a slight restlessness.

---

[2] See Volume on "Diseases of the Nervous System in Modern Clinical Medicine." D. Appleton & Co., publishers.

Heart and Arteries.

Among these four cases but one is deserving of brief mention. The patient, a stout, short woman of 36, had been very well and very active up to the autumn of 1907, when, following a strenuous western trip with much walking and mountain climbing, she had sinking spells and went to bed with what was at first considered neurasthenia. She was very ill all winter—unable to raise her head and having sinking spells. There was aortic stenosis, but no other demonstrable lesion. The interest centers around a persistent pain in the left shoulder, an intensely sensitive area the size of a silver dollar just to the left of the second and third dorsal spine. Careful X-ray examinations have failed to reveal an aneurysm. Galvanism relieved the pain for a time, but it still persists, relief being obtained only from codeine and much rest.

The remaining cases were of the usual types.

PHYSICAL EXAMINATIONS FOR MARRIAGE LICENSES. The law that has recently gone into effect in the State of Washington, requiring marriage licenses of those about to be married has many commendatory features, and is being cordially received by the medical profession as a whole. In order to demonstrate their belief in the wisdom of the law it is reported that the Spokane County Medical Society has passed a resolution whereby all such examinations will be made without fee.

PROTECTION OF FOOD. We learn that the Boston Board of Health has recently adopted a regulation requiring that all forms of food exposed for sale in store windows be suitably protected from both dust and flies.

DANGERS OF TIPPING. Quite a commotion has been caused in the past few months in medical circles in Berlin, by the accusation made against several of the leading physicians that they were using unfair methods for obtaining patients. One of the most eminent of those accused was Professor Senator, President of one of the prominent German societies. It was claimed that these men were in the habit of giving commissions to certain hotel employees in return for patients recommended to them. After much bitterness, Professor Senator has cleared himself from the charges apparently by showing that the so-called commissions were merely tips such as are given so frequently in the English and Continental hostelries. Whether the other accused men will be able also to justify themselves so satisfactorily still remains uncertain.

RAPID CONVALESCENCE AFTER LAPAROTOMY. Munro, in the chairman's address in the section of surgery of the American Medical Association, speaks as follows concerning the after treatment of his cases of laparotomies in the Carney Hospital:

"In practically all cases, except inguinal and femoral hernias, the patient is set upright in bed at once after operation or within a few hours, and the majority are out of bed in forty-eight hours and are given as liberal a diet as they can be persuaded to take. All are encouraged to move the body and extremities, and they are given water liberally to keep down thirst and to prevent the dirty dry mouth that comes with lack of moisture.

"The whole subject of post-operative care, especially with reference to the various complications, has been growing more and more in evidence in the last few years, and it is as a modest contribution to one phase of this subject that I have ventured to offer this short paper."

TOXIN VERSUS ANTITOXIN.

By P. W. Shedd, M.D., New York City.

If we inject into the circulation of an animal of other order than ourselves (e. g., horse, guinea-pig, rabbit) the pure toxin of a bacterium, or the juice of a poisonous plant, or the venom of serpents in graduated dosage, we find that the blood has developed, or rather cells have developed and thrown into the blood-serum a body, a substance, a hemic component not normally present. Such substance or abnormal anti-body may, by the use of chemical reagents, be changed from liquid to solid form or vice versa, and it has a distinct, specific and antithetic correspondence or ratio (in the particular animal) with the primarily injected toxin, poisonous plant juice, serpent venom, etc. This is the specific antitoxin in the animal, having, so far as we know, a sort of physio-chemical, opponent or neutralizing action upon the toxin already present in the animal, a relationship depicted or represented graphically by Ehrlich in his side-chain theory. (In the matter of "theories," it is of interest to note in an article by Prof. Dr. med. C. Kopp—"Muenchener med. Wochenschrift," No. 19, S. 957—on "The Significance of Wassermann's Sero-diagnosis of Syphilis," the following comment: "The establishment of [cell] reaction by means of complements, based upon the ingenious side-chain theory of Ehrlich, is certainly most interesting and of value as an attempt to elucidate biochemic processes; but, in my opinion, we are going nowadays too far when we unreservedly accept such theoretic concepts as scientific axioms. This is especially true of Wassermann's sero-diagnostic test, for, in the judgment of numerous investigators, many phenomena appearing in this test lead to the conclusion that the theory has, by no means, elucidated fully and with finality the processes developed in the luetic reaction.")

Experiment *in vitro* makes evident some such (Ehrlich) neutralization of toxin by its correspondent, cytically generated antitoxin, and the assumption of specificity *in vivo* or in the infected animal organism became a more or less natural conclusion in the minds of those who, hitherto, in infectious diseases could see no light, and, being governed by no law of nature, proceeded with the ancient calomel, salts, refrigerant drugs, narcotica, etc.,—traditional medicine. Whether, actually and predominantly, the greater success of antitoxic treatment be due to a degree of specificity, or to the fact that nature is no longer forced to combat a gravely large number of potent medicinal agents in addition to a serious and destructve bacterial infection, is a delicate query to submit to some intellects.

To minds trained in clinical and therapeutic logic, it would seem obvious that a case of infectious disease is, necessarily, made up of two components: organism plus infection; that the case of chubby, leucophlegmatic Johnny Green plus the bacillus diphtheriæ

is not a syndrome qualitatively similar or the same as that presented by wiry, nervous Tommy Black plus the same strain of bacillus diphtheriæ.

To any scientifically trained mind, supposition of identity in the Green-Black cases would appear illogical, idiotic. Where all factors are constant, the totalities are constant, but in the Green-Black morbidities one factor only, the micro-organism, is a fixed point. We are familiar with the method of manufacturing diphthera antitoxin. The toxin is thrown into the circulation in gradually augmenting and immunizing dosage, and the antitoxin fabricated by the specifically stimulated cells is a physio-chemical antidote or neutralizant (Ehrlich). It seems needless to remark that a specific antitoxin cannot be used homœotherapeutically in the actual morbidity. Toxin and antitoxin are absolutely dissimilar, are antidotal, antipathic.

The essence of clinical homœotherapy is the individualization of the case. Shall we prescribe the proto- or the biniodide of mercury or lac caninum or phytolacca or some other drug in the individual case of diphtheria? Would a panaceal horse-serum antitoxin, or an antitoxin generated by the patient himself, and hence in conformity with his idiosyncrasies, be more probably curative in his case? And how shall such an antitoxin be cytogenically evolved?

If we have absolutely pure toxins of the various pathogenic micro-organism, e. g., a pure toxin of the bacillus diphtheriæ, and administer it in suitable dosage, what is the result? Cellular mechanism, roused by the *simile,* not the *ison* or *idem,* begins to pour out an antitoxin against the pharmacal toxin—a specifically individual antitoxin, under whose domination come both the artificial and the natural *(ex bacillo)* toxin. We are able to graduate, continue or terminate the dosage of the *simile* toxin by reason of the control under our clinical observation; namely, the symptoms of the natural morbidity. Where cases (e. g., the Green-Black diphtherias) call emphatically for non-bacterial homœopathic drugs—for example, bromium in one, lac caninum in the other—the pure toxin or the bromium or the lac caninum might serve as intercurrents. This, however, is a clinical problem to be solved by the clinician.

The fabrication of pure, *unchemicalized* toxins of the micro-organisms commonly pathogenic in man has for a long period occupied the author's time, energy, and thought. Finding it impossible to obtain from the (supposedly) great biologic firms in the country, pure suspensions of the various bacteria, he has been compelled, for his own satisfaction and surety, to grow his own cultures in order to derive from them pure toxins in the letter and spirit of homœopathic pharmacology. Into each toxin enter four factors: 1. Alcohol 95 per cent. (Traller); 2. Distilled sterile water; 3. Graduated heat; 4. The micro-organism.

The series, as planned at present, is as follows:

Sepsin	Staphylocin
Streptocin	Diphtherin
Tetanin	Basicolin
Typhosin	Tuberculin (hominis)
Leprosin	Bovtuberculin (bovis)
Influenzin	Avtuberculin (avis)
Pneumocin	Meningin
Gonocin	Anthracin
Cholerin	Mallein
Soorin (thrush)	Favin
Pityriasin	Microsporin (tinea)
Pertussin	Megalosporin (tinea)
Actinomycin	Pyocyanin
Tetragin	Botulin

Enteritin

Of the series, Sepsin (proteus vulgaris, the active factor in Pyrogen) and Staphylocin (staphylococcus aureus, albus and citreus) are ready and should be obtainable at the pharmacies. For his own protection and that of the physician, the author would advise the physician to ask to be shown the original ounce package, bearing the author's name in script. Where this is lacking, the purported toxin is fraudulent, and the physician is requested to forward the pharmacist's name to the writer.

This toxin series is the first utilization of modern bacteriologic technic and science. The toxins are derived from pure cultures, not from ground-up or diluted whooping-cough or tuberculous sputa, contents of abscesses, pneumonia debris, gonorrheal discharges, etc., etc., veritable menageries of micro-organisms, Noah's arks of all the bugs in the category, charnel-houses of rotten tissues.

In these pure toxins we have medicinal instruments as clear cut and purposeful as the surgeon's knife. Their pathogenies have been rather definitely defined by Nature many thousand times. The classic proving of the pure toxin upon the healthy body should by no means be neglected, and here is where our enthusiastic medicists and talkers may gain their laurels, or halos.

"SCIENCE" says:

"The number of students in the universities of the German empire has this summer reached 51,700, an increase of about 3,000 over last winter and of 4,000 over the summer of 1908. There has been a large increase in the faculties of medicine and philosophy, and a decrease in the faculty of law."

DEMONSTRABLE DILUTIONS.—It is reported that Berthelo estimates that one gram of musk in 100,000,000,000,000,000 c. c. of air is perfectly perceptible to the sense of smell, and that others claim it to be demonstrable in still greater dilution. This corresponds to the homœopathic 18x and is, we believe, the most attenuated substance yet known that is capable of material recogntion.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only, and preferably to be type written—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.
ASSOCIATE EDITORS:
F. W. COLBURN, M.D. C. T. HOWARD, 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, if possible.

THE INSTITUTE, ITS TRUSTEES AND ITS JOURNAL.

We have heard from sources which presumably are reliable that a very remarkable meeting was held in Washington, D. C., on Wednesday, October 6, at the New Willard Hotel. This meeting was noteworthy in that it was the first of the new Board of Trustees of the Institute, and the business it had to transact concerns every homœopathist in the country. There were present at the meeting representatives from the Pacific coast, from the Atlantic seaboard, and the most important points between. It was therefore a representative body which met, and such a meeting strongly emphasizes the fact that interest in homœopathy and its welfare is as keen and lively today as ever. All the trustees were present but one, who was excusably detained by serious family illness. There were present at this meeting President Ward, Vice-Presidents Schenck and Hobson, Secretary Horner, Treasurer Smith, Registrar Forbes, and Drs. McClelland, Custis, Porter, Royal, Cobb, F. E. Boericke, Eugene L. Mann and Sutherland.

While many items of business were transacted which in due season will be made known to the membership of the Institute, a matter of peculiar interest to the profession was settled in a way which it is hoped will prove satisfactory to all concerned. Reference is made to "The Journal of the American Institute of Homœopathy." None of those present at the Detroit meeting of the Institute are likely to forget the record-breaking meetings which were held by the Institute as a committee of the whole when at the unusual hour of 8 A. M., a large representation of the Institute gathered to discuss the Journal matter. The decision arrived at is well known, and it became one of the first duties of the Board of Trustees to pass judgment upon the Journal. We understand it is to be the decision of the Trustees that the Institute shall own, control and publish its own Journal under the Committee's management, and that the first issue of the new journal is ordered for January,

1910. No criticism is here made of the first attempt of the Institute to publish a journal. The present editor is known as an indefatigable worker, and the favorable comments he has received apropos of the Journal are numerous.

The work before the Journal committee is no sinecure; the task presents many serious obstacles, but there can be no question of the ultimate success of the Journal under its new management if the profession will heartily coöperate to make it a success. The appearance of the January number of the new journal will be looked forward to with keen and critical interest.

SOUTHERN HOMOEOPATHIC MEDICAL ASSOCIATION.

The *Gazette* would call the special attention of its readers to the meeting of the Southern Homœopathic Medical Association, to be held in Hot Springs, Arkansas, on November 15, 16 and 17, and would suggest that if any of its readers wish to take a short vacation at this season of the year, and while doing so be hospitably entertained and intellectually refreshed, they could do no better than to attend the meeting referred to. Our Southern colleagues are hospitable and very much in earnest, and at the present time are making vigorous efforts to organize into an effective and permanent Society. Naturally, they are anxious for encouragement, such as can come from those who are favored by thorough organization. A live, progressive and up-to-date program has been arranged for, and the meeting is a predestined success. Contributions of articles and letters expressing sympathetic interest and encouragement will be welcomed by the Secretary of the Association, Dr. William A. Boise, of Knoxville, Tennessee. It is not exactly a "cry from Macedonia," for our Southern colleagues are independent, vigorous and capable and quite able not only to form an association but to carry out its work successfully; but they naturally would appreciate fraternal greetings, and such we ask for them.

SPRINGFIELD MEETING OF THE STATE SOCIETY.

As is well known, it has been a very unusual thing for the Massachusetts Homœopathic Medical Society to hold its annual or semi-annual meetings elsewhere than in Boston. The reasons for this are obvious, and the success of the meetings which have been held testify to the wisdom of the custom. Unquestionably, however, great good may be accomplished by holding these meetings of the Society elsewhere than at the Hub. The experiment of two years ago, when the October meeting was held in Worcester, showed that Worcester was not very far away, and it was accessible and a convenient place in which to hold a meeting, for the meeting proved to be a great success. Possibly encouraged by this ex-

periment, and to deal justly with different sections of the State, the Executive Committee decided to hold the October meeting of the Society this year in Springfield, and accordingly on Wednesday, October 13, the meeting was held in that city, where suitable arrangements had been made. The G. A. R. hall had been secured and proved to be amply commodious. It was an easy hall to speak in, and the ante-rooms and general accommodations were in every way satisfactory. It may be noted that a large hall was made use of wherein to serve lunch and dinner, and there was ample space around the tables for the serving of lunch. At the Boston meetings, as will be recollected, the facilities for serving lunch are exceedingly restricted, and it is impossible without considerable crowding and discomfort to accommodate all who are present.

The program prepared by the various chairmen and committees was carried out almost to the letter, although unfortunately one or two promised papers which would have given great pleasure were not presented. There was quite enough, however, to occupy the hours and minutes of the meeting, and the subjects discussed were in each case of practical importance as well as interest. The report of the meeting will be found elsewhere in this number.

Our Springfield colleagues and the members of the Homœopathic Medical Society of Western Massachusetts showed themselves to be possessors of gracious hospitality which was appreciated by those present. It should be noted, also, that an opportunity which was improved by many was afforded to inspect the exceptionally beautiful and well appointed Wesson Memorial Hospital and the Wesson Maternity. These two institutions side by side are certainly among the most elegantly finished and appointed hospitals in existence. It was a joy to all surgeons to visit the operating rooms of the Hospital, for with the spotless white marble floors, walls and doors and everything that heart could wish, it would seem impossible for the minutest speck of dust or the smallest germ to find a resting place. The appointments throughout the Hospital and Maternity are most sumptuous, and the institutions certainly form a memorial worthy to commemorate a philanthropic and charitable family.

A NEW ERA IN SURGERY.

By the above text the writer does not mean to suggest that surgery is undergoing radical change in its methods. In all departments of medicine progress and variations constantly cause the old to give place to the new. This is particularly true of that most progressive branch having to do with surgery. That some more vital alteration is imminent, however, seems to be suggested by a number of recent articles. Perhaps the most notable of these is one by Morris, of New York, Professor of Surgery in the Post-Graduate School and Hospital. This appeared in the "Medical Times" and is entitled "Appendicitis-Pyosalpinx, a Case Illustrating the Principles

of the New Era of Surgery." It is in the form of a clinical lecture to his class, and is therefore presumably well considered before being given.

Some quotations from this may show the actual idea of the teacher better than any abstract would do:

"If we were dealing with the pyosalpinx feature of this case alone, I would hardly stop to wash or wipe out any of the pus, although it has flowed freely over the peritoneum of the pelvis and has bathed the wound of the abdominal wall. As we are to examine the appendix, however, I will pour enough salt solution into the pelvis to float out a good deal of the pus and some clots of blood. The appendix is next brought into the wound and it is seen to be distended and congested. . . . The abdominal incision is closed with the exception of an opening about as big as a lead pencil for a small wick drain which extends from the pelvis to the surface. This wick drain will be left in place for four or five days.

"The essential point in the treatment will consist in changing the external dressing of gauze every half hour for the first few hours in order to bring into action the principle of capillarity which will suck out all of the pelvic fluids very rapidly. You know that I have taken no pains to get all of the pus out of the pelvis and have not spent time in wiping or otherwise making the toilet of the peritoneum. Every move has been made with the idea of saving time, but yet without hurry. Hurry in operating is to be avoided, but expeditious operating which makes every move count and which allows such an operation as this to be completed in less than twenty minutes is desirable. It would be better if the operation could be done in five minutes, for the new era in surgery includes the idea of leaving the patient with her natural resistance unimpaired. She is to manufacture phagocytes and opsonins and to manage the infection largely herself. We have simply turned the tide of battle between the phagocytes and bacteria. She has had the advantage of a short period of anæsthesia. The incision was small; I avoided handling bowel, and confined the work to structures which needed direct attention. By observing these precautions the patient has been left in first rate general physical condition. She remains a good factory for the manufacture of her phagocytes and opsonins. If we had done very conscientious work in making the toilet of the peritoneum, if we had spent a long time in separating the adhesions, in picking up all bleeding points and in avoiding the spreading of pus in the peritoneal cavity, we would have damaged her by the violence of our efforts. We would have prevented the factory from immediately taking up this function of manufacturing phagocytes and opsonins enough for subsequent management of the case.

"Now I wish you all to keep track of this patient's subsequent history. I think you will find that tomorrow there is no sign of peritonitis, that she is very comfortable indeed for such a case, and that she has started in immediately to make recuperation. Please note that no rubber gloves were worn at the operation because they

would have interfered with the nice sense of touch, necessary in quick work, and nice work in separating the adhesions. I have worn no mouth guard or cap, and it would have been quite as well if I washed my hands after operation instead of before.

"If the case had been one of pinning a loose semi-lunar cartilage of the knee joint I would have worn rubber gloves, gauze mouth protector and a cap.

"The time has come for us to make intelligent distinction between cases and to recognize the requirements according to the light of our new era. The first era of surgery in the days of Hippocrates was the heroic era. The second era of surgery was the anatomic era, in the days of Vesalius. The third era of surgery was introduced by Pasteur and Lister and may be called the pathologic era.

"In the pathologic era we were taught to remove all products of infection, no matter at what cost to the patient.

"The fourth or new era may be called the physiologic era of surgery. It is now just beginning to dawn, and is based upon the studies of Metchnikoff in phagocytes and of Wright in opsonins. The basic idea of removing all products of infection by our art of the pathologic era is to be dropped in favor of retaining such natural resistance on the part of the patient that phagocytes and opsonins can be manufactured immediately by the patient.

"I do not believe that any man can step into the light of the physiologic era until he has mastered the science of the pathologic era and is prepared to apply it, as far as essential without interfering with the principles of the physiologic era."

If the conclusions of this surgeon become fulfilled in the future, and many indications are found which suggest that they will, then must the aim of much in surgery be altered. The object will not then be of necessity to the elimination of all noxious material even at the expense of injuring the healthy, but merely the removal of the excess, leaving to nature the cure that she can then ably accomplish. Even now we recognize that frequently antiseptics and various forms of local treatment do more harm than good, while slowly but surely we are coming to a better realization of the vast amount of strength included in that recently much reviled phrase: *vis medicatrix naturæ.*

PRESENT DAY MEDICATION.

In the Medical Summary there recently appeared an article by Blair of Harrisburg upon the question of the size of the dose and the single remedy. This will be of interest and is therefore appended:

"Our homœopathic and eclectic friends have done a vast field of work in therapeutics it is a shame we know so little about. We have lost the art of using drugs for their indications in small doses. Full physiologic doses of medicine do harm if long continued, and the average four-ounce prescription continues such drug action

altogether too long, and often does positive harm. My idea is to give a few doses of this character, and to continue the medication with small doses of mild and kindly acting drugs that do not mask symptoms and do not overwhelm the system with a lot of foreign matter, placing an unnecessary stress upon the vital powers. One cannot succeed with small-dose medication unless he goes to the trouble to really inform himself as to the detailed action of his drugs and to study each individual case carefully. The senseless plan of combining a half-dozen drugs in one mixture has neither rhyme nor reason to commend it, and is bad practice. We are using too many combination tablets. The whole matter has been fogged very largely by the propaganda for the National Formulary, a truly wretched compendium of shotgun mixtures rich in alcohol and sugar."

Such statements are not usually made by members of the dominant school except by those whose tendencies are somewhat more liberal than are those of the majority. They suggest, however, an inclination toward that common ground where sooner or later all physicians must meet and where truth will be sought for its own sake rather than for that of any sectarian feeling. In this connection a statement credited to Prof. John Uri Lloyd, the well-known Cincinnati chemist and materia medicist, may appropriately be quoted: "The man who wants to know but does not know, and yet tries to learn how to know, *will know;* but the man who thinks he knows and rests content in what he thinks he knows, *will never know.*"

There is at the present time a strong tendency to break away from the self-constituted authority of the pharmacopœia and the materia medica and to search for facts which may be beyond question by any. When that time comes and apparently not until then will the medical profession be free from the present well-deserved criticism of bias, prejudice and uncertainty.

MEMORIAL BUILDING FOR THE HUMANE SOCIETY.

We learn from that most unique publication, Our Dumb Animals, that the directors of the Massachusetts Society for the Prevention of Cruelty to Animals and the American Humane Educational Society are planning to erect a building as a permanent memorial to their late president, George T. Angell. Mr. Angell always hoped for such a building in Boston in which both of these humane societies could be located, and it is the sincere wish of the editors that the project may progress to a successful termination. While the medical profession is much abused in certain quarters by members of this and allied societies, we, nevertheless, feel that the intentions of these members are of the best, despite the fact that their interpretation of certain parts of medical work is erroneous. We trust, therefore, that any influence that our readers may have in benefiting this cause may be freely and gladly offered.

ATTENDANCE AT MEDICAL SOCIETIES.

The Boston Medical and Surgical Journal, in its editorial upon the recent meeting of the Massachusetts Medical Society, strongly deplores the apparently increasing disinclination of physicians to attend the meetings of their medical societies. At this meeting of the State society the attendance at all sessions save the annual dinner was very deficient in spite of the fact that there was no attempt to present either elaborate or numerous papers. The feeling seems to be prevalent that one can carefully read the papers later when printed and that the time of the meeting can better be spent in social and friendly intercourse.

Not only in Massachusetts is this feeling manifest, as the entire country seems to share it to a varying extent. Even in the national meeting of the American Medical Association, where presumably the greatest lights of the profession participate, it is seldom that more than ten per cent. of the entire membership attends. And of this small proportion only a fraction attends the meetings, the others devoting their time to non-professional pleasure.

It seems that the homœopathic profession gives a somewhat better record. Here we have seen at our annual conventions nearly one-third of the entire membership present, the great majority of whom took an active part in the various sessions. In our Massachusetts Homœopathic Medical Society and in the Boston one the attendance has usually been comparatively good, better, we are inclined to think, than in many other places.

It is true, nevertheless, that doctors seem to be no exception to the rule that "The best way to a man's heart is through his stomach" (and apparently to a woman's also), as those sessions where a dinner, a banquet or a lunch is served, are always the best attended. So true is this that at least two of the local Boston societies serve refreshments at each meeting, with a very gratifying increase in attendance. The psychology of eating would be a most fruitful topic for a thesis by some wise investigator, as he could perhaps explain, among other things, why a man will eat with so much relish food that, if served to him in his own home, he would probably consider as a joke.

Whatever the explanation, the fact remains that attendance at medical meetings is becoming steadily smaller and smaller. It seems not improbable that by some societies at least, the professional papers will be entirely eliminated, the meetings being entirely devoted to clinics and social intercourse.

ADVANCES IN THERAPEUTICS.—A monumental advance in therapeutics has been the evolution of Dr. Flexner's anti-meningitic serum. The whole subject of serum therapy continues to occupy the minds and the devoted energies of both our clinicians and our laboratory workers; and it is within these lines that very great therapeutic achievements are to be hoped for. Here. at least, is an absolutely scientific and logical therapeutic means, the lack of which has hitherto been a depressing opprobrium of our profession —The Medical Times.

SOCIETIES.

MASSACHUSETTS HOMOEOPATHIC MEDICAL SOCIETY.

The sixty-ninth semi-annual meeting of the Massachusetts Homœopathic Medical Society was held in G. A. R. Hall, Springfield, Mass., Wednesday, October 13, 1909, the meeting being called to order by the President, Charles R. Hunt, M.D.

Report of Committee on Dermatology, Syphylology and Genito-Urinary Diseases, Seth A. Lewis, M.D., Chairman.

I. How Can We Protect Our Boys and Girls from the Social Evil? —Peter J. Haigis, M.D.

II. The Remoter Manifestations of Gonorrhea, and Their Interest for the General Practitioner.—Orren B. Sanders, M.D.

III. Business Session.

a. The reading of the minutes of the last meeting was waived since they had been printed in the report.

b. The following physicians were approved by the Board of Censors, recommended by the Executive Committee and elected by the Society:

Robert E. Conlin, M.D., Woburn.
Charles F. Johnson, M.D., Newburyport.
David L. Martin, M.D., Boston.
Ellen E. Schenck, M.D., Shirley.
Clara C. Simmons, M.D., Boston.
Joseph E. Sternberg, M.D., Boston.
Winifred M. Woolls, M.D., Boston.

c. Reception of Delegates from other Societies.

IV. Luncheon.

Report of Committee on Opthalmology, Otology, Rhinology and Laryngology, Albert E. Cross, M.D., Chairman.

V. The Importance of Cycloplegics in Refraction, with Special Reference to Children.—Arthur B. Norton, M.D., Professor of Ophthalmology, New York Homœopathic Medical College.

VI. Preventable Aural Conditions.—Frederick W. Colburn, M.D.

Report of the Committee on Materia Medica, Mary A. Leavitt, M.D., Chairman.

VII. Some Ideas on Materia Medica.—Alvin M. Cushing, M.D.

Report of Committee on Surgery, William F. Wesselhoeft, M.D., Chairman.

VIII. Cranial Injuries as Productive Factors in Criminality.—DeWitt G. Wilcox, M.D.

Report of the Committee on Gynecology, Herbert D. Boyd, M.D., Chairman.

IX. How Best to Deal with Malpositions of the Uterus.—John H. Carmichael, M.D.

X. The Importance of Reporting Cases.—Nathaniel W. Emerson, M.D.

XI. Dinner.

Owing to the death of the wife of Frank W. Patch, M.D., the annual oration was omitted.

Adjournment.

It was decided to send a resolution of thanks to the Society of Western Massachusetts for their care in arranging matters for the comfort and entertainment of the guests.

VOTES.

A letter from the attorney of this Society, to whom was referred the matter of bringing about the affiliation of the various local societies with the State Society, was read, the attorney giving it as his opinion that such affiliation should not be made without consent of the Legislature.

It was voted that this matter be referred to the Legislative Committee for investigation.

An open letter sent by the homœopathic physicians of Chelsea to the officers of the Rufus S. Frost Hospital, Chelsea, was read and the question discussed by the Society, after which it was voted that a committee of three be appointed by the President to take the matter under investigation and report to the Executive Committee of the Society at its next meeting in January.

At the suggestion of Dr. Strong, it was voted that the Legislative Committee of the Society be requested to take up the question of reciprocity, and if in their judgment advisable, present a bill to the Legislature carrying out this effect.

With a view to carrying out some of the ideas mentioned by Dr. Haigis in his paper in regard to having children in the schools instructed about the "social evil," it was voted that a committee of three be appointed by the Chair to confer with a committee from the Massachusetts Medical Society, with the Board of Education and the Board of Health, and report the results to the Society at its next meeting.

At the suggestion of Dr. John L. Coffin, it was voted that a telegram be sent on the afternoon of this meeting to Dr. Frank W. Patch, whose wife died recently, informing him of the profound and heart-felt sympathy of this Society in his great bereavement.

Discussion of papers by Dr. Haigis and Dr. Sanders:

In commenting on the statements made by these men, Dr. George E. May emphasized the importance of instructing boys and girls in regard to the subjects under consideration. It was his opinion that this was a much more momentous question than that of tuberculosis or alcohol, and that it could be dealt with properly by suitably-trained teachers in the lower grades of the elementary schools.

Discussion of Dr. Norton's paper by Dr. Wells:

"It seems to me that perhaps a few definitions of some of the terms used by Dr. Norton may enlighten us on the subject.

"The term cycloplegic is confounded in the minds of many with the term mydriatic. The former is a drug which paralyzes the accomodation while the latter merely dilates the pupil. Every cycloplegic is also a mydriatic; but every mydriatic is not a cycloplegic. Euphthalmin and cocaine enlarge the pupil, but do not paralyze the accomodation. The term esophoria means a tendency of the eyes to turn inward, while exophoria means a tendency of the eyes to turn outward. The use of atropin or some other drug which paralyzes the accomodation is imperative. In regard to the use of cycloplegics with children, no one can take any exception to what Dr. Norton has said. In fact, I would go him one better and say that it is imperative to use cycloplegics in children where myopia or astigmatism is present. I refuse to examine any child without the use of atropin. I know that my opinion is useless unless I have a complete paralysis of the accommodation.

"With adults, most of us have not reached the plane which Dr. Norton occupies. I am getting there, however, and have a confession to make which will illustrate my faith. A year ago I referred to Dr. Norton a patient who was, as I remember it, about forty-eight years old, whom I examined. He had a presbyopia. I was led to suppose before this that a patient in whom the ciliary muscle was losing its tone would not have any latent hyperopia, and it had never been my practice to use atropin. I sent the prescription of the lenses I ordered for him, and was very much chagrined when Dr. Norton sent me a report of the result which he had obtained by the use of atropin.

"I am not yet using atropin with all adults, but am using it in more and more cases. A case which does not get relief from glasses should be treated with atropin or scopolamin. The effect of the latter drug lasts three days, in comparison with six or seven days for the atropin.

"I want to enforce one thing that Dr. Norton said, and that is the

bad practice of sending children to opticians. The school examination law which is now in force in Massachusetts has called to the attention of the authorities many children with defective sight, and the parents are advised to consult their family physician about the child and get his advice. I do not know to what extent the family physician sends these children to an oculist, or whether the parents take the children themselves. Now, if an oculist refuses to see such cases, is it not probable that the optician fails to properly diagnose the case?

"With regard to glaucoma. I have simply one case in which such a result supervened, and this was a very slight attack, more subjective than objective. It was relieved by the use of eserin. No serious result followed."

Discussion of Dr. Colburn's paper by Dr. Bellows:

"This is a very practical paper, and strikes at the root of things. The great secret in treating defective aural conditions successfully, lies in the early recognition. It is surprising how insidiously a catarrhal deafness, for instance, will advance without, perhaps, any recognition of the process which is going forward. An early recognition of these cases enables us to abort them before the actual thickening occurs. After the tissue changes have occurred, it is more a matter of holding the process in check than for greatly improving the condition, especially in adults.

"I want to say just one thing more, and that is the importance of finding out if the children who are troubled with these throat conditions which affect the ears are excessive sugar eaters. Children have what is called a sugar index. Some can eat a large quantity without being affected by it, and others can eat only a little. It is, therefore, well to change the child's habits in regard to eating cakes, pastry, sweets, candy, and drinking sweet beverages like soda water."

Dr. Cross emphasized the importance of looking into the question of the ventilation of the child's sleeping room as a factor in bringing about the throat conditions spoken of.

Discussion of Dr. Cushing's paper by John P. Rand, M.D.

After speaking of his use of some of the drugs mentioned by Dr. Cushing, Dr. Rand said:

"We find fault with the imperfections of our materia medica, but the trouble is largely our own. Very few of us have ever done anything to improve the materia medica. Hahnemann in his day proved, I think some ninety-six remedies upon himself. I do not know how many Dr. Cushing has proven, but I judge about fifteen or twenty. The great majority of us, however, have never proved even a single one, and still we say that the materia medica is all wrong and that we have no confidence in it. Dr. Wesselhoeft used to say that the way to study a drug was to prove it on one's self.

"The real trouble, as I look at it, is that we have not any of us the faith in the action of drugs that our fathers in the profession had. If we had, we should be proving and reproving drugs to make the provings more perfect, as they did it, and we should be able to apply those drugs as they did, and get the results that they did. Our patients would have more confidence in us and in the drugs we used if we had more faith in the drugs themselves."

Discussion of Dr. Wilcox's paper by Dr. Frank C. Richardson:

"Mr. Chairman, there is so much that might be said upon this subject that it is difficult to know where to start, and, more particularly, to know where to stop. The only thing that seems legitimate at present is to just beat about the edges a bit.

"The paper is an exceedingly interesting one, as you will all admit. It is impossible to state whether or not this man would have become a criminal had he not been knocked on the head. It is not conclusive that the blow was the cause of his criminality. It would be interesting to look still more closely into his heredity. Whether he was an acquired

degenerate, of course it is impossible to say. His statements in regard to his mental condition after the operation I should receive with a good deal of allowance, because he has demonstrated all through his life that he is not trustworthy. His dramatic instinct is thoroughly consistent with the type of degenerate which he represents. This narration of their deeds, or supposed deeds, is the most interesting thing I have ever listened to. They tell stories which would prove interesting reading in any magazine. I have found many times that they are made up of a conglomeration of Sherlock Holmes, Raffles and various other criminal exploits.

"The matter of criminal responsibility is the question of the age, I believe. How to determine the responsibility of the criminal is being discussed in legal circles and by psychiatrists all over the country and all over the world, more especially in the Old World. Grasset has written a most interesting book entitled 'The Semi-Insane and the Semi-Responsible.'

"Those of you who have read Nordau's 'Degeneracy' have probably come to the conclusion that very few people who amount to anything will escape being classed as degenerates. Every genius comes pretty near being a degenerate, according to these classifications. Many times I have said that all the world's best work had been done by neurotics. I believe that.

"Now, going a step further and coming to the degenerate class, so-called, those who have exhibited peculiar, strong characteristics, well-marked proclivities, in certain directions, concentration in certain directions and superficiality in others, a lack of moral sense according to traditional standards, standards which are recognized, and which they refuse to recognize. It is most difficult to say where to draw the line. Who can say that one is semi-responsible or semi-insane, where the border-line is between sanity and insanity, and if we admit that there is such a thing as semi-responsibility what shall be the punishment?

"I believe that in legal circles they pay more attention to the animus than to the crime, and the punishment is being inflicted now not so much in accordance with the crime as with the animus. I believe that that is in the right direction.

"The matter of degeneracy and the varying types of degenerates would occupy a whole day to discuss with any sort of completeness.

"Now, I suppose that you have all read recently about the effort which is being made to differentiate between so-called psychic neuroses and the true psychoses, the difficulty in differentiating between the so-called psychasthenia and the true manic depressive condition. It seems to me that it is a task that leads to nowhere. We all have our moods. We all have our days of depression, our days of exaltation, and in some of us they seem to be almost psychic. Now, then, in so many depressing conditions you get to the extreme degree, the exaltation amounting almost to mania and the depression amounting almost to melancholia. You will many of you remember that you have had bad dreams, day dreams as well as sleeping dreams, of all sorts of incongruous things, ideas, almost, amounting to visions. You have heard and seen all sorts of things. You have been able to rectify these impressions; they have not remained. Your power of rectification has prevented them from going further. Therefore you are not insane. Were you temporarily insane? Had you not been able to rectify these, had you not retained your power of rectification, would you be insane?

"I believe that if it were more generally understood that every crime would be punished by law, that nothing excuses crime against the law, that there is no escape, there would be more rectification of false impressions and impulses. Punishments may be modified according to circumstances; they may be gauged according to the animus.

"I realize I am wandering somewhat from the subject. It is a recognized fact that anything which disturbs the integrity of the brain may lead to crime, a lack of moral sense, and Dr. Wilcox's case may be an

illustration. It would almost seem so since this boy's crimes started soon after his injuries. Whether it is so or not, we cannot say. Even though this man commits no more crimes after his seven years' incarceration, we would hardly be able to conclude that the operation had led to his reform.

"I have in mind to say one thing in particular, and that is that I believe every severe head injury should be carefully investigated, and if there is the slightest evidence of a fracture, operation should be immediate. The sooner the operation the better, and I believe that the operation should be a very radical one. I mean that surgeons should have no fear of opening the skull, and opening widely. In regard to the seat of the operation, one has to speak less positively. Frequently the brain injury is not at the site of the fracture. You will be governed by localizing symptoms entirely, if you have any. If you can see or feel the fracture, it is legitimate to operate there in the absence of any localizing signs. The latter should, however, be the most important factor in deciding upon the site of the operation. And if the localizing symptoms show that the right side of the brain has been injured, operate there, even if you feel a crack in the opposite side of the skull."

Dr. Carmichael's paper was discussed by Drs. Whitmarsh, Wilcox, and May.

Drs. Mosher, Hinson, Carmichael and Cushing spoke briefly in regard to medical treatment in connection with the cases mentioned by Dr. Emerson.

BOSTON HOMOEOPATHIC MEDICAL SOCIETY.—The first of the fall meetings of this society was held on Thursday, October 7th, in the hall of the Boston Society of Natural History.

After the regular business of the meeting, including proposals for membership, Dr. A. G. Howard exhibited an unusual case of foreign body taken from the knee-joint of one of his patients.

The Scientific Session was directed especially toward the phase of diagnosis in medicine, and the following papers were given:

Laboratory Diagnosis of Tuberculosis, W. H. Watters, M.D.

Some Essentials in Diagnosis, F. S. Piper, M.D.

The Interpretation of the X-Ray in Diagnosis, A. G. Howard, M.D., and G. H. Osgood, M.D.

Poliomyelitis Anterior Acuta: Its Causative Factors and Diagnosis, E. E. Allen, M.D.

The meeting was largely attended and papers were freely discussed.

EFFECTS OF SODIUM BENZOATE IN FOOD.—All the readers of the *Gazette* are undoubtedly familiar with the report of Dr. H. W. Wiley, which stated so specifically the harmful effects of sodium benzoate when used as a food preservative. Subsequent to this report a committee was appointed by the Secretary of Agriculture to investigate it. This committee consisted of Drs. Remsen, of Baltimore; Chittenden, of New Haven; Long, of Chicago, and Herter, of New York. Their report was almost the opposite to that presented by Wiley in that they claimed the drug to be practically harmless. After much discussion and hard feelings on both sides the matter finally came up at the annual meeting of the Association of the State of New York Pure Food and Dairy Department, recently held in Denver. Dr. Wiley was strongly supported by Dr. C. A. L. Reed, of Cincinnati, and others, all opposing the ideas advanced by the referee board. After much persuasion they lost their point, however, and a resolution was passed, adopting the report of the latter board.

If we agree with the majority, therefore, we may assume that sodium benzoate in the minute amounts used, is not a serious factor in the production of disease or of diseased conditions.

BOOK REVIEWS

THE MONTH'S BEST BOOKS.

Text-Book of Surgery, Brewer; $6.00. Lea & Febiger.
Diseases of the Skin, Hyde; $6.00. Lea & Febiger.

A Practical Treatise on Diseases of the Skin. By John V. Shoemaker, M.D., LL.D., Professor of Skin and Venereal Diseases, Materia Medica, Therapeutics and Clinical Medicine in the Medico-Chirurgical College and Hospital of Philadelphia, Pa., etc. Fifth Edition. Revised and Enlarged. Illustrated with 29 Half-Tone Plates containing 40 Figures, nearly all original. F. A. Davis Company, Philadelphia, 1909.

While we have not the pleasure of personal acquaintance with the author, we feel that he must be a man of unusual mental ability on account of his able treatment of such diverse subjects as dermatology, materia medica, venereal disease and clinical medicine. His text-book on materia medica is particularly well known and widely used, while his many articles in the medical press make his name a very familiar one. It can be safely concluded, therefore, that the present work comes from one having authority as well as wide experience as a writer and teacher.

It most appropriately begins with a chapter dealing largely with the anatomy and physiology of the skin, followed by one on the classification of the various diseases. These are then fully described in proper order. Some vagueness is noticeable in some parts as, for instance, in the differentiation between epithelioma and carcinoma cutis where the exact meaning is difficult to follow.

A more generous use of illustrations would seem to have been advisable. One feature is the inclusion of a formulary of over eighty pages, in which large numbers of prescriptions are given for the various diseases. An indication of the trend of modern prescription writing is found in the fact that these are all given in the metric sytsem as well as in the more common one.

The author does not apparently belong to that modern school of dermatologists that tends to disregard the use of local applications in many conditions where they were formerly considered to be invaluable, as by him local treatment receives detailed attention.

Therefore, while certain things might be changed with advantage we may safely conclude that the subject of dermatology has been fully and ably covered.

Studies on Immunity. By Robert Muir, M.A., M.D., Professor of Pathology, University of Glasgow. In Collaboration with Carl H. Browning, M.D., Alexander R. Ferguson, M.D., and William B. M. Martin, M.B., Ch.B. Oxford University Press, New York, 1909.

This book consists of a collection of papers and articles published separately during the past few years in various medical journals. These articles have been more or less modified in the compilation in order to make an harmonious whole and avoid repetitions. Immunity is considered in three sections: properties of hemolytic sera, properties of anti-immune bodies and properties of anti-serum.

Of such vital interest have become the questions of hemolysis, immune bodies, agglutinins, opsonins and anti-bodies as a class that the members of the medical profession, however situated, can but ill afford to be without an understanding of some of their phenomena. It is, perhaps, unfortunate that this book is so technical that to fully appreciate its worth it must be carefully studied. When such study has been made, however, one is most generously repaid for all the labor, and the student who has made it will then be the first to testify to its quality, that is certainly not excelled by any book in our language.

Hand-Book of Obstetrics. By R. Cadwallader, A.M., M.D., Assistant in Obstetrics University of California, Medical Department, San Francisco, Calif. With 104 Illustrations in the text. F. A. Davis Co., Philadelphia, 1908.

This book is one of the comparatively few that has yet appeared in the East written by a man from the Western coast. It is an unpretentious manual intended to be literally a hand-book for the student and for those in general practice. No pretense is made toward completeness, particularly along the line of obstetric surgery. The author confesses to his diffidence in taking up the work, a feeling that is pleasing, as so frequently too much self-esteem is evident in books from cover to cover. He need, however, have no reason for this diffidence as the book that he has prepared will compare well with any of the handy manuals that are perhaps better known. We can commend it as one covering the subject briefly, concisely and in a very creditable manner.

The Scientific Reasonableness of Homœopathy. By Royal S. Copeland, A.M., M.D., Dean of the New York Homœopathic Medical College and Flower Hospital.

This little booklet of about fifty pages comprises the gist of a number of addresses made by Dr. Copeland in various places during the past two or three years, and is probably familiar to the majority of the readers of the Gazette. To those who have not had the opportunity of perusing it, however, we recommend it with all sincerity. We believe it to be an illustration of those works, unfortunately too few among us, which are suitable to pass into the hands of the layman as giving a fair and unbiased explanation of the ground upon which homœopathy takes its stand. The idea is not to prove by clinical data the advantages of the law of similars but rather to show that the tendency of general scientific medicine is directed toward that same law.

Principles of Surgery. By N. Senn, M.D., Ph.D., LL.D., C.M. Fourth Edition Revised by Emanuel J. Senn, M.D., and Emanuel Friend, M.D., F. A. Davis Co., Philadelphia, Pa., 1909.

Nearly every system of surgery devotes the first chapters to the general principles of the art, and treats of inflammation, wound-healing, bacteriology, etc. It is with these fundamentals that Senn deals in his volume, the fourth edition of which, revised and enlarged, is now presented. Most of the volume is the same as previous editions. Chapters have been added on Wright's opsonic therapy and Bier's hyperemic treatment, and the value of the book is thereby materially increased.

The regeneration and the degeneration of the various tissues are exhaustively and interestingly treated. Bacteriology is dealt with in a manner to assist the surgeon rather than the pathologist. The characteristic clinical phenomena of infections with the different bacteria are discussed and the proper method of treatment outlined. Tuberculosis of the various tissues and organs is carefully considered and the general line of treatment given.

Altogther the book is a valuable addition to the surgeon's library, as the fundamentals of surgery are here compressed into one volume of easy reference.

Third Report of the Welcome Research Laboratories at the Gordon Memorial College, Khartoum, Egypt. By Andrew Balfour, M.D., B.Sc., etc.

The importance of the work that is being performed by these laboratories along the lines of tropical disease cannot well be over estimated. During the past few years our knowledge of such diseases and particularly of their etiology has been enormously increased. This knowledge is tending to make the life in the tropics not only bearable but pleasant, as by it we are learning how to overcome or to guard against various

forms of infection. The present report is along the same lines as the two preceding ones, investigations concerning the diseases indigenous in Central Africa. A new floating laboratory has been prepared upon which the travelling pathologist moves from place to place along the Nile and its branches, studying both the disease as it affects the natives and all allied phenomena. Much work has been done upon sleeping sickness, Kala-azar, and upon various lines of entymology. Studies of the medical practice and superstitions of the people of certain localities are included, as well as many ethnological data.

The book is profusely illustrated throughout, both by black and white sketches and by elaborate colored plates.

To those interested in tropical medicine it will bring a vast amount of valuable information, and will also suggest the enormous field that still lies open for research.

A Text-Book of Surgery. For Students and Practitioners. By George Emerson Brewer, A.M., M.D., Professor of Clinical Surgery at the College of Physicians and Surgeons, Columbia University, New York; Surgeon to the Roosevelt Hospital; Consulting Surgeon to the City Hospital, to the Muhlenberg Hospital of Plainfield, N. J., and to the Perth Amboy City Hospital; etc. Illustrated with 415 Engravings in the Text and 14 Plates in Colors and Monochrome. Second Edition, thoroughly revised and much enlarged. Cloth, $5.00; leather, $6.00. Lea & Febiger, New York and Philadelphia, 1909.

In recent years the subject of surgery has become so extensive that no one volume can cover the entire field in full detail. As a result, exhaustive systems and series have been written. As these have been too voluminous for the average practitioner, numerous manuals or handbooks have appeared, planned to give a working résumé of the subject. Midway between these two extremes, avoiding the disadvantages of both and at the same time combining almost all their advantages, come the single volume works like this new one of Brewer's. To those familiar with the earlier edition we may say that in the present one more than two hundred pages have been added in the various chapters. In general arrangment but little change is noted other than these very important additions. We think that a little more might have been written with propriety concerning blood transfusion and hemolysis, as these subjects are now receiving so much attention by surgeons.

The color plates, of which there are a number, are made directly from life by the Lumiere process, a method that seems to promise much for the future. The other illustrations are excellent, serving well their purpose of elucidating a text that is itself very lucid, even independent of them.

We certainly believe that the possession of Brewer's Surgery will bring satisfaction to every owner desirous of a book that gives all the essentials without including unimportant matter largely of merely scholastic importance.

A Practical Treatise on Diseases of the Skin. For the Use of Students and Practitioners. By J. Nevins Hyde, A.M., M.D., Professor of Dermatology and Venereal Diseases in the University of Chicago, Medical Department (Rush Medical College). New (8th) edition, thoroughly revised and much enlarged. In one very handsome octavo volume of about 1137 pages, with 223 engravings and 58 full-page plates, in colors and monochrome. Cloth, $5.00, net; leather, $6.00, net. Lea & Febiger, Philadelphia and New York, 1909.

The author of this book possesses a reputation for ability in his specialty that is probably excelled by no one in the English-speaking world. Whether this is partly due to the excellent preceding editions of the book or whether his innate ability has made possible these very successful editions is a subject of possible debate. However, these may

stand as cause and effect the fact itself remains indisputable that "Hyde, on the Skin" has become a well recognized and much respected phrase in medicine.

This latest volume does not differ essentially from its predecessors with which, doubtless, the majority of the readers of the *Gazette* are more or less familiar, except in the many additions which embody the most recent research. So great have these been that more than two hundred pages more are required than in the earlier edition.

In perfect accord with the increasing American interest in tropical diseases we find a separate chapter on "Diseases of the Tropics," that is certainly most timely.

Some disappointment is felt at the entire omission of the vaccine treatment in the chapters on furunculosis and carbuncles, as it seems to be an all but universally admitted fact that this is by far the best means to employ in such diseases.

We have so frequently highly commended the books of this publishing house for their excellent illustrations that repetition is almost unnecessary. It will suffice to say that here they are both numerous and well chosen, adding much to the clearness of the text. The entire book gives much satisfaction to the reviewer, who believes it to be without a superior in English at the present time.

Essentials of Laboratory Diagnosis. Designed for Students and Practitioners. By Francis Ashley Faught, M.D., Director of the Laboratory of the Department of Clinical Medicine and Assistant to the Professor of Clinical Medicine, Medico-Chirurgical College, etc., etc., Philadelphia, Pa. Containing an Indican scale in colors, six full-page plates and numerous engravings in the text. F. A. Davis Company, Philadelphia, 1909.

Seldom has the reviewer entered upon his task more willingly than at the present time when he writes his impressions of the book under discussion. The possession of some means of combining the results of the clinician with those of the laboratory becomes constantly more important, as well as not infrequently more difficult. It is to books like this one that this adjustment becomes possible.

Among some of the more important topics covered are the blood, the sputum, blood pressure, parasites, gastric analysis, the urine and general bacteriologic methods. Of particular interest is the chapter on the opsonic or vaccine methods and the colored plate illustrating the indican reaction.

The book is not too large to be easily read and used as a hand-book. It is compact and not at all verbose. For these and other reasons it is warmly recommended.

OPENING OF BOSTON UNIVERSITY SCHOOL OF MEDICINE.—On Thursday, October 7, the opening exercises of Boston University School of Medicine were held in the amphitheatre of the school. Before a large attendance of students, alumni and faculty, Dean Sutherland gave an eloquent address upon "Ideals in Medicine." This was followed by brief speeches by Professors E. P. Colby and Walter Wesselhoeft, two members of the original faculty of thirty-six years ago. Dr. Richardson, Registrar, then formally welcomed the students, and officially announced the opening of the session of 1909-10.

THE NATIONAL QUARTERLY OF THE ECLECTIC MEDICAL ASSOCIATION.—The first number of this new journal appeared in September, under the editorial direction of the secretary of the Association, Dr. W. N. Mundy. It contains the minutes of the Chicago session of the Society, a number of very good papers there presented, editorials, book reviews, etc. The new journal is very neat in its arrangements and is a credit to the association that presents it.

PERSONAL AND GENERAL ITEMS

A book sale of duplicates, odd volumes, etc., at merely nominal prices, will be held for the benefit of Boston University Medical Library at the library, 80 East Concord Street, November 3 to 12, from 11 A. M. to 3 P. M., every day except Saturday. There will be many important homœopathic works, among them Gentry's Repertory, Allen's Encyclopedia, Hahnemann's Chronic Diseases and Materia Medica, Hale's New Remedies, Hartmann's works, Hering's Guiding Symptoms, etc. Terms cash. All physicians invited.

Dr. DeWitt G. Wilcox, formerly of Buffalo, New York, has taken up his residence at 184 Aspinwall Avenue, Brookline, and has opened an office at 520 Commonwealth Avenue, Boston.

Dr. G. Forrest Martin of Lowell, Mass., has removed his office from 19 Paige Street to Wyman's Exchange, corner Central and Mark Streets; residence, 45 Harvard Street.

Dr. Frank C. Walker, B. U. S. M., 1884, has removed from Taunton to Nantucket, Mass.

Drs. Helen S. and Edna M. Childs have removed from Jamaica Plain to Trinity Court, Boston.

Dr. Harry J. Lee, B. U. S. M., 1904, has removed from Somerville to 499 Beacon St., Boston.

WANTED—A physician in good standing, registered in Massachusetts, will consider a professional engagement, either in general practice or in private sanatorium work, during the whole or in part of this coming winter. Address "X," care of New England Medical Gazette, 422 Columbia Road, Boston, Mass.

The *Gazette* learns with much sorrow of the death of Dr. George Francis Sears of Chicago.

Dr. Shears was professor of surgery at Hahnemann Medical College since 1889 and was president of that institution since 1900. For some months he had been suffering from a nervous affection, involving the spinal cord, and his death came as a result of this disease on August 27, 1909. In the homœopathic profession of the city, the State and the nation he was a prominent figure, and his loss will be deeply felt by all his associates.

Dr. A. G. Howard, who has for a number of years devoted his attention to orthopedic surgery at his office at 107 Massachusetts Ave., has removed to 520 Commonwealth Ave.

The *Gazette* learns with much pleasure of the election of Dr. Henry F. Schantz, of Reading, Penn., as president of the Pennsylvania Homœopathic Medical Society for the coming year.

We are familiar with the energy and intelligent enthusiasm of Dr. Schantz, and feel sure that the Society will never find cause to regret its choice.

The *Gazette* extends to Dr. W. J. Hawkes of Los Angeles, Calif., its most sincere sympathy in the sudden loss of his son. This son, a boy of twelve years of age, was suddenly killed by slipping from a bicycle on a slippery pavement under the wheels of a heavy passing dray.

We congratulate the Eclectic Medical Institute of Cincinnati upon the approaching completion of its new building in that city. This building consists of six stories and is excellently fitted for all modern forms of medical instruction.

The August and September number of the "British Homœopathic Review" constitutes the "Congress Number." In this will be found in full the papers presented at the recent British Homœopathic Congress, and the discussions thereof. They comprise a very interesting series of articles and one that may be read with advantage by all.

INSTITUTE OF MEDICAL RESEARCH FOR CHICAGO.—Mrs. Nelson Morris has donated the sum of $250,000 to found an institute of medical research in Chicago, similar to the one made possible by the munificence of Mr. Rockefeller in New York. This new institute will be connected with the Michael Reese Hospital and will be constructed under the direction of Dr. J. W. Jobling, Pathologist of the Michael Reese Hospital, who will also be director of the new institute.

SKIN GRAFTING.—Davis, in the "Annals of Surgery" for September, presents a very interesting article upon the technic and results of skin grafting. His conclusions are as follows:

"The general health of the patient must be taken into consideration when skin grafting is contemplated, and grafts to be successful must only be transplanted to healthy wounds. As a rule grafts do not take well on luetic individuals. No antiseptics must touch the flaps before or after cutting. A general anæsthetic is necessary in the majority of cases where large grafts are removed. It is best to cover the defect with a single large graft if possible, as the healing is just as satisfactory as if several small flaps were used, and the scar is much less. Silver foil immediately over the graft has proved its worth, but it is best to apply it without the paper and not to use alcohol. Temporary moist salt gauze dressings are also very satisfactory."

TUBERCULIN THERAPY OF RENAL TUBERCULOSIS.—We quote the following from an article in the October number of the "Medical Record" by Karo, of Berlin:

"The important question is: Which cases are suitable for tuberculin treatment? I am of the opinion that with the exception of those cases in which there is a special reason for us to operate immediately, such as fever, etc., we may, with perfect safety, try a systematic tuberculin treatment. Operation is only necessary in cases where this treatment has proved a failure. This delay is absolutely without any danger for the patient. We are all the more justified to start a tuberculin treatment, as even the most thorough clinical investigation is unable to inform us as to how far the disease has progressed.

"In a far advanced case we will probably be obliged to operate, but that does not exclude the advisability of first attempting a tuberculin treatment. The most important thing is, therefore, an early diagnosis, and it is just for this reason that I have called your attention to the accuracy of a specific diagnosis by tuberculin injection.

"Even in cases requiring an operation, tuberculin is of the utmost importance for the after-treatment; above all for the complete recovery in cases showing an involvement of the bladder. We have again and again become convinced that in all cases that have been treated with tuberculin after the operation the bladder symptoms healed much quicker than in cases in which no tuberculin was applied. I am convinced that for this reason tuberculin will prove indispensable in the treatment of all cases of tuberculosis of the urinary organs; and, in conclusion, I should be very pleased if this paper should be the means of attracting your attention to the specific, conservative treatment of renal tuberculosis."

AN UNUSUAL OPERATION.—In the September number of the "Pacific Coast Journal of Homœopathy" Dr. Ward, President of the American Institute, reports an unusual case. This he states to be a description of the largest ovarian cyst reported in literature. The patient was

a woman 47 years of age, in whom a tumor had been demonstrable for 23 years, with constant enlargement for the past 15 years. During the last year she had been confined entirely to bed and could not turn from side to side for 38 days prior to the operation. Six men were required to lift her upon the two operating tables that were necessary for her. Through a small incision trochars were introduced and the cyst was drained in 40 minutes, the sac later being removed. The total weight of the tumor and the sack was 219 lbs. 6 oz. The weight of the woman after the tumor was removed was, unfortunately, not given. Death resulted from shock.

FOUR THOUSAND CONSUMPTIVES STARVE YEARLY.

Many Indigent Dying Cases Are Being Sent to Southwest.

The following communication from the New York Tuberculosis Association should be carefully read and pondered by every physician:

"Cruel and inhuman practices are alleged in a statement given out by the National Association for the Study and Prevention of Tuberculosis against the eastern doctors who persist in sending dying cases of consumption to the Southwest.

"Fully 7,180 persons hopelessly diseased with tuberculosis annually come to die in the States of California, Arizona, New Mexico, Texas and Colorado, most of them by order of their physicians. The statement, which is based upon the testimony of well-known experts, and all available statistics, shows that at least 50 per cent. of those who go to the Southwest every year for their health are so far advanced in their disease that they cannot hope for a cure in any climate, under any circumstances. More than this, at least 60 per cent. of these advanced cases are so poor that they have not sufficient means to provide for the proper necessaries of life, which means that 4,315 consumptives are either starved to death, or forced to accept charitable relief every year.

"It is not an uncommon thing, the National Association declares, for whole families, who can hardly eke out a living in the East, to migrate to the West in the hope of saving the life of some member of the family. In most instances, the abject poverty of such cases forces them to beg, or to live on a very low level. Often consumptives who cannot afford the proper traveling accommodations are found dead on the trains before reaching their destination. The resources of almost every charitable organization in the Southwest are drained every year to care for cases which would be self-supporting in their Eastern homes.

"It costs on an average, at least $50 per month for the support of a consumptive in the Southwest, including some medical attention. The National Association strongly urges no one to go to this section who has not sufficient funds to care for himself at least one year, in addition to what his family might require of him during this time. It is also urged that no persons who are far advanced with tuberculosis go to so distant a climate.

"Consumption can be cured, or arrested in any section of the United States, and the percentage of cures in the East and the West is nearly the same. Any physician, therefore, who sends a person to the Southwest without sufficient funds, or in an advanced or dying stage of the disease, is guilty of cruelty to his patient. Renewed efforts are being made to stop this practice, and to encourage the building of small local hospitals in every city and town of the country. Attempts are also being made in Southern California and in Texas to exclude indigent consumptives or to send them back to the East."

REACTION IN THE MEDICAL ASSOCIATION.—"Northwest Medicine," a journal that has for several years been of very excellent merit, has recently been taken over in its entirety by the combined medical associations of Oregon, Washington and Idaho. It therefore, presumably, speaks with authority for this section of the country. In the first number we find a report from the delegate to the American Medical Association at its last meeting in Atlantic City. This report is of interest along the same lines as were the attacks of Lydston and others. It indicates a feeling of reaction against the extremely autocratic measures of the so-called inner circle or machine. We quote it in full:

"Dr. Andrew C. Smith remarked that few of the delegates had had much to say, inasmuch as the business of the House was apparently all slated, and executed by a very few members, who appeared to control the affairs of the Association. He said that the retiring President, Dr. Burrell, in his annual address, recommended, that the secretaryship, editorship and management be segregated, with a different head to each department. He also remarked in his address, that the presidency is a simple figurehead, the deduction being that the committee appointments and all matters of executive importance are dictated by the secretary, as is well known to all who are familiar with A. M. A. politics.

"No attention having apparently been given to the recommendations of the president, Dr. Smith, after commenting on the machine-like methods of the manipulators of the A. M. A., urged that the recommendations of the retiring president be given more courteous consideration, especially inasmuch as these recommendations were voiced by the rank and file of the profession throughout the land. He moved, therefore, that the Board of Trustees be requested to appoint an editor, and a manager, neither of whom should be connected with the secretaryship.

"This motion was immediately seconded, but a point of order was raised by Cantrell, of Texas, one of the faithful machine manipulators, and the motion was ruled out of order. Dr. Smith concluded his report with a motion that the delegate from the O. S. M. A. be instructed to promote legislation tending to carry out the suggestions of President Burrell in the segregation of the three offices, and that he also be instructed to initiate or support any action tending toward the restriction of the term of office of the members of the Board to one term."

The following additions, corrections and alterations are made to the list of 1910 Committee of A. I. H., as previously published:

A. B. Norton is a member of the Committee on Resolutions and Business, not A. B. Morton. E. P. Mills, Ogden, is a member of the Committee on New Members, not E. P. Hills.

H. F. Staples, Cleveland, O., and John C. Calhoun, M.D., Pittsburg, Pa., are added to the Committee on New Members.

The Committee on Publication consists of J. Richey Horner, Chairman; Joseph P. Cobb, Chicago, and T. H. Carmichael, Philadelphia.

The local Committee of Arrangements consists of the following:—

Honorary Chairman, W. J. Hawkes, M.D., Los Angeles, Cal.; Chairman, F. S. Barnard, M.D., Los Angeles, Cal.; Secretary, T. Low, M.D., Los Angeles; Treasurer, E. C. Buell, M.D., Los Angeles; W. E. Waddell, M.D., Los Angeles; W. E. Nichols, M.D., Pasadena; Eleanor F. Martin, M.D., San Francisco.

The Committee on the American Association of Clinical Research is as follows:—

Chairman, James Krauss, M.D., Boston; Walter Wesselhoeft, M.D., Boston; Fred B. Percy. M.D., Brookline, Mass.; DeWitt G. Wilcox, M.D., Boston; Charles L. Nichols, M.D., Worcester, Mass.; Royal S. Copeland, M.D., New York; John E. Wilson, M.D., New York; William A. Geohegan, M.D., Cincinnati; Willis B. Young, M.D., St. Louis; H. R. Arndt, M.D., San Francisco; Thomas G. McConkey, M.D., San Francisco.

Memorial Committee—Substitute the name of Maclay Lyon, M.D., Kansas City, Mo., in place of that of C. F. Menninger, M.D., Topeka, Kan.

THE NEW ENGLAND
MEDICAL GAZETTE

Vol. XLIV DECEMBER, 1909 No. 12

ORIGINAL COMMUNICATIONS.

THE PROBLEM OF AMERICAN BUSINESS NEUROSIS.*

By Frank C. Richardson, M.D., Boston, Mass.
Professor of Nervous Diseases, Boston University.

Those who are paying special attention to nervous diseases cannot fail to have been impressed with the fact that the exigencies of American business life are producing etiological factors, the effects of which upon the nervous system are most disastrous.

With alarming frequency leaders of business interests are collapsing from over-strain, and this class furnishes its full quota to sanitaria for nervous and mental diseases, while those of less prominence are succumbing to the effects of the nerve-wrecking pace in increasing numbers.

Sooner or later there will come, no doubt, a natural reaction from the present feverish strife for business and social supremacy, but in the meantime there will be opportunity for serious damage to the nervous and mental stability of the nation which must react in greater or less degree upon future generations. The wise and faithful physician, the logical conservator of the mental, as well as physical health of the community, must intervene to mitigate these consequences. It would seem that upon the neurologist especially has fallen the burden of responsibility, not only for the preservation of the stability of the present generation, but for the insurance of the nervous integrity of the race to come.

To preach from the rostrum the conservation of nerve energy and the philosophy of long life undoubtedly has its value, but on the whole it is a thankless task. It is the concrete case upon which we can exercise most influence. It is individual need that prompts to attention application of rational remedial measures and their promulgation if successful. Fortunately, prophylaxis and treatment of the conditions under consideration are of the same nature, and so, slowly, patiently, and one by one, founders and perpetuators of customs may be made to realize and correct their errors. An invaluable aid to our efforts at reform will be the fact that one prominent outgrowth of the modern demand upon human energy is a growing

* Read before the American Institute of Homœopathy at Detroit, June, 1909.

concern on the part of the public about its individual health. Keen competitive strife for the superlative has forced upon us a realization of the necessity for securing the most perfect action of mind and body during as long a period as is consistent with the laws of life. The business or professional man of today must be in possession of perfect mental and physical faculties in order to be assured of success in life. "I must work, therefore I must keep well," is the persistent thought, and the thinking man is already incorporating into his scheme of life pecautionary measures against disease.

The medical profession, with its traditional altruism, is responding nobly to the demand, and it is acknowledged on every hand that the medicine of the future will be preventive medicine.

Already the movement in this direction is taking practical form. It is now a common practice to have the teeth inspected by a dentist at stated times in order that impending decay may be forestalled. School children are examined by public medical officers for the detection of ocular defect, and many adults who wear glasses make periodic visits to the oculist to be sure they are getting the best possible aid to their vision. An increasing number of persons are having their urine examined at regular intervals to anticipate possible kidney trouble.

It has been confidently prophesied that in the not distant future, people, impelled by either law or custom, will at intervals determined by their age submit themselves for thorough physical examination. But, unfortunately, the perspicacity to provide for future health is as yet confined to a comparatively limited number. Too many of our American business men are living a life of physical and mental strain which is suicidal. Long hours devoted to commercial and financial problems of the most intricate character, hurried railroad journeys, insufficient time for eating or sleeping, little fresh air and no repose of mind or body is the prevailing routine. In order to spur on the flagging powers recourse is had to alcohol, tobacco, and stimulating pastimes. It is no longer uncommon to hear admissions of having smoked from ten to twenty cigars in a day and to having lost count of the number of alcoholic beverages consumed. The evening of such a day may be passed in the name of recreation in competitive stress around the billiard or card table, still smoking and drinking. If the theatre is visited, entertainments of the most stimulating character are selected; anything else bores him, and plays of real worth are not popular. Still we prate of the decadence of the stage, which for mercantile reasons is forced to cater to the demand that it furnish stimulus to jaded nerves.

This is a familiar picture which will be recognized by all neurologists as true to life. Furthermore, it is not the portrayal of the life of an acknowledged profligate, but of thousands of reputable American citizens and, "more's the pity," fathers of families.

Imagine this nervous tension, to speak of it mildly, continued month after month, year after year, and wonder that the poor abused victims of the new century swirl retain even a semblance of normal nerve function. The inevitable result of such a life is not

only lowered vitality, enfeebled circulation, disordered metabolism, and defective elimination, but an unstable nervous functionating with all its horrid brood of symptoms which are familiar to you under the nomenclature of neurasthenia, psychasthenia, and hysteria.

The hopelessness of such a specimen of human wreckage is pitiable in the extreme. Having long since recognized the uselessness of drug administration, he has probably turned to one or more of the healing cults, whose exponents seem to be governed by no principle which restrains the fancy or fetters the invention, but which flourish because the world is little less credulous than it was in the good old days of witchcraft and diabolism.

Confused by the babel of pseudo-philosophies, utterances from medical and lay sources upon the subject of "right living," he realizes his inability to make a choice of methods, and returns for advice to the family doctor, who discreetly shifts the responsibility to the neurologist, the general utility man of the profession.

The proper treatment of such a patient is a task requiring not only the knowledge of the physician, but also the acumen of the lawyer and the ethical science of the priest. For such a man to abandon his business is in most cases impracticable, and in many, inadvisable. There is no time for even temporary disability, for he who sits by the wayside to rest receives but scant courtesy from the onrushing mercantile horde, and it is very hard to catch up. "The sick man's sacrifice is but a lame oblation." The discouragement incident to enforced rest is often a handicap impossible to overcome by all the philosophy we may be able to instil. It is doubtful if even strenuous work is so productive of exhaustion as the dread of failure and morbid sensitiveness to criticism which beset neurotics. The most valuable counsellor is he who devises for these men some method of continuing their business activities in a more rational manner. To do this is not easy, but the true difficulty is to carry conviction that such a method as that selected is practicable. Patient and persistent education will often be required to accomplish this. It will be necessary to inculcate a respect for the immutable laws of health and to wash out many cherished beliefs as to traditional business customs.

Individualization is absolutely necessary. The physician cannot expect to appreciate all of the details of mercantile management, but he can make himself acquainted with his patient's needs and limitations and advise accordingly.

Each business situation has its own problems; nevertheless, with few, if any, exceptions, every business, no matter how large the enterprise, can be systematized in accordance with the principle found everywhere in nature, namely, the alternation of activity and rest. The veriest slave to business must admit that work which cannot be finished in a reasonable number of hours out of the twenty-four would best be either carried over to the next day or additional help be secured.

Emergencies will arise, of course, but too often the occasional stress becomes the habitual, and so long as the work is done the cost

is not counted. Repeatedly cases are met with where a business has rapidly outgrown its old plan of conduct, and new methods are imperatively demanded; yet the business man, blinded by the smoke of battle and intent only upon individual accomplishment, is struggling along, wearing himself out by attention to details which should be left to heads of organized departments. Strange as it may seem, the medical adviser, untrained, to be sure, in business affairs, but keen to detect and correct transgression of natural law, is often the first to call attention to the necessity for change.

Neurasthenia is not monopolized by jaded politicians, society dames, anxious housewives and mothers, pallid students and high-strung musicians and artists. The harassed American business man contributes a goodly proportion of the functional neuroses coming under the care of the physician. Many men who are thought to be irritable are simply ill. The only way to secure the best results of the powers that are in them is to regulate the hours of irksome drudgery.

Darwin found it impossible to concentrate his attention for any lengthy period without fatigue, and wisely gave up the attempt to pursue his special subjects for more than an hour or so at a time. Had he not done so, much of his invaluable work might never have seen the light.

If such limitations are true of a man of his gigantic intellect, the average man may reasonably expect to do more and better work with frequent periods of rest. The legitimate way to treat the results of bad habits is to replace them by good ones. The absolute necessity for the apportionment of work and relaxation must be impressed upon the weary seeker for relief, after every aspect of the case has been carefully considered. Often a visit to the place of business will furnish the physician with a clue to cause and remedy. If the patient is master of his own time the task will be simplified; if not, the coöperation of his superiors is, as a rule, easily secured if they are made to understand the exigencies of the case.

It is surprising how slight an addition to the time of relaxation may be beneficial. An hour later at business in the morning, affording ample time for the bath, exercise and walk to the office; an hour longer for luncheon, giving opportunity for more fresh air and sunlight; leaving business an hour earlier in the afternoon for motoring, golf, snow-shoeing, or any congenial exercise; all or any of these concessions to health are usually possible to secure, and will be found of immense advantage in restoring nervous equilibrium. They must, however, be specifically prescribed. The physician must not content himself with advising in a general way that his patient must take rest and exercise. Exact instructions as to kind and amount must be given, and the patient convinced of the necessity of complying with every detail of the treatment with the same scrupulous care he would use if seeking business success.

There are many vague conceptions of what constitutes relaxation. Idleness is not rest for the tired brain-workers under consideration, and healthful occupation which stimulates thought in new

directions is much more likely to bring refreshment. In one case the cultivation of horse-back riding has restored a set of shattered nerves and revolutionized the methods of a large business enterprise. Another man has acquired steadiness of nerve, as well as of aim, by daily rifle practice. Two partners in business and neurasthenia are benefiting in both respects by taking practical lessons in surveying. Both of them, formerly inveterate "night owls" are now willing to go to bed at a reasonable hour healthfully tired. An editorial writer on a great daily is much interested in the construction and flying of kites, and has learned the truth of the statement that oftentimes more and better work can be done in six hours than in ten.

In the treatment of this class of cases drugs play a comparatively small role, and mental and physical hygiene is the *sine qua non* of success.

Approaching the subject of the use of alcohol in the most liberal way possible, it must be acknowledged that the neurologist is beholden to this agent for a surprisingly large number of his cases. Notwithstanding the prohibition wave which has recently swept over the country, there is every reason to believe that the alcoholic habit among business men is steadily on the increase. There are certain scientific facts which have been repeatedly demonstrated and cannot be gainsaid. The brain and spinal cord, and all the nervous matter become subject under the influence of alcohol to organic deterioration. The membranes enveloping the nervous substance undergo thickening, and the true nerve tissue is sometimes modified by softening or shrinking of its texture, by degeneration of its cellular structure, or by the interposition of fatty deposits. These deteriorations of cerebral and spinal matter give rise to a series of derangements which show themselves in the worst forms of nervous disease. But not a single nervous lesion from alcohol appears without its warning. As a man who, when drinking at table is warned by certain unmistakable indications that the wine is beginning to take decisive effect on his power of expression and motion, so the slow alcoholic is duly apprised that he is in danger of a more permanent derangement. He is occasionally conscious of a failing readiness of speech, and in writing or speaking he loses common words. He is aware that after fatigue his limbs are unnaturally weary and heavy, and he is specially conscious that a sudden fall of temperature lowers too readily his vital energies. To escape the evils arising from the use of alcohol there is only one perfect course, namely, to abstain from alcohol altogether. No fear need be entertained of any physical or mental harm from such abstinence. Every good may be expected from it.

True, a certain very qualified temperance may be compatible with a healthy life; but such indulgence should be unnecessary and encourages the dangerous desire to further indulge. A man who abstains is safe. A man who indulges at all is unsafe. A man who relies on alcohol for support is lost.

While less destructive than alcohol, the excessive use of tobacco

in every form may induce various nervous changes. In every case the symptoms presented are indicative of a defective activity in the nervous structure of the cerebro-spinal and sympathetic systems. The nicotine has a very decided influence upon the motor fibres of the spinal nerves and probably upon the cord itself. It is through these structures that it excites muscular agitation, tremor, followed in extreme cases by temporary suspension of action. In like manner, tobacco has the property of acting on the sympathetic system of nerves, exciting them to produce muscular spasm followed by deficient power as illustrated by the familiar effects of first attempts at smoking. To those who smoke in moderation these effects are unfamiliar, and it is the abuse rather than the use of tobacco by the American business man that contributes to his nervous breakdown. A short smoke after the evening meal is not, as a rule, inconsistent with hygiene and may serve in some degree to soothe and to facilitate quiet thought.

While an explicit dietary is of the utmost importance in the scheme of treatment, each case will require special consideration and general directions would be of little aid. It is, perhaps, true that the increasing irritability of the American people may be in part due to a too abundant meat dietary, combined with the factors already enumerated. The half-oxidized products of albumin circulating in the blood are certainly not conducive to mental and moral stability. A conservative rule would be that animal food should not be taken oftener than once a day, and should be eaten while it is fresh, and after it has been well cooked.

Of equal importance to the inculcation of the principles of sane living is the establishment of sound thinking.

It must never be forgotten that the important element in the treatment of these neuroses is the patient himself, and that little can be accomplished until his attitude toward his condition is one of hope, faith, courage and self-reliance. No direction should ever be given without explaining what is expected to be accomplished by its following and how. He should be instructed in the relations existing between sin against natural laws and sickness, and should be made to realize that "When Nature fills the sails, the vessel goes smoothly on, and when Judgment is the pilot the insurance need not be high"; that "When Industry builds upon Nature we may expect the pyramids; where that foundation is wanting the structure must be low." It may require strong moral support to break the habits of a lifetime, but by wise and patient counsel the intelligent man may be led to the knowledge that "They who are merely carried on the wheel of inclination and circumstance, without the hand and guidance of sovereign Reason are but the automatous part of mankind, rather lived than living, or at least under-living themselves."

It follows, then, that in the application of a practical therapy to these victims of slavery to the fetich of business two classes of remedial agencies are necessary—those which are furnished by the arts of hygiene and dietetics, and those invoking intellectual discipline and moral education. A faithful adherence to such a course

of treatment will do much to enable them to break their thraldom—to "lead their captivity captive and to be Cæsar unto themselves."

To recapitulate briefly:

Strenuous American business life is producing in many of its followers a combined neurosis partaking of the character of neurasthenia, psychasthenia, and hysteria.

The etiological factors in the production of this neurosis are, chiefly, continuous mental activity and the excessive use of alcohol and tobacco.

Its increase is a menace to the nervous stability of the present generation.

A business system that makes such pernicious exaction of its devotees as prevails in America today must of necessity be changed or we shall be the progenitors of a race of incompetents.

Its dangers may be forestalled by establishing the custom of periodic thorough examinations by skilled physicians and reliance upon their advice.

Its consequences may be mitigated by promoting obedience to natural law, including the most important principle of alternating activity and relaxation in periods suited to the limitations and needs of the individual.

The foregoing suggestions as to the conservation of our business vitality are offered in all humility and with a full realization of their inadequacy to completely turn the tide of ebbing force.

The problem of American business neurosis is one which we especially as neurologists must face, and if this paper contains a hint which will aid in its solution it will have served its purpose.

VIS MEDICATRIX NATURAE.—The following abstract from an editorial in the "Medical Brief" will, we believe, be of interest to the readers of the Gazette:

"Our forefathers in medicine spoke a great deal about the *vis medicatrix naturae*, then the term was allowed to sleep, and now once more it seems it is to be awakened. Our conceptions of the protective and reparative functions of the serous membranes have changed much in the past few years, and that to the advantage of our patients. These protective purposes are now recognized and understood more fully and we should therefore be careful to foster and not to impede them. Who would have believed a decade or two ago that the spinal cord and brain may be bathed in virulent, septic material for days and still return to the normal, aided by manufactured antitoxins and mechanical relief of the serous effusion? We have daily demonstrations of the wonderful power of self-protection manifested by the peritoneum when it is invaded by disease bacteria. We see abscesses around the appendix thoroughly walled off and only awaiting an incision for drainage to permit the peritoneum to return to its normal condition.

"We have found out, in other words, that the *vis medicatrix naturae* of serous membranes may be depended upon if the surgeon is not too meddlesome: this is especially true in regard to recuperation from insults to the great serous membrane lining the abdominal cavity. In dealing with infections in this locality the less the physician does and the more he trusts to the natural power of recuperation the better will it be for the patient."

THE LAW OF SIMILIA: DOES IT BEAR THE LIGHT THROWN UPON IT BY MODERN SCIENTIFIC INVESTIGATION?*

By Frances M. Morris, M.D., Boston, Mass.

After having promised to give a paper before your society on the subject of materia medica, I was overcome by the thought of the vastness of the subject, especially when I compared it with the smallness of my experience in writing papers. I have, however, been very much interested in the work of some of the scientific men in the dominant school, who have by their investigation into the causes of disease been throwing light upon the law which governs our materia medica. It, therefore, occurred to me, that an interesting paper might be written on that subject.

Homœopathy has been treated with scorn always by the dominant school, and many of the practitioners of our own school have little knowledge of the really great men who were pioneers in the science of homœopathy. Our materia medica has come to us as the result of the labors of men who thoroughly believed in the law of cure; men who gave to its development unselfish devotion and unremittent toil. Our law is a scientific law, and the men who developed our materia medica were scientific men, men of ability, of skill in diagnosis, men who were up to date in their knowledge of the physiology and anatomy of the human body, men of logical minds and keenly observant, and they have left behind them records of achievement which arouse in us admiration, and desire for emulation.

Are there records anywhere in the history of medicine of men more successful in the treatment of disease than were Hahnemann, Bönninghausen, Carroll Dunham, Hering, Lippe, and others whom we might mention? Was not their success due to their faith in and their persistent application of the law? As a school we have been satisfied with the law, and with Hahnemann's explanation of its action, because those of us who have tried to use it in practise have come to consider it akin to a divine law, and have stood almost in awe, as we have seen the wonder-working power of the infinitesimal dose; and as every new development in our knowledge of the physiology of the body has revealed to us more and more how necessary was the potentization of the remedy, that it might be absorbed in quantities suited to the infinitesimal cell,—we have felt like echoing Hahnemann's cry: "Homœopathy is the great gift of God to man."

It does not seem possible that any mere man, unless inspired, could have been so far in advance of his age. But when some of our own professors of materia medica tell us that Hahnemann is a back number, that the Organon is full of ancient and exploded theories; when a man, who has for many years been recognized as a

* Read before the Homœopathic Medical Society of Western Massachusetts.

leader in our homœopathic school, a man of ripe experience, whom we all honor and respect, tells us that while he believes that Hahnemann laid a foundation for a therapeutic method, to be modified and perfected in part by the principles and rules so clearly defined by himself, and in part by the new knowledge evolved from the labors and experience of successive generations in the whole wide field of science, he also believes that it is not a law, but only one method of therapeutics among others. When our patients going to distant towns call to their aid the best homœopathic physician in the place, and are given prescriptions to be filled at the druggists, and have local applications applied, and are told when they object to the treatment as unhomœopathic, that the broad-minded of the homœopathic school are up to date and use anything that will help the patient; when we face the fact that while the medical profession of the dominant school is overcrowded, so few young men and women are entering our schools that the demand for homœopathic physicians is far above the supply; when men of Dr. Worcester's standing, who are influencing public opinion, dare to publish the statement that: "Homœopathic cures are mental cures," then we long to be able to prove in a scientific way our law of cure.

We are, therefore, rejoiced when we find that the leaders in scientific research in the dominant school and some of the leaders in our own school are working in line, some are even working together, to promulgate a system of therapeutics by means of which the law of similia may be demonstrated to the unbelieving.

In reading some of the recent literature on vaccine therapy, I have been interested to note the remarkable resemblance between the new law of therapeutics as laid down by the latest observers, and Hahnemann's law of therapeutics as laid down in the Organon, and I am going to ask you to listen to a few quotations from both sources.

Bosanquet in his book on vaccine therapy, published in 1905, says: "It is evident that a scientific treatment for any disease can only exist when the exact nature of the morbid process—its causation and the alteration in the functions of the body which underlie its manifestations, is thoroughly understood. All the therapeutic measures that are not founded on this basis are merely empirical."

In the Organon ¶ 3, 5, we read: "The physician should distinctly understand what is curable in diseases in general and in each individual case in particular. He should be governed by distinct reasons. . . . The physician in curing derives assistance from the knowledge of facts concerning the most probable cause of acute disease, as well as from the most significant points in the entire history of the case. Aided by such knowledge, he is enabled to discover the primary cause of the latter, which is dependent mostly on a chronic miasm."

Bosanquet goes on to say that "even at the present day, very many of the remedies come under the heading of empiricism. Of this is the use of mercury, in syphilis, a disease of which we do not know the cause. Equally empirical was the discovery of the value

of quinine in malaria, although the parasite which produces the malady has now been identified, and we presume that quinine prevents its development." Bosanquet is a scientist, yet he ignores absolutely the fact that the parasite is found only in the blood of patients suffering from chronic malaria, and that quinine even, from statements made by physicians who use it empirically, cures not more than 50 per cent. of the cases treated by that drug.

Again, Bosanquet, in speaking of various theories of immunity, says: "Attention was turned to the possibility of some vital reaction on the part of the animal attacked, whereby it was able to resist the invading parasite. The study of the serum of the blood has brought to light a peculiar effect which it produces in many diseases upon the micro-organisms which cause the disease. This reaction is useful in a number of cases for the purpose of diagnosis, and is very closely allied to those other properties of serum by which resistance to disease is brought about."

In the Organon ¶ 29, we read: "We have seen that every disease (not subject to surgery alone) is based upon some particular morbid derangement in the functions of the vital force." Again, in ¶ 31: "Those partly psychical and partly physical terrestrial potencies known as noxious influences, inimical to life, do not possess the morbific power of modifying human health unconditionally, but they produce sickness only at a time when our organism happens to be sufficiently disposed and inclined to become affected, and to have its feeling of health altered into morbidly abnormal sensations and functions by the morbific cause that is present." Hahnemann knew nothing of the infinitesimal microbe which is believed by some to be the cause of all of our diseases, and by others to be the result of disease—the toxines of which are now being used according to homœopathic law for the cure of disease, but his statements sound anything but antiquated.

Then Bosanquet goes on to say: "On the basis of these discoveries a scientific system of treatment of the diseases caused by parasitic organisms has been worked out, and in some instances actually introduced into practice."

In the Organon we find ¶ 142, 143, 144: "Among the symptoms, especially of chronic diseases, varying little in form, it is sometimes impossible to distinguish certain symptoms resulting from a simple drug administered for curative purposes. But this is a matter attended with great difficulty and uncertainty, and should be left only to experts in the art of observing.

"After a considerable number of simple drugs have been tested, and after every element, or symptom of disease which these drugs (as artificial morbific agents) are by themselves capable of producing, have been carefully and faithfully recorded, we shall then possess a true Materia Medica. . . . .

"A Materia Medica of that kind should exclude every supposition, every mere assertion and fiction, its entire contents should be the pure language of nature, uttered in response to careful and faithful inquiry."

In speaking of immunity from disease, we read in the Organon: "Young and healthy persons may become accustomed to marshy regions and remain healthy if their habits are temperate, and if they are not weakened by want, fatigue or excesses."

Bosanquet states on page 13: "Many persons never suffer from scarlet fever, others equally resist influenza. Personal immunity may be lost owing to temporary conditions of health, as, for instance, fatigue or depression."

In Hahnemann's introduction to the Organon, "A Review of Physics," page 35, we read: "The true healing art is that intellectual office, incumbent on the higher human mind and free powers of thought, discriminating and deciding according to cause, a duty of which office is, whenever that instinctive, unconscious, and unreasoning, but automatic, energetic vital force has been thrown into discordant action by disease, to harmonize those discordancies by means of a similar pathogenetic affection of a higher degree, originated by a drug homœopathically selected. After this the natural morbid affection will no longer be able to act upon the vital force, which will get rid of the former (the disease), while the latter (the vital force) merely continues to be engaged with the similar, rather more powerful pathogenetic drug affection, against which it may now direct its entire energy. Ere long the drug affection will be overcome, leaving the vital power free and able to return to its normal condition of health, and to its destination, 'to animate the organism and maintain its health.'"

Welsh suggests that in cases of infection, conflict may be supposed to occur between a bacterium and the body cells, each side replying to the destructive substances brought against it by its opponent with anti-bodies capable of neutralizing them. Toxin being met by anti-toxin; bacterialysin by anti-bacterialysin, and so on. Enough has been said, anyway, to show the immense complexity of the serums and the capacity possessed by animal bodies of protecting themselves against injurious influences.

I cannot attempt in this paper to more than refer to the different theories that have been formulated in regard to bacteria, and the treatment of diseases by anti-toxins—toxins or vaccines as they are now called.

The first theory of resistance to disease on lines of vital action was that of Metchnikoff. This was the theory of phagocytosis. The opponents of the phagocytic hypothesis brought out another theory, which is called the humeral theory; according to this the fluids of the body and not the cellular elements constitute the important factor in opposing the invasion of bacteria. R. M. Allen of London, in his book, entitled "Vaccine Therapy and the Opsonic Method of Treatment," published in 1908, says: "Of the means whereby the body tissues are enabled to overcome bacterial invasion, our knowledge is as yet far from perfect. The process is admittedly a very complex one."

Metchnikoff does not deny the action of the opsonins, but he

gives them a secondary place, while Wright has demonstrated the presence in the blood of substances that act upon the bacteria and get them ready for destruction by the phagocytes. To these bodies he has given the name of "opsonin." This theory has been generally accepted and is known as the "law of immunity."

The dominant school of medicine has at last found a law in therapeutics, so near to the homœopathic law, that we can almost say that they have discovered by induction in the twentieth century what Hahnemann discovered by deduction more than a century ago. Can we then say that the scientific world has outgrown Hahnemann?

Comparing the "law of immunity" with the "law of similia," we read in Allen's introduction to his book on vaccine therapy the following: "Although we are as yet ignorant of the cause of small-pox, and can only conjecture upon the nature of vaccination, we have from analogy with other similar processes, reason for the belief that it consists of an active immunization by the agency of an attenuated form of the causal organism."

In ¶ 147 of the Organon, Hahnemann says, in referring to the testing of drugs: "A drug, completely tested with regard to its power of altering human health, and whose symptoms present the greatest degree of similitude with the totality of symptoms of a given natural disease, will be the most suitable and reliable homœopathic remedy for that disease, for which the specific curative agent will have been discovered."

Allen says: "The general concensus of opinion is that the best possible results are, as a rule, only to be looked for when organisms isolated from the patient's own lesion are employed for the manufacture of the vaccine."

Again, page 108: "A patient infected with bovine bacilli is most sensitive to the bovine bacillus, and one infected with the human is most sensitive to the toxines from the human."

Again, page 109: "I would maintain that all experience of vaccine therapy derived from the study of other varieties of bacteria would indicate that an autogenous vaccine prepared from cultures of the patient's own bacilli will certainly be the one most appropriate for him."

Again, page 186: "So great are the variations exhibited by the different microbes of the Friedlander group, that but slight success may be anticipated from any vaccine other than that prepared from the patient's own organism."

From all sources we are receiving testimony of the power of similia to battle with similia. Those who are studying the science of therapeutics are on the right road, and for the sake of humanity, we hope they may not be side-tracked, or miss the way.

Dr. A. Calmette, director of the Pasteur Institute in France, and in our country, Drs. S. Weir Mitchell, Reichard and Noguchi have been actively engaged in the search for an anti-venomous serum. Their latest statement is that anti-venenes are specific, that is, in treating the bite of any snake, an anti-venene prepared from

the venom of that species of serpent must be used, cobra venom to antidote cobra venum, rattlesnake venom to antidote rattlesnake venom, etc.

There are many things of interest to homœopathists in Bosanquet's chapter on snake poisons, which mean nothing to him or to his colleagues in the old school, because they do not know where their law of immunity is leading them. Time will not permit me to make many quotations, but this one is too good to pass over: "Death in cases of bite by the daboia results from the extensive character of the coagulation of the blood. Curiously enough, it appears that a small dose of the poison insufficient to cause this phenomenon is followed by a diminution of coagulative power, and if this has once been produced, no subsequent injection of further doses of the poison will any longer produce clotting. This peculiar phenomenon is dependent on some obscure vital action."

From Hahnemann's time to the present day the question of the dose has been a difficult one. We have been the butt of ridicule for the dominant school, because of the smallness of the dose, even in the third potency, and those of us who have learned by experience the power of the higher potencies, have been called cranks and mental healers, even by our own colleagues. Hahnemann gave very accurate directions in regard to the size of the dose, and the discoverers of the new law agree with him perfectly. Listen! We read in the Organon, page 137: "Within certain limits of quantity, the smaller the doses are of the drug selected the greater the efficiency."

Again, ¶ 160, we read: "The dose of a homœopathic remedy can scarcely be reduced to such a degree of minuteness as to make it powerless to overcome, and to completely cure an analogous, natural disease of recent origin, and undisturbed by injudicious treatment. We may, therefore, readily understand why a less minute dose of a suitable homœopathic medicine, an hour after its exhibition, may produce an appreciable, homœopathic aggravation of this kind."

Allen, on page 68, says: "The average initial dose varies with different organisms. It is better to err on the side of too small, rather than on that of too large dosage." On page 124, he gives the initial dose for suspected tuberculosis as follows: "The pure tuberculin is taken, and seven successive dilutions made, each of a tenth of the strength of the preceding, so that the final, or No. 7 dilution contains 0.0000001 c. c. of the original tuberculin in each c. c. This is the initial dose in febrile cases, in the afebrile cases 1 c. c. of the No. 4 dilution equals 0.0001 c. c. of the original tuberculin, is employed."

In the Organon, ¶ 129, we read: "A drug does not exert equal strength on all persons, and a great difference is observable in this respect; for instance, a moderate dose of a drug, known to be very powerful, may sometimes produce but a very slight effect upon an apparently delicate person, while the same individual is affected quite perceptibly by other, much less powerful drugs. As this is

not to be predetermined, it is advisable that each person should begin with a small dose of medicine, gradually to be increased day by day, discontinuing the dose as soon as results have been obtained."

Allen, on page 35, says: "Experience has shown that the proper initial dose varies considerably for different organisms, and to a less extent for different persons. It will be found as treatment progresses that gradually increasing doses, often at shorter intervals, have to be employed. But so long as a certain dose produces an adequate response, increase of it is not advisable." Also, on page 180: "They found that the dosage could only be determined by investigating each individual case, either a too small, or a too large dose resulting in little or no response."

Few, even of those who have followed Hahnemann most closely, have had the courage to follow his directions in regard to the frequency of the dose, and watch results, but he says, ¶ 130: "The duration of the effect of a dose is determined only after comparison of a number of experiments." In acute diseases he recommends repeating the dose quite frequently, until the system responds to the remedy, but says the dose should not be repeated so long as improvement can be noted. He also describes a time of aggravation, and says that the physician should by no means interfere by giving another dose until that phase was passed. We know that he cured many diseases, both acute and chronic, with one dose of the indicated remedy, but many cases were given one dose at intervals of one, two or three weeks. And even in the cases of some of the antipsorics, he gave the time limit of the action of the remedy from three to four months.

Allen, on pages 21 and 23, describes the action of an injection of bacterial vaccine in such a manner, that if we were to alter the terms used, we would have Hahnemann's description of the effect of the indicated remedy. After the initial dose of vaccine is given, there is an aggravation of symptoms, a rise in temperature, and a depression of the index. This Wright has called the negative phase, and it may continue from fifteen hours to several days. The index remains practically steady at this elevated level for a time; it may be for hours, days, or even weeks. This he calls the positive phase, and Allen remarks: "Very soon after the inception of the rise, even before the index has reached the level at which it stood prior to the injection, the patient may begin to improve and declare himself to feel better." The positive phase is followed by a second negative phase. And after considerable experience, Allen and Wright both learned that in certain acute cases, even if they did not repeat the dose, the index would again rise and maintain the positive phase.

The negative phase may be said to correspond to Hahnemann's time of aggravation when the similar dose arouses the reactive powers of the system. The positive phase mentioned by Allen corresponds to the time of the curative action of the drug; the second

negative phase, to the battle of the vital force with what is left of the drug effect on the system after the disease has been overcome, and the subsequent positive phase, to the state of health. Allen says that the negative phase may last for days or even a fortnight, and the crest of the positive phase be not attained in from one to three weeks.

On page 182 he says: "As regards frequency of administration, this should be controlled by determination of the index, a negative phase lasting for a fortnight, with a dose of 100,000,000 or 150 millions organisms, is by no means infrequent, in which case little advantage can accrue from fresh injection before the end of the month."

We know how strongly Hahnemann opposed all local treatment in cases infected by gonococci. Listen to the latest scientific statement on such infection:

Allen, on page 181: "Their conclusion is that vaccine therapy appears to be far more efficient, and at the same time scientifically more tenable, than local antiseptic treatment."

One more point to prove that Hahnemann was a century ahead of the scientific school, and I am done with comparisons. In ¶ 290 he made a statement that has been ridiculed many times. The paragraph reads as follows:

"Besides the stomach, the tongue and mouth are the parts most susceptible of medicinal impressions; but the lining membrane of the nose possesses this susceptibility in a high degree. Also the rectum, genitals, and all sensitive organs of our body are almost equally susceptible of medicinal effects."

Listen to the latest scientific statement. Allen, page 97, says: "Flugge adduces experiments to show that pulmonary phthisis can be induced in a number of animals by inhalation, and that the number of bacilli required to induce infection by ingestion is millions of times greater than that required to induce infection by inhalation."

Bosanquet, on page 86, says: "The anti-toxine has also been given by some physicians by the rectum, and by the mouth. Parkinson states that for the last two years rectal administration has been carried out at the London Temperance Hospital, and that the results obtained have been very satisfactory. He also reports a case of ulcerative pericarditis apparently cured by rectal injections of antistreptococcic serum."

As a law of therapeutics the law of immunity is not in itself a practical law for the treatment of acute diseases. It was at first received with great enthusiasm, but the physicians of the dominant school have already grown cold and seem on the verge of discarding it entirely. They say that it is not practical, that the difficulties in the way of obtaining the autogenous toxins are too great for its use in general practise. It, therefore, seems at present to be of more value to our school than to the school to which its discoverers belong. Through the work of Dr. Watters, the eminent pathologist of our own school, it has helped us to recognize the action of our remedies

on the serum of the blood. It should help us to demonstrate to the open-minded of the dominant school the power of the small dose and the similar remedy. It should also lead them to look into our law of similia without prejudice.

If, then, the light thrown on our law by modern scientific investigation will strengthen the faith of the homœopathist and will lead the open-minded physician of the dominant school to investigate the guide to practise as it is so clearly laid down for him in the "Organon of the Art of Healing," the work done for suffering humanity by Metchnikoff, Wright, Watters, and other pathologists, will be second only to that done by the founder of homœopathy.

PULSATILLA: ACTION ON MUCOUS MEMBRANES.

By Eva M. Blake, M D., Scranton, Penn.

Pulsatilla, anemone, wind flower. Tradition says that the anemone sprang from the tears of the goddess Venus. At any rate, the word anemone comes from anemos, wind. This tradition and one fact give us two important characteristics of the drug: namely, increased secretion (tears) and delicacy of structure with changeableness.

Pulsatilla acts upon the vascular system, especially on the right heart, and on the veins and capillaries. Thus we find that whatever retards the return of blood to the heart must, of course, provoke just the train of symptoms in which pulsatilla may be indicated. We know that a warm, close room will produce these symptoms. If you should sit in a close room or one whose temperature is too high, the veins would become tortuous, and there would be oppression about the chest and retardation of the heart's action. This is a picture of pulsatilla. It acts on the right heart, more than on the left, consequently, despite chilliness which arises from anemia, the open air acts as a stimulus to the venous circulation. This improves the symptoms depending on the sluggish flow of blood. Therefore, we shall expect the vaso-motor system to be generally affected, and increased secretions on mucous surfaces.

Eye. Pulsatilla produces tearfulness and tears. There is a strong tendency to weep at trifles or nothings. It is said that the blossom of the anemone opens only to the wind. Equally, the pulsatilla patient is happy only when with company and sympathizers; but sympathy, or an attempt on the part of the patient to rehearse his condition, causes increased secretion of tears. If this continues for some time the lids become swollen and red, with itching and smarting. Ordinarily the local picture is one of belladonna or aconite, but history of tears completes the picture of pulsatilla. In chronic conjunctivitis the pulsatilla secretion is thick, greenish-yellow, blond, variable, increased one day and almost disappearing the next. Lids may be agglutinated. Eyes "watering" when in a

light wind, with itching and smarting of lids, suggests this remedy for autoists.

Nasal Mucous Membrane. Pulsatilla here affects the very early symptoms as merely increased secretion, accompanied by venous retardation; and pulsatilla will be indicated in just such so-called "colds-in-the-head," which develop after being in a warm, close room. Probably this is a more frequent cause of nasal congestion and coryza than actual draughts of fresh air. Pulsatilla has the reputation of curing only the later stages of coryza, secretions having the characteristic thick consistency, yellow or green, non-irritating. Among children we have found the condition prevalent and readily yielding to any potency of pulsatilla, from 30x to 45m.

One patient, a girl of thirteen years, came to the dispensary complaining of "spitting" frequently. On careful questioning the following symptoms were elicited: Pain in frontal sinuses at any time, lasting a variable length of time; dropping from posterior nares of thick, blond, tenacious, yellow chunks of mucus. Child was not yet matured, but developing rapidly. After pulsatilla 45m discharge became less and headache less frequent.

Throat. Pulsatilla has marked action here, particularly when accompanied by gastric disturbances. Sensations of rawness and soreness, of swelling and fulness prevail. Pharynx has venous congestion, showing distended blood vessels on surface. There is a sensation of dryness, usually without thirst.

Chest. If the trouble extend from throat to bronchi we expect to find the expectoration having the same characteristics as the nasal discharge. It is white, green, yellowish, tenacious or thick matter of a bitter, greasy, salty or putrid taste, always markedly variable.

Stomach. Here we find increased secretion. There is rising into the throat of thick mucus; waterbrash; sensation of scraping and burning, with nausea and vomiting of food or bitter acid mucus. Thirst may accompany. Symptoms of anxiety, worry, fretfulness, with tears are present when pulsatilla is the remedy, and during pregnancy this condition is present frequently.

Intestines. Increased secretions still. Distension of abdomen with sensitiveness to touch. There is much venous stasis due to mental preoccupation. Colic supervenes for a time, followed by diarrhea. No two stools are alike. They may be green, watery, acid, bloody, yellow, white, etc. Venous congestion leads to hemorrhoids, which we find blind or bleeding. Smarting, itching and some pain accompany stools, with spasmodic bleeding.

Bladder. Cystitis is present, characterized by scantiness of urine, or increased urination with mental excitement. Enuresis occurs in mild individuals and children. Urine is sometimes profuse and like water; sometimes scanty, and red or brown. With micturition is burning in the urethra.

Genital Organs: Male. The discharge here of pulsatilla is very like that of gonococcal infection. There is little or no excoria-

tion of the parts, but the secretion is thick, yellow or green, and intermittent.

Genital Organs: Female. Menstrual discharge is delayed or intermittent, due to venous retardation. Normal secretion is increased to a leucorrhea, uterine or vaginal, thin and watery, with sticking pain and itching, or thick yellow and bland. It "comes in fits and starts," as does also the menstrual flow. Lochia, too, stops for a few hours or days and then starts with a gush. Lochia may be white in color, of a milky consistency (Clark). Varicosities, due to sluggish venous circulation, are marked throughout genital disturbances.

In summing up the general action of the anemone on mucous membranes, we have two chief manifestations as a result of its action on the vaso-motor system:

1. Venous stasis.
2. Increased secretion.

THE BEST WAY OF DEALING WITH UTERINE DISPLACEMENTS.*

By J. H. Carmichael, M.D., Springfield, Mass.

By the announcement of my text I am supposed to state simply the treatment of uterine displacements. To make my position clear it is essential for us to know what supports the uterus. Mechanically, it is suspended across a cavern by guy ropes or, in anatomical terms, ligaments. The true ligaments are of four pairs, namely: the round, utero-sacral, the utero-pelvic and the utero-ovarian. In its normal position it is situated above the plane of the arch in an anteverted position at an angle of ten degrees. It is freely movable upwards and downwards, its supports being susceptible of considerable stretching without harm. The sets of ligaments that give the greater support are: first, the round, and second, the utero-sacral. When the round ligament becomes elongated by relaxation, subinvolution, or other causes while the utero-sacral remains firm, it produces the various flexions and reversions with which you are all so familiar. When all the true ligaments become relaxed we have a condition of prolapse.

The principal supporter or suspending ligament of the uterus is the *round* ligament, and without this none of the others can keep the uterus in a normal position.

A certain number of cases are non-operable on account of the stage or environment, and we must be content to treat such after the recommendations of most gynecologists. Acute displacements, of course, should confine the patient to bed, the uterus replaced and a tampon introduced, leaving it forty-eight hours, when it can be removed and another inserted. In about ten days the trouble will

* Read before the Massachusetts Homœopathic Medical Society, Springfield, Oct. 13, 1909.

generally be overcome. The same treatment may be of use where a displacement is discovered early after childbirth.

If a woman becomes pregnant who is known to suffer from a retroversion, it is always good judgment to replace the womb just before the third month, and keep it in place with a Thomas-Smith pessary during the next two or three months, when the womb will be found to have risen high enough to find its own support.

When there is a displacement one should not find it, but be able to diagnose the many complications that are in the majority of instances associated with it, for without this knowledge one cannot successfully contend with the difficulty. It will seem a simple thing to many of you when I advise one operation to correct all forms of displacement of the uterus. I do not mean that this operation will remedy all forms of distortion or deviation from the normal uterine body, such as extreme flexion (possibly congenital), which is an entirely different matter. All of the uterine supports may be in perfect condition, and yet one may have a womb distorted to an extreme degree of flexion and the treatment of such a condition in no way related to a displacement.

In 1885, Alexander, an English surgeon, proposed and put into practice the shortening of the round ligaments, with more or less success, but the ligament attachment was still so far away from its uterine support that it soon became elongated again with a return of the former trouble, so that few have any confidence in the Alexander operation today.

Barratt has a modification that I believe will not prove any more effective than the original operation of Alexander, as the ligament is brought out in the same locality as is Alexander's, the internal abdominal ring. His technic, however, is different. He opens the abdomen and ties a ligature (one and one-half inches from the uterus) to the round ligament, then with a pair of forceps similar to a Cleveland ligature carrier, only straighter, he passes under the fat next to the fascia to the internal abdominal ring down along the round ligament into the cavity, grasps the ligature and draws it out at the ring and with it the round ligament. He does the same on the opposite side and when both are out joins them at the centre. This firmly stretches these ligaments and supports the uterus, but, as I said before, must leave a good chance for failure on account of the distance from the uterus to the abdominal ring.

Ventrofixation and finally suspension by Kelley's method, which forms one or two false ligaments from the posterior aspect of the uterus to the peritoneum of the abdominal wall, has been quite satisfactory in my hands. In fact, I had thought it the most satisfactory of all the various operations until I commenced to operate by the Gilliam method, and since then I have had no use for any other. I go farther in my claims for this (the Gilliam operation) than does the author himself, who in his modest way, endorses it for retroversion and prolapse. I utilize it in all forms of displacement, and have been doing so for the past four years without a relapse in any

case or any bad results, with the exception of a varicose condition of the veins of the round ligament, giving a little uneasiness for a month or two in two cases.

You probably do not all understand the technic of the operation, so an illustration will be in order: First, open the abdomen in the median line, after the usual manner. Second, break the adhesions about the uterus and do any work necessary on the appendages or appendix vermiformis. Third, by lifting the broad ligament on one side the round ligament will come into view. Fourth, about one and one-half inches from the uterus a silk ligature is slipped under it with a Cleveland ligature carrier, not tied, but brought out and clamped by a hemostadt. The other side is treated precisely the same way. Then the fat is dissected back from the fascia for an inch and a half. The fascia is cut by a knife stab about an inch from the incision and one and one-half inches above the pubis. A Cleveland ligature carrier is plunged through the rectus muscle and peritoneum, its jaws opened and the silk-carrying ligature grasped, brought up through this opening, which in turn brings the round ligament with it. This is stitched to the fascia with a kangaroo tendon through and back, tied and cut close up. The opposite side is treated the same. After both ligaments have been sutured it will be observed that the fundus of the uterus is suspended. You can readily pass three fingers over it, between its surface and the abdominal wall, and find it is flexible and yielding; conditions under which the bowel would not be liable to become strangulated. It will be observed that the uterus rests easily and naturally on the bladder, and will conform to the conditions of the bladder and rectum which they assume in their daily functions. If pregnancy takes place gestation will go on naturally and there will be no embarrassment nor difficulty during labor. The abdominal wound is closed in the usual manner.

To my mind this is the most scientific of the many operations devised for the various displacements of the uterus. I have been doing this operation, as I previously stated, for four years and have no untoward results to report. Three of my cases have borne children, all without complications. If I have complications they are dealt with at the time of operation. I frequently remove the appendix, perform trachelorrhaphy, perineorrhaphy, and ligament suspension all in the same patient, and have the patient about much sooner than I did after the Kelley operation, when I was occasionally annoyed by a relapse, which is unknown to me after the Gilliam operation.

HARVARD DENTAL SCHOOL.—The new buildings of the Harvard Dental School, adjacent to the Medical School, were opened this fall for the first time. The buildings are to serve the double purpose of housing laboratories and as a hospital. There is a large infirmary, two operating rooms and associated smaller ones; also one equipped for X-ray work. On the upper floor is a museum already containing a large number of specimens. The new buildings provide for the dental school one of the most modern institutions in the country.

KLEPTOMANIA.*

By H. L. Northrop, M.D., Philadelphia, Penn.

Nearly a year ago I had the honor to present a paper to the New York-Pennsylvania Interstate Homœopathic Society, whose meeting was held in Scranton. My subject was "Trephining for Moral Degeneracy." Because of the favorable impression which that subject made, and the attention which it received, I am encouraged to invade this same territory today with a paper on a sister topic; at the same time I must tell you that my paper of a year ago also received adverse criticism at the hands of some, while one editor rather facetiously and at considerable length referred to my conclusions and results as imaginary and far-fetched. My paper pleased the phrenologists, of course. It was reprinted in their journals and accepted by them as evidence substantiating their claims and carrying out their views in regard to the cerebral localization of mental functions, characteristics, disposition, etc., both normal and abnormal, and moral and immoral. And why not? Turn about is fair play, and if phrenology helps the surgeon to locate and to cure mental disease, and thereby to lessen crime and immorality (as it certainly does), then let surgery acknowledge this debt and give proper credit to phrenology. Many cases are now reported upon recognized authority which clearly show the dependence of the operative success upon accepted phrenological data. This is a subject to which the brain surgeon should give his best time and thought.

Kleptomania is common; the world is full of theft and thieves. A desire to acquire is natural to every one. If the object of it be for self-protection, self-preservation, and comfort, and the methods employed be honorable, and if they respect the rights and ownership of others, this desire to acquire may be looked upon as a natural and a rational instinct. On the other hand, kleptomania implies a lack of control over this instinct, a morbid state of the mind with an absence of controlling motives. This desire to acquire, this instinct, is conspicuous in the animal which, however, unless trained, lacks all control over it. But in man the intellect and the will exercise more or less supervision over the love of possession. Thus what is natural to the animal is also perfectly natural to man, but if the latter enjoy his full mental faculties, then his innate desire to possess beyond a right and reasonable degree, is restrained, and he does not steal. All of which is along the line of harmony between the several mental functions, and which means the same to the mind that harmony of function means to the body, namely, health.

Gall, a world-wide authority on phrenology and discoverer of many facts relating to the anatomy and physiology of the nervous system, years ago observed, on his visits to asylums and prisons,

* Read before the Pennsylvania Homœopathic Medical Society.

that men given to stealing presented a very prominent anterior temporal region; while Gall, Hollander, and others, reported many cases of kleptomania in all of which a pathological lesion involving the anterior part of the temporal lobe on one or the other side (usually the left) existed, and was demonstrated either ante or postmortem. This lesion was, perhaps, in the nature of a bulging of the parieto-temporal region, due to an irregularity in the contour of the parietal and temporal bones, or was a cortical cyst in the temporal lobe, possibly with other changes, such as softening and degeneration of the surrounding brain tissue, hemorrhagic effusions, adhesions, etc. This temporo-sphenoidal lesion and kleptomania appeared to bear relationship to each other so direct and positive as to lead Hollander to conclude that "the temporo-sphenoidal lobes are in some way connected with the propensities common to man and the lower animals," while kleptomania and voracious hunger and thirst, he has demonstrated, are faculties associated with the anterior part of these temporo-sphenoidal lobes.

The case of kleptomania which I take pleasure in reporting will illustrate the benefit that at least some of those afflicted with a mania to steal may obtain from surgical procedures. I saw Margaret G. in November, 1908, for the first time. She was then thirteen years old and, like her brothers and sisters, was backward in school and mentally dull. Because of a most persistent and aggravated habit of stealing anything and everything she could lay her hands on, she was expelled from school as a moral degenerate. She was then referred to me and I obtained the following history: When fifteen months old, while her mother was confined to bed by a serious illness, she fell from a child's high chair and struck on the corner and leg of a stove, receiving a dislocation of the left shoulder and a head injury, also on the left side. The exact character and extent of this head injury I could not learn. Nothing of importance or interest occurred during her childhood until she was ten years of age, when her kleptomaniac tendencies became manifest. She stole her mother's glasses and hid them; she stole her grandfather's pocket-knife and threw it over the fence into the adjoining yard; whenever she got hold of a piece of money she would hide it for a while and then spend it. (Kleptomaniacs usually hide and hoard their stolen goods.) When sent to a store on an errand she would pick up all kinds of articles—anything lying upon a counter—and if not caught in the act (and she seldom was) would secrete the stolen thing in her room. In school she stole from the girls and boys and teachers, and the habit became so aggravated and obnoxious that, as I have already stated, she was forced to leave school. When scolded for her theft, she would always drop her eyes, then glance up and smile and say: "I could not help it, I had to take them" (a characteristic statement of a kleptomaniac). Whenever walking or standing, she would hold her hands together, the right hand clasped and covered by the left. An examination of her head showed a slight but perceptible fulness above and in front of the

left ear. After her hair had been removed and her head shaved, this localized fulness showed plainly. Believing this case to be one of kleptomania resulting from pathological changes in the anterior part of the left temporal lobe, this lesion in turn being due to the head injury received in childhood, I advised surgical treatment. Before operating I sought the advice of Drs. Bayley and Hicks, at that time visiting neurologists to Hahnemann Hospital, who corroborated my diagnosis and sanctioned my proposed plan of treatment.

On November 30, 1908, I opened Margaret's skull in the left anterior temporal region, making a U-shaped flap, base downward, of the scalp tissues and temporal muscle. This exposed a very irregular temporal fossa, deeply indented in front where the squamous part of the temporal bone sutures with the greater wing of the sphenoid. This acute depression lay directly over the anterior extremity of the temporal lobe of the brain, while just back of it the squamous bone bulged outwardly, causing the fulness observed before operation. I next removed the floor of the temporal fossa over an area two inches antero-posteriorly by one and one-half inches vertically, including the entire segment of depressed bone. I incised the dura around the margin of this bony aperture and gave escape to more than the usual quantity of cerebro-spinal fluid. Adhesions were found between the three meninges covering the apex of the temporal lobe; these I destroyed with a dural separator. I did not disturb the cortex; it appeared dull and soft (flabby). The dural flap was next sutured in position and the rest of the wound closed in the ordinary way. Perfect wound healing followed and Margaret recovered nicely. When first permitted to be out of bed she began to play her old kleptomaniac tricks, and one of the nurses reported that she had stolen several articles from the supply closet. No attention was paid to this, however, and the child did not repeat her performance during the remainder of her stay in the hospital, nor has she stolen a thing, since, to the knowledge of parents or teachers. To be sure, it is only ten months since the operation upon this child's head, but inasmuch as she has not fallen from grace up to this date, and shows not the slightest inclination to do so, I believe she is permanently cured.

THE NEW FROST HOSPITAL.—The new Rufus S. Frost Hospital of Chelsea was open for inspection October 11. This is the institution that replaced the one destroyed in the disastrous Chelsea fire of last year. The present building consists of brick and concrete, measures 160 by 67 feet and is three stories in height. It has accommodations for about seventy patients. Dr. Charles Leeds, of Chelsea, has been one of the most energetic of the staff in providing for the completion of this excellent suburban hospital.

Messrs. Lea & Febiger, of 708 Sansom Street, Philadelphia, have recently issued their new illustrated catalogue of books. This catalogue, together with a portrait of Dr. Wm. Osler, suitable for framing, may be obtained by any physician who cares to apply.

REPORT OF AN INTERESTING CASE.

By Walter Wesselhoeft, M.D., Cambridge, Mass.

The following case appears to me worthy of detailed report, partly from its unusual and doubtful character and partly by reason of its favorable termination, despite its severity.

L. F. W., 47, printer; thin, spare, sallow, of active disposition and highly nervous temperament. Family history good, though father is said to have died of some prolonged brain affection. Since patient is an ardent Christian Scientist, who denies the existence of disease in any of its manifestations, it is difficult to obtain data relative to former disorders. Two attacks are admitted, however, which may have had some bearing on present illness. They were of long duration: the first, occurring seventeen years ago, lasting some twelve weeks; the second, two years since, seven or eight weeks. As they were attended with pain in the joints, powerlessness, the need of remaining in bed and of help in moving, it is highly probable that they were both cases of acute articular rheumatism.

During the last week of August, 1908, while working in his garden and in good health, though nervously fatigued from constant and trying attention to business as head of a printing establishment, he was bitten by a cat which had long troubled him and which he now succeeded in catching. The bite caused a deep punctured wound in the right index finger, attended with much pain and soreness. At the end of a fortnight, however, it was fairly healed, without special attention or treatment of any kind. The cat at the time was normal and remains so since. It is to be noted that the work in which Mr. W. was engaged necessitated the handling of fresh, moist earth.

Until towards the end of September, that is, about three weeks, no change of health was observed. The family then saw a marked increase in Mr. W.'s nervousness, with great irritability—first attributed to overwork—and, what was unusual in a man who had always shown much self-control, extreme irascibility on slight occasion, and great sleeplessness. Towards the first of October, while sitting by an open window, after an uncontrollable outburst of anger liberated by some trifling cause, he felt the right side of his face stiffening. This is attributed to a draught of air; but soon the stiffening spread to the left side, as well, preventing the separation of the jaws and rapidly extending to the neck. There was no marked pain, but a distressing sense of tension, more particularly on the right side of the face, which was soon seen to be paralyzed, as the mouth was drawn towards the left with inability to raise the right eyelid or properly close the eye.

During the next twenty-four hours the muscular rigidity grad-

ually affected all the muscles of the neck and extended down the back, with frequent spasms of the muscles of the pharynx, twitching of the face, and sudden backward motions of the head. At the end of another day the erector muscles of the back had become involved, with severe spasms causing the head and trunk to be drawn violently backwards and recurring at shorter intervals, often no longer than four or five minutes. The spasms were without actual pain, but so distressing that the patient was forced to cry out and beg to be strongly bent forward to counteract the contraction of the back. By the end of a week all the dorsal muscles had become affected besides those of the chest, the diaphragm and the abdominal recti, which appeared to contract as the muscles of the back relaxed.

October 10. When first seen by me the condition was deplorable, violent spasms at every attempt to move, to drink or separate the teeth. Even sudden sounds, drafts of air, the mere intention to speak excited the spasms which had now become opisthotonous in character, tonic spasms of one or two minutes' duration. Even when at rest the attacks come on; he feels them approaching and calls loudly for someone to support the head and back, to push the trunk forcibly forwards as his only means of getting relief. Painful cramps of the oblique abdominal muscles extending down to the groins, first on right side, then on left. Excessively nervous and restless, irritable and impatient in the extreme; constantly calling for support and assistance. Has not slept for four nights except in naps of three to five minutes, wearing out all his attendants. With great care can be raised to his feet at times, and with strong support on both sides, is able to walk with dragging, shuffling gait to adjoining bath room; but legs constantly give out from under him. Can pass urine only by kneeling on hassock and being held firmly with head pressed against the wall or some unyielding object. Partial retention of urine; has now passed 8 ounces of dark urine with very frequent interruptions and in dribbling stream, with great difficulty. Great desire for stool with no power to expel feces. Cannot lie down. Unable to adjust legs or feet while sitting; they have to be moved and arranged for him; forever wishing to change his position. Occasional short naps from sheer exhaustion, out of which he is waked by approaching spasms. Swallowing most difficult; the attempt has often to be abandoned, but now and then he can drink freely. Sense of emptiness, calls out for food and succeeds now and then in swallowing hastily egg and milk or broth. Excessive thirst; breath foul; constant attempts at expectoration of tough, stringy saliva, often bloody, which is forced from between the teeth and has to be wiped from lips. Has repeatedly bitten tip of tongue during spasms as the jaws become partially separated and the tongue apparently thrust forward.

Despite the almost incessant calls for support, for assistance of one kind or another, the extreme nervousness and anxiety, the outburst of anger and impatience—the mind remains clear; and now

and then between the choking, the spasms and efforts to expel the saliva, speech is possible, though articulation most difficult.

Remedies of one kind and another had been tried, but abandoned, as the condition became aggravated from day to day, and both patient and family had become exhausted and discouraged. In view of the early rheumatic attacks, the first conclusion was that the case was one of tetanus on a rheumatic basis; but on learning of the incident of the cat bite, the question lay between hydrophobia and traumatic tetanus. The ability to suck liquids in between the teeth and to swallow freely during occasional intervals between the spasms, pointed rather to the last-mentioned form of lockjaw, the whole aspect of the case to nux vomica as the remedy. This was at once administered in the 3x, fifteen drops in water, as often as it was possible to introduce a teaspoonful.

October 11. Night much the same, but here and there longer naps; spasms still as frequent and violent. Despite the difficulties and suffering, patient was transported to the hospital in a chair, and made the journey without marked aggravation. The succeeding history was that of gradually lessening severity and frequency of the attacks. Soon the jaws relaxed during sleep, which became longer and more restorative. At the end of a fortnight an abscess developed in the perineum, which, on being lanced, discharged a gill of most offensive pus, but healed promptly.

No other remedy was administered save during the fifth night, when, an aggravation appearing to set in, a number of doses of cicuta were given. As this was without effect, stramonium was given for a short time; but since the first improvement had taken place under nux vomica, and the whole case presented so marked a picture of nux vomica pathogenesy, this remedy was again resorted to, with the result that gradually all the symptoms improved.

At the end of five weeks the patient could return home, though the jaw still remained stiff and only partially controllable. After another month nothing remained but a slight facial paralysis and occasional rigidity of the jaw. At last accounts patient had fully recovered his bodily health and nervous poise—and the cure was attributed to Christian Science.

THE APPENDICITIS OPERATION.—At the recent meeting of the International Medical Congress in Buda Pesth one of the most interesting discussions was that concerning the advisability of operating in appendicitis. In this discussion a large number of eminent physicians and surgeons participated. It is stated that the speakers were divided into three groups: Those favoring operation in all cases, those for operation in selected cases, and those for no operation at all.

Among those strongly opposed to operation in any case were Drs. Lenhartz, of Hamburg, and Bourget, of Lausanne, who asserted that by proper hygiene, diet and nursing a lower mortality could be obtained than by operation. On the other hand those favoring immediate operation in every case failed to receive the highest support that has been extended to them in past years. In short, the consensus of opinion was against the radical measures. The majority of the speakers are also reported to have been strongly opposed to the practice of making a puncture to determine whether an abscess has formed or not.

RECORDS OF STATE HOSPITALS, 1908.

By Arthur Blakeslee, Westboro, Mass.

Rates of Recovery.

In the reports dipsomaniacs and inebriates, and others "not insane," are separated from the mentally diseased. There is a growing liberality in supplying refuges, under the supervision of the State Board, for certain ones who need them.

Reckoning upon the admissions of the year, aside from those named, the reported recoveries were as follows:

1908.	Admissions.	Recoveries.	Percentages.
Westboro Hospital,	401	87	21.70
Worcester "	505	84	16.63
Danvers "	621	88	14.17
Taunton "	427	49	11.48
Northampton "	326	32	10.00

Massachusetts, although the American Medico-Psychological Association has decided against it, still follows the old way of rating the acute alcoholic as mentally diseased. Can this be true of delirium tremens? Being vigorous, the recovery of these cases is in excess of any others. In the table below is shown their way.

1908.	Admissions.	Recoveries.
At Worcester,	23	29
" Taunton,	26	25
" Northampton,	22	18
" Danvers,	44	46
" Westboro,	22	24

The excess of recoveries is due to some who held over from the previous year. If they are excluded, from both the admissions and recoveries, the following is shown:

1908.	Admissions.	Recoveries.	Percentages.
Westboro,	382	63	16.49
Worcester,	484	55	11.36
Danvers,	585	42	7.18
Taunton,	402	22	5.47
Northampton,	300	14	4.66

Hydrotherapy.

For five years, since the "Codman" came into use, hydrotherapy has been used at Westboro for the women, there being only the ordinary means for the men. Some are kept in the water, at about blood heat, day and night, for three weeks and

even more. On the raving wild ones the effect is excellent, quieting them remarkably.

First admissions of manic depressive women were at Westboro 23, and 65.22 per cent. recovered; for men the rate was 54.55. One bath tub for them was insufficient. At Worcester there were 30 such, and their recovery rate was 46.67 per cent.; at Taunton, 40.00; Danvers, 23.08, and Northampton, 20.00.

In the deaths of manic depressive women, including both the first and other admissions, is seen what appears an unexampled low hospital rate. During five years, 1904-8, Westboro received 207 such and only 5 died, a percentage of 2.42. In the same years the other hospitals admitted 927 of them and 108 died, being 11.64 per cent. By the soothing use of water, at Westboro, many frenzied ones were preserved from wearing themselves out. At present a building for 60 women is going up, with many bath tubs, and the "Codman" is to be for the men.

Voluntary Admissions.

In the year Westboro had of these 67, of which 3 were finally held by the usual court process. Taunton had 7, Northampton 5, and the others none. At the McLean Hospital in 1907, the latest at hand from there, of 173 commitments 104 were voluntary.

Private Patients.

Of these, at the year's close, Westboro had 179; Worcester, 168; Danvers, 127; Northampton, 112, and Taunton, 92.

In income from them Westboro received $53,922; Worcester, $47,683; Danvers, $38,857; Northampton, $33,258, and Taunton, $21,811.

On Trial Visits.

These correspond to "probations," now so much and well used for offenders. At the year's end there were sent out from Westboro 154; from Taunton, 77 (just one-half); Worcester, 64; Danvers, 28, and Northampton, 27.

There returned from such visits, in the year , at Northampton, 5; at Westboro, 23; Taunton, 94; Worcester, 96, and Danvers, 122.

The above shows wide variations. It seems clear that the longer a visitor can remain at home the better.

It is evident that at Westboro Hospital there is much of useful activity, with most encouraging and satisfactory results.

PHYSICIANS IN NEW YORK.—Vol. XI of the Medical Directory published by the Medical Society of the State of New York shows that there are 13,023 physicians in the State, of which number the boroughs of Manhattan and Bronx have 778. In the entire city of New York there are said to be 6,642 physicians.

EDITORIAL.

Books for review, exchanges and contributions—the latter to be contributed to the GAZETTE only, and preferably to be type written—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.

ASSOCIATE EDITORS:
F. W. COLBURN, M.D. C. T. HOWARD, 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, if possible.

THE PHYSICIANS' LIFE INSURANCE.

There are but few if any things that should be more carefully provided for by the physician with dependents than the one of life insurance. Almost from time immemorial there has been an all but universal recognition of the deficient business ability possessed by the average physician. Thanks partly to this seemingly innate disability, and partly to the relatively small fees for which he works it is very exceptional for one of this profession to become really well-to-do as the term is now understood. To the doctor money seems to have but one reason for existence, to be spent. The innocence and gullibleness of the medical profession is notorious to such an extent that it is one of the most promising hunting grounds for promoters of the so-called "get-rich-quick" schemes and hundreds of other frauds.

These being undebatable facts it certainly behooves every member of the profession to whom some kin looks for assistance to so arrange his business affairs that whatever sudden or unforeseen calamity comes to him suitable provision will be made for those dependent upon him. By far the most common form that this calamity takes is sudden or unexpected death. When a man with a moderate practice of fifteen hundred to three or more thousand dollars suddenly takes sick and dies, what have the members of his family to look forward to? While this income has not been large it has enabled the wife and the children to have a comfortable home and a varying amount of the luxuries of life. It is unexpectedly cut off! What remains? A collection of bad accounts on the books, worth but a fraction of their face value. A few books that are not saleable; some instruments and office furniture that no one will buy. What is the result? Unhappiness, misery, poverty. Lucky is the widow if a collection of debts is not her lot.

To the average physician one of two ways is open to prevent such an event: he can save his money or he can take out life insur-

ance. These options are so clearly stated in an editorial in the Medical World that they will be abstracted in part:

We will say that Dr. John Smith is 35 years of age, married, and has four children. He lives in a country village and takes in $1,800 a year in cash. His medicines, stable expenses, light, heat, fire insurance, clothing for his family, household expenses, etc., cost him about $1,500 a year. He has practically $300 a year to spend, to invest, or to save. If he invest or save it, he must live and compel his children to live without luxuries or pleasures beyond those which they may derive from the bare fact of living. If he dies suddenly, his family are to be instantly deprived of all income.

Let us suppose that he has dragged out a miserable existence for twenty years at this rate, depriving himself of every luxury. Let us stretch the argument to the point of presuming that he has met the growing expense of clothing his two daughters while growing to womanhood, and given them an education befitting their station in life, and *still managed to have the* $300 *yearly to lay by* (which is not at all likely). He would have $6,000 in the bank. Now, presuming that he dies. His family have this amount on which to draw for living expenses. The bank pays the widow the munificent sum of $240 a year. She has been accustomed to an income of $150 a month, and is now instantly cut to $20 a month. Can she live on that? Can she pay taxes, fire insurance, care for the depreciation of property, continue the education of her children, and clothe them and herself on any such sum? Hardly.

Now, Dr. John Smith takes another view of it, and takes out $10,000 life insurance at the age of 35. If he is able to subsist on $1,800 a year and have $300 left, he can subsist on $1,800 a year and pay $300 a year (or $30 on the thousand) for $10,000 life insurance. *Now,* if he die suddenly his wife has the income from $10,000 from which to draw, instead of having but $6,000.

Her income is $400 a year instead of $240. If, however, Dr. John Smith lives 20 years after taking out his $10,000 life insurance policy, he will draw out about $7,500 in cash, or he can take a "paid up" policy for about $15,000, if he thinks he can earn enough in a few years to keep him till death may overtake him. So selecting, he can leave a snug sum to wife or children, if they survive him.

There is another feature which we have never heard any life insurance solicitor urge on a "prospect," but which we have figured out in our own experience. Without life insurance protection, any man with a family is impelled to make sacrifices and forego expensive pleasures in order that he may save money for his wife and children in event of his sudden demise. He can't afford such luxuries, lest he might die penniless and his dear ones come to want. *But,* if he have life insurance protection he can buy anything his income affords, secure in the thought that if death comes to him suddenly, his family will not only not suffer because he spent that money for his or their pleasure, but also that they will have

vastly more from the policy than he could have bequeathed to them had he depended upon his earnings from his professional practise.

It would seem, therefore, to be the absolute duty of every physician who is in any way a family man or who has any dependents to carry as much of the so-called "ordinary" life insurance as the circumstances demand or his income allows. By so doing he assures for himself a quiet conscience in the realization that by his unexpected demise no undue suffering and want will be experienced by those who look to him for sustenance

IS DECEPTION EVER PERMISSIBLE?

From time to time one reads articles in the medical press condoning or condemning the use of deception or the so-called "white lies" by the physician. Some there are who are strongly convinced that the truth and the truth only is all sufficient for every occasion; others, on the contrary, assert with equal conviction that there are times when not only must the truth not be told but where deliberate falsehood is fully justifiable. Much is to be said on both sides of the question before it is, if it ever is, settled.

While not desiring to attach ourselves to either side an article recently appearing in one of the German journals seems to present the favorable aspect of sometimes telling what seems to be an absolute untruth. In this article the writer, a physician, carefully describes his personal experience, feelings and impressions during a severe and almost fatal illness. He was seized with a sudden attack of appendicitis of such severity that by the time operation could be performed the appendix had ruptured and peritonitis started. He was fully conscious of his serious condition and the doubtful chance of recovery. When he saw the surgeon he asked him what he thought was his outlook. The surgeon in a very cheerful manner assured him that he would recover in due time. The doctor knew that the surgeon did not mean all that he said; but, he states, the very statement itself acted as a decided stimulus to him and was, he believes, a not inconsiderable factor in his ultimate recovery.

ORTHOSTATIC ALBUMINURIA.

Much interest is always manifest in those peculiar cases of orthostatic or postural albuminuria that are occasionally encountered. This condition consists of a distinct degree of albumin excretion in the urine, while the patient is in the erect position and its total disappearance when the recumbent position is assumed. It differs thereby very distinctly from the true nephritis where in the typical case the albumin excretion is constant. Much discussion has arisen concerning the cause of this peculiar phenomenon, nor can it be said that how we ever know the exact etiologic factor. A recent

and very probable explanation has been given by Jehle, of Cologne. He claims it to be due to a peculiar change in the position of the spinal column or some parts of it, a kind of lardosis, having nothing whatever to do with the kidney primarily or with the nervous system as many assume. This abnormal position of the spine acts as a disturbing factor on the vascular mechanism of the kidneys and so allows of the secretion of albumin.

Once recognizing the cause, the treatment is simple; prevent the patient from assuming the injurious position, making him take some other in its stead. This correction is best made by some orthopaedic support such as a corset or jacket. When such correction is made, says Jehle, the condition and its allied symptoms of headache, lassitude, with sometimes vomiting completely disappear. The name "lardotic albuminuria" is suggested as the proper designation of this condition which is probably not particularly uncommon. While this new method of treatment yet awaits complete verification, it is nevertheless so simple that anyone can try it and so harmless that no injury to the patient will ensue even if it does not prove effectual.

A NEW SIGN FOR THE DETECTION OF MALINGERING AND FUNCTIONAL PARESIS OF THE LOWER EXTREMITIES.

Hoover, in the "Journal of the American Medical Association," gives a new test that will enable the examiner to detect simulation of paresis in the lower limbs. Lenner thus describes it: "The sign is based on the following facts: If a normal individual, lying on a couch, in the dorsal position with legs extended, lifts one foot, the heel of the other foot always digs into the couch. This complemental opposition is felt by placing the hand under the tendon Achilles. In case of paralysis of one leg, due to a pathologic lesion, if the patient attempts to lift the paralyzed foot, there is the same complemental opposition and the heel of the sound side digs into the couch. If the patient lifts the sound foot the complemental opposition of the paralyzed limb will depend on its strength; there will be no movement, whatever, if that limb be completely paralyzed. Just the opposite takes place in case the paralysis of the leg is hysterical or simulated. If the patient be told to lift the paralyzed leg, or to make a great effort to do so, there will be no movement of the paralyzed limb (provided the paralysis seems to be complete) nor any complemental opposition of the sound one. If, however, the sound limb is lifted, complemental opposition is exhibited in the paralyzed limb and the heel digs into the couch.

"This sign is certainly a valuable one. It seems surprising that, simple and easy to elicit as it is, it was not described long ago."

ENGLISH TUBERCULOSIS SANITARIUM IN SWITZERLAND.—It is planned to open during the present fall the Queen Alexandra Sanitarium for tuberculosis patients at Davos, Switzerland. This sanitarium has been erected and founded by English charity, but its benefits will be extended to all members of the English speaking races of whatever nationality. It will accommodate approximately fifty-five patients. The requirements for admission are: English speaking nationality, suitable medical condition and insufficient financial resources to permit a treatment in private sanatoria or hotels.

SOCIETIES.

The forty-third annual meeting of the Worcester County Homœopathic Medical Society was held in the new Hahnemann Hospital, Worcester, on Wednesday afternoon, November 10, and the following officers were elected: President, Dr. Geo. N. Lapham, Rutland; 1st Vice-President, Dr. Albert E. Cross, Worcester; 2nd Vice-President, Dr. Frank T. Harvey, Milford; Secretary and Treasurer, Dr. Lucy E. Wetherbee, Worcester; Auditor, Dr. John P. Rand, Worcester; Librarian, Dr. Jennie T. Lane, Worcester; Censors, Drs. J. K. Warren and Carl Crisand, Worcester, and Edward R. Miller, Leominster.

After the election of officers, the Bureau of Clinical Medicine, Dr. A. E. P. Rockwell, Chairman, presented the following program:

People. Dr. Frank C. Richardson, Boston.

The Office Treatment of Cervical Stenosis. Dr. Eliza B. Cahill.

The Practical Value of Fecal Examination. Dr. J. Arnold Rockwell, Cambridge.

The regular meeting of the Boston Homœopathic Medical Society was held in the Natural History Rooms, November 4, 1909, the meeting being called to order by the President, Nelson M. Wood, M.D.

Business Session.—The reading of the records of the last meeting was waived.

The following physicians were proposed for membership: Harriet Louise Palmer, M.D., Oscar R. T. L'Esperance, M.D., Joseph E. Sternberg, M.D.

The following physicians were elected to membership: Susan B. H. Gibbs, M.D., J. Walter Schirmer, M.D.

The President elected the following as the Nominating Committee: D. W. Wells, M.D., Chairman; J. Arnold Rockwell, M.D., and S. H. Calderwood, M.D.

Scientific Session.—Dr. George R. Southwick presented to the Society a case of pseudo-hermaphroditism in an individual forty-seven years old.

Some Suggestions as to the Drug Treatment of Acute Anterior Poliomyelitis.—Frederick B. Percy, M.D.

The orthopedic treatment was discussed by Howard Moore, M.D.

The paper was also discussed by Edward E. Allen, M.D.

Arteriosclerosis.—Edward P. Colby, M.D.

Discussion by John P. Sutherland, M.D.

Adjournment.

THE NEW TREATMENT FOR THE DRUG HABIT.—Many forms of treatment have been advocated from time to time for the treatment of opium and for drug habitues. One of the latest and one that presents much hope is that introduced by Dr. Lambert, professor of clinical medicine at Cornell. It consists in the use of a combination of tincture of belladonna with the fluid extracts of hyoscyamus and xanthroxylon. The size of the dose varies from case to case. It is reported that the dose should be given every hour and that practically no suffering is noted. The amount of the drug from which the patient is being cured is gradually reduced rather than suddenly stopped. Dr. Lambert says the obliteration of the craving for narcotics is not a matter of months or weeks, but is accomplished in less than five days. "The result is often so dramatic that one hesitates to believe it possible."

Certainly such a statement, emanating from this authority, should be given careful consideration and thorough trial.

BOOK REVIEWS

THE MONTH'S BEST BOOKS.

Systemic Pathology, Adami and Nicholls; $6.00. Lea & Febiger.

Therapeutics, Materia Medica, etc., Potter; $6.00. P. Blakiston's Son Co.

Diseases of the Nose, Throat and Ear, Knight & Bryant; $4.50. P. Blakiston's Son & Co.

Practice of Medicine, Tyson; $5.50. P. Blakiston's Son & Co.

Medical Diagnosis, Wilson; $6.00. J. B. Lippincott Company.

The Food Tract. Its Ailments and Disease of the Peritoneum. By A. L. Blackwood, B.S., M.D., Professor of Clinical Medicine and Materia Medica in the Hahnemann Medical College, Chicago. Author of "A Manual of Materia Medica, Therapeutics and Pharmacology," etc. Philadelphia. Boericke & Tafel. 1909.

This book, like several others by the same author, has for its aim the presentation of the salient facts concerning the various diseases under consideration, together with some of the more commonly useful remedies with their leading indications.

The classification is strictly anatomical, beginning with the lips, proceeding in direct sequence to the rectum and terminating with a chapter upon diseases of the peritoneum. Etiology, pathology, symptomatology, diagnosis, and prognosis are all briefly considered in a very clear manner, but the greater amount of attention is devoted to treatment, particularly the homœopathic method. This is as it should be and is certainly very commendable.

If any criticism might be made of the book it would probably be to regret that in a number of instances certain conditions are treated as disease entities when they should more properly be considered as symptoms. We are, however, unfeignedly glad to have these books coming from members of our homœopathic school, and believe that they are finding for themselves an opening that has not been previously filled by any others.

Protozoology. By Gary N. Calkins, Ph.D., Professor of Protozoölogy in Columbia University, New York. Illustrated with 125 Engravings and 4 Colored Plates. Lea & Febiger. New York and Philadelphia. 1909.

Just in proportion as a new subject increases in importance in medicine, just so should the knowledge of that subject increase in the minds of its practitioners. During the past decade the subject of protozoölogy has made enormous strides toward the central part of the medical field, and has become transformed from what might be said to be an almost insignificant department into one of much importance in which we now recognize we are just beginning to fully comprehend its possible scope.

No one with whom we are familiar is more able to write upon this as yet very complex subject than the author of the book now being considered. For years his work along this line has been memorable, and if for no other than that on the etiology of small pox and vaccines whatever comes from his pen warrants careful thought.

In this book we find the entire subject of protozoölogy discussed, giving thereby an interest both to the physician and to the non-medical biologist. Emphasis is placed on the importance of the subject to the latter as well as to the former class of students. The chapters descriptive of the possible relation between protozoa and cancer, certain

rhizopods and small pox and the malarial organisms are particularly valuable. The book will certainly take an immediate position in the front of the class treating of this subject.

The Renewal of Life. Arguments for Subcutaneous Injections of Oil in the Cure and Prevention of Senility and Disease; for the Making of the Acme of Abundant Health, Stamina, Vigor, Vitality and Constitution; for the Cure of Consumption and Other Diseases, Particularly those of a Chronic Nature. By Thos. Bassett Keyes, M.D., of Chicago, Chairman of the First Organization Committee of the American Congress of Tuberculosis, and one of the Vice-Presidents of the International Congress of Tuberculosis, St. Louis Exposition, 1904. The Tubercule Press Bureau. Chicago. 1909-10.

In this book we find that the author has but one purpose in view: the advocacy of "the greatest therapeutic advance that has ever been made." Certainly this is a bold claim and one that in the opinion of the reviewer is not justified by the facts as given.

The great therapeutic advance consists in the subcutaneous injection of oil for the treatment of disease. It has thus far been used principally in tuberculosis, but the statement is made that it is "of vital importance in the treatment of all other diseases." The oils used are briefly mentioned, but wthout any details concerning their use.

The deductions and conclusions are based upon what seem to be very incomplete premises, and until further confirmation is given should certainly be received with great caution.

A Text-Book of Materia Medica and Therapeutics. Characteristic, Analytical and Comparative. By A. C. Cowperthwaite, M.D., Ph.D., LL.D. Tenth Edition with an Appendix, enlarged, including new remedies. 864 pages. Canvas, $5.00, net. Half-morocco, $6.00, net. Postage, 28 cents. Philadelphia. Boericke & Tafel, 1909.

Probably almost every reader of the *Gazette* is familiar with this work that has for more than twenty-five years been a standard in homœopathic literature. From the standpoint of the undergraduate student, as well as from that of the graduate and post-graduate, it has many times been subjected to the test with only the most gratifying results. Now, after five years, a new edition appears in answer to a very strong demand. This new edition does not differ much from its predecessor, a few drugs being added in the appendix. The arrangement is the same as heretofore; first, a general analysis of the drug, then its characteristic symptoms, followed by the therapeutic uses for which it is adapted.

Some books require no recommendation from the reviewer, and it is believed that this is such an one.

Surgery of Childhood. By Sidney Freeman Wilcox, M.D., Professor of Clinical Surgery, New York Medical College and Hospital for Women, Consulting Surgeon to The New York Hospital for Women, The Laura Franklin Free Hospital for Children, The New York Ophthalmic Hospital, The Flower Hospital, The Memorial Hospital for Women and Children, Brooklyn, The Saint Mary's Hospital, Passaic, N. J., The Wesson Memorial Hospital, Springfield, Mass., Grace Hospital, New Haven, Conn. Profusely illustrated. Boericke & Runyon. New York and Philadelphia. 1909.

We approach consideration of this book with considerable reluctance as we wish to be fair both to the author and to the reader. In the first place we question the need of a work devoted to surgery of childhood, as the subject is neither a specialty in itself nor does it materially differ from other surgery. It is written avowedly for the man in practice, not

for the surgeon, therefore it aims to impart general rather than special information. The text is very readable, both in regard to subject matter and to typographical arrangement. No text, however good, could offset the very imperfect illustrations that are found in many places. In these days of excellence in illustration, particularly in connection with medical books, the very crude attempts at line drawings cannot fail to leave the idea that the subject matter is as imperfect as are the pictures. Far better would it have been to have used a much smaller number of good plates.

Our impression of the book, therefore, must be one of regret at what we believe to be neglected opportunities.

Manual of the Diseases of the Eye. For Students and General Practitioners. By Charles H. May, M.D., Chief of Clinic and Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department, Columbia University, New York, 1890-1903, etc. Sixth Edition, Revised. With 362 Original Illustrations, including 22 Plates, with 62 Colored Figures. Price, $2.00 net. New York, 1909. William Wood and Company.

An earlier edition of this has been favorably reviewed in the columns of the *Gazette*, leaving but little to be said at the present time concerning the general arrangement. In size and in subject matter included, but little change is noted. We are pleased to learn the very safely conservative new paragraph upon the conjunctival test for tuberculosis. Cerebral decompression is another of the subjects treated for the first time.

The book is very evidently written for the general practitioner rather than for the specialist, and as such fulfils its purpose excellently. It is profusely illustrated throughout, many colored plates being included, all of which add much not only to the appearance but give a greatly increased value to the subject matter itself. As said of the earlier edition, we are much pleased with this latest one, believing that the author has produced a book that will give to each possessor excellent satisfacton.

Therapeutics, Materia Medica, and Pharmacy, Including The Special Therapeutics of Diseases and Symptoms, The Physiological and Therapeutical Actions of Drugs, The Modern Materia Medica, Official and Practical Pharmacy, Minute Directions for Prescription Writing, Also the Antidotal and Antagonistic Treatment of Poisoning. By Samuel O. L. Potter, A.M., M.D., M.R.C.P. Lond. Formerly Professor of the Principles and Practice of Medicine in the Cooper Medical College of San Francisco; Author of the "Quiz-Compends of Anatomy and Materia Medica," etc. Eleventh Edition, Revised and Enlarged. Price, $5.00 net. P. Blakiston's Son & Co. Philadelphia, Pa. 1909.

No book, however well advertised, gets to an eleventh edition unless it possesses a large amount of intrinsic worth or in some manner is able to prove itself to be a benefit to those readers for whom it has been written. Potter's Therapeutics and Materia Medica is no exception to this rule.

As the last preceding edition appeared in 1905 the present one is fully justified.

The book is divided into three parts, exclusive of a full introductory chapter and an appendix containing phrases for prescription writing, hypodermic formulæ and some excellent tables on differential diagnosis.

Part I takes up materia medica. Each drug is separately considered as to its origin, dosage, physiological action and therapeutics. As usual, many of the therapeutic suggestions are as familiar to the homœopathic fraternity as to their friends of the dominant school. To illustrate: in the article upon ignatia, after speaking of the uses of the drug in many

neurotic conditions and in children's diseases, the author says: "cerebrospinal irritability is diminished by small doses though excited by large ones." Also pulsatilla in large doses is reported to have aggravated certain cases which, when the dose was decreased, proved readily amenable to cure by the same drug. Other cases might be cited in numbers all tending to show how comparatively similar are some of the prescriptions of the older school in medicine to the more accurately selected "indicated remedy" of homœopathy.

Part II deals with pharmacy and prescription writing.

In Part III come the special therapeutics. Here the diseases are given alphabetically with the drugs that are serviceable in each.

It is gratifying to note how prominent the single remedy is yearly becoming at the expense of the complex prescription. Here again considerable quite good homœopathy, even including some rather crude "indications" will be found. Any physician of any form of medical belief that desires to obtain a thorough knowledge of dominant medicine (and we can conceive of none that should not) will find in this book a complete reliable exposition of this increasingly important subject.

Proceedings of the Thirtieth Annual Session of the International Hahnemannian Association. Held at Pittsburgh, Pennsylvania, June 17, 18 and 19, 1909. Published by the Association, 1909.

This is the report of the thirtieth annual session of this Association held at Pittsburgh in June last. It comprises the complete minutes of the session, together with all papers presented and full discussion. A feeling of optimism is evident throughout and a steadfast belief in homœopathy, particularly that part having to do with the higher potencies. Many of the papers are excellent and are well worth study by all who practice in accordance with the law of similars.

The loss of the late Dr. H. C. Allen is deeply felt. If the reviewer may predict, it might be said that the person best qualified to take his place as a leader in the near future is the brilliant young materia medicist of New York, Dr. Rabe.

Diseases of the Personality. By Professor Th. Ribot, Paris. Translated (with Homœopathic annotations) by P. W. Shedd, M.D., New York. 142 pages. Cloth, $1.00. Postage, 7 cents. Philadelphia. Boericke & Tafel. 1909.

Dr. Shedd, the translator, announces that this is the first of a series of translations upon psychological subjects, the others to follow, covering Diseases of Volition and Diseases of Memory.

The one already prepared and now under review is the writing of the well-known French psychologist, Prof. Ribot. Among the topics discussed by him are organic troubles, mental troubles, affective troubles, and dissolution of the personality. Many illustrative cases add interest and serve to clarify what might be rather heavy reading for the average physician. Dr. Shedd's purpose, beyond the mere translation, has been to lay emphasis upon the importance in homœopathic therapeutics of mental symptoms and to show how Prof. Ribot's work demonstrates this importance. With this end in view numerous annotations are made throughout the entire work, comparing the views of Hahnemann with those of the eminent French savant.

The Examination of the Function of the Intestines by Means of the Test Diet. Its Application in Medical Practice and Its Diagnostic and Therapeutic Value. By Prof. Dr. Adolf Schmidt. Halle, A. S. Authorized Translation from the Second Revised and Enlarged German Edition. By Charles D. Aaron, M.D., Professor of Diseases of the Stomach and Intestines in the Detroit Post-Graduate School of Medicine; Clinical Professor of Gastro-Enterology in the Detroit

College of Medicine; Consulting Gastro-Enterologist to Harper Hospital, etc. Philadelphia. F. A. Davis Company, 1909.

This little book covers in an admirable manner one of the most neglected subjects in clinico-pathological medicine, the examination of the feces. On account of the unpleasantness of the work very few investigators have followed any detailed study. Nothnagel was the first to pursue it with any completeness and since then Schmidt has been the leading worker. The results of his years of work are incorporated in the book in review. After a brief introductory discussion detailed description of the technique of fecal examination, both chemical and microscopical, is given. A very evident aim has been to eliminate the unduly complicated tests or those of questionable value to the clinician, retaining only those relatively easy of performance and of definite service. Following this are a number of chapters giving the diagnostic data and explaining the pathologic significance of the results that may be attained.

In view of the increasing attention now being directed by surgeons toward the pancreas, the sections upon diagnosis of disease of that organ are of particular interest. We believe that the author has acted very wisely in merely describing the Cammidge reaction and treating its diagnostic value as, at present, very questionable.

Seldom have we read a book covering a somewhat uncertain subject in a more unprejudiced manner, describing all the newest ideas, but at the same time safely conservative.

The translator deserves commendation for the very readable text that he has prepared from a language sometimes difficult to turn into the easy rolling sentences of the Anglo-Saxon world.

Archives of the Middlesex Hospital. Volume XV. Eights Report from the Cancer Research Laboratories. Edited for the Cancer Investigation Committee. By W. S. Lazarus-Barlow, M.D., F.R.C.P., Director of the Cancer Research Laboratories; formerly Pathologist and Lecturer on Pathology at the Westminster Hospital. MacMillan & Co., Ltd. London, June, 1909.

At the present time it is probably no exaggeration to say that thousands of men in the medical profession are earnestly pursuing the hitherto fruitless search for the cause of cancer. A number of laboratories, institutions or commissions have been brought into existence for the exclusive purpose of investigating the entire subject of malignancy. Among these various bodies none is more eminent or commands to a greater degree the respect of all than the one connected with the Middlesex Hospital and under the direction of Dr. Lazarus Barlow.

Reports emanating from this source may be credited accordingly as giving the latest data in this very obscure field of research. This, the eighth annual report, makes up a volume of more than two hundred pages. In it we find a statistical study of the disease as it affects the cervix uteri, the thyroid gland, the ovary, and the mammary gland. Detailed description of the effects of radio-activity upon animal cells is of peculiar interest to homœopaths. Here in the conclusion we read: "As a result of the facts indicated above, we conclude that the action of X-rays, radium, thorium, and uranium, upon the animal cell as exemplified by the ova of *Ascaris megalocephala* of the horse is twofold. In small doses or continued for a short time it causes division to proceed at a faster rate than normal; in larger doses evidence of an inhibitory power is given which may lead to total arrest of development at some varying period after the cycle of changes leading to the formation of the embryo has commenced."

From whatever viewpoint the subject of cancer may interest our readers, they should all receive benefit and instruction by carefully studying the report.

Minor and Operative Surgery, Including Bandaging. By Henry R. Wharton, M.D., Surgeon to the Presbyterian Hospital, and the Children's Hospital; Consulting Surgeon to St. Christopher's Hospital, the Byrn Mawr Hospital, and Girard College; Fellow of the American Surgical Association. Seventh Edition, enlarged and thoroughly revised, with 555 illustrations. Lea & Febiger. Philadelphia and New York. 1909.

A new edition of this very compact book appearing in such a short time after the earlier one well proves the justness of the very favorable review given by the Gazette of that earlier edition. This is a book that aims to cover the surgical needs of the general practitioner, treating in detail of those operative procedures he is called upon to perform and covering major surgery in merely a general manner. It is a pleasing contrast to many of the so-called text-books where the great bulk of the book consists of description of operative technique possible only to the specialist in surgery.

Bandaging in all forms receives particular attention in Part I. Antisepsis and asepsis receive nearly sixty pages, while fractures, dislocations and amputations are all appropriately described. The subject of minor surgery, including anesthetics, dressings, abscesses, burns, etc., is particularly pleasing to read, and to it are devoted nearly two hundred pages.

The reviewer can speak from personal experience of the popularity of this volume in its earlier edition, as the review copy was placed by him in the library of a medical school. Here it has been in almost constant use by the students, and is repeatedly said to be the most satisfactory book on the subject now available. We gladly recommend it.

We learn with pleasure that Dr. J. C. Wood, of Cleveland, has begun the revision of his well-known text-book upon Gynecolgy, and that the new edition will be in the hands of the publishers, Messrs. Boericke & Tafel, within a comparatively short time.

SYNTHETIC MONSTROSITIES.—Ellingwood's Therapeutist quotes Professor Lloyd as follows: "From the very beginning of the synthetic craze until the present, eclectic authorities have protested against the theoretical therapeutic invasion attempted by modern synthetic chemistry. It started in Germany by the discovery of a method of making salicylic acid from carbolic acid, and the world was soon flooded with artificial salicylic acid, made by a patented process that could be employed only in Germany. Quickly following, came successively other products, new in structure, and absolutely untried in medicine or in pharmacy. These, as a rule, were introduced by laboratory experimenters who practised on frogs, dogs, rabbits and such.

"University professors united their efforts to displace well-known and tried remedies by these too often untried monstrosities. To even give the names of these substances, enthusiastically forced upon the world, and artfully advocated, even in the editorial pages of State medical journals, would fill volumes.

"It would seem that the time must come in the dominant school, when their leaders would rebel against this host of synthetic monstrosities hurled into their ranks. 'The American Pharmaceutical Record' makes the following strong statement: 'Everywhere there are signs of a revolt against the cult of the synthetic.'

"The neglect of the older remedies has become notorious. It would seem as if the modern physician was ashamed to be found using any of the old drugs, when a new and more expensive novelty might be employed instead."

PERSONAL AND GENERAL ITEMS

We are indebted to Mr. Arthur Blakeslee of Westboro for the following interesting item: At the Westboro Insane Hospital a patient who had recovered his reason, but who remained at the hospital by choice, recently died, bequeathing $4,000 to the institution. Although one-fourth of this has been relinquished to avoid litigation, the appreciation evidenced by the bequest has not been lessened.

We take great pleasure in reporting that, after his trying and tedious illness and convalescence, Dr. Horace Packard has recovered his usual health and strength and has resumed his round of professional duties.

Dr. Elizabeth W. Wright, resident physician at Galen Hall, Atlantic City, since her graduation from Boston University School of Medicine in 1908, entertained the Woman's Homœopathic Club of Atlantic City at its first meeting in September.

Dr. Laurence R. Clapp, B. U. S. M. 1908, after some months of service in Minnesota State Insane Hospital at Fergus Falls, has located at Farmington, New Hampshire.

Dr. John A. MacMillan (Hahnemann of Philadelphia) has located at 1801 Beacon St., Brookline.

Dr. David L. Martin, class of 1909 B. U. S. M., after some months of service as assistant superintendent in the Massachusetts Homœopathic Hospital, has gone to the Emerson Hospital, Boston, as resident physician, Dr. Frank O. Cass having resigned to take up practice in his home town, Newport, Vermont.

Dr. Edgar F. Haines, B. U. S. M. 1906, has given up practice in Danvers, and has entered the service of the United States Army, Medical Corps, at Fort Moultrie, Sullivan's Island, Charleston Harbor, South Carolina.

The American Society for Clinical Research, which was organized on October 27, and is composed of physicians and surgeons of both the homœopathic and the old school of practice, at a meeting held on October 28 in John Ware hall in the Medical Library, Fenway, Boston, elected the following officers: Dr. Chas. H. Bangs, Lynn, president; Dr. W. T. Hamilton, of Montreal, first vice-president; Dr. E. Stillman Bailey, Chicago, second vice-president; Dr. James Krauss, Boston, general secretary; Dr. Francis X. Corr, Dorchester, corresponding secretary; Dr. Walter Wesselhoeft, Cambridge, treasurer; Dr. DeWitt G. Wilcox, Brookline, registrar.

The *Gazette* extends its sympathy to Dr. J. H. McClelland, of Pittsburgh, who has been through a severe attack of pneumonia, complicated by pleurisy. We regret extremely his serious illness, but are rejoiced to learn of the improvement in his condition. Our best wishes for a speedy and complete recovery.

Dr. Benjamin T. Loring, class of '98 B. U. S. M., has removed his residence from Roslindale to Watertown, where he has opened an office.

FOR SALE.—"Hercules Special," X-Ray, "High Frequency" Coil, 115 volts, A. C., cost $350; like new, beauty. Also 2 H. F. X-Ray Tubes, Fluoriscope, Tube Stand, H. F. Electrodes, price $175. "M.D.," care N. E. Medical Gazette.

Dr. Frank E. Allard announces that hereafter his office hours at 373 Commonwealth Ave. will be from 3 to 5 daily, Sundays by appointment. Special attention will be given to physical diagnosis from the standpoint of early detection and prevention of disease.

THE RED CROSS STAMP.—The director of the American Red Cross Society has recently reported that the net profits from the sale of the Christmas red cross stamps last year amounted to $135,000, which amount is devoted entirely to the campaign against tuberculosis. For the present holiday season a new stamp has been designed, one inch square. These stamps are to be sold only by recognized agents and the proceeds will, as before, be devoted to anti-tuberculosis work.

Dr. W. H. Watters, who has been taking a somewhat enforced vacation, has returned to his regular place in the pathological laboratory of Boston University School of Medicine.

Dr. James E. Stevens, class of 1903, B. U. S. M., has removed from Saxonville to Beaver Street, Waltham.

Dr. Rufus B. Weaver of Philadelphia has been honored by the Philadelphia Academy of Medicine by being made the recipient of the first honorary fellowship bestowed by the Academy. Public exercises were held on the evening of November 16 at Odd Fellows' Temple, Philadelphia, at which Dr. Herbert L. Northrop, Dean of Hahnemann Medical College, and others, made addresses. The *Gazette* extends its congratulations to Dr. Weaver for the honor bestowed upon him.

Dr. W. H. Phillips, of the Cleveland Homœopathic Medical College, and until recently editor of the Cleveland Medical and Surgical Reporter, has been taking a post-graduate course in pathology at Boston University. During his stay, Dr. Phillips was the guest, with Mrs. Phillips, of Dr. and Mrs. W. H. Watters at West Roxbury.

The regular semi-annual meeting of the Board of Trustees of the American Institute of Homœopathy has been ordered by the President for December 18, 1909. The sessions of the Board will be held in the Hollenden Hotel, Cleveland, O., beginning at 10 o'clock in the morning. Most important matters are to be considered and the attendance of each member is earnestly requested.

By order of the President. J. Richey Horner, Secretary.

FOR SALE.—Harvard office examining chair, in good condition. Price $25. Address "Physician," care of New England Medical Gazette, 422 Columbia Road, Boston.

Dr. W. A. Burr, one of the well-known physicians of Denver, Colorado, has been compelled by ill health to remove to California.

Drs. E. M. and Grace A. Jordan have removed from Malden to 93 Newbury Street, Boston.

MEDICAL REGISTRATION STATISTICS.—In the report of the Massachusetts Board of Registration in Medicine for July, 1909, friends of the Boston University School of Medicine may find much cause for gratification. The board, it will be remembered, is a mixed one and is one that is, and always has been, notable for the friendship and amity that the various members have felt for each other. The sectarian question, as far as possible, has been put into the background in their deliberations, and their results have been unquestioned from the standpoint of fairness and absence of prejudice. Dr. Harvey, the able secre-

tary for many years, presents the report now under consideration, from which the following facts are gathered:

Of the principal New England colleges represented the following is the percentage of failures of those taking the examination: Boston University, none; Harvard, 5.9; Tufts, 24; College of Physicians and Surgeons, 80. The percentage obtained by each student taking the examination is also given. The average of these percentages is as follows: Harvard, 78.6; Boston University, 77.2; Tufts, 74.6; Physicians and Surgeons, 64.9.

Statistics similar to these have been repeatedly given in preceding numbers of the *Gazette*, and all combine to show that Boston University School of Medicine is not only capable of turning out as good men as the average of its competitors, but also can stand well to the front in this comparison.

Dr. David H. Beckwith, of Cleveland, Ohio, died in Cleveland on November 19 at the age of eighty-five. Dr. Beckwith was one of the best known homœopathic physicians in Ohio and was for fifty years professor in Cleveland Homœopathic Medical College. He was also well known by homœopathists throughout the length and breadth of our land. He belonged to a group of pioneers now greatly decreased in numbers, for he was of those early converts to the doctrine of similia whose enthusiasm and deep convictions, and earnestness and success made the doctrine popular. He had a dignified and gentle manner, a sympathetic and genial disposition, and was a marked figure in any assembly of men. He joined the American Institute of Homœopathy in 1865, and for many years was a constant attendant at its meetings. That his worth was appreciated by his colleagues is testified to by the fact that he was elected President of the Institute and filled that position in 1871. He was an honored and respected member of the local and State societies of Ohio, and in his passing leaves a memory that should prove a stimulus to all his successors.

MORTALITY STATISTICS NEXT YEAR.

Revised Version of Classification of Census to Go Into Effect.

Washington, D.C., October 11, 1909.—U. S. Census Director, E. Dana Durand, today promulgated new rules and instructions for the purpose of securing more complete and accurate transcripts of deaths occurring in the selected death registration States and cities of the United States. These transcripts are obtained every month by the Census Bureau from nearly all of the city and State registrars in the Census death registration area and they form the basis of the mortality statistics prepared by the Division of Vital Statistics, under Chief Statistician Dr. Cressy L. Wilbur.

This action is expected to result in the presentation of the most scientific and trustworthy mortality statistics ever compiled in connection with a decennial U. S. Census, which affords the population bases for the 1910 death rates. In addition to this important step toward more reliable data, the new revised version of the Classification of the Causes of Death, as adopted at the Paris conference for the second decennial revision of the International Classification, will go into effect January 1st next in the Census registration area. Supplementing these will be the use of the new United States standard death certificates which it is believed the organized registration officials forming the vital statistic section of the American Public Health Association will adopt for the report of deaths commencing January 1 next, at the Richmond, Va., meeting, October 19-22 next.

In his communication to the State registrars, Director Durand states

that in their work of co-operation it is of the greatest importance that there should be exact agreement between the number of deaths as compiled by the State officers and by the Census Bureau, at least with respect to the total number of deaths reported for each month in each State, county and city. Differences occur at present which are not creditable to American statistics. For the purpose of preventing such differences, a monthly shipment check list, showing the deaths by months and areas, has been prepared and will be supplied to each State registrar.

He asks transcribers to follow absolutely the instructions for copying and advises tests to ascertain correctness. Permanent transcribers are preferred because of the skill acquired. Local registrars should be compelled to make returns on time. No effective registration can exist when the central office permits tardiness. The credit of the State service must suffer, the Director states, from heedless and incompetent work, and the compensation paid for the returns is sufficient to entitle the Government to thoroughly reliable transcripts, promptly transmitted, and containing all of the statistical data required to be registered under the State law.

To the city registrars the Director suggests they note the instructions to State registrars. He states that a city registrar should have in his hands the certificate of every death that occurs, with absolutely no exception, before any disposition is made of the body; hence there should be no occasion for certificates filed many days after the close of each month or year. The corrections should be obtained before the burial or removal permit is issued. No imperfect certificates or unsatisfactory statements of cause of death should be accepted. When overlooked, however, they may be corrected readily by special blank or telephone, and city returns should therefore be superior in quality and completeness.

In conclusion, the Director states that with the cordial co-operation of State and city registration officials, the value of the mortality statistics of the United States will be greatly improved. It is especially requested that every effort be made to carry out faithfully the recommendations for the remaining months of the present year, so that the entire returns for the year 1910, which are especially important because of the comparisons possible with the population data of the Thirteenth Census, may be in complete agreement for all of the States and cities of the United States. Special circulars of instructions will be issued relative to the reporting of occupations and causes of death. It is hoped that the new standard certificate, and the approved instructions, may be adopted by all of the registration States and cities, so that thoroughly comparable returns may be instituted for the decade beginning January 1, 1910.

Dr. Wilbur, who was one of the American delegates at the second decennial revision, stated today that the opportunity of starting out with the use of the revised classification for the mortality statistics relating to the actual census year, is of the greatest value. It is highly gratifying, he said, that the wishes of the United States for the advancement of the date of the International revision from 1910 to 1909 were acceded to by the French government and the other countries participating.

In accordance with a resolution of the International Commission, an official version of the revised titles is to be prepared in each language represented. The English translation has been made by Dr. Wilbur, aided by the other American delegates and by Hon. G. W. Knibbs, Commonwealth Statistician of Australia. This will provide precisely the same tabular list for all English-speaking countries that have adopted the International Classification.

The active interest of the United States in the promotion of International uniformity was accorded a very graceful recognition in the

bestowing of the vice-presidency of the International Commission upon Dr. Wilbur, who was called upon to preside over one of the sessions.

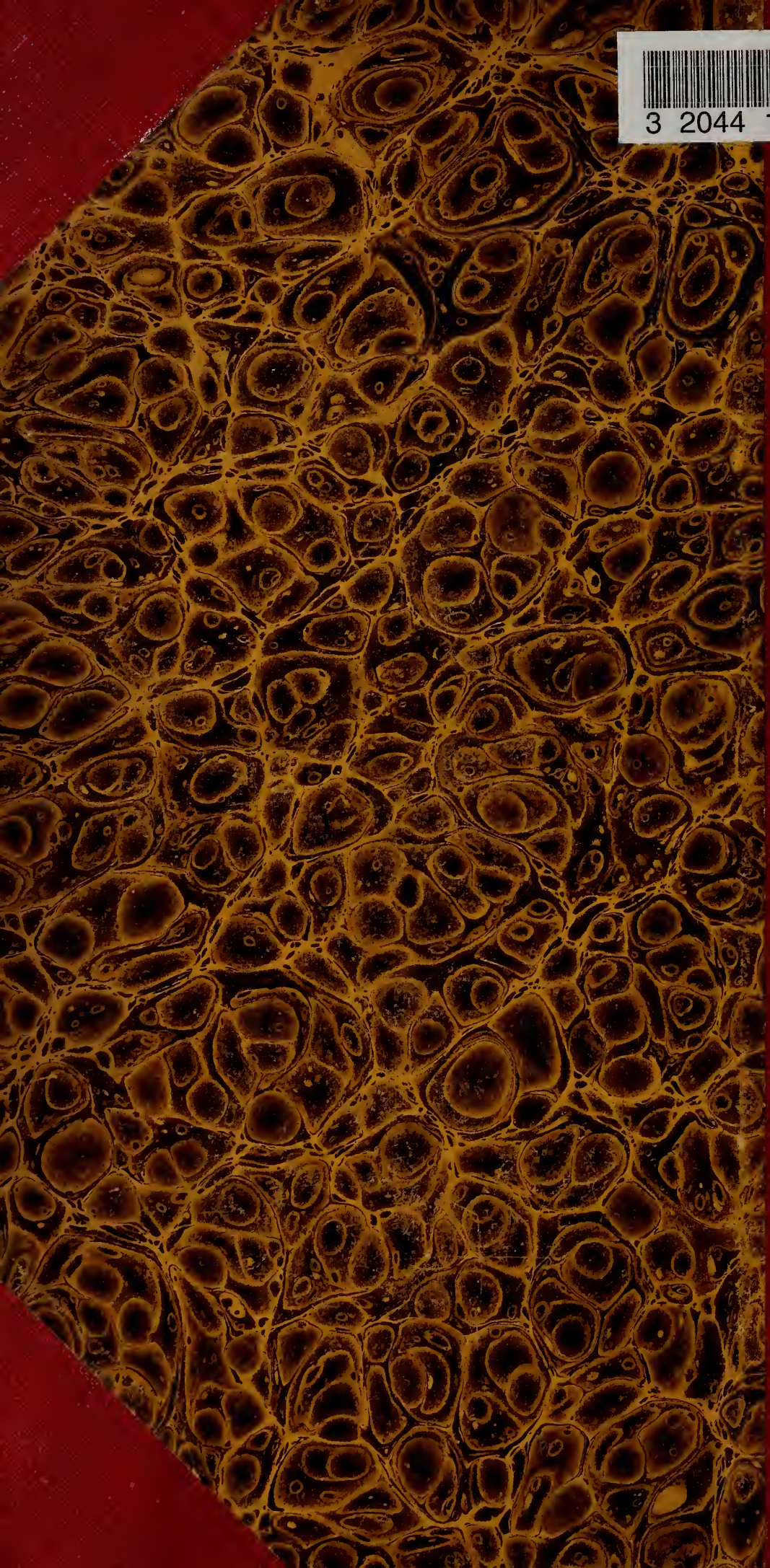
The next revision will be called in 1919 and under the auspices of the French government, unless other provision is made. Dr. Wilbur said it is to be hoped, however, in view of the great advancement of American vital statistics and the important part this country has played in the extension of the International Classification, that the third decennial revision will be called by the American government to meet at Washington.

GALL STONES. Hemmeter, the well-known authority on diseases of the alimentary tract, has written a very excellent article in the "Monthly Cyclopædia and Medical Bulletin" upon Cholelithiasis. His statements concerning the treatment of an attack of colic are particularly valuable:

"The patient must be put to bed immediately; a hot water bag is to be applied over the liver, and one-fourth grain of morphine is to be injected hypodermically at once. The drinking of small quantities of hot water during the attack, or hot Carlsbad-Sprudel water is to be recommended. When the patient has recovered from his immediate colic attack I recommend to him to continue the use of the hot Carlsbad-Sprudel water morning and evening, one tumbler before breakfast as hot as can be taken; then allow one hour to elapse before taking any food. If a slight chronic icterus continues after an attack of colic, and especially if the liver and gall-bladder regions are sensitive, I advise all patients to continue this Carlsbad treatment for a month. In this period the patient must lie down for three hours twice daily, say from nine to twelve in the morning, and from three to six in the afternoon, and hot cataplasms must be applied to the liver region during this time. During the first hours in the morning he should drink one hundred cubic centimeters of Carlsbad-Sprudel water every fifteen minutes, as hot as can be taken. In this way the patient may drink six to eight hundred cubic centimeters in a day. If the patient cannot tolerate so much, the amount of Carlsbad water taken can be restricted, particularly in the afternoon. During this treatment, the meals are taken at half past seven, one P. M. and seven P. M.

"Medicinal Treatment.—Gall-stones cannot be dissolved by any medicines that can be taken by the mouth. All medicines that have hitherto been supposed to have had this power bring about their only apparent and very transient improvement by their anodyne effect. Thus the Durand drops, which are composed of one part of turpentine, four parts of ether, twenty to thirty grams of cognac and the yolks of two eggs, act simply as an anodyne. The dose is fifteen to sixty drops. Olive oil, oleate of soda, glycerine, preparations made from bile and bile salts are of doubtful value. But I have seen cases in which the salicylate of soda seems to act as a very effective anodyne, and even reduce the jaundice and size of the liver. We do not know in what way salicylate of soda influences the metabolism of the liver cells, but we do know that it is an intestinal disinfectant to a certain extent, and I have convinced myself that the bactericidal effect of the bile is increased after two days' taking of sixty grains of salicylate of soda in divided doses. . . . . I do not use cholagogues. There are no cholagogues except those that do harm; even the bile salts, when so administered, injure the stomach."

Tf-38-34c
41C
708



3 2044 103 098 257