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PRELUDES TO INSANITY.*

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It is gratifying to know that in this age of modern scientific methods the interesting field of psychology has not been neglected. Insanity in its various forms and phases is no longer studied and classified from the symptomatic phenomena it presents but rather from a physiological and pathological basis. It is along this line that our hope for future development in psychiatry must lie. Much of the obscurity in the pathogenesis of nervous, and especially of mental diseases, is largely to be explained by the simple fact that the brain and the nervous system have been studied, altogether too much, as something apart from the other portions of the body—as something beyond the jurisdiction of the great fundamental pathological processes which operate on the whole organism. The mists of prejudice and empiricism are slowly lifting before the sunlight of modern research, carried on by investigators into the etiology of insanity. They are gradually removing the obstacles that have so long paralyzed the development of mental medicine and are demonstrating conclusively that the study of psychology must be conducted along the same lines as pursued in the investigations of other branches of medicine. While we recognize that heredity is the great predisposing cause of insanity, the physical aspect of mental disease must never be lost sight of. The study of the sympathetic relations between functional and organic disorders of the body and mental disturbances, has only

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emphasized the fact that there is no distinct line between the disorders of a corpus morbosum and an animus morbosum. Hence, in accounting for the manifestations of insanity, not only is a study of the structure, function and nutrition of the brain necessary, but our inquiry must proceed further and include the entire nervous system and all the organs and functions of the body. For these must all act in harmony and as an entity with the brain and nerve centres. As a result, then, of this distinct relationship there is with every organ and structure a distinct connection with the brain and hence all physiological, as well as pathological conditions, possess and exercise an influence on that organ.

Griesinger, Boucharde and others have demonstrated the necessity of studying all diseases of the nervous system as one inseparable whole, of which insanity is only a portion. There is no doubt that the brain is involved like any other organ of the body in the general toxic or somatic diseases and many of the insanities are but the expression of the later disturbance of the functions of the brain, dependent upon changes in the nerve cells, secondary to abnormal conditions in other portions of the body. The relations of the dependence of changes in the nervous system upon general somatic diseases is often thoroughly masked, and the lapse of time between the events may be such that the relationship between the two is often overlooked. The importance of appreciating the fact that many sensory, vaso-motor symptoms may be prelude to an attack of insanity is now generally recognized. While the precise nature of the pathogenesis of the various insanities is far from being perfectly understood, we do know that the recognition of early symptoms may often enable us to anticipate and possibly prevent the later appearance of the phenomenon known as insanity. The experience of any neurologist can furnish examples of cases with an unusual form of headache, which if not arrested, might lead to an attack of mania. We are well acquainted with the change in disposition, the restlessness and irritation that occur in an individual affected by the slightest physiological disturbances, as witnessed in the depression of the dyspeptic or the exaltation of the intoxicated. We recognize that physiological disturbances, accompanied by pathological changes, as manifested in the menopause and puerperal conditions, stand as strong etiological factors in the production of insanity. Too often, I fear, cases are certified as insane, and the attack described as a sudden outburst, with cause quite unaccounted for, when if the real clinical history of the case could only be known there would be, though perhaps greatly disguised, a long train of symptoms, sensory and motor, sleeplessness, change in disposition, and other facts indicating in autointoxication, or some other physical disturbance, a causative relation to the symptoms of insanity.

To have a healthy working mind we must have the sensory apparatus working in a normal condition. If we have a sensory system that is debilitated from any cause, the mental centres will not be long in showing the influence of the disturbance. How often have we seen marked instances of that in cases of melancholia, that, when diligently inquired into, afforded a history of oft repeated severe nerve storms. If we could understand the true etiology of the minor nerve disturbances that so often receive slight recognition in the earlier stages of melancholia, and remove the cause we would accomplish much, that we must now confess, is left until the storm is too fully developed. We know that many of these sensory symptoms are often transitory, and not of grave significance. Hence, probably, the reason why they are regarded as slight and trivial ailments. We so commonly meet with cases of melancholia in which our patients, sometimes seemingly well-nourished, have been subject at first to headaches, weary, painful feelings in the back of the neck and down the upper portion of the spine when wearied with little exertion. These sensory symptoms have continued until terminating in mental depression. Then when the mental trouble is pronounced the bodily pain seems to have passed off, only to return, in some instances, when the convalescence is established. Indeed the recurrence of the sensory symptoms comes to us as a pleasing signal of the light breaking in and scattering the clouds of depression. The melancholia, which is sometimes a sequela of influenza, is often marked in the early stages by these symptoms of long-continued headaches, or other sensory disturbances. If we could explain their exact nature, and their relationship to the mental symptoms which so often follow them, much would be accomplished in a field that to me is very inviting and interesting. If we are to accept these disturbances as due to toxic influences, is the toxemia merely a secondary and intermediate stage and not the real primary cause? If so, we must look beyond the toxemia to some great first cause. The uric acid theory does not afford us a satisfactory basis on which to account for all these manifestations. We no longer explain headaches and similar disturbances of the sensory apparatus as vaso-motor in origin, but are rather inclined for the real cause to attribute them to a failure of nutritive and dynamic energizing of the higher cortical cells. There is probably given to each neuron an innate power of building up its stores of potential energy (anabolism), and of liberating these stores in a dynamic form (katabolism), these two powers being balanced so that the neuron shall neither become, as it were, too full nor too empty. These powers in the sensory neurons are influenced, and probably regulated to a great extent from without by much action, by the innumerable and constant afferent impressions from the skin and viscera, by direct interference through other

neurons, and finally by the blood current. And any disturbance of this complicated series of conditions in a person of a sensitive organism may, no doubt, cause the danger signal of pain to be put out. In short, to be "neurotic," or "unstable" mentally, indicates a lack of power to resist the influences from within or without that are adverse to life or health. The same influences produce different effects in people. Exposure to cold braces one man and brings on bronchitis in another. Difficulties in life will in one individual stimulate a spirit of resistance, and in another break down the spirit and cause mental depression. For mental development we must have constant healthy stimuli on the sensory organs acting first on the great sensory centres in the brain, and then their transmission in proper form to the receptive mental centres. Mind arises through sensations at first—no sensation, no intelligence—and a healthy sensory system is most requisite in order to have the great mental functions satisfactorily performed. Does this not then explain why melancholia so often follows a condition where the sensory apparatus is weakened, poisoned or starved? The mental areas are only reached through the sensory. Why does sunshine produce cheerfulness, or fresh air a feeling of organic comfort, or muscular exercise exhilaration? The first step in the process is the reception of the sensory impression, the second is the mental effect. Sensory disturbances arise first—disturbing impressions are sent to the mental cortex, and the mental manifestations come as natural psychological sequences. The sensory areas are the gateway to the mind, and so must bear the first imprint, must suffer first. An oversensitive constitution is commonly the basis of the melancholic diathesis. This, of course, means that the sensory impressions in such a case are strong and overpowering. By keeping before us the necessary relation between the sensory and mental activities of the brain, many of the clinical facts of an attack of melancholia will be better understood, and some suggestions gleaned for its treatment, and perchance, light gained that may serve useful in guiding us to do something for its prevention. A physician approaches a case of illness by inquiring into the food supplies and how the body was digesting them. Our duty as physicians is to test the mental food supplies. Any departure then from normal sensory functions, especially in those who are predisposed to insanity, is worthy of attention.

There are also motor disturbances which often may be considered as preludes to mental symptoms. I have met with many cases where the friends of the patient have related that one of the earliest manifestations has been general muscular unsettledness. We are all familiar with the changes in facial and eye expressions due to the fact that the muscles upon which these changes depend are highly innervated. These muscles represent emotion

and mental action with marked peculiarity and distinctness. The reactivity and power of co-ordination with each other is commonly changed in the incipient stages of mental disease.

Sleeplessness is often noticed and spoken of for weeks before there is a suspicion that the case is pointing towards mental collapse. While we cannot accurately describe the physiology or psychology of sleep, we do know the absolute necessity of brain rest to maintain healthy mentality. The vascular theories do not afford us an explanation of either sleep or sleeplessness, and we must look to the cortical cells themselves for an explanation. Insomnia must be due to some disturbance between anabolism and katabolism in the mental area. When a patient complains of persistent sleeplessness we may well suspect the approach of further indications of a nerve storm well worth guarding against.

At least fifty per cent. of the patients entering our institutions for the treatment of mental disorders have a history of nutritive and digestive troubles. The lack of activity in assimilation and elimination seems unmistakably a factor in contributing to the toxic condition, which finds expression in the mental symptoms. Obstinate constipation and distressed feelings in the epigastric region are common to nearly all cases of melancholia, and we cannot doubt that intestinal putrefaction with the formation of complex products of bacterial fermentation sustains a causative relation to many distressing cases of mental disease.

The modern teachings of Salmi, Krafft-Ebing, Ford Robertson and others, supporting the toxic theory of intestinal infection, are each year finding greater favor among careful observers. The progress which has recently been made in bacteriology and physiological chemistry has gone far towards demonstrating that the great majority of the processes of disease in general are due to toxic elements in one form or another. May we not then quite reasonably look to the general organism to discover along the lines of modern pathology a bacillus or a toxin which may originate, directly or reflexly, the conditions in the insane? The future brightens with a hopeful and cheering prospect that the application of this toxic theory of diseases to the nervous system is destined to clear away much of the present vagueness and mystery of the causative agents and pathogenesis of mental diseases. I am convinced from the light of my own experience that many cases of mental disorder might be prevented if the early symptoms of digestive and nutritive derangements could be corrected. The relief experienced by the regular and systematic cleansing of the alimentary canal, together with prescribing an appropriate diet, has warded off more mental distress than we are at all aware of. We have all noticed in the cases undergoing treatment that as soon as digestion and elimination are restored and maintained in a normal condition that our patients gain in flesh, and that increase in weight affords grounds for a cheering prognosis.

In the insanity of young women the danger signal is often particularly noticeable in menstrual derangements. Many cases have a history of amenorrhœa dependent upon some physical disorder. While such cases often make good recoveries there is little reason to doubt that if such patients had submitted themselves in the earlier history of their trouble to their family physician their later symptoms might have been arrested. That there is a kinship between hysteria and mental disease is now generally recognized, and so often have I found the mental element sustained an intimate relation to some former manifestations of hysteria that I feel disposed to express a warning to those who say, when called to such a case, that it is "only hysteria."

We know that oftentimes varied forms of circulatory disturbances may be detected in the early history of mental cases. Cardiac palpitation, fainting fits, alterations in pulse rhythm, lack in capillary circulation, are common. With the vaso-motor disturbances, especially in women approaching the climacteric period, the flushings, sensations of giddiness, etc., we are all familiar. The blood changes, I must confess, are as yet too imperfectly understood to make any definite statement in regard to their presence in the early stages of mental disease. Dr. Lewis Bruce has reported some interesting observations from which we are told that after a patient has suffered from certain forms of mania there is a persistent leucocytosis, and that if such a patient relapse there is a marked fall in the leucocytosis and especially in the polymorphonuclear cell percentage prior to the onset of the attack. McPhail tells us that there is no evidence to show that anemia is in itself a cause of insanity, yet an anemic condition of the blood is, undoubtedly, in many cases intimately associated with mental diseases. All observers agree that there is a marked deficiency of red cells and hemoglobin, especially in cases of melancholia.

In regard to paresis, and the special features of a case that presents indications of that disease, it can scarcely be within the scope of this paper to deal. Whether we agree with the theory of Ford Robertson and others that paresis depends upon the occurrence of a general toxic condition, the exact nature of which is still obscure, or that syphilitic infection is the sole cause to which general paralysis is traceable, we cannot fail to see in the history of every case, opportunities which might perchance have been taken to ward off the advance of the toxic element which, when once it has gained a foothold, seems to disdain our best therapeutic measures.

We are all well aware that it is an extremely difficult matter to define the border line between sanity and insanity. Urquhart tells us that we might as well ask one to chalk off the foundations of a rainbow as to ask when a man becomes insane. I have fre-

quently been puzzled in reading the history, as outlined by the family physician, and particularly his answer to the question as to the duration of the insanity. Too often the answer is vague and unsatisfactory. Often one event or experience is cited, while if the real facts were given we might learn that the mental symptoms were merely the culmination of a long train of pernicious influences in a person already predisposed by heredity and environment to mental disease. The alleged causes are by no means invariably the real ones in the development of insanity, and the clinical facts brought out rather indicate preliminary symptoms that have been passed over unnoticed by the friends of the patient.

An attack of mental disease cannot be regarded as a simple or localized phenomenon. There is a harmony of action existing between the brain and the nerve centres in the cord and the special ganglia of the organic systems of the body. The sensory apparatus often presents the first indications of degeneration. The mental cortex is apparently the centre of the organism. The higher the centre the greater do we find the power of resistiveness. If the defences are weak, as in the great number whose history is blighted by the taint of heredity, the natural resistiveness is noticeably weakened. It is for this class especially that the importance of the early recognition of premonitory symptoms appeals to us, for in those not naturally predisposed to insanity many of the symptoms to which I have called attention occur without any mental attack. The element of heredity so often prevails that the importance of careful study and attention to the preliminary symptoms, especially the manifestations of disturbance in the lower nerve centres, indicating that a storm is approaching, cannot be too strongly urged. The progress in our knowledge of mental diseases is certainly pointing more clearly to the fact that all the varied phenomena that we now know as insanity should be regarded as merely an expression of departure from a normal condition in which the whole nervous system is concerned.

We cannot shut our eyes to the fact that insanity is on the increase and that if we are to combat that advance success must be sought by adopting prophylactic measures. To prevent insanity were better than to cure it, which, we know too well, is often impossible. The task may indeed be a difficult one in which to accomplish anything like a measure of success, when we are so often brought face to face with the baneful influences of heredity. Even, however, with that seemingly insurmountable barrier in our pathway, we may, I am persuaded, do much, not only by discouraging its propagation from generation to generation, but, by an early recognition of those symptoms which so often are a prelude to insanity, may in many instances turn aside the current which points towards a condition we are all gratified to see our patients escape.

**SUBCUTANEOUS INJECTIONS OF OIL INCREASE CELL
ACTIVITY OF THE BODY—WITH ESPECIAL
REFERENCE TO THE TREATMENT
OF CONSUMPTION.**

BY THOS. BASSETT KEYES, M.D., OF CHICAGO.

Theories of Immunity.—Let us now consider some of the theories of immunity and later see how digestion of fats and injections of oil meet these theories, as they do in many particulars.

In all serum therapy in which experiments have been vigorously carried on since Koch, in 1882, published his first article relative to his discovery of the germ, it has been decided that such serums, should such a one be discovered to prevent tuberculosis, will not act so as to destroy the germ directly, but in a secondary way by stimulating to increased energy the white corpuscles of the blood, or, as Buchner puts it, that perhaps in the white corpuscles the defensive power of the blood (alexin) originates, while Metschnikoff believes their action may be due to increasing phagocytosis. How often the blood in a state of health prevents the growth of disease germs in a similar way no one would be able to compute, but it is known that even germs of the most severe diseases may be found in the secretions without having excited the disease of which they are characteristic, and it is this power which in itself constitutes immunity.

The lateral chain theory of immunity formed by Ehrlich, in 1897, has been looked upon as an hypothesis of great value in explaining natural and acquired immunity, it being based upon the specific action of toxins, a distinct toxin being formed for each substance eliminated from the body, being a bacteriolytic serum stimulated by the presence of one kind of germ or pathological substance, and being devoid of action upon another. Ehrlich also founds his lateral chain theory upon the mechanism by which the cells are nourished, this cellular protoplasm being very complex, with many combining functions, or "lateral chains," carried on by "receptors" of various forms, and according to its peculiar form is able to secure by attachment the substances called "haptophores," which it can use and for which it is said to be particularly adapted. The receptors formed for the purpose of taking up nutritious haptophores may also take up poisons and destructive haptophores as of pathological germs which have gained access into the system. Should this be the case, according to the hypothesis, the pathological germs may stop the nutrition of the cell and bring about its destruction; on the

other hand, should the pathological substance not attach itself in a quantity sufficient to destroy the cell, it forms new receptors for taking up nutrition in, that its life may be maintained. Through repeated attacks of pathological substances (pathological haptophores) the cell, in order to maintain itself, grows new receptors greatly in excess, which are finally liberated into the plasma, and are capable of uniting with haptophores, either pathological or nutritious, and being separated from the cell form products of immunity, and thus animals become immune from certain poisons and pathological conditions because their cells either lack the appropriate receptor or possess an unlimited number of them. This hypothesis is accepted as accounting for natural and acquired immunity, study and observation showing that lowered vitality of the individual lowers the immunity. As pointed out by Prof. Welch, in his Huxley lecture, it was interesting to see that this theory, propounded for the purpose of explaining immunity, like the other great theory of phagocytosis, has the mechanism of cellular nutrition as its basis.

How Fats Assimilated from the Intestines and Oils Injected Subcutaneously Meet the Great Theories of Immunity, and How They Cure the Disease.—When fat is taken into the intestine, it is split up into oils and assimilated mechanically by absorption through the villi, the white blood cells being in readiness to absorb them and being particularly abundant at the villi, after a hearty meal. The process of assimilation of fats is not agreed by all observers, and, therefore, not exactly understood, but that it enters the blood in an emulsified or solid form, and under certain conditions is deposited directly in the tissues, is assented to. With many tubercular patients the fat is not digested, but passes away with the stools.

In subcutaneous injections of oil, we use an oil which, because of its purity, needs no straining, and not being in the form of fat tissue, needs no splitting into oil globules by the intestinal juices. The oil injected under the skin, therefore, enters the blood in a way somewhat similar as if it were strained through the villi of the intestine. Let us notice what happens when a subcutaneous injection of oil is given. First we observe a puffing up of the skin, on account of its being raised by the oil injected, and this swelling corresponds exactly to the amount of oil injected. A rosy circle, several inches in width, at once takes place. This active hyperemia, showing the blood at work, and in a period of about three hours 20 c.c. of oil will have entirely disappeared, leaving no trace of where it was injected. It has been absorbed, and has gone to make new tissue and give nutriment to the blood.

Subcutaneous Injections of Oil Produce Immediate Growth of Blood Cells.—An examination of the blood after an injection shows an increased growth of its cellular constituents, both in

number and size. This meets the theory of immunity as to phagocytosis; it also can be applied to the theory of immunity devised by Ehrlich in that oils either assimilated from the intestine or from subcutaneous injection enter into the circulation. Now, on account of the increased amount of nutrition in the blood, the cells must develop more receptors to receive the nutrition or haptophores, and on this account receptors would be as necessary to grow in excess, and thus be greater in number to combat with pathological germs and to supply cell nutrition.

The peculiarities of the body juices of immunized animals, and the formation in them or presence of antitoxins, amboceptors, and other antibodies, depend upon the separation of the unnecessary receptors from the excessively stimulated cells and experiments with the toxine antitoxine reaction and the amboceptor reaction indicated that these separated receptors are able to continue their combining functions in fluids containing them. The complementary body or solvent of foreign and pathological cells is not accounted for in Ehrlich's theory, and of this we are left in doubt, but is thought to be a property of the blood, rather than of an antitoxine injected.

It has not been my intention to claim that oil injected is a true antitoxin against tuberculosis, but that it acts as such in part according to the theories of immunity cannot be denied, and the digestion of fats and oils by the intestine shows why some people are naturally immune from many diseases and particularly of the disease tuberculosis. Clinically it is proven that when fats and oils can be digested by the tubercular patient that they improve rapidly from the disease, that the people who habitually eat large quantities of fats never have tuberculosis, and if they do occasionally it is because the fat is not assimilated; and that subcutaneous injections of oil form the most valuable part of the plan of the treatment of tuberculosis, being perhaps as near a specific for the disease as anything is possible to be.

Outdoor Life Promotes Appetite and the Eating of Fats.—Outdoor camp life promotes appetite and the eating and digesting of fats. With these facts in view, some five years ago I established an out-of-door camp for the treatment of tuberculosis in Northern Wisconsin, and was one of the first to recommend tent life for consumptives at the first meeting of the American Congress of Tuberculosis, at which time it received considerable adverse opinions, but which is now very generally advocated. It has proven of great value in the treatment of tuberculosis, inasmuch as it promotes assimilation of food, it strengthens the corpuscles of the blood through the pure air breathed and the stimulation of the sun, the blood is better enabled to take up nutrition and use it in replacing diseased tissues.

Selections, Abstracts, Etc.

NOTES ON NON-OPERATIVE GYNECOLOGY.*

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ALTHOUGH the subject of this paper is non-operative gynecological work, I trust that I shall not be suspected therein of desiring to minimize the operative side of such practice. During the twenty-five years of my professional life I have seen much of surgery in diseases of women, and I have always held and taught that where an operative procedure is indicated, and there is neglect to give the patient the benefit of such procedure, the gynecologist in charge is recreant to duty.

In the early days of my practice the operative craze was in the air. To operate with a promise of accomplishing so much at a rapid rate was very attractive, and unless there were decided counter-indications, the patient was urged to accept the radical rather than the conservative method of treatment. The patient was assured that she would avoid a long, tedious experience, and the surgeon was pleased at the prospect of quick work. The routine and unending patience required to restore a gynecological patient to health and comfort had small credit in those days. Many cases gave brilliant results. Many others, although operated upon after the most approved methods and under strict aseptic and antiseptic precautions, were disappointing. Individual idiosyncrasies, unexpected local involvement, and systemic conditions modified the expected result.

The pendulum began to swing back, and each individual case became a law unto itself.

To-day, the most frequent division of gynecological cases that comes to us is those that must be operated upon to save life, and those that may be, to save time and a long disability.

In placing before our patients the question of operative interference, with its probable advantages and possible disadvantages,

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the working woman will, as a rule, elect the operation, for time means much to her. But as women rise in the social scale they are less ready to embrace operative interference, except as a last resort, but are willing to spend time and means indefinitely if there is prospect of ultimate recovery.

No experienced specialist will for a moment question the propriety of early operative interference, where possible, in most pelvic or abdominal tumors, solid or cystic. I have usually excepted small fibroids, so situated as not to give pressure, and of non-hemorrhagic nature, with a warning to the patient of their possible rapid development, and a caution to be prepared for immediate operation should unfavorable symptoms arise. However, there is a class of fibroid cases where the symptoms appear serious, but where they will soon yield to non-operative measures, and defer indefinitely the question of operation. The following case illustrates this class:

Now travelling in Egypt is a patient who considers herself perfectly well. Five years ago, at the age of 48, she came to me with a history of profuse and painful menstruation, lasting six, eight; and ten days. She had marked gastric and intestinal disturbances, and more or less constant pelvic distress, which became more pronounced at each menstruation. Leucorrhœa was present during the intermenstrual period. She was much depressed. There was a history of gradual enlargement of the abdomen. On examination it was found that while the cavity of the uterus measured only three inches, there were multiple fibroids reaching half way to the umbilicus. One was pedunculated, the size of a tangerine orange, and had dropped down into the posterior cul-de-sac. It had become impacted there by development, and was extremely sensitive. In the knee-chest position, I was able with some effort to dislodge it, and with a properly-adjusted tampon to keep it out of the pelvis. An operation was advised, but while the patient and her husband were considering the matter, she was made so comfortable with palliative treatment that they elected to try that method for a time. Ergot and later compound viburnum tablets were taken to aid in diminishing congestion. Six months later all symptoms had disappeared. The tumor had so much diminished in size that it reached but slightly above the pubes. The patient could take long walks with comfort, menstruation was scanty and painless, and she refused to consider an operation. Two years later, the menopause was established. The patient still reports every few months. Now there is only an irregular tumor, freely movable behind the pubis, and entirely without sensitiveness. She was allowed, without question, to go abroad. Both the patient and her husband are fully aware that

degenerative changes may come at any time, and are ready to return should any pelvic symptoms arise.

Further conditions, involving the question of operation, are: Accidents of childbirth and malignant disease. With improved methods of midwifery, the former are now seldom seen calling for secondary operation. But malignant disease is a constant possibility. No one familiar with its contributing causes would leave cicatricial tissue to become an irritant, or interfere with pelvic circulation. It is inexcusable to treat a beginning malignant condition for an eroded cervix, when by the use of cocaine, in one's office, it is so easy to remove, without the patient's knowledge, a small piece for microscopical examination. Of course, pus collections should not be allowed to remain in the pelvis any more than in any other part of the body.

With this definition of the limits of my subject, I will mention some of the more frequent general conditions that call for treatment in non-operative gynecological patients, and methods used to correct them; and some of the most frequent local troubles found in these patients, and the means utilized to relieve them.

There will be no attempt to treat this subject exhaustively.

In dealing with these cases successfully, one must realize that while they present themselves for gynecological treatment, many of their symptoms are not purely and exclusively gynecological, although often they are reflexes from functional disturbances springing from the original pelvic disorder. While the local conditions must be treated, the local measures adopted will be made more effective if, in each case, combined with them, is a careful consideration of the general condition, and those measures utilized that will most quickly restore any functional disorder that may be present.

The most frequent general symptoms of these patients are the derangements of secretion and excretion, anemia, and symptoms of the nervous system. The most frequent local conditions are: (1) Displacements of the uterus, with or without displacements of the adnexa; (2) catarrhs, acute, sub-acute, and chronic, confined to the uterus, and (3) the same, with extension to the tubes and secondary involvement of the ovaries.

I have unbounded faith in local treatment, but in many cases one can use local treatment indefinitely and utterly fail to cure the patient if with it do not go general medication and hygiene. This includes diet, clothing (few women dress properly), carefully regulated out-of-door life, with some interest to divert the mind from introspection.

The most frequent nervous symptoms that gynecological patients wish to be relieved of are their nervous instability ("nervousness"), headache, backache and other neuralgias, and in-

somnia. The nervous symptoms generally arise from imperfect capillary circulation in some part of the nervous centres, more often from the spinal cord, and are often associated with deficient excretion from the skin, kidneys, or bowels, or defective cardiac action. In considering the nervous symptoms, the condition and improvement of secretion and excretion first demand attention.

To assist excretion by the skin, I always insist upon a daily bath, preferably on rising, and taken as hot as can be borne for three minutes, scrubbing well with a brush or coarse cloth and soap, and followed by a cold shower, or cold water poured over the body from a pitcher. With delicate patients the latter is preferable, since salt can be added to saturation, which will raise the specific gravity of the cold water, and less shock will be felt. One unconvinced of the amount of waste thrown off by such a procedure, need only examine a specimen of urine taken before and another after such a bath, and note the amount of urinary solids in both. I always give my patients, with the directions for the bath, a little idea of the anatomy of the skin, its condition when the glands are not acting well, and also of the vasomotor physiology involved, thus insuring their hearty co-operation. Engelmann, of Kreuznach, has written that "for gynecological patients general bathing under scientific supervision is a remedy of great value. Associated with friction it acts on the same principle as a counter-irritant, attracting a considerable volume of the circulation to the surface, thereby relieving splanchnic congestions, and by stimulating the nervous system becomes an active promoter of absorption. It is valuable as a remedy for chronic exudates, adhesions, neoplasms, and in the treatment of amenorrhea due to obesity."

The amount of urinary solids voided daily by a gynecological patient should be early determined. Not infrequently I have found the excretion of solids 30 to 40 per cent., or even more, less than normal. These patients present varying degrees of nervous irritability, and in some extreme cases are near uremic convulsions. I consider that it is far more important in such cases that the renal insufficiency be determined than that the displaced uterus, or prolapsed or diseased ovary or tube, be diagnosed. We must not forget that the kidneys, ovaries, and tubes spring from the same source embryologically. It is a clinical observation that a close sympathy exists between renal insufficiency and pelvic disorders. Patients with renal insufficiency will complain of irritable nerves, more or less headache, backache, and insomnia. Large draughts of water often restore the kidney action without medication. I have such patients take at least eight glasses a day, either hot or cold, on an empty stomach. Where insomnia is a marked symptom, I have found two or three glasses of water, two

or three hours after dinner, in the evening, to be a better hypnotic than drugs. I always direct that, upon lying down, the patient shall rest upon the right side for a time to allow the water to pass readily out of the stomach into the bowel. If one selects a pure and tasteless spring water it is not difficult to have any amount desired taken with the most satisfactory results. Malted milk is valuable as a hypnotic in this connection, a cupful taken hot on retiring, and again in the night, if wakeful. Of course, a weekly laboratory examination of the urine is a matter of routine.

It has been aptly said that "constipation, that protean monster, can derange more lives with neurotic symptoms than any other one pathological condition that can be named." It is, as a rule, present, to a greater or less degree, in all gynecological cases. Mild cases will be corrected by simple laxations and régime. The loaded colon exists much oftener than is suspected in those who have daily movements, as well as those who have not. The daily movement may pass down through the accumulation of feces, impacted in the loculi. Two symptoms without an abdominal examination are suggestive of a possible colonic impaction, the presence of chloasmic spots and the voiding habitually of very dark feces. When laxatives are relied upon, I have found it advantageous to give with them calomel or blue pills, more or less frequently. The best means to rely on to empty a loaded colon has, in my experience, been colonic flushings. They should be used daily, as long as dark feces are voided, once or twice a week when the discharges become yellow. These flushings have been called "liver washers," because, if properly given, a large part of the water is absorbed from the intestine, taken up by the portal circulation, and passed through the liver. A more or less congested liver is always present in these cases.

The patient, in the knee-chest position, receives from two to six pints of water as hot as can be borne, either soapsuds, or a physiological salt solution. As the colon becomes distended, the scybalous masses usually separate from the wall of the loculi, and fall into the lumen of the bowel, but if this does not readily occur, gentle kneading of the bowel after it is filled with water will help to dislodge them.

The specialist who sees many cases of diseases of women realizes the very great importance of having a careful abdominal examination precede the pelvic one. Many cases show varying degrees of fecal retention, but the following case is fortunately an unusual one in its exaggerated degree of colonic involvement:

Mrs. L. Md., aged 68, an extremely nervous and hysterical woman, a patient of Dr. Julia G. McNutt's, recently presented herself, after an absence of some months. She reported that she had been more or less confined to her bed for four months, and

that she had been trying for several weeks to get strength enough to come to the city from one of the suburbs, in order to see if she could not be relieved of the constant discomfort in her right side. She came into the office walking with difficulty, supported by her son, a broad-shouldered athlete over six feet in height. Her local physician had assured her that there was a gradual development of a tumor in the right side, and, from the position, it was probably connected with the appendix. Immediate operation was advised. She wished to see Dr. Julia McNutt before deciding. She could distinctly define the mass herself. It was extremely sensitive. It was noticed on shaking hands with her that her skin was cold and clammy, the sclera yellow, complexion pale and muddy, chloasmic spots on the face. There had been no elevation of temperature. With this history the condition of the colon was interrogated before a pelvic examination was made. As suspected, the large, defined mass was found to be entirely within the bowel, doughy to the touch, and very sensitive on account of the long retention. The ascending, transverse, and descending colon was crowded with feces, and on vaginal examination the whole pelvis was found to be filled with a protruding rectum containing hard, scybalous masses. It was difficult at first to make the patient understand the real condition. She had had a daily movement by rochelle salts and found it hard to realize how the salines could keep a canal through the centre while allowing the mass to remain. In her thankfulness at escaping from the dreaded operation, she was willing to follow the directions which were, colonic flushings daily, laxatives, bitter tonics, and strychnine. In a week she returned, smiling and unsupported, and happy to have lost her tumor. Examination confirmed its entire disappearance.

I believe autoinfection from renal, intestinal, or cutaneous insufficiency, to be of supreme importance in these cases. It is well recognized by neurologists as an etiological factor in their specialty, and as a very important point in considering the nervous symptoms of gynecological cases it is not to be lightly passed by.

No one symptom is reported to us so frequently as occipital headache. It will be found frequently in conjunction with a weak heart, the most common cause of which is the poison absorbed from intestinal decomposition. It has been said very tritely that "the weakness of a weak heart is of the greatest possible consequence." This occipital headache yields readily to one or two doses of digitalis. Coal tar derivatives are decidedly counter-indicated. It used to be supposed that it was because of the direct cardiac stimulant that digitalis behaved so well. But Sajous points out that it is quite indirectly a heart stimulant. He says: "Digitalis is probably the most perfect cardiac stimulant of our pharmacopeia, but only because better than any other drug it

enhances the activity of the pituitary body, which, in return, so stimulates the suprarenal glands as to bring them to their highest functional possibilities. The physiological action of the suprarenal glands is to transform or destroy the toxic substances which are produced in the organism under the influence of muscular activity and of the nervous system." Its action, then, is to start up this circle of activities that neutralize the toxins that depress the heart.

Most of these patients are anemic, partly from autoinfection. Although iron is so much needed, it is, as a rule, badly borne. Those substances that increase nutrition, usually give the most valuable results, peptonoids, phosphates, malt extracts, and cod liver oil when tolerated. It is important to have blood examinations made at regular intervals as indicated. The full benefit of a blood examination can be obtained only by the examination of all the constituents of the blood. During the last year this fact has been most clearly demonstrated in the case of three sisters, who, although with the same heredity and environment, presented very different temperamental states. Their hemoglobin varied but slightly, being respectively 78, 72, and 60 per cent. This test could have been of little service as a guide to the general treatment, if there had not been other marked characteristics in the blood of each, which pointed to decided differences in their general conditions, and suggested entirely different lines of treatment in the individual cases. The results entirely justified the adoption of measures along the lines indicated by the several blood analyses. The following is a report of the blood examinations in these cases made by Dr. R. L. Watkins, together with notes of diagrams and treatment:

Miss O. D., single, aged 36. Myofibroma; hysterectomy; hematocele; blood corpuscles diminished from hemorrhages; microcytes; neurasthenic.

	Hemoglobin	Red cells	White cells	Microcytes
July 20, 1904 ..	78 per cent.	2,950,000	.. 5,900	.. Many
Oct. 25, 1904 ..	85 "	.. 3,450,000	.. 6,500	.. Diminished
Feb. 23, 1905 ..	93 "	.. 3,500,000	.. 4,500	.. Less
June 8, 1905 ..	98 "	.. 3,900,000	.. 5,900	.. Very few

Treatment.—High, dry inland air; laxatives; bitter and heart tonics; peptonoids; electricity.

Miss A. D., single, aged 28. Endometritis; salpingitis; autoinfection; neurasthenic.

	Hemoglobin	Red cells	White cells	Microcytes
Jan. 23, 1905 ..	72 per cent.	.. 3,140,000	.. 5,850	.. Many
Feb. 23, 1905 ..	80 "	.. 4,140,000	.....	.. "
June 8, 1905 ..	80. "	.. 3,540,000	.. 6,550	.. Absent

Treatment.—Hygienic measures; laxatives; digestives; mineral acids; nerve tonics; electricity.

Miss W. D., single, aged 24. Pelvic peritonitis; anemia; exostoses of middle turbinated bones.

	Hemoglobin	Red cells	White cells	Microcytes
Feb. 23, 1905	60 per cent.	3,750,000	6,900	Very few
June 8, 1905	72	3,900,000	7,100	"

Treatment.—Operation on nose; laxative; iron; fat emulsion; electricity.

All had pelvic disturbances, and all were anemic. The first had a large myofibroma of the uterus, with very profuse hemorrhages. Following operation her blood showed red and white cells in good condition, but their number really diminished to about one-half the normal quantity. A great many microcytes were present, probably the result of the repeated hemorrhages (Jaksch). The second had dysmenorrhea of long standing, with endometritis and salpingitis, autoinfection, and was neurasthenic. The pelvic reflexes had been the cause of marked disturbances of excretion and secretion, which in turn induced autoinfection and the resultant neurasthenia. Autoinfection showed in the blood by very marked microcytosis. While there was not such rapid improvement in the blood condition of this patient as desired, except for entire disappearance of microcytes, there has been a great improvement in the functional disorders and the condition of the nervous system. The third case had a pelvic peritonitis, secondary to a catarrhal salpingitis. She had one nostril occluded and the other much narrowed by exostoses. Diminished hemoglobin was considered due to the difficulty of inspiration with imperfect oxygenation of the blood. The nares were relieved by operation, and improvement followed. In each of these three patients there was enlargement of the thyroid gland of varying degrees. This showed that there had been of long standing a vasomotor irritability which had resulted in this partial paresis of the nerves in this locality. This is a not infrequent complication where pelvic reflexes have been in existence for some time, and this complication, as a rule, disappears when the nerve fret is removed and vasomotor tonicity restored.

When a patient presents herself for local treatment, and on inspection we see a mucopurulent or purulent discharge escaping from the cervix, we must first decide as to its nature and cause. For treatment this leucorrhœa comes into three classes:

(1) Congestive leucorrhœa, caused by conditions outside the organs of generation, such as constipation or abdominal tumors, fluid collections, or plastic exudates.

(2) Due to displacements of uterus or adnexa, which would affect the circulation.

(3) Due to diseased state of the uterine mucosa and glands, or of the appendages, with or without the former conditions also.

Fortunately many patients can be readily placed in the first or second class. We can promise a more or less speedy relief of symptoms, as we are able to relieve the constipation, elevate and support the uterus, if indicated, and where accompanied by local and general relaxation, increase general and local tonicity. Where a vaginal support is indicated, cotton or wool should be used at first, but as soon as possible a firmer one of soft or hard rubber should be substituted, the latter always when it can be worn, for its greater cleanliness and firmer support. One should aim to limit as early as possible the patient's visits, having her return, however, as often as indicated to assure one's self that improvement is progressive. All support should be removed as early as can be done with safety, insisting upon a return at stated times, that the gynecologist may be sure that restoration has been secured.

The subject of this paper requires a somewhat detailed description of vaginal tamponade, and the subsidiary local measures that usually accompany it. As the vaginal tampon is an agent useful in both simple and complicated non-operative cases, they will be considered together under this head. If the patient be placed well down in the knee-chest position and the perineum raised by the left index finger, the air enters and by its own weight the whole pelvic contents gravitates toward the abdominal cavity. If this does not readily occur, the finger holding the perineum can be carried forward, and by gentle pressure against uterus or appendages, help them to move up as far as possible. No pressure should be used that causes pain. It may be that no perceptible dislodgment can be obtained, but a tampon properly placed will give comfort, and medication can be kept in contact with the tissues. If one end of a narrow strip of non-absorbent cotton or wool, 12 to 19 inches long, be carried by a long dressing forceps against the back of the index finger as it holds up the perineum, up into the posterior cul-de-sac, the tissues along the canal need not be touched. The tampon can be packed gently back and forth in the cul-de-sac more readily and with less discomfort to the patient than can be done with the aid of a Sims' speculum. The material should be soft and yielding, either aseptic non-absorbent cotton or sterilized wool. Absorbent cotton should never be used, since it tends to pack into a hard mass when wet. The whole of the posterior cul-de-sac should be filled, but not packed hard enough to cause discomfort by pressure. In introducing the tampon, the end first carried up has a string attached of firm, soft knitting cotton. This end, seized by the forceps, is saturated with the medicament selected and turned over into the

adjoining clean part of the cotton. It is then passed up quickly to the cul-de-sac, before the medicament soaks through, to be rubbed off on vulva or vaginal canal. The lower end of the string, caught around the little finger of either hand, or between the thumb and second finger of the left hand, as the tampon is introduced, prevents the entire string from being carried up with the tampon. No two patients need the same amount of cotton or wool. With the same patient the amount varies according to fullness or emptiness of the bowel, or the forward position of the uterus and adnexa. The object is to fill the cul-de-sac comfortably. One can readily tell in packing when there is enough, and the rest of the strip of cotton can be pulled off. Care should be taken that, without giving pain, the cotton is gotten well up behind the cervix. When in place, the patient should be directed to rise straight up on her knees, while the index or packing finger holds the cotton in place behind the cervix. By this precaution the air that ballooned the vagina is allowed to escape and the tampon, held by the finger, is not crowded down by the return of the elevated pelvic organs. At the same time that the tampon is held in place, if it is not too large, the cervix will be felt to ride down over the cotton, holding it back behind it. This leaves the external os free, allowing opportunity for free escape of any discharge from the uterus. A carelessly adjusted tampon can do much harm by preventing free drainage. On removing the finger, while the patient is still straight upon the knees, the part of the string remaining outside should be cut, leaving only a piece an inch in length beyond the vulva. If it be longer, it may be drawn upon by the inner part of the thighs in exercising and cause the tampon to be displaced, as well as cause chafing. When the patient stands, the pelvic organs gravitate back again toward their former position, but the tampon now receives their weight and holds them somewhat above their former level. If only for a fraction of an inch, it is sufficient at least to take the drag off adhesions if they are present. If there is tubal involvement, I usually place a little larger amount of packing on each side of the cul-de-sac, if it can be pressed up without pain. If the distal end of the tube can be kept in the slightest degree higher than the proximal, it will favor drainage into the uterus. In rare cases large tubal collections have discharged through the uterus, the probable cause being that the exudate caused an adhesive inflammation of the tube, holding it upon a plane high enough to permit drainage. When the inflammatory swelling, which helped to produce the closure or constriction of the uterine end of the tube, has been sufficiently reduced, the escape of the fluid collection is possible. As a rule, such a fortunate termination does not result. Generally, by increased weight from its pathological condition, as well as relaxed

supports, the tube has sunken to a lower level than the fundus. Becoming adherent in this new position, any evacuation of fluids into the uterus is mechanically prevented. In a catarrhal salpingitis of long standing, tamponade may make drainage through the uterus possible. And, not infrequently, vaginal treatment, with patient, judicious attention to detail, will show the entire clearing up of a case with exudations, adhesions, and tubal and ovarian complications. So long as there is progressive improvement, one is justified in continuing these methods. Whether the condition be changed by drainage or absorption, it is well to follow out the measures that show progress, although one may not always be positive about the exact course taken in the recovery. Should there be, however, recurrent attacks of peritonitis, however slight, or symptoms of retained pus, the patient should be urged to submit to operative interference and warned of the dangers of delay. The patient who is under treatment for a heavy displaced uterus, with involvement of the appendages, should wear continuously a properly adjusted tampon, to be changed as indicated. Particularly should this be the case during the menstrual period, especially if the flow be profuse or prolonged. It should be changed daily if the patient is able to be about. Many do much better to be so protected and permitted a certain amount of liberty. The tampon should also be changed daily where there is an irritating leucorrhœa or an odor to the discharge. As improvement follows, its renewal may be delayed to the second, third, or fourth day, as indicated. When conditions improve, and there is no discharge, but a firmer support is impracticable, I have used wool and seen the patient only at intervals of a week or ten days. The tampon need not be removed when douches are taken, if it is placed well up behind the cervix. It becomes saturated with the water, but when the patient sits up the water is pressed out, and if wool be used it will retain its elasticity. In most patients, when the local sensitiveness is relieved, a properly adjusted support must take the place of the tampons. It is interesting to note how often, when the utricular glands are being restored by the intrauterine injections and the local circulation improved by appropriate treatment, the weight of the uterus and adnexa have greatly diminished. The ligaments, muscles, connective tissue, and the blood vessels have participated in the general upbuilding of the whole body, and they can now give the needed support that they were intended for. Then we begin by lessening the amount of material in the tampon, after a little leaving it out after every other visit, watching effects and returning to its use at any time indicated. It is left out altogether when it is found that the sagging does not return on its removal.

In a case where there is much sensitiveness, exercise is

restricted and a douche is ordered every two to six hours, of twenty to thirty minutes' duration, at a temperature of 105 to 124 deg. F. In some cases, in place of the douche, more rapid results are obtained in relieving pain and inflammation with the use of antiphlogistine. One-half to one ounce wrapped in the end of a small tampon, is passed quickly up into the cul-de-sac, with the patient in the kneé-chest position. The rest of the tampon is packed lightly over it to keep it in place, and it is changed in forty-eight hours. At the same time a layer one-fourth inch in thickness is spread over the hypogastrium, covered with absorbent cotton, to be removed when the remedy dries and peels off. This will be twenty-four hours in some instances; in others not till forty-eight hours or more. Pure ichthyol often gives quick relief from pain. Later a solution of ichthyol, twenty-five to fifty per cent. in glycerin, may be used. As the tissues become accustomed to one remedy, change to another, which may be of no greater value, but which will serve to break up a "habit of body." Thigenol is as valuable as ichthyol, while it has the advantage of being odorless. The stains made by it on linen can be quickly removed, and it is also non-irritating and antiphlogistic. It is used in solution in glycerin in eight to twenty per cent. on tampons. A change may be made to applications of Churchill's compound tincture of iodine to the vaginal roof, using pure glycerin upon the tampon, at the same time painting the hypogastrium with this tincture if needed. To some patients glycerin is an irritant to the mucous membranes. If care is not taken commercial glycerin may be substituted by the druggist, which is irritating from a trace of sulphuric acid. If I am convinced that the fault is not in the glycerin, I substitute in its place albolene or lanoline. Where simple astringency is needed, I use upon the tampon a solution of tannin or acetate of aluminum in glycerin, one to two drams to one ounce. When a patient complains of constant pain, I apply a small fly blister, moving it about as fast as one heals; or the Paquelin cautery, lightly brushed over the seat of pain. Both give relief.

In my experience there is an undoubted value in the use of electricity for neurotic women and young girls, as an adjunct to the local treatment. As the patient lies upon the table, a flat pad is placed under the neck, connected with the positive pole of a galvanic battery, another under the sacrum, connected with the negative pole. The current is made as strong as can be borne for the needed vasomotor stimulation. This treatment is emphasized while the vaginal treatment is minimized. If there are many reflexes from the pelvis, after a little the positive pole is removed from the neck and placed on the hypogastrium. Even a ten-

minute application does much good. I frequently alternate at every other visit the high frequency current or the vibrator.

When we are obliged to place a patient in the third class, where the endometrium is diseased, to the preceding treatment should be added, as early as safety permits, intrauterine irrigation.

The uterus that needs irrigation is as a rule heavier than normal. The endometrial glands are diseased and the irritation has brought more blood to the organ. The interstitial tissue has greatly increased and the ligaments, blood vessels, and connective tissue packing are all relaxed and no longer furnish adequate support. "In the light of modern pathology," says W. E. Ashton, "inflammation of the uterine mucosa becomes a subject of vital importance, as it is the starting point of nearly all the inflammatory lesions of the pelvic organs." As the uterus and appendages sink in the pelvis they usually follow the curve of the sacral canal and become retroposed. The pelvic circulation is interfered with by the descent and displacement. The veins would need to empty themselves uphill, which they are little disposed to do. They become tortuous and distended, and the pelvic organs are fed by dammed-back venous blood. The increased weight and displacement lets the organs interfere more or less mechanically with the action of the rectum, allowing fecal retention. The crowded bowel, in turn, by pressing forward and downward, increases the displacement of the uterus and appendages. The fluid part of the retained fecal matter becomes absorbed into the pelvic circulation, making a blood that will take little part in any nutritive changes that are attempted. The dusky red look of the tissues must be changed to a brighter coloring, and, until we establish a clean arterial pelvic circulation in place of the dirty venous one, it is useless to expect much from intrauterine irrigation. Diet, exercise, and laxatives can do much, but better and more far-reaching results will be obtained if with them are combined colonic flushings, since they not only empty the bowel more perfectly, but also when part of the water is absorbed, they flush the liver and kidneys, organs always more or less congested in these cases.

The weight of a heavy engorged uterus retrodisplaced, dragging upon tender and adherent ovaries, complicated by varying degrees of salpingitis, will, with every movement, be a constant source of distress. Unless the treatment inaugurated makes comparative comfort take the place of ever-present varying degrees of discomfort, it will be difficult to persuade the patient to submit to it long enough to prove its value. The first consideration is, to restore the pelvic organs to a better position and to remove the strain upon adhesions if they are present. In short, the condition

calling for intrauterine irrigation in non-operative gynecology is always a complicated one, and its various divisions must receive appropriate attention. Some patients who should not be irrigated at the physician's office, may be so treated at home or in the hospital, where they are kept in bed. Such are acute inflammatory conditions, either septic or gonorrhoeal. Moreover, chronic cases, where the patient is very nervous, or the appendages are involved to any great degree, should not be irrigated until general and local irritability is diminished by general régime, douches, and tampons. A sedative tablet of valerian, assafetida, and sambul, two to six times a day, will often be a valuable help to control fretted nerves.

The intrauterine irrigation for postpartum and postoperative use is a procedure of long standing, and from it and its beneficent results has sprung its employment in nonoperative gynecology, originating with operating surgeons. Its rationale is well known as a cleanser and antiseptic (if medicated), as a stimulant to the vasomotor nerves, blood vessels and muscular fibres of the uterus.

The time-honored medicated cotton-wrapped probe has very little effect upon the uterine mucosa, a fact easily proven if such a probe, wet with iodine, be passed to the fundus of the uterus before a hysterectomy. When the organ is laid open after removal, the staining will be found to be confined to the cervical canal in proportion to its patulousness, and a small stain will be seen at the fundus where the probe point touched. On account of the pear-shaped character of the cavity, the rest of the wall will have escaped the staining. To treat thus a chronic corporeal endometritis or metritis, one may expect to go on indefinitely with the work, should the patient permit the treatment to continue. Intrauterine treatment by the intrauterine syringe is scarcely more effective, while not without danger. Intrauterine applications of electricity in the hands of a specialist do not enter into the scope of this paper. One with hospital experience realizes how readily all parts of the uterine cavity can be reached by an intrauterine irrigation through a double current catheter. The cervical canal must be sufficiently patulous to allow the return flow should the eye of the irrigator become clogged with thick mucus or other obstruction. It is a perfectly safe procedure to practice in one's office work, provided intelligent care is taken in selecting cases, and the same aseptic precautions are observed that are considered necessary in hospital work, fresh gowns, sterilized instruments, solutions, and accessories, but, above all, care in selecting cases. Of course, no physician who was attending a septic case would practice intrauterine irrigation any more than he would use the scalpel under such circumstances.

The technic of intrauterine irrigation is comparatively simple.

The patient lies upon the table with a Kelly pad under her and the knees well drawn up. A cleansing vaginal douche is first given of sterilized water at a temperature of 105 to 115 deg. F., and, if indicated, one and one-half per cent. of lysol or two per cent. creoline is added.

The intrauterine irrigation which I prefer, is the Kelly modification of the Fritsch-Bozeman.

In most cases the medium size can be used, but one can be had which is no larger than the tip of a Simpson's sound, still large enough to permit a small, steady stream to pass. With so small an instrument few cervixes need dilating. Should, however, the internal os be so firm as not to readily admit this little instrument, I do not try to push it through, but see if a few moments' use of the negative galvanic current will not make it glide in. When giving intrauterine treatment, it is my custom to place over the hypogastrium a flat electrode connected with the positive pole of a galvanic battery. Another, with a handle attached eight to twelve inches long, is connected with the negative pole and placed under the sacrolumbar region. When desiring to dilate the cervix the stylette of the negative cord is removed from the handle and dropped into the little ring on the outer end of the irrigator. The instrument resting in the cervical canal with the tip firm against the internal os, will as a rule gradually dilate the os, and soon be felt to "slip by." If still held for a few moments longer, one can recognize that the tissues have sufficiently relaxed so that the catheter is freely movable and will permit an outflow of fluid if required. One must always be sure of a possibility for the exit of fluid, should the catheter be clogged. No risk can be run of distending the uterus by retention and the escape of fluid through the tube into the peritoneal cavity. Should the relaxation of the internal os not be so readily secured no further effort should be made in the office, certainly not by metal dilators or tents. Such a case should be dilated under ether, either at home or in a hospital. Plain sterilized water I most frequently use. The temperature may be from 100 to 118 deg. F., according to the patient. It should always be as hot as is comfortable. One patient will have discomfort if the temperature is above 100 deg. F., while others who have pain at 105 deg. will be relieved if it is raised to 110, 115, or 118 deg. The temperature may be increased gradually during the douche, and from time to time. The quantity used varies from one pint to one gallon. Where there is much discharge the irrigation is continued until the water runs clear. If pain has been induced and the hot water acts as a sedative, it is allowed to flow into the uterus until the discomfort is relieved. If the continued flow does not relieve pain, the irrigator is removed at once from the uterus, and the fluid is allowed

to flow into the vagina until discomfort is controlled. When the discharge has been irritating to the last pint of irrigating water some bland antiseptic remedy is added, or boric acid, one ounce to a pint, can be used. In infected cases, 1 to 10,000, or 1 to 3,000 bichloride of mercury; carbolic acid, one to two per cent.; or ten, twenty to fifty per cent. of an organic salt of silver may be employed. The last I have found specially valuable in gonorrhoea. In hemorrhagic conditions, such as fungoid endometritis or after abortion or curettage, I use Churchill's compound tincture of iodine one to two drams to an ounce of sterilized water. In these hemorrhagic cases, I often supplement irrigation by cramp bark or viburnum compound tablets, two every two to six hours, according to indications. Ergot may be sometimes indicated, but most cases yield without it, and the viburnum has the advantage of causing little or no disturbance of the stomach, which cannot be said of ergot. When the pain of uterine cramp occurs, it may be managed by simple measures. While bichloride of mercury is a most satisfactory remedy where needed, perhaps with this more than any other drug one needs to be prepared for more or less pain. Local means, such as a hot water bag, the hot vaginal douche, with or without the irrigator, the positive galvanic electrode over the fundus, with negative over the sacrolumbar region, may give relief. If not quickly effected, one to three tablets of a compound of acetanilid, caffeine citrate, camphor monobromate, and sodium bicarbonate may be given. Rarely a 1-4 gr. tablet of codeine may be needed. In these office cases, seldom, if ever, do I give a hypodermic injection of morphine. Occasionally it may be necessary in acute pelvic cases in hospital or at home. Then I always combine it with atropine sulphate, 1-150 to 1-200 gr., which will, in most instances, prevent its nauseating effects. I consider it a misfortune when a gynecological patient has to have a dose of opium or morphine, except in those acute conditions where it is absolutely impossible to substitute milder remedies. We all know the proneness of these patients to contract a drug habit, and loth should we be to lead one into all the horrors of its possession. A patient after an intrauterine irrigation is not allowed to leave the office with pain, and she is carefully instructed how to meet any return of it, which will be rare if asepsis has been strictly observed. Its return can, as a rule, be traced to some fault in mechanism, not in method, provided intelligent care has been exercised in selecting the case for irrigation in the office. And, moreover, if each time that the patient presents herself for such treatment the gynecologist makes sure that she is at that time in a safe condition for it. In a nervous, apprehensive patient, to prevent shock or relieve it, should it begin to appear, from half an ounce to an ounce of aromatic spirits of

ammonia in water may be given, or whiskey (rarely), before or following the irrigation, as seems indicated. It tides over or relieves the symptoms which are not apt to appear again, when the patient realizes what she is to expect.

In conclusion, it may be said that in safe hands, intrauterine irrigation can be proved to be of great value in selected cases in office work. Old, so-called chronic cases of endometritis and metritis, with or without tubal and ovarian involvement, can be, in most instances, greatly benefited and often practically cured, provided the irrigation be supplemented by other means of treatment that are equally needed. No two patients can be treated just alike. No hard-and-fast rules can be laid down. Only experience and great care in observation can teach why one patient can be safely irrigated in the office and why another that might seem like her in many respects to a careless or indifferent observer, should only be irrigated after divulsion and curettage under ether, and where rest in bed after irrigation can be insisted upon.

In closing these notes upon some of the leading points in non-operative gynecology, it may be emphasized that nowhere does careful discrimination in diagnosis and prognosis have more value than just here. And another of the inferences from experience is that there is a large field for patient office work in this department of practice, and a field that is not over tilled.—*Med. Record.*

ABSTRACTS.

Etherization of Children.—According to W. G. Elmer, (*Archives of Pediatrics*, New York, June), there are but few occasions in which ether may not be given to children in preference to other anesthetics. The most important of these is an abnormal state of the respiratory organs, as in acute bronchitis, pulmonary congestion or pneumonia. The preparation of children for the operation and anesthetic does not differ materially from that of adults. Solid food should be absolutely forbidden on the day of operation. If an operation is fixed for eleven o'clock in the morning, a cup of broth may be given at seven, unless there is some definite reason for not doing so, and water may be given at the same time. The fluids are promptly absorbed from the stomach, and four hours later the child should be in excellent condition for the anesthetic. The open method of administration is the one which should be adopted always. In order to lessen shock and to preserve bodily heat and energy, the vital activity of the tissues should be kept up to its highest point, and for this purpose an abundance of oxygen is necessary. This

can best be supplied by pure fresh air. The smaller size of Allis inhaler should be used. This should have a clean, folded towel pinned closely about it, and permitted to extend about an inch below the lower margin of the cone. The open end of the cone should always be allowed to remain free and unobstructed, admitting pure air without restraint. If the child is very much reduced from prolonged disease, and the operation is apt to be a long and dangerous one, every precaution must be taken to preserve the vital forces. The child's body should be swathed in cotton batting or an electrotherm may be used on the operating table. There must be absolute quiet in the room, and only the anesthetist and the nurse should be present. The article closes with specific directions as to the method of etherization and how to meet emergencies.

Alcohol as a Therapeutic Agent.—J. Barr (*British Medical Journal*, July 1st) states that it is impossible to foretell the action of alcohol in any particular case or to know whether it is going to do good or harm. He dissents from the popular opinion that constant use of alcohol confers immunity from its toxic effects and says that with increasing years men are able to stand less and less alcohol, while in advanced age the results of free inhibition are disastrous. From its irritating action on the nerves of the stomach alcohol may cause a temporary contraction of the splanchnic vessels and a slight rise in the general blood pressure. Once absorption takes place, however, it has a paretic effect on the vasomotor system and the arterial blood pressure falls. There is then a rush of blood to the surface through the paretic vessels; the nerves and vessels lose their power of regulating the body temperature, and consequently there is a large cooling surface which allows of a rapid lowering of the temperature. This effect may explain the value which some German physicians attach to the use of alcohol in conjunction with cold baths. Barr states that in pneumonia almost the only use of alcohol is as a specific. He also states that alcohol is not a food in the proper sense of the word, and that the advice of the Apostle Paul to Timothy to take a little wine for the stomach's sake must have referred to a fairly dilute solution of alcohol, as we know that while strong potations increase the secretion of gastric juice, they inhibit the digestive function. Barr refers at some length to the effect of alcohol in various diseased conditions.

Medical Jurisprudence and Toxicology.

IN CHARGE OF
A. J. JOHNSON, M.B., M.R.C.S. (ENG.).
W. A. YOUNG, M.D., L.R.C.P. (LOND.).

PRESIDENTIAL ADDRESS.*

BY DR. GLARIEUX.

Gentlemen,—In calling me to the great honor of presiding during the year 1905, at the meetings of the Society of Mental Medicine of Belgium, you have thought not of my own feeble, personal merits, but of the position I hold as a member of the Central Committee of Inspection of the Insane Asylums of the kingdom.

You have thought, that at the prospect of an eventual revision of the law of the administration of the insane, at a time when in scientific bodies, in the congress, in medical papers and even in political journals a great many questions of interest to the medical profession and especially to alienists are being discussed—you have thought, I say, that it would perhaps not be entirely useless to have as president of this society a man who, through his official position, might contribute to hasten the solution of such important questions, which are always being discussed, but which are never being acted upon.

You have thought, I am sorry to say mistakenly, that the committee of inspection had the same rights here as similar institutions have in neighboring countries. You know that in Holland the medical inspectors have most extensive powers, and that alienists find in them powerful aids in helping them to their just rights, and the insane find in them strong and active defenders of their interests.

Notwithstanding this, if we have not the same authority, and the same powers as our colleagues, yet we are imbued with the same zeal and the same devotion to the cause.

All our efforts will tend to the double end, to elevate the position of the medical alienists and to improve the condition of the poor unfortunates who are suffering from insanity.

Before communicating to you the impressions which I gathered in my trip through the different asylums, you will permit me to

*Translated by Alfred W. Herzog, Ph.B., A.M., M.D., of New York, Member of the Medico-Legal Society, from the Bulletin of the Belgium Society of Mental Medicine.

thank our president who precedes me, for all the tact and zeal which he has used in exercising his functions.

You know that Dr. Villers has, since his entrance to a medical career, consecrated his activity; all his energy and all his science to the prosperity of our society, and he has not left his important functions of secretary until he was assured of the aid of a successor worthy of himself.

I am glad to greet at this time Dr. Massaut, our secretary, and to express to him our gratitude for his efficient work. With the aid of such an excellent assistant I view the labors of the presidential position with less fear and greater calm, knowing besides that your valuable encouragement and your well wishes will never lack.

Myself being connected with no insane asylum, neither public nor private, and guided only by my interest in the unfortunate insane, I believe I cannot be called in the wrong if I give you my personal and impartial impressions of eight years of inspection of these institutions.

I am glad to recognize, in all earnest, that in all our asylums, be they large or small, important improvements of a material and hygienic nature have been introduced. New buildings, larger and better ventilated, have replaced old ones suffering from the defects of old age; high walls, reminding one too strongly of prison walls, have been supplanted by artistic iron fences, which permit the poor insane to let their eyes wander in the neighboring gardens. Gas and electric light tend to dethrone smoky lamps, giving but feeble light; steam heat commences to replace charcoal burners. Flowers on the window sills please the eyes, and song birds in their little cages warble their happy notes, in strange contrast to the mournful sounds around them. The rooms are generally well kept, clothing and bedding clean and neat, the nourishment good and plenty, and I can bring no better proof of this than the picture of good health that can be read from every face. Lastly, I wish to compliment the keepers of our insane asylums for their devotion. Without professional training they give devoted care and spontaneous help, though it be not very enlightened nor intelligent. From all this I would conclude that our poor insane are kept in our asylums under good hygienic conditions and that they receive sufficient care.

But, gentlemen, let me ask you now, if your directors, who have shown themselves so impressed with these necessities of the insane, to make such material improvements in the asylums, have also been sufficiently impressed to facilitate for you the accomplishment of your important duties?

What have they done to elevate the prestige and the authority of the physician?

Do they give you those chances, which you demand, so as to be able to follow the progress of psychiatric science?

Do you hold in the insane asylum that important place which by right belongs to you?

Each time I visit an insane asylum I am painfully impressed with the secondary position which is given to the physician. I know asylums in which the physician has not even an office. How do you expect him to have a library or a laboratory under such circumstances? I am always forced to fight off the impression, and I do hope that I am wrong, as if the physician does not exercise his functions in the insane asylum, except when an insane patient has become afflicted with some bodily ailment, as if an insane person were not always a sick person, and if he did not need the services of the physician even outside of the sick room.

It is a sorrowful truth, gentlemen, which you recognize, as well as I do, that here in Belgium, among the leading class, in the middle class and in the lower classes, there are people who consider an insane as a dangerous being, dangerous for himself or dangerous for others, and that he must be locked up under any circumstances. Once locked up, this unfortunate for whom no efficient treatment exists, may one day get better, or may never get better, according to his own good or bad luck.

May I tell you, gentlemen, that I know medical men who, convinced of the uselessness of the intervention of the physician, deny the existence of a rational treatment of insanity and think for our unfortunate insane of nothing better than hygienic surroundings. And do you not think that your directors and legislators share their opinion, when they admit, or rather claim, that one physician is sufficient, I will not say to treat, but to occupy his time with from seven to eight hundred insane?

The complete abandonment in which mental medicine was left until the last few years, the fact that a physician could, without a day's preparation, I will not say become an alienist, but be put at the head of an insane asylum—are these causes not enough to give credence to the belief that an insane is not a sick person and that a physician could do nothing for the insane?

Our first duty is to protest in our writings and by our actions against this opinion. It is erroneous and superannuated. The asylum must become a hospital, the insane must be recognized as a patient, and as such he has the right to medical assistance. Your duty, your conscience and your dignity demand, that you make it known to your directors, that your labor is greater than your physical power, that there are limits to your physical strength, and it is time, high time, that you receive assistance.

I would be wanting in my duties if I did not pay my respects

to the laudable efforts which show themselves in various of our asylums. I know that all of you are animated by the best intentions, and I know also that if the progress is slow, this is not due to you, but because you are surrounded by influences which prevent you from accomplishing more. It is due to your perseverance that we are aiding in the gradual disappearance of means of constraint in our asylums, and that we hope to see installed new arrangements, which will permit us to use baths and other therapeutic means, and other so much desired improvements. Your scrutinizing looks seem to ask me, in which remedy I look for the solution of the present circumstances—whether I hope for it by means of a revision of the laws affecting the treatment of the insane?

I desire to remain, gentlemen, on the field of practical things, of things that can be easily realized. I wish to make an appeal to the good-will of all those who have the management of our asylums in their hands; an appeal to the Minister of Justice, who is always anxious for the rational treatment of the insane under his jurisdiction, as well as of the good name of the asylums of the State and of our Colonies; also, I wish to appeal to the ladies and gentlemen who are directors of our private asylums, who are all equally interested in the welfare and the progress of their establishments. I call the attention of them all to the principal question of the recruiting of adjunct physicians. You all know with what great interest we hear the news that the place of chief physician to one of our asylums has become vacant. But when a place of assistant physician becomes vacant, nobody listens and nobody cares, except, perhaps, the physician residing in the immediate neighborhood.

Why this indifference on the part of our young physicians?

Why don't they even care to try for the position?

The reason is, because, according to the custom in Belgium, the position of assistant physician seems to belong by right to one or the other of the young physicians of the village wherein the asylum is situated, and if no one want it there, to one or the other physicians residing in the village nearest to it.

Different reasons, which have nothing at all to do with the medical profession, nor with scientific achievements, friendship, perhaps, or the intention of helping some young practitioner, cause practitioners to get the appointments, who know of the existence of a branch of medicine dealing with insanity only from hearsay and who promise to purchase, but not always to study, after their appointment, the most elementary treatises of psychiatry.

These severe words, gentlemen, are not my own. They were spoken in 1896 during a meeting of this society by Prof. Masoin,

when the organization of the medical service in the insane asylums of Belgium was being discussed.

You see that this question is not a new one. I love to think that to-day it is sufficiently ripe to receive the beginning of a solution by means of the organization of assistant physicians at the height of their new functions.

My excellent colleague, Dr. Claus, in an address delivered in 1902, has given with a great deal of spirit and truth to the actual assistant physicians of our asylums the name of physicians *in partibus infidelium*, having like their colleagues in the ministry a field which they know only by the title which has been forced upon them.

Well, gentlemen, it is necessary that our adjunct physicians, *in partibus infidelium*, become acquainted with their flock, who need their aid and protection so much. It is time that the physicians-in-chief of our asylums be helped intelligently in their hard work, and that others bear with them the burden of responsibility of the moral, mental and physical health of so many unfortunate ones. According to my idea, the importance of the reorganization of the service of assistant physicians must be measured in accordance with the results which it can give. One must not lose sight of the fact that the assistant physicians of to-day must be prepared to become the physicians-in-chief of to-morrow. This stage in the asylums would be of incontestable use, in permitting the young physician to prove and to develop his knowledge and his aptitude, and causing him to devote himself to favorite studies, relating to neurology and to psychiatry, two twin sisters, which one must never separate.

A place of chief physician of an asylum becoming vacant, this place naturally would belong to the most worthy assistant physician, to the one who would be most likely to fill his new place perfectly. In creating an opening and a nearly assured advancement to the assistant physicians, we would also create a body of workers, so select that the State and asylum directors of private institutions could freely choose candidates, whose past guaranteed the future. To-day, gentlemen, in consequence of the happy initiative of the distinguished Professor Francotte, medical students may, without leaving the State; devote themselves to theoretical and clinical studies of mental diseases.

The medical faculty of Liege gives a certificate, stating that the student has submitted himself with success to an examination on clinical psychiatry. And if the number of the holders of this certificate is yet small, this is because this diploma up to the present has not been appreciated at its true value, and that the fact of receiving it gave no guarantee of an assured opening in the field.

Professor Masoin, in a recent communication to the Academy of Medicine, entitled "Remarks on the so-called Arbitrary Sequestrations, and on the Medical Service in Insane Asylums," tells us that on the ninth of last March the medical faculty of the University of Louvain had determined to give a special doctorate in mental medicine.

You all know that in Brussels, Professor De Boeck gives interesting clinical lectures on Psychiatry, which, notwithstanding all their attraction, draw not a desirable number of students, perhaps because these must have passed their theoretical examination, or because in the second semestre the time for examination draws near.

You see, gentlemen, that spontaneously laudable efforts from all sides make their appearance, for the purpose of making a study of mental diseases easier. Let us profit of the moment where the medical field seems overfilled, to encourage the young workers and to influence them to enter the road of mental medicine, notwithstanding the seduction which might be exercised by other specialties, which often may be more lucrative.

In organizing on a scientific base the corps of assistant physicians, with a guarantee of a future, one elevates greatly the prestige and the authority of the whole medical staff of the asylums. This will cause the indifference and apathy of students of medicine in regard to the study of psychiatry to be replaced by a just appreciation of the many advantages of this new field.

Permit me now, gentlemen, to submit to you the following propositions, which I am sure merit your approbation:

1. All insane asylums must have at least one adjunct physician, living in the asylum or at least in its immediate neighborhood.
2. The adjunct physician is to receive a sufficient salary to permit him to devote his entire time to the patients of the asylum and to the study of nervous and mental diseases.
3. Whenever a place of adjunct physician becomes vacant, the Society of Mental Medicine shall be officially informed thereof.
4. The proprietors or directors of insane asylums shall present a list of three candidates to the superior authorities. This list shall be submitted to the central inspection committee of asylums, and they shall choose the candidate, and their definite nomination shall be submitted to the Minister of Justice for approval.
5. Professional skill, scientific degrees, and the special diploma of doctor of mental medicine shall determine the choice of candidates.
6. After two years' service in the same asylum, adjunct physicians may exchange places with others in a different asylum.
7. It will be desirable that adjunct physicians do service in

an asylum for men, an asylum for women and an asylum for children.

8. Chief physicians are selected from adjunct physicians on account of personal merit.

Is it necessary, gentlemen, to enumerate to you the numerous advantages which would result from the permanent presence at the asylum of an adjunct physician, always ready for whatever might happen and animated by the sacred fire of science?

Let it suffice for me to tell you, that there would be, first of all, the recognition of the great truth, too much misunderstood among us, that the insane is a diseased person and that he has need of a physician. From this standpoint alone the service rendered would be immense. Besides there would be a constant medical inspection of the asylum. There would be the greater security to the family and the more rational treatment of the patient. There would also be a careful and complete keeping of statistics and observations of the clinical material. There would also be the introduction of scientific life into our asylums, through the exchange of views between master and pupil. There would also be the introduction of good-natured rivalry between the different members of the staff of the various asylums, rivalry the only object of which would be the interest of the sick and the progress of the science.

I appeal to the good-will of everybody. To you, gentlemen, who are professors, to draw to the flag choice men, full of ardor to work. To you, gentlemen, who are physicians of asylums, to prepare your assistants in such a way that they later on may be able to fill with dignity the position of physician-in-chief. To you, gentlemen, who are owners of private asylums, to understand that it is part of your duty and part of your interest to make the task easy for your physicians, and to elevate your asylums to the height of modern progress, so that they may be able to uphold with dignity the comparison with asylums of foreign countries.

Noblesse oblige—our past obliges us to march ahead. Let us not forget that Belgium originated the modern treatment of the insane, and that we count among our pioneers in this line the celebrated Guislain.

In the presence of such elevated interests it is worse than to be saving, it is wrong to be miserly, under the odious pretext of being economical.

Permit me, in closing, to use the beautiful words, which were uttered recently at the Academy of Medicine of Belgium, by the erudite Professor Masoin, whose knowledge and authority in the matter are universally recognized:

“But, it is a thing more grave, it is the assistance of the un-

fortunates, who have been attacked by insanity, and here hesitation is impossible. One must at least do as well as the neighboring nations. One must no more look at a few pennies than one looks at millions when it comes to other expenses."

A nation does more honor to itself by giving good treatment to its sick, than by carrying off victories in war. And to-day, even after many hundreds of years, historians rightly glorify the nations who, like the Greeks, honored their old men and helped their sick tenderly.

May our country some day receive the same praise.

—*Medico-Legal Journal.*

School Hygiene.

A NEW BLUE-BOOK.

ONE of the latest publications of the British Government to reach Toronto is the Blue-Book, containing the report of the Inter-Departmental Committee on the Medical Inspection and Feeding of Children Attending Public Elementary Schools. It is issued in two volumes. Volume I. contains the Report itself, also appendices giving an analysis of various returns on these subjects and a summary of the same, together with extracts bearing on the same subjects from the Reports of the Scotch Royal Commission on Physical Training, and of the Inter-Departmental Committee on Physical Deterioration. Volume II. contains the List of witnesses, the Minutes of Evidence and twelve appendices, occupying 65 pages, chiefly memoranda from the British Dental Association, the Charity Organization Society, and other organizations, Instructions and Reports issued by the London County Council, and various educational authorities in regard to medical inspection, underfed children, etc.

The bare enumeration of the above contents will serve to show that these Blue-Books are by far the most valuable sources of information on medical inspection of schools and allied subjects now available.

The Committee was appointed on March 14th, 1905, by the Marquis of Londonderry, President of the Board of Education, and its membership is as follows:

Mr. H. W. Simpkinson, C.B., Asst. Sec. of the Board of Education (Chairman).

Mr. E. H. Pelham, Junior Examiner of the Board of Education (Secretary).

Dr. H. F. Parsons, Asst. Medical Officer of the Local Govt. Board.

Mr. Cyril Jackson, Chief Inspector of Elementary Schools.

The Hon. Maude Lawrence, Chief Woman Inspector of the Board of Education.

Mr. R. Walrond, Senior Examiner of the Board of Education.

The terms of reference were:

(1) To ascertain and report on what is now being done and with what result in respect of Medical Inspection of Children in Public Elementary Schools.

(2) And further, to enquire into the methods employed, the sums expended, and the relief given by various voluntary agencies for the provision of meals for children at Public Elementary Schools, and to report whether relief of this character could be better organized, without any charge upon public funds, both generally and with special regard to children who, though not defective, are from mal-nutrition below the normal standard.

In dealing with a report at once so important and so extensive, it is manifestly impossible to do more than refer briefly to the salient points.

It appears that, besides London, there are forty-eight educational authorities, in whose areas a definite system of medical inspection is established, generally, though not always in charge of a school medical officer. Often the medical officer of health is also the school medical officer, and this excellent arrangement is the natural outcome of the work done by the M. O. H. Often, too, the teachers have for years carried out a system of examination of the eyesight of their pupils. It is important to observe in no case does the inspection include treatment. It is strictly confined to the examination of the children, the discovery of defects or ailments, and the notification of the parent.

But in Liverpool, Birmingham and elsewhere, the Queen's Nurses do an excellent work in dressing sores, cuts, bruises, etc., for poor children. The carelessness, ignorance, apathy or poverty of the parents are the most formidable of all the obstacles in the way of progress in this direction as they are in every other direction. As the nation and the race are uplifted, these obstacles will be removed, as the people come to see the direct gain, even from a material point of view, of attention to children's defects and ailments. So will their negligence and apathy disappear, and as common sense and good judgment take the place of prejudice, complacent optimism, or wilful blindness, so will the value of an education which does not neglect the body for the so-called "mind" appear to all and be insisted on by all.

As Dr. Hayward, S.M.O., of Wimbledon, says: "When I was going round a class the other day, a teacher very kindly showed me some pretty nature-study drawings which the children had been making. They had specimens of silk-worms coming from eggs, and of frogs coming from tad-poles. They were learning botany, and drawing flowers and so on. I asked them what book they were reading that afternoon. It was a class of girls about thirteen years of age. They were reading Sir Thomas Malory's 'Morte d'Arthur.' A number of that class had their heads swarming with vermin. You can hardly call that a complete education."

In the last report of the medical officer for Halifax we find:

"I may cite two instances; the first is that of a child who was sent to school in her grandmother's spectacles, 'because her teacher said she needed some'; the second is that of an infant who squinted as the result of being long-sighted. When the mother received a note asking her to take the child to hospital to have the squint corrected by glasses, she was much aggrieved and said she 'smacked the child whenever she saw it squint, and what more could she do'? Comment, I think, is superfluous."

Seven results are ascribed in the Report of the Committee as already due to medical inspection:

1. Infectious disease has been lessened. Teachers possess a little knowledge of the symptoms of infectious disease, and therefore it is more quickly and effectively controlled.

It is believed that the Education Act of 1902 has, by omitting the sanitary and education authorities, facilitated prompt and effective action *re* epidemics.

2. The *morale* of the schools and the physical condition of the children have been greatly improved by the increased attention to personal cleanliness defective children have received.

3. Better care. Defects have been remedied; surgical apparatus has been obtained.

4. Great attention has been paid to eyesight, and many defects have been discovered and remedied, with the result of diminishing headache and apparent stupidity.

5. The question of defective hearing has received attention.

6. Teachers realize more the importance of attending to ventilation, and take more interest in the bodies of the pupils. The S. M. O. is a great help and support to the teacher.

7. Generally we feel, no doubt, that the medical inspection has done much towards bringing to view defects, the treatment of which secures the child from unnecessary suffering and may save him from serious trouble in after life. Finally, we desire to point out how small is the expenditure which inspection involves: in no urban area does it require more than 0.1d. rate, generally not so much."

These are beneficial results. There is no one interested in the welfare of our schools but would welcome such results here. The appointment of school medical officers, the closer connection between sanitary authorities and education authorities, and the provision of opportunities by which the able and conscientious men and women forming the teaching profession could avail themselves of the most modern, economical and indeed fascinating results of preventive medicine, is well worth the best efforts of the medical profession, the public, and the Government.



OBSERVATIONS CONCERNING SOME PALMAR ERUPTIONS.

BY HENRY W. STELWAGON.

Journal Cutaneous Diseases.

IN this paper the author discusses some points in connection with chronic, dry, scaly phases of eczema (*Eczema seborrheicum*), and syphilis of the palmar aspects of the hands, in which the eruption seems wholly independent of recognizable external agency. They are rarely seen in his experience under 25, and seldom under 30 years of age.

The circulatory system is frequently weakened, especially from heart trouble, primary or secondary to renal trouble. There is commonly some anemia, and the patients lead a sedentary life. Females are much less liable than males. A marginate border, especially if serpentine or crescentic, excludes eczema, but not eczema seborrheicum. In the latter, however, the morbid process is more superficial, as a rule, yet in some syphiloderms the infiltration is very slightly marked. Scalps are so frequently seborrheic that too much stress must not be laid on the concurrence of this symptom, the presence of eczema seborrheicum of the trunk is more reliable. A sharply marginate, crescentic or serpiginous eruption of the palm alone is almost invariably syphilitic. A history of syphilis is suggestive, but does not definitely settle the diagnosis. Itching usually points to eczema.

These affections are very intractable. For the type of eczema referred to, salicylic acid ointment (10 to 20 per cent.), salicylic acid plaster (5 to 15 per cent.), washing with *sapo viridis*, has been recommended. In some cases the "X-ray" is very successful.

For the treatment of the chronic dry palmar syphilis, Stelwagon recommends the administration of mercury, by inunction or hypodermic injections, or in pill to enormous doses. Pot. iod. often proves very useful.

The circulation should be improved in every way possible.

D. K. S.

The Canadian Journal of Medicine and Surgery

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NO. 5.

Editorials.

THE PREVENTION OF LEAD POISONING AND THE TREATMENT OF LEAD COLIC.

AUTHORITIES are pretty well agreed as to the main precautions necessary to prevent the onset of lead poisoning on the part of those exposed to it. Those employed in lead works may do much to protect themselves, or rather, their employers may do it for

them. Drs. DeLéarde and E. Dubois (of Lille), who have had large opportunities of forming accurate opinions on the etiology of lead poisoning and its treatment, contributed a timely article on this subject, which appeared in *La Presse Médicale*, February 14th, 1906. A statistic of employees in lead works or painters treated at the Charité Hospital, of Lille, from 1892 to 1905, shows the following figures:

In 1892	35 patients.	In 1899	41 patients.
1893	40 "	1900	26 "
1894	33 "	1901	18 "
1895	67 "	1902	9 "
1896	77 "	1903	13 "
1897	66 "	1904	12 "
1898	56 "	1905	5 up to Oct.

—a total of 498 patients, with 4 deaths. The question is asked, "Is the progressive diminution of the number of patients due to the closing of certain lead works?" The reply is in the negative, for, if one or two factories have closed their doors, the factories doing business have increased their output in a considerable proportion. Another question asked is, "Do the manufacturers prevent their employees from going for treatment to the hospital, where the patient's disease is known, and do they oblige them to be treated at-home, where the disease could be concealed?" The reply is that the physician of the two most important lead factories of Lille, who regularly examines the employees of these factories every week, informs Drs. DeLéarde and Dubois that lead colic is becoming more and more rare in these factories (11 cases of lead colic in two years).

The real reason of the change, in the opinion of Drs. DeLéarde and Dubois, is owing almost entirely, if not altogether, to the persevering efforts of some manufacturers, who have improved and perfected their methods of manufacture. To be convinced of this, one has only to visit a lead factory which is kept in good order and provided with a modern outfit. In these works the lead is ground in a machine which is covered with a wooden cage, so as to prevent the finely powdered particles of lead from being scattered through the air. Then the employees are obliged to keep their hands clean and to take hot baths frequently. A dressing room is provided for them, where their working clothes are left on leaving the factory. Gloves and blouses of linen are

worn during work by the employees who crush the white lead. The floor of the working room is frequently sprinkled with water and the ventilation of the building is very free. The employees are also shifted, so that no one remains continually for over a fortnight engaged in a particularly dangerous part of the work. Besides, an obligatory medical inspection of the employees takes place every week. In lead works where these rules are observed cases of saturnism are rare; in other factories, where they are not observed, cases of lead poisoning occur quite commonly.

An important observation made is that employees in lead works should abstain from the use of alcohol. The emunctories which suffice to eliminate from the body the lead absorbed during work in the factory, are unable to do the work when a second poison is superadded to the first.

The rarity of lead poisoning among painters or the comparative mildness of the disease in them is due to the fact that painters use white lead mixed with oil, that is to say, in a condition in which the absorption of the poison by the air passages is impossible. However, the same remarks as to cleanliness, bathing and change of clothing apply to painters and indeed to all persons who work with lead in any shape or degree. It is evident that lead-lined and painted cisterns should never be used in houses; that cosmetics and hair-dyes are dangerous, and that care should be taken in selecting canned foods not to use those which have been too long canned.

In the treatment of lead colic, Drs. DeLéarde and Dubois have broken new ground. They say: "Without denying the existence of intestinal spasm, which has been made to explain the pathogenesis of the constipation noted in lead poisoning, we think that the principal, we would be tempted to say, the only cause of the retention of fecal matter is pain located in the abdominal muscles, and more particularly at the lower insertions of the right and left rectus abdominis. Defecation cannot be accomplished without the aid of these muscles, which compress the intestinal mass and facilitate the advance of the feces. But, with each effort to bring these muscles into action, pain is increased, and as the pain is very sharp, the sufferer avoids making any efforts at defecation; instead of utilizing the action of the recti muscles, he endeavors to immobilize them.

After alluding briefly to different treatments devised by others, as well as themselves, for the relief of the abdominal pain of lead colic, they say: "Since 1901, we have used epidural injections of cocain. The dose of cocain injected varies, according to the intensity of the pain, from 1 to 3 centigrammes (.154-.462 grains), dissolved in from 2 to 4 cubic centimetres of sterile water. Two centigrammes of cocain is the dose generally used (.308 grains), and is the one we recommend. A few moments after this dose is injected into the spinal canal, pain is abolished; the patient feels a sense of general relief; he is able to rise from bed and go to the water closet. All the patients treated at the Charité Hospital in the service of Professor Combemale, had one or several stools during the twenty-four hours following the epidural injection of cocaine. We have collected observations made on 16 cases of lead colic (5 in hospital practice and 11 in private practice), and not the slightest malaise or symptom of intoxication resulted from the epidural injection of cocain in them. Ten of the sixteen patients had natural stools some hours after the cocain was injected; the other six had free movements of the bowels after the administration of purgatives; three of them had received only one centigramme of cocain (.154 grains), a dose which, in our opinion, is not sufficient to relieve severe colic. In all the cases pain disappeared in a few moments."

The treatment of lead colic by epidural injection of cocain, according to Drs. DeLéarde and Dubois, has the following advantages over older methods: Rapid disappearance of pain; almost immediate cessation of vomiting and constipation—in a word, complete cure in one or two days. Stovaine may be used instead of cocain as an epidural injection in cases of lead poisoning.

J. J. C.

THE UNIVERSITY COMMISSION'S REPORT.

THE report of the Royal Commission on the University of Toronto project was presented to the Legislature, April 6, 1906. The Commission, comprising Mr. J. W. Flavelle (Chairman), Prof. Goldwin Smith, Sir William R. Meredith, B. E. Walker, Rev. Canon H. J. Cody, Rev. D. Bruce Macdonald, and A. H. U. Colquhoun (Secretary), has been six months at work getting material on which to make their recommendations.

The following brief synopsis of their report appeared in the *News* of April 7th:

"We have arrived at a critical juncture in the progress of University education.

The constitution of the University of Toronto should be completely re-cast.

The University should be entirely free from political control. The control and management of the University should be vested in a Board of fifteen Governors, chosen by the Lieutenant-Governor-in-Council, and holding office for six years.

The Senate should direct the academic interests of the University.

The School of Practical Science, the School of Medicine and the Law School should be united with the University as its faculties of Applied Science, Medicine and Law.

Appointments to the staff should be made by the Board of Governors, upon the recommendation of the President.

There should be created a Council of the Faculty of Arts, composed of the faculties of all the Arts colleges and representatives of the federated colleges, and a Council for each faculty.

The President should be the chief executive officer of the University, be elected by the Board of Governors, and be relieved of teaching duties. A caput or advisory committee should advise the President in matters of discipline.

The office of Chancellor should be retained, but that of Vice-Chancellor abolished.

The Senate should be retained with limited powers.

The Faculty of Medicine has agreed to admit women students.

In no respect should the department of Arts be permitted to fall behind.

Departments of Forestry, Pedagogy and Household Science should be instituted.

A portion of the succession duties should be devoted to the University.

The Board of Governors should endeavor to secure the removal of Trinity College to the University grounds.

An Art School and School of Music should be established.

The University Library should be extended, and a museum established.

The purchase of the Ontario Veterinary College by the Government is recommended.

A million acres of land in New Ontario should be set aside for University purposes.

The Provincial aid to the University should not be less than \$275,000 per annum at the inception."

As medical readers are principally interested in the Faculty

of Medicine, we shall confine our remarks to questions arising in connection with that part of the report. Under the arrangements proposed by the University Commission, the President of the University, who is to be *ex-officio* a member of the Faculty of Medicine, would only make recommendations to the Board of Governors as to appointments on the staff of the Faculty of Medicine, after close consultation with those best qualified to advise him. Being responsible for his recommendations, the President would have to obtain the opinions of the Medical Faculty as well as the views of others who would be in a position to advise or recommend the appointment of a candidate, not necessarily known to the Medical Faculty. The system of financial administration in the Faculty of Medicine might also be altered in some respects with advantage to all concerned. For instance, it is the opinion of the Medical Faculty that the professors of anatomy, pathology, experimental therapeutics and hygiene should be paid by the State. The professor of anatomy instructs certain students in the Arts course, as well as students of medicine. This is more particularly the case in the B. and P. course (a six years' course), through which a graduate may obtain a double qualification in Arts and in medicine. The professor of anatomy should not, therefore, look solely to the Faculty of Medicine for his fees. The professor of pathology, having to devote his whole time to the work of his department, could not engage in practice. The professor of experimental therapeutics would be also excluded from practice. The professor of hygiene would also enter into this category, so that part at least, if not all, of his salary, should be paid by the State, and should not be a charge on the finances of the Medical Faculty of the University. Very little original work has been done so far by the Faculty of Medicine in experimental therapeutics, and it is felt that original research work in this branch of medicine and in pathology should be extensively carried out. It may be that the lack of a properly organized hospital has prevented such work being undertaken; but that difficulty will soon be obviated.

The question of the medical education of women, having already been dealt with by the Senate and Faculty of Medicine of the University, need cause no difficulty, and women students will be admitted by the Faculty. The latter body has already transmitted its views to the Senate of the University, in these words:

"That in view of certain prospective changes which are suggested in connection with the method of providing instruction in medicine for women in Toronto, the Faculty of Medicine of the University of Toronto is now prepared to register female students in medicine, and agrees that whatever arrangements are deemed necessary should be made for their instruction."

Other phases of the contemplated changes in the government and management of the University of Toronto, in which medical practitioners and the Medical Faculty are interested, may crop up when the report of the commissioners is being discussed in the Legislature. In the meantime, the general scheme of reform recommended by the commission is worthy of the scrutiny and attention of all the friends of the Provincial University.

J. J. C.

THE UNFAVORABLE PROGNOSIS OF INSANITY IN ONTARIO.*

Among laymen, as well as physicians, a good deal of interest attaches to the answer to this question, "Is the disease curable?" If in the affirmative, human sympathy is deeply stirred; physicians make strenuous efforts to restore the patient to health. If, on the other hand, a considerable number of individuals afflicted with a disease do not regain their health, even after they have been placed in a favorable condition, interest in their fate necessarily flags.

Philanthropists sacrifice their lives in caring for the leper; physicians proffer unavailing efforts to cure leprosy. The prognosis of that disease is unfavorable, its treatment unsatisfactory. Christian charity may tender a helping hand to the leper till he breathes his last sigh, but medicine wins no laurels by his bedside.

Is insanity in Ontario an incurable disease? Scarcely so bad as that, since, during the last official year, one cure occurred in a patient who had been twenty years under treatment. Yet the published returns, which we cull from the individual reports of the medical superintendents of the eight Provincial asylums

*Thirty-eighth Annual Report of Inspector of Prisons and Public Charities upon the Lunatic and Idiot Asylums of Ontario, for the year ended September 30th, 1905.

for the insane in Ontario, show little ground for the establishment of a favorable prognosis in insanity. The following statistic shows the results obtained during the year ended September 30th, 1905:

	Remaining in Asylums, Oct. 1st, 1904.	Admitted during the year.	Total number under treatment during the year.	Discharged as recovered.	Discharged as improved.	Discharged as unimproved.	Died.	Eloped.	Transferred.	Remaining in Asylums, Sept. 30th, 1905.
Brockville.....	660	154	814	55	14	3	47	3	30	662
Cobourg.....	144	8	152	..	1	1	6	..	8	144
Penetang.....	149	72	221	2	1	..	5	..	3	211
Mimico.....	556	163	719	44	6	2	39	2	21	605
Hamilton.....	1003	167	1170	45	12	7	39	4	..	1063
Kingston.....	598	111	709	32	17	10	34	5	1	610
London.....	1021	190	1211	69	13	6	75	..	..	1048
Toronto.....	725	184	909	68	19	9	43	4	17	749
Total.....	4856	1049	5905	315	83	38	288	18	79	5092
Percentage....	....	....	....	5.33	1.40	.64	4.87	..	..	....

It appears, therefore, that 5,905 insane persons were under treatment in these eight asylums during the year ended September 30th, 1905. Of that number, 315 persons, a percentage of 5.33, were discharged as cured; 83 persons, a percentage of 1.40, were discharged as improved; 38 persons, a percentage of .64, were discharged as unimproved; 288 patients, a percentage of 4.87, died. The mortality is low enough; but the number of cures is very small.

The question of the recovery, partial or complete, of an insane person is difficult to determine, depending on the cause of the malady, the temperament, disposition, education, nationality and the normal mentality of the patient. Recovery is usually gradual, rarely does sudden restoration occur and, as a result, in the breast of the medical attendant, "Hope ebbs and flows like the wave." To measure the professional skill employed in the treatment of the insane in the asylums of Ontario by the output of cures or the probational discharges of patients, improved or unimproved, would be a fallacious test. But that is just another way of saying that, in a large number of the insane of Ontario, the prognosis as to the recovery of sound mentality is unfavorable. By the exercise of admirable care and good hygiene, the lives of the insane are conserved,—but that which makes life precious is rarely restored.

In studying the reports of the medical superintendents of the eight Provincial asylums, we do not find any attempt made to classify the insane patients as belonging to the acute or chronic classes. If the term chronic mania were restricted to cases in which evidences of dementia are exhibited between the exacerbations of restlessness, excitement and destructiveness, there would be less confusion in distinguishing between acute and chronic insanity. The line which distinguishes between acute and chronic mania must always be somewhat arbitrary and unscientific. The duration of an attack of mania beyond twelve months is usually considered sufficient to determine the condition, and this may be a safe rule, since it precludes the possibility of terming the condition incurable. Adopting the time limit as an arbitrary line of division of the insane into two great categories, the acute and the chronic, one might say that patients in whom the duration of insanity, prior to admission, had extended over periods of under one month and up to twelve months, were acute cases. By the same test, patients in whom the duration of insanity, prior to admission, had been from twelve months to twenty years and upwards were chronic cases. Measured by this time test, the 1,049 patients admitted during the year ended September 30th, 1905, into the eight Provincial asylums, may be classed as follows:

Duration of Insanity prior to admission.	Number of admissions.	Percentage of admissions in acute and chronic cases.
From under one month to twelve months.....	672	64.06 per cent. acute.
Twelve months to twenty years and upwards.....	355	33.85 " chronic.
Unknown.....	22	2.09 " not classed.
	<u>1049</u>	<u>100.00</u>

A natural comment, on reading this statistic, would be that the long duration of insanity in 34 per cent. of the patients admitted into the eight asylums during the last official year would give grounds for an unfavorable prognosis.

Though the recorded cures among the insane dealt with in these reports are few, the greater number occurred among patients belonging to the class we have ventured to term acute, which appears in the following table:

Period under treatment in Asylums.	Number of patients discharged as cured during official year.	Percentage of total cures in acute and chronic cases.
Under one month to twelve months	246	78.09 per cent. acute.
Twelve months to twenty years and upwards	69	21.91 " chronic.
	<u>315</u>	<u>100.00</u>

If we glance at a statistic showing the length of residence of patients remaining in the eight Provincial asylums, September 30th, 1905, the tendency of a great number of them to drop into the hopeless class of the chronic insane appears in a very convincing way:

Length of residence in Asylums.	Patients remaining in eight Asylums, Sept. 30, 1905.	Percentage of total patients.
Under one month to twelve months	725	14.23 per cent. acute.
Twelve months to twenty years and upwards	4367	85.77 " chronic.
	<u>5092</u>	<u>100.00</u>

In making these calculations, the returns from the Orillia Asylum for Idiots have been omitted. Naturally one concedes that chronicity is the especial feature in the debased mentality of idiots. Our conclusion would be that the last returns of the eight Provincial asylums for the insane in Ontario show that the prognosis of insanity is most discouraging. J. J. C.

A PRO AND A CON IN REFERENCE TO THE NEW HOSPITAL.

THE erection of the new Toronto General Hospital is now only a question of months. The difference of professional opinion as to the right of fully qualified physicians following their patients into the wards has been adjusted on the understanding that they are pay-patients, contributing at least seven dollars per week towards their maintenance. A half loaf is better than no bread, and it's surely a long lane that has no turning. It is a step in the right direction. The hospital management have a perfect right to laws and regulations, the more the better, looking at the circumstances from one point of view. On the other hand; the

physicians of good standing have also rights that should be respected; first, on account of their scientific ability, and secondly, as many of them are men who own a good deal of property, pay the highest taxes, and thereby in a measure yearly contribute to the support of the hospital. 'Tis a pity that any question of the kind has arisen, and it is a great cause of congratulation that it has been so quickly settled. The settlement is, of course, not a compliment, but a square business deal. Some think that quite "the pound of flesh" has been extorted, in that doctors should follow only pay-patients into the hospital. A patient who can pay seven dollars a week and also his own physician could probably afford to stay at home, and employ one of Lady Aberdeen's souvenirs to perform the duties of nurse. It is often only by the most tactful, moral suasion that the physician can induce his patient, especially if from the middle classes, to enter a hospital at all. However, luckily that prejudice is passing, and we hail the better day, when the great new structure, we trust, by the saving grace of its skyline and the speaking force of its interior equipment, will educate the public to the wonderful benefit that has been conferred on them, and that it is their duty in a spirit of thankfulness to uphold the hands of those physicians who have conceived the great project and those of the lay public who have so magnificently contributed of their means and made the project a reality. Some of our medical men of Toronto feel wounded in spirit because they knocked and for a while the door remained closed, and it took the golden sesame of \$200,000 (the City's grant), to open it. Bury the hatchet. Such thoughts belong only to the smallness of life, the real thing is progress. One of the chief objects in the building of this new institution is to give the young men who are coming on, a field for clinical study and scientific research. Soon they will stand between the people of this great country and the death angel. Let all unite to give them a splendid fighting chance, and permit of fewer opportunities being given the lay press to remark in their obituary notices, "A highly successful operation was performed, but the patient died an hour later."

It is surely a great responsibility to shut the doors to students outside the University of Toronto. The Provincial Treasury has contributed the large sum of \$250,000 towards the scheme, so

that it is folly to attempt to reason that the hospital is not a Provincial institution. For that reason it seems a most arbitrary measure to say that the people are to be taxed, but not allowed to enter the hospital as students. In case, say, McMaster University should establish a medical faculty, are their students to be refused the *entrée* to the wards? It is all very well to argue that the Trustees will not exercise that right and will make regulations for the admission of outside students. They may do so and may not, but it would be better not to make it an act of grace from the Trustees, but to so word the Act now as to avoid any difficulty later. It would not be necessary to throw open wide the doors to all students, over whom the trustees would have no control, but enact that all students, no matter from what university, shall have access to the wards under certain regulations and on the payment of the fees as laid down by the Trustee Board. Where else can they so well obtain the advantages of clinical study, where learn better what knowledge really means? Oliver Wendell Holmes has tersely said, "The best part of our knowledge is that which teaches us where knowledge leaves off and ignorance begins. Nothing more truly separates a vulgar from a superior mind than the confusion, in the first, between the little that it truly knows, on the one hand, and what it half knows and what it thinks it knows on the other." May the new hospital have many latch keys, and may old Solomon in all his glory be the only door-keeper.

W. A. T.

EDITORIAL NOTES.

Hymeneal Incentive to the Class of 1905 (Medicine).—We learn from an item in the *Globe*, March 13th, 1906, that a meeting of the class of 1905, Medicine, University of Toronto, was held for purposes of organization. It was decided to write to each member of the class asking for information, in order to send an annual circular letter to each member, stating the whereabouts and other items of interest of the various members. It was also decided to adopt as "class boy of 1905," the first male child born to a member of the class married subsequent to graduation. There are just a few restrictions in the terms of the "class boy of 1905." Not to mention all, girls are barred out, and besides the winning male child must be born to a member of the class subsequent to

graduation. This would be severe on a member of the class who had secured a partner and done something for Canada before being capped. However, the number of men who marry before graduation in medicine is ever a small one, so that this restriction is not likely to crop up as an injustice. As a proper incentive to the members of the class of 1905, Medicine, to assume the rosy bonds of Hymen, soon after graduation, "the class boy" hook is well baited; it is to be hoped that it will catch a good many victims, wary and unwary:

"Felices ter et amplius,
Quos irrupta tenet copula."

Forgetfulness of Former Friends.—The pictures of those whom we knew a few years ago grow fainter in our minds. Not only do their conjured-up representations become less clear, but their actual living selves in a few years become unrecognizable. We change, they change, all living beings change in obedience to the mandates of inexorable life. Look at a colored photograph of yourself taken at twenty-five years of age; look again at another photograph taken when you were five-and-thirty; turn and glance at your own face reflected in a mirror and then cease to wonder that former friends and acquaintances do not recognize you.

The Treatment of Gonorrheal Rheumatism by Anti-gonococcus Serum.—In the *Journal of the American Medical Association*, January 27, '06, Dr. Jno. Rogers, of New York City, publishes an article on the treatment of gonorrheal rheumatism by an anti-gonococcus serum. The serum was prepared by Dr. Jno. Torrey, the bacteriologist, in the experimental laboratory of Cornell University Medical College. The serum is injected hypodermically into the subcutaneous tissue in the back of one of the upper arms of the patient in doses of min. xxx—xl. The dose may be repeated on successive days, according to the requirements of the case. A urethral injection of a silver solution is used after each urination. The anti-gonococcus serum has little or no influence on the urethritis; as long as that disease persists, recrudescence of the arthritic complications may be looked for. Dr. Rogers says: "The recrudescence of the arthritis after its apparent cure by this serum therapy, the rarity of the affection, compared with the almost universal susceptibility of the urethra,

the proved systemic resistance of man to experimental inoculation, and clinical observation that the same individual is prone to repeated attacks of arthritis with every fresh gonorrhœa, all suggest some difference in the local and systemic resistance to the infection. The unfortunates who suffer from gonorrhœal rheumatism must have a constitutional or congenital *deficiency of antibodies*, and, as soon as these are supplied artificially, the disease subsides." The clinical histories of eight cases of gonorrhœal rheumatism treated with his serum are given to support the author's theory. As the treatment of gonorrhœal rheumatism with iodide of potassium or the salicylate of sodium is a conspicuous failure, Dr. Torrey's serum will be hailed with acclaim by the entire profession. There is one point brought out in Dr. Rogers' paper that has long been known to clinicians,—the necessity of curing the patient's clap, if any progress is to be made in relieving him of his arthritic disorder. In a treatise published by William Wood & Company, New York, 1881, Richard Barwell, F.R.C.S., Charing Cross Hospital, recommended sulphocarbolate of sodium, gr. xv, every four hours in acute gonorrhœal rheumatism. In such cases the same salt used as a urethral injection, viz.:

R Sodii sulphocarbolatis..... ʒ ss.
 Hydrogenii peroxidi,
 Aquæ āā ʒ ij.

will also be found useful.

Treatment of Eczema and Strophulus in Young Children by a Diet of Buttermilk.—Lesné, of Paris (*Archives de Médecine des Enfants*, 1906, Janvier, t. ix., No. 1, pp. 1-9), recommends buttermilk for young children affected with eczema or strophulus. Buttermilk is easily digested on account of its low percentage in cream, and also from the very fine subdivision of the casein, which results during the butter-making. It is likewise slightly antiseptic, through the lactic acid it contains, which prevents fermentation and the putrefaction of the casein. A tablespoonful of flour and from 80 to 90 grammes of sugar being added to a liter of buttermilk, the whole is placed over a slow fire and brought to the boiling point. Thus prepared it may be used as a substitute for ordinary milk, as it has about the same calorigenic value. The alvine evacuations of children who use this diet become regular and lose

their usual fetid odor; pruritus is diminished or disappears; the rash also diminishes or entirely vanishes in a few days. It goes without saying that the regular local treatment employed in such cases should not be neglected.

The University of Toronto Clinical Hospital.—As was stated in this journal, July, 1905, the new hospital to be erected near the Queen's Park is to be a Provincial institution, with public and semi-private wards. It will be the clinical hospital of the Medical Faculty of the University of Toronto. All patients admitted to this hospital, who are unable to pay \$7.00 per week, will be handed over to its regular staff, which will consist of clinicians belonging to the University of Toronto Medical Faculty. Private patients paying for their own maintenance will, of course, be allowed to select their own physician. Rather than change this rule, Mr. Flavelle, chairman of the new hospital board of trustees, who appeared recently before the Toronto Board of Control, made the following statement: "You will not understand the trustees as extending any threat or seeking to exercise improper pressure when I say that, in their judgment, it would be better to refuse the generous grant which the Council made than to accept it on conditions that make the successful operation of the hospital practically impossible." This statement meant that a grant of \$200,000, voted by the Council of Toronto, to aid in purchasing a site for, and in constructing the buildings of, the new hospital, would be refused by the trustees, if the Council of Toronto were to insist that physicians not members of the staff of the new hospital should be allowed to follow their patients into the new hospital, without regard to the amount paid for the maintenance of these patients.

Glycogen and Diet.—In health the quantity of heat developed in an animal is in proportion to the quantity of newly-formed glycose. Every febrile disease, which provokes an abnormal expenditure of combustible material, is accompanied by a diminution of glycogen. Muscular labor also produces a great loss of glycogen, which is consumed in raising the temperature of the organism and is expended as energy. In the article on Metabolism, Nutrition and Diet (Kirke's "Handbook of Physiology," 15th American Edition), information is given by Pavy as to the

average amount of glycogen in the liver of dogs under various diets. He says:

Animal food.....	7.19 per cent.
Animal Food with sugar (about $\frac{1}{4}$ lb. of sugar daily)...	14.5 "
Vegetable diet (potatoes with bread or barley meal)...	17.23 "

The dependence of the formation of glycogen on the kind of food taken is also well shown by the following results obtained by the same experimenter.

Average quantity of glycogen found in the liver of rabbits after fasting and after a diet of starch and sugar, respectively:

After fasting for three days	Practically absent.
After diet of starch and grape sugar.....	15.4 per cent.
After diet of cane sugar.....	16.9 "

Glycogen is also formed on a gelatine diet, but fats taken in as food do not increase its amount in the cells. The diet most favorable to the production of a large amount of glycogen is a mixed diet, containing a large amount of carbo-hydrate, but with some proteid. Glycerine injected into the alimentary canal may also increase the glycogen of the liver. Glycogen is, together with fat, an ordinary form of the alimentary reserves. It is a most manageable food and most easily disposed of; it is found in small quantities in all the tissues. The medical authorities of the German army advise that a certain amount of cane sugar be served out to the soldiers when they are on forced marches. The intention of adding sugar to the rations is to add to the store of glycogen, which is consumed in raising the temperature of the organism and is expended as energy.

The Centennial Number of the "New York State Journal of Medicine."—We have looked through the Centennial number of the *New York State Journal of Medicine*, a copy of which has been sent us by the editor, James P. Warbasse, M.D., 1313 Bedford Avenue, Brooklyn, N.Y., and have been much interested in the perusal of the papers and addresses contained therein. The Centennial number celebrates the 100th Anniversary of the Medical Society of the State of New York, which in its present happy condition, may be fairly considered one of the strongest state medical associations in America. As the editor of the *New York State Journal* very properly says: "The Medical Society of the State of New York has completed a hundred years,

devoted to the highest interests of medical science—years associated with advanced thought, original research, faithful service and many honorable and honored names.” We have much pleasure indeed in establishing friendly relations with the *New York State Journal*, and shall look for its advent every month with pleasure.

Some Views on the Prevention of Puerperal Infection.—The treatment of puerperal infection is most successful when it is of a preventive character. It goes without saying, that nothing of an infective nature—unclean hands, catheter, douche nozzle, etc.—should be introduced into the parturient canal by obstetrician or nurse. Lacerations and bruises of the parturient canal should be looked for shortly after delivery. Minor lacerations should receive immediate treatment; major ones should be operated on in from twelve to twenty-four hours. Douching of the parturient canal should form a consecutive part of the subsequent treatment of these cases. If the injured parts are not regularly douched and kept clean, the life of the patient is in danger, greater danger, indeed, than if her lacerated perineum had not been sutured. Numberless women in all lands have suffered from laceration of the parturient canal, great or small, and have recovered their health after more or less childbed fever, nothing having been done in the way of treatment, except some cleansing of the external genitals. Observation and experience have convinced the writer of these lines that a primipara, who has received a considerable laceration of the parturient canal during labor is in a safer condition, as to her life, without prompt suturing of the wound, rather than with it, unless antiseptic douching of the injured parts is methodically carried out in the sequel. Probably one of the greatest advances made in the nursing of an obstetric case is the fact that when an obstetrician of the present day orders vaginal douching, the modern nurse is willing and ready to carry out his orders. Men of the older generation of practitioners in Ontario, who may read these lines, will remember that some of the nurses they had to deal with did not know how to give vaginal injections and others did not like to give them. In some cases of lacerated perineum in which sutures have been passed, the negligence or unwillingness of the nurse to give vaginal douches, the longing of a weak, exhausted patient for rest, or her fear of a wet bed have resulted in a conspiracy of inaction grateful to the nurse, but fatal to the patient.

J. J. C.

PERSONALS.

DR. A. M. ROSEBRUGH has removed his office from Shuter St. to his residence, 76 Prince Arthur Ave., near St. George St.

DR. ALEX. PRIMROSE, of 100 College St., lost by death on April 11th his father, who, for many years, had lived in Nova Scotia.

WE had the pleasure of hearing a couple of weeks ago from our collaborator, Dr. H. P. H. Galloway, now settled in Winnipeg. We are more than pleased to know that the Doctor is doing well out West, and likes his new home.

WE tender to Dr. H. H. Moorhouse, of Spadina Avenue, our sincere sympathy on his peculiarly sad bereavement last month. It is more than usually sad that so bright a boy, one who showed every sign of bright intellectual attainment, should be cut off when just budding into manhood.

DR. B. E. MCKENZIE, of this city, has been invited to give a clinic on Saturday, the 12th inst, at Detroit Medical College, and be present at the closing exercises, to be held the same day. On the 17th inst. Dr. McKenzie will attend a meeting of the National Association for the study and prevention of tuberculosis, at Washington, and take part in the discussion of a paper to be read by Dr. J. E. Goldthwait, of Boston, on "Surgical Tuberculosis."

THE American Orthopedic Association meets in Toronto on August 20th and 21st next. It is intended that the sessions will occupy but two days this year, in place of three, in order that the members may have an opportunity of fraternizing with their friends who come across the water to attend the meeting of the British Medical Association. The members of the Association will put up at the King Edward Hotel, where the meetings will be held, with the exception of a clinic, to be held at the Orthopedic Hospital.

DR. COLIN A. CAMPBELL, late Senior Resident House Surgeon Royal London Ophthalmic Hospital (Moorfields Eye Hospital), London, England, has returned to Toronto and started practice at 55 College Street. Dr. Campbell is a graduate of Trinity. He was on the House Staff Toronto General Hospital 1899-00, and after some time spent on the Pacific took up special work in Europe, and has been for the past three years Resident House Surgeon at Moorfields. Dr. Campbell is a member of the Ophthalmological Society of the United Kingdom.

Obituary

DEATH OF DR. W. J. DOUGLAS.

DR. W. J. DOUGLAS, Cobourg, died suddenly while driving to visit a patient, March 29th, 1906.

W. J. Douglas was born near Norham, in 1853, being a son of Mr. Alexander Douglas, an estimable citizen of Percy Township. He graduated from Trinity Medical College, taking the gold medal for that year, when but 21 years of age. He practised for some years at Castleton, and then went to Edinburgh and London for a post-graduate course, taking his degree at Edinburgh and standing first in his class. He went to Cobourg some sixteen years ago. Dr. Douglas was a member of the Medical Council of Ontario and of the Provincial Board of Health.

He married Miss Martha Macklin, daughter of Mr. Robert Macklin, of Brighton Township, who, with one son, Alex. Macklin Douglas, Toronto, survives him. Telegrams and expressions of sympathy were received by deceased's family from friends and members of the medical profession throughout the Province, and great sorrow was felt for his loss in Cobourg. The funeral, which took place on the afternoon of March 31st, was largely attended.

DEATH OF DR. ALEXANDER THOMPSON.

DR. ALEXANDER THOMPSON, Strathroy, died March 31st, 1906. He was seized about midnight with an attack of angina pectoris, and attended by his son, Dr. A. Stewart Thompson and Dr. McCabe, both of Strathroy, but obtained little relief and, having a second attack towards morning, passed away about 8 o'clock. His age was 68 years and 7 months. The deceased left a widow and a grown-up family. The funeral was private, but in addition to the immediate relatives was attended by six members of the Sons of Scotland, and the Rev. Mr. McCrea, of London, who represented the Executive of the Grand Camp of the Sons of Scotland, and also by Dr. R. W. Bell, medical inspector of the Provincial Board of Health, who represented that Board.

Service was held at the house prior to the funeral and much sympathy expressed for the bereaved family. A few words were said in regard to the kindly virtues of the deceased, who, though a man of few words, was of sound judgment, his opinions, when expressed, carrying weight.

Correspondence.

The Editor cannot hold himself responsible for any views expressed in this Department.

TORONTO GENERAL HOSPITAL.

To the Editor of THE CANADIAN JOURNAL OF MEDICINE AND SURGERY :

Dear Doctor,—I have the honor to inform you that the Trustees of the Toronto General Hospital have set aside as "semi-public," two wards in the hospital (ward No. 25 for female patients, and ward No. 13 for male patients), for the reception of any cases which may be sent in by the profession at large or by fraternal societies or workmen's organizations. The practitioner or society physician, whether a member of the Hospital Staff or not, may follow his cases into these wards and treat them in the same way as he at present follows and treats cases in the semi-private and full private wards; and he may collect a fee for attendance on such cases.

The charge per patient for these wards will be \$7 per week. In these semi-private wards the patients will be provided with the same fare, nursing and general attendance as are given to the ordinary cases in the public wards. They will not be used as clinical material unless at the suggestion or with the approval of their own physicians.

If the above provision for semi-public wards is found inadequate, additional wards will be set aside for the purpose, if pressure upon the space required for public wards will permit of it.

Wards 4, 10, 11, 16, 17, 18, 19, 35 and 40 are now being used for semi-private, surgical and medical cases; wards 28 and 29 are used for semi-private eye and ear cases; wards 50 and 51 in the Pavilion, for semi-private gynecological cases, and one semi-private ward is available in the Burnside, for obstetrical cases.

A rate of \$10.50 per week is charged for all the above semi-private wards, and the patients occupying them are at liberty to have their own medical advisers. In the semi-private wards the patients receive the same fare, nursing and general attendance as are given to patients in the full private wards.

The following comprise a complete list of private ward rates:

In Main Building.—A \$18, B \$18, C \$16, D \$16, E \$18, F \$16, G \$16, H \$20, I \$16, J \$16, K \$18, L \$20, 8½ \$14, R \$14, S \$14 "Walker" \$30, C. M. \$30, "Morrow" \$30, O. R. \$30, "Cockshutt" \$20, 3 \$14, 20 \$14, 21 \$14, 37 \$16.

In Eye and Ear Department.—U \$14.

In Surgical Pavilion.—V \$18, W \$16, X 18, Y \$18, Z \$20,
52 \$18.

In Lying-in Department.—A \$20, B \$20, C 20, D \$18, E \$18.
For cot in semi-private ward the rate is \$10.50 per week.

Faithfully yours,

JOHN N. ELLIOTT BROWN,
Superintendent.

Toronto, Mar. 27, 1906.

News of the Month.

DR. SHEARD ADDRESSES THE STUDENTS.

DR. CHARLES SHEARD, Medical Health Officer of Toronto, addressed the final meeting of Toronto University Medical Society, on April 12th, and when introduced by President Wesley Rich, received a reception from the four or five hundred students present that indicated the popularity of the Doctor at the college.

The Doctor urged every student to aim at taking post-graduate work, visiting the great hospitals of Europe and America, and specializing on some department of medical work. The instruction at the college was very good, but it should be considered only the beginning of their course of study. Exhaustive technical education was the only way to get the requisite knowledge and skill to carry out in the most successful manner the noble work of the physician.

"Never think of remaining a general physician," he said. "If you are out of funds, take a general practice till you have saved \$5,000, then escape to some of the large centres, specialize and practice your specialty. If you have to start with a general practice, don't sink your money in real estate or fine horses, and remember Prof. Osler's advice, to keep your affections in cold storage for a decade after leaving college. Between thirty and thirty-five is early enough to marry. If you have a wife and family on your hands you won't do much post-graduate study.

"From my knowledge of London, where I spent several years, I am sure you can get started as easily there as in Toronto, and your fees would be paid in pounds instead of dollars. I know now that I was exceedingly foolish to ever leave London for Toronto."

There were many good reasons for settling in the large centres. In the first place, if a man secured any reputation at all he got huge fees for his services. That was simply because they were fashionable. The Doctor told of cases where Toronto people had gone to New York for simple professional services which could have been provided quite as well in Toronto for fully \$500 to \$1,000 less than what was paid in New York. "If people will do that kind of thing, you are foolish to object," he added.

Dr. Sheard thought the general prospects for the medical pro-

profession were still good as regards remuneration. While there was an extremely high percentage of failures in mercantile life, not more than five per cent. of the physicians who attended properly to business had any difficulty in making a good living.

Referring to the matter of temperance, his advice was as follows: "Be temperate in the broad sense. Keep away from the bar-room, tavern and billiard-room, and from all games of chance. Life is real and chance plays very little part in it."

Concluding, he said the students would find their greatest happiness by following Carlyle's advice: "Blessed is the man who findeth his work and doeth it." This was a sure cure for depression of spirit and would inspire them to true and noble action.

ITEMS OF INTEREST.

Hospital Incorporated for Consumptives.—A bill incorporating the Toronto Free Hospital for Consumptives was reported by the Private Bills Committee, April 12th, and the usual fees remitted in view of the character of the body. The first trustees are Messrs. W. J. Gage, W. A. Charlton, H. P. Dwight, H. C. Hammond, James L. Hughes, R. H. Davies, Ambrose Kent and W. L. Wood.

Ex-House Surgeons Dine.—Thirty-five of the ex-house surgeons of the Toronto General Hospital dined at the King Edward on April 9th, and organized themselves into an association, with the following officers:—Hon. President, Dr. Chas. O'Reilly; President, Dr. R. B. Nevitt; First Vice-President, Dr. W. P. Caven; out-of-town Vice-Presidents, Drs. McAlpine, of Lindsay; Third, of Kingston; Hillary, of Aurora; A. Ardagh, of Orillia; Middlebro', of Owen Sound; Mullin, of Hamilton; Acheson, of Galt; D. Armour, of London (Eng.); Barker, of Baltimore; Secretary-Treasurer, Dr. J. N. E. Brown; Council, Drs. J. F. W. Ross, H. A. Bruce, P. E. Doolittle, W. N. Barnhart, W. B. Hendry. The meetings of the Association will be yearly, at which one of the ex-house surgeons will deliver an address. Dr. L. F. Barker was elected to deliver the first address.

Queen's Convocation.—The only feature in connection with Queen's medical convocation on April 12th was the conferring of the honorary degree of Doctor of Laws upon Dr. C. K. Clarke, Superintendent of Toronto Asylum for the Insane. Dr. Clarke was presented to Chancellor Fleming by Prof. Shortt, who eulogized the life-work of Canada's leading alienist. In addressing

the graduating class Dr. Clarke pointed out that the aim of the graduate of medicine should be to acquire a broader culture than is ordinarily the case with Canadian physicians. Graduates were urged to become broad-minded physicians before specializing as surgeons. Regarding Government aid to Queen's, Dr. Clarke said that merely improved the position of Toronto University. There should be no petty bickerings, he said, in the discussion of broad educational policies. Short addresses were also delivered by Dean Connell and Principal Gordon. The former stated that Queen's medical registration this session was 223, greater than ever before.

Enlargement of Grace Hospital.—It is proposed to build a wing to Grace Hospital and in that way double its accommodation for patients. Property to the north of the present building on Huron Street as far as Division Street has been purchased and the sum of \$50,000 towards the necessary \$200,000 already subscribed.

Queen's Graduates.—On April 9th, Queen's Medical College issued the list of graduates and passmen. There were 47 graduates, comprising the following:—A. E. Baker, Black Falls, Sask.; W. H. Ballantyne, Kingston; J. A. Barnes, Kingston, Jamaica; A. M. Bell, Moscow; E. Bolton, Phillipville; F. J. Brandoek, Northport, N.S.; H. Cochrane, Sudbury; G. L. Cockburn, Sturgeon Falls; C. B. Dean, Bridgetown, Barbadoes; D. G. Dingwall, W. F. Gavin, Lancaster; G. D. Gordon, C. W. Graham, B.A., Kingston; J. Johnston, B.A., Combermere; W. G. Leadley, C. A. Lawlor, Kingston; S. L. Lucas, Kingston, Jamaica; F. E. Lowe, Adelphi, Jamaica; S. McCallum, M.A., Brewer's Mills; J. P. McCormick, Ottawa; D. J. McDonald, Whycocomagh, N.S.; A. G. McKinley, Chapelton, Jamaica; D. McLellan, Forester's Falls; F. R. Nicoll, B.A., Kingston; F. J. O'Connor, Long Point; W. M. R. Palmer, Northcote; R. K. Paterson, Renfrew; W. E. Patterson, Newburgh; W. R. Patterson, L. L. Playfair, C. A. Publow, Kingston; H. O. Redden, Ernestown; J. Reid, Renfrew; A. D. C. Robb, Nashville, Tenn.; B. A. Sandwith, Whitstable, Eng.; F. F. Saunders, Rhinebeck, N.Y.; S. S. Shannon, Kingston; S. H. Smith, Chambers; J. B. Snyder, Lancaster; W. E. Spankie, Wolfe Island; J. R. Stewart, B.A., Waba; E. M. Sutherland, B.Sc., B. C. Sutherland, Montreal; W. J. Taugher, Beachburg; C. P. Templeton, Napanee; J. J. Wade, Balderson; D. M. Young, Bristol, Que.

The Physician's Library.

BOOK REVIEWS.

Nursing. By ISABEL HAMPTON ROBB. Cleveland: E. C. Koeckert. 3rd Edition. 1906.

Mrs. Robb, a Canadian lady, and a graduate of Bellevue (N. Y.) Hospital, formerly Superintendent of the Illinois Training School for Nurses, Chicago, and later of the Johns Hopkins Hospital Training School for Nurses, Baltimore, is an authority on nursing, and the third edition of her well-known text-book will be welcomed by the profession. A good many changes have been made, upwards of 50 pages being added, and part of the work being re-cast. In particular, an outline of a three years' hospital course replaces the two years' course formerly given, and great attention has been bestowed on the completeness of the book. Altogether it is one of the best text-books on nursing in existence.

H. MACM.

Physicians' Pocket Account Book. By J. J. TAYLOR, M.D. Published by The Medical Council, 4105 Walnut Street, Philadelphia, Pa.

This little book contains within its first few pages sufficient business suggestions to make it worth its value alone, suggestions which, whether copied word for word, as given in this book, or used as suggestions, are of the utmost importance. For instance, as a short way of expressing one's feelings to a patient who has not responded as rapidly as perhaps he should to his account, take this: "I have done my part; don't you think you should now do yours?" The advice, too, given to the young practitioner is very valuable. "Render honest, efficient service, full measure, and then charge and collect an honest fee for it." "You must be supported by your patrons or the time will come when you can no longer render services at all." "The difference between a successful physician and an unsuccessful one, in a financial sense, is often only the difference between a good collector and a poor one."

The book is practically a day-book; the name of the patient and his address at the top of the page; the year, month and date, person to whom service is rendered, description of service, debit and credit columns—this makes up each page, besides which there

is sufficient room in which to enter a certain number of balances due and brought forward to this book.

The obstetric record is practically all that the Registrar-General could ask for. The cash account at the end of the book is large enough for the average man to keep some record of what he receives and what he spends throughout the year. Altogether, this little book is a decided improvement on some that we have seen, and if properly used will be of the greatest value to every busy practitioner.

A. J. J.

The Divine Fire. By MAY SINCLAIR. Toronto: McLeod & Allen.

A clever book in its way, but to a medical man a somewhat exhaustive clinic on the poetic temperament as found in a young man, the son of a London book-seller. The authoress evidently does not believe in anesthetics and sharpens her knife in full view of her victim, he meanwhile making his own remarks and giving his diagnosis of his own case. "The Divine Fire" is the name given by mutual consent to the disease; the value of the fuel consumed is underestimated by both. The gold is sifted occasionally, but only the dross measured, and the fire is too often poked to allow those who sit by it time for any golden fancies.

W. A. Y.

Lectures on Auto-Intoxication in Disease, or Self-Poisoning of the Individual. By CH. BOUCHARD, Professor of Pathology and Therapeutics; Member of the Academy of Medicine, and Physician to the Hospitals, Paris. Translated, with a preface and new chapters, added by Thomas Oliver, M.A., M.D., F.R.C.P., Professor of Physiology, University of Durham; Physician to the Royal Infirmary, Newcastle-upon-Tyne; Formerly Examiner in Medicine, Royal College of Physicians, London. Second revised edition. Philadelphia: F. A. Davis Company. 1906.

We owe to Dr. Oliver a deep debt of gratitude for so ably presenting to us English-reading people the second revised edition of Professor Ch. Bouchard's admirable lectures on this fascinating and all-important subject. We find the meaning of the French text has been most fluently rendered into English. The chapters on the "Toxicity of Urines," perhaps stand out as particularly bright stars in a heaven of radiant meteors; but his lectures on typhoid fever and cholera contain many points of every-day interest and suggestions of considerable value from a therapeutic standpoint. The author's views on uremia are quite original and worthy of much consideration.

The subject of intestinal antisepsis is fully and lucidly dis-

cussed. Beta naphthol and salicylate of phenol are the drugs most favorably spoken of.

The discussion on the important part played by auto-intoxication in mental diseases is particularly interesting just now, as this subject is attracting universal attention. Although in these thirty-two lectures the author deals extensively with the entrance of poisons *ab extra*, yet he does not treat at any length with the question of how the body protects itself against the invasion of microbes. This important phase of the question is, however, ably handled by the translator in an appendix. W. H. P.

Practical Dietetics, with Reference to Diet in Disease. By ALIDA FRANCES PATTEE, Graduate Boston Norman School of Household Arts; Late Instructor in Dietetics, Bellevue Training School for Nurses, Bellevue Hospital, New York City; Special Lecturer at Bellevue, Mount Sinai and the Hahnemann Training Schools for Nurses, New York City. Third Edition. New York City: A. F. Pattee, publisher, 52 West Thirty-ninth Street.

There has not been enough attention paid in our Canadian hospitals by either physicians, students or nurses to the question of diet in its relation to disease. In our large hospitals, both in Toronto and elsewhere, the nurses have not been properly and systematically trained in this respect prior to graduation. With the advent of a new hospital an additional incentive will be given no doubt to progressiveness in this matter. The author is decidedly practical and experienced, and the price of the book (one dollar) is within the reach of all.

It is, therefore, to be commended for perusal by nurses, physicians, students, and the intelligent housewife. The diet in infancy, and the dietaries for young children, and the pregnant woman, are given special attention, while the list of recipes alone is sufficient to make the work valuable as a text-book, or for a reference library. E. H. A.

Neurotic Disorders of Childhood. Including a study of Auto and Intestinal Intoxications, Chronic Anemia, Fever, Eclampsia, Epilepsy, Migraine, Chorea, Hysteria, Asthma, etc. By E. K. RACHFORD, M.D. New York: E. B. Treat & Co., 241-243 West 23rd Street. 1905.

Rachford in this work has done a real service for the medical profession. He writes on a subject which has received but little attention, and yet the matters dealt with are such as come frequently to the attention of every busy and observant practitioner. The fact that children are predisposed to such neuroses as con-

vulsions, epilepsy, hysteria and incontinence of urine is recognized by everyone, who may often, however, find himself at a loss to give a sufficient reason for the complex conditions which demand analysis in order that intelligent treatment may follow. In this work he will find a rational explanation. The author has evidently made a very careful study of the subject of development and the explanations given are based upon sound biological and physiological bases. So much of our work is necessarily empirical that it is a great satisfaction to have true, scientific reasons given when they can throw light upon clinical conditions.

While it is a real satisfaction to utter words of commendation regarding the author's part, one may also say that the publishers have done ample justice in the way of paper, binding and printing. The book is one that will add very materially to the value of the physician's library.

B. E. M.

The Jungle. By UPTON SINCLAIR. Toronto: McLeod & Allen, publishers. Cloth or paper.

A book of horrors. A story of the Chicago stock-yards, written with the awful brutality of naked fact, and with the compelling force of truth. The facts woven into a story of the life of a family of Lithuanians who land in the city of Chicago hopeful, healthy and willing, even eager to work. They get employment in the stock-yards. As the tale unfolds, their lives become a delirium of terrible drudgery, their prospects for the future as black as hell. One may well ask, "Does the author who sees it all so plainly offer any solution of this ghastly problem?" Let every physician interested in unfortunate humanity read and ponder.

W. A. Y.

Essentials of Materia Medica, Therapeutics, and Prescription Writing. By HENRY MORRIS, M.D., College of Physicians, Philadelphia. Seventh edition, thoroughly revised. By W. A. BASTEDO, Ph.G., M.D., Instructor in Materia Medica and Pharmacology at the Columbia University, College of Physicians and Surgeons, New York City. 12mo, 300 pages. Philadelphia and London: W. B. Saunders & Company. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. 1905. Cloth, \$1.00 net.

The student cannot find a better or more practical work on Materia Medica, Therapeutics and Prescription Writing than this little essentials from the press of W. B. Saunders & Company. But, then, this work is no exception in this respect to all the other numbers of this excellent series of compends. Dr. Bastedo, in revising the book for this seventh edition, has brought

it in accord with the new (1905) pharmacopeia, introducing all the new remedies, and carefully indicating their therapeutic doses and uses. For a work of three hundred pages it contains a mine of information so presented as to be easily grasped. We give it our unqualified endorsement.

W. J. W.

Diseases of Metabolism and of the Blood, Animal Parasites, Toxicology. Edited by RICHARD C. CABOT, M.D., Instructor in Clinical Medicine in the Medical School of Harvard University. An authorized translation from "Die Deutsche Klinik," under the general editorial supervision of JULIUS L. SALINGER, M.D. New York and London: D. Appleton & Company. 1906.

This is one of the Manuals of Modern Clinical Medicine being issued at present by the Appletons, and deals with the subject of constitutional diseases, such as indicated by the title. These subjects are very scantily treated in any medical work in English and therefore this volume will prove of great use to the English-speaking profession generally. The subjects are treated from a rational point of view, both as to symptomatology and treatment, and the writers wisely confine themselves to discussing thoroughly certain aspects of each disease. Diabetes Mellitus, by Naunyn, is an especially interesting article. So far as the reviewer has been able to examine the other articles, they are excellent, and the work can be commended to all who desire to read an intelligent discussion of these subjects.

A. M.P.

A Treatise on Surgery. In two volumes. By GEORGE R. FOWLER, M.D., Examiner in Surgery, Board of Medical Examiners of the Regents of the University of the State of New York; Emeritus Professor of Surgery in the New York Polyclinic, etc. Two imperial octavos of 725 pages each, with 888 text illustrations and 4 colored plates, all original. Philadelphia and London: W. B. Saunders Company. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. 1906. Per set: Cloth, \$15.00 net; half morocco, \$17.00 net.

We have been looking forward to the appearance of this work with the greatest expectations, for Dr. Fowler's endeavors in the field of practical surgery have been such as to stamp his writings with unquestionable authority. It is not too much, indeed, we feel it is too little to say that our expectations have been fully realized. The work is a masterpiece. It is an accurate, up-to-date treatise on surgery, skilfully presented. This entirely new work presents the science and art of surgery as it is practised today. The first part of the work deals with general surgery, and

embraces what is usually included under the head of principles of surgery. Special attention is given to the subject of inflammation from the surgeon's point of view, due consideration being accorded the influence of traumatism and bacterial infection as the predisposing and exciting causes of this condition. Then follow sections on the injuries and diseases of separate tissues, gunshot injuries, acute wound diseases, chronic surgical infections (including syphilis), tumors, surgical operations in general, foreign bodies, and bandaging. The second part of the work is really the clinical portion, devoted to regional surgery. Herein the author especially endeavors to emphasize those injuries and surgical diseases that are of the greatest importance, not only because of their frequency, but also because of the difficulty of diagnosis and the special care demanded in their treatment. Throughout special attention has been given to diagnosis, the section on laboratory aids being unusually excellent. The text is elaborately illustrated with entirely new and original illustrations, and evidently neither labor nor expense has been spared to bring this feature of the work up to the highest standard of artistic and practical excellence.

The Ophthalmoscope and How to Use It. By JAMES THORINGTON, A.M., M.D., Professor of Diseases of the Eye in the Philadelphia Polyclinic. 73 illustrations, 12 colored plates. Philadelphia: P. Blakiston's Son & Co. 1906.

After all, the way to learn to use the ophthalmoscope is to use it. No amount of theory can take the place of practice, but theory can smooth over some of its rough places. Necessarily a knowledge of the use of the ophthalmoscope implies the interpretation of the appearances of the eye-ground both in health and in disease. It is somewhat difficult to preserve a just balance, not to say too little or too much, and in this Thorington has succeeded.

J. M.

Urinary Analysis and Diagnosis by Microscopical and Chemical Examination. By LOUIS HEITZMANN, M.D., New York. Second revised and enlarged edition, with one hundred and thirty-one illustrations, mostly original. New York: William Wood & Co. 1906.

The second revision of this work appears after six years. In it the author has endeavored to simplify the methods and tests in the chemical examinations, leaving out the more complicated ones.

He has laid great stress upon the microscopical examination, and especially microscopical diagnosis; the especial feature of this most important branch of the subject is the numerous full-page

illustrations, which have been carefully selected and made directly from specimens in the author's possession; they should prove of the greatest practical value. The matter is well arranged for ready reference. The highest praise is due the publishers, Messrs. Wm. Wood & Co., for the excellent style in which the book is finished.

W. H. P.

Nasal Sinus Surgery with Operations on Nose and Throat. By BEAMAN DOUGLASS, M.D., Professor of Diseases of the Nose and Throat in the New York Post-Graduate Medical School and Hospital. Illustrated with 68 full-page half-tone and colored plates, including nearly 100 figures. Royal octavo, 256 pages. Bound in extra cloth. Price, \$2.50 net. Philadelphia: F. A. Davis Co., publishers, 1914-16 Cherry Street

One of the most perplexing and troublesome conditions the practitioner meets with is that of suppuration in the accessory sinuses of the nose. The difficulty of complete illumination of the parts, the small size of the space available for manipulation, render exact localization of the source of the pus a perplexing problem appreciated the more fully the oftener one attempts it. A special work on the anatomy of the parts and on the methods of manipulation necessary for diagnosis and treatment is therefore much to be desired. Every effort has been made in the present book, both by illustration and by verbal explanation, to make clear the intricacies of the subject.

J. M.

A Text-Book on the Practice of Gynecology. For Practitioners and Students. By W. EASTERLY ASHTON, M.D., LL.D., Fellow of the American Gynecologic Society; Professor of Gynecology in the Medico-Chirurgical College of Philadelphia. Second edition, revised. Octavo of 1079 pages with 1046 original line drawings. Philadelphia and London: W. B. Saunders Company. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. 1906. Cloth, \$6.50 net; half morocco, \$7.50 net.

The fact that two editions of Dr. Ashton's new work have been required in the short period of six months indicates beyond a doubt that the medical profession was quick to appreciate the practical merits of the book; indicates that the general practitioner wants a treatise on gynecology that does not assume him to be an expert gynecologist, but rather describes in detail, not only what should be done in every case and emergency, but also precisely *how to do it*. Owing to the short time that has elapsed since the appearance of the first edition, and also from the thorough manner in which Dr. Ashton handled his subject originally, the

changes in this edition are necessarily few in number and limited chiefly to the correction of a few typographic errors and the alteration of several of the illustrations. In reviewing this new edition we cannot refrain from again speaking of the very practical illustrations. There are 1046 of them, all original line drawings made especially under Dr. Ashton's personal supervision, from actual apparatus, living models, dissections on the cadaver, and from the operative technics of other authors. All superfluous anatomic surroundings are eliminated and the operations and procedures are detailed step by step with a clearness and accuracy we have never before seen. Certainly, the success the work has won is well deserved and fully to have been expected.

A Laboratory Manual of Physiological Chemistry. By ELBERT W. ROCKWOOD, M.D., Ph.D., Professor of Chemistry and Toxicology and Head of the Department of Chemistry in the University of Iowa, etc. Second edition, revised and enlarged, with one colored plate and three plates of microscopic preparations. Large 12mo, 229 pages, extra cloth. Price, \$1.00, net. Philadelphia: F. A. Davis Co., publishers, 1914 Cherry St.

This is a very handy manual for practical work in the laboratory. The directions for making the experiments are plain and easily understood, and the facts observed are briefly yet clearly described.

The text-matter of the more important experiments is printed in larger type in order to make the course flexible, and give the student a better idea of the relative value of the various topics.

A. E.

The Food Factor in Disease. Being an Investigation into the Humoral Causation, Meaning, Mechanism, and Rational Treatment, Preventive and Curative, of the Paroxysmal Neuroses (Migraine, Asthma, Angina Pectoris, Epilepsy, etc.), Bilious Attacks, Gout, Catarrhal and other Affections, High Blood-Pressure, Circulatory, Renal and other Degenerations. By FRANCIS HARE, M.D., Late Consulting Physician to the Brisbane General Hospital; Visiting Physician to the Diamantina Hospital for Chronic Diseases, Brisbane; Inspector-General of Hospitals for Queensland. In two volumes. London, New York and Bombay: Longmans, Green & Co., 39 Paternoster Row, London. 1905. Cloth, 30s., net. Pp. 497-535.

The physiological uses and actions of food are first considered, the nitrogenous as structural or reparative and the carbonaceous as strictly a fuel and more likely to accumulate in the blood than

the former. The income of carbon to the blood and the regulation of income by physiological, and to some extent by pathological methods, is next dealt with, and the methods by which the carbon is got rid of. Consideration is then devoted to a theory that under certain conditions carbonaceous material accumulates in the blood to a pathological extent, and this state the author designates "hyperpyremia," and proceeds to argue in favor of his theory. Other chapters are devoted to the various conditions and processes antagonistic to hyperpyremia, the mechanism and causation of some of the paroxysmal neuroses, the relation between pyremia and uric acid and clinical aspects of hyperpyremia and its resultant degeneration. Attention is given to general considerations of treatment, and the work closes with an appendix of cases well illustrating the contentions of the able writer, who is to be congratulated upon the enormous mass of most valuable material collected from varied sources and made available for reference. Deduction is the key-note of the work.

The work may be recommended as one that will amply reward careful perusal; it can not be merely skimmed through. It will be a welcome addition to the library of every thoughtful practitioner; the consultant will find it especially valuable, while the clinician will fairly revel in its wealth of illustrative material.

C. R. D.

Gall-Stones and Their Surgical Treatment. By G. A. MOYNIHAN, M.S. (Lond.), F.R.C.S. Second edition, revised and enlarged. Philadelphia and London: W. B. Saunders & Co., publishers. Canadian agents: J. A. Carveth Co., Ltd., Toronto.

The second edition of Moynihan's work on gall-stones has just appeared. Besides many new illustrations and case records, a new chapter, entitled "Congenital Abnormalities of the Gall-bladder and Bile-ducts," has been added. In dealing with this subject the author does not take up more space and time than the comparatively rare occurrence and slight importance clinically would justify. The chapter is clear, well illustrated, and to the point. The cuts showing the variations in the termination of the bile-ducts should be of special interest to surgeons.

Probably the best section of the book is that which deals with the etiology of gall-stones and the pathological conditions which may result from their presence. For his descriptions and conclusions in regard to this subject, Mr. Moynihan has drawn, not only from his own practical experience, but also from the experiments and observations of the gall-stone students of the world. His treatment of the subject is so clear, and told with so much interest, that a solid foundation is laid for the complete understanding and

thorough appreciation of the next section—that dealing with the symptoms and signs of gall-stone disease in all its variations.

In taking up the operative treatment, the same thoroughness is present. Not only does he describe each operation with the greatest detail and clearness, but he also allots considerable space to the description of the preparation of the patient and surgeon in the light of modern aseptic and antiseptic methods.

F. N. G. S.

A Text-Book on Modern Materia Medica and Therapeutics. By A. A. STEVENS, A.M., M.D., Lecturer on Physical Diagnosis, University of Pennsylvania; Professor of Pathology, Woman's Medical College of Philadelphia. Fourth edition, revised. Octavo of 670 pages. Philadelphia and London: W. B. Saunders & Company. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. 1906. Cloth, \$3.50 net.

The new fourth edition of Dr. Stevens' excellent work on practical therapeutics appears at a most opportune time, close upon the issuance of the Eighth Decennial Revision of the Pharmacopeia to which it has been adapted. Dr. Stevens, by his extensive teaching experience, has acquired a clear, concise diction that adds greatly to his work's pre-eminence. New articles have been added on Scopolamin, Ethyl Chlorid, Theocin, Veronal and Radium, besides much new matter to the section on Radiotherapy. The numerous changes in name or strength of various drugs and preparations, as called for by the new Pharmacopeia, have also been made. In fact, it is somewhat difficult to speak of Dr. Stevens' Therapeutics without resorting to the frequent use of superlatives, for of all the good works on this most important of subjects, this book before us is undoubtedly the very best.

Manual of Chemistry. A Guide to Lectures and Laboratory Work for Beginners in Chemistry. A Text-Book Specially Adapted for Students of Medicine, Pharmacy and Dentistry. By W. SIMON, Ph.D., M.D., Professor of Chemistry in the College of Physicians and Surgeons of Baltimore, and in the Baltimore College of Dental Surgery. Eighth edition, thoroughly revised. Philadelphia and New York: Lea Brothers & Co. 1905.

In a department of knowledge, like chemistry, where the advances are so rapid, it is difficult for text-books to keep up with current investigations. The eighth edition of this manual has been thoroughly revised and brought up-to-date in all parts. Several of the chapters have been rewritten, their contents being rearranged in order to conform to modern views.

The work aims to furnish to the student of general science a clear presentation of the facts pertaining to chemistry. At the same time prominence has been given to facts which are of direct interest to the physician, pharmacist and dentist.

A number of experiments have been given which may be made in the laboratory with a comparatively small outfit of chemical apparatus.

A. E.

The Diseases of Infancy and Childhood, Designed for the Use of Students and Practitioners of Medicine. By HENRY KOPLIK, M.D., Attending Physician to the Mount Sinai Hospital; Formerly Attending Physician to the Good Samaritan Dispensary, New York; ex-President of the American Pediatric Society; Member of the Association of American Physicians, and of the New York Academy of Medicine. Second edition, thoroughly revised and enlarged. Illustrated with 184 engravings and 33 plates in color and mono-chrome. New York and Philadelphia: Lea Bros. & Co. 1906. Canadian Agents: Chandler, Ingram & Bell, Toronto; Chandler & Fisher, Winnipeg; Chandler & Mills, Montreal.

In the second edition of his book, Dr. Koplik has brought his book "abreast of the advances of the past few years." The author has not been satisfied to revise an odd chapter; but on the other hand, has gone through the volume and almost rewritten it in its entirety. The section on Infant Feeding covers nearly 90 pages, and is worthy of the most careful perusal. In this section Dr. Koplik takes up not only Food Preparations, Artificial Infant Foods, the pasteurizing and sterilizing of cow's milk, etc., etc., but goes into the details of the home preparation of modification of milk for infant feeding, the method of calculating percentages of fats, proteids and sugar, when shall food be peptonized, the whey method of modification of cow's milk, when is the bottle-fed infant thriving, Biedert's mixture, the Rotch method, etc., etc.

Koplik's *Diseases of Infancy* may be fairly considered quite a valuable addition to the literature devoted to pediatrics now in print

A Treatise on Diagnostic Methods of Examination. By PROF. DR. H. SAHLI, of Bern. Edited, with additions, by FRANCIS P. KINNICUTT, M.D., Professor of Clinical Medicine, Columbia University, N.Y.; and NATHANIEL BOWDITCH POTTER, M.D., Visiting Physician to the City Hospital and to the French Hospital, and Consulting Physician to the Manhattan State Hospital, N.Y. Octavo of 1,008 pages, profusely illus-

trated. Philadelphia and London: W. B. Saunders & Company. 1905. Canadian agents: J. A. Carveth & Co., Ltd., 434 Yonge Street, Toronto. Cloth, \$6.50 net; half morocco, \$7.50 net.

The publication of Dr. Sahli's work, translated from the German, has been awaited by the profession in this country with a good deal of pleasure. W. B. Saunders & Co. are to be congratulated upon their enterprise in this connection, and, judging from a few evenings' study of Dr. Sahli's treatise, we bespeak for it a large sale. The work is, to say the least of it, thorough and exhaustive, the author giving with much detail the different methods of examination necessary to make a correct diagnosis. Dr. Sahli has treated *in extenso* the examinations of the stomach, blood, feces and sputum. In the chapter on examination of urine, a good deal of new material is given, including Seliwanow's reaction for levulose, Bial's test for pentoses, quantitative determination of urochrome after Klemperer, osmotic pressure and cryoscopy of the urine, and the different methods of staining pigments. The American edition appears simultaneously with the new fourth German edition.