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EDITORIAL.

THE MEDICAL SUPERINTENDENT OF THE TORONTO GENERAL HOSPITAL.

We believe that the Board of Governors of the Toronto General Hospital acted wisely in selecting a medical man to succeed Dr. J. N. E. Brown, who resigned. We ventured to express this view in our issue for May. We are glad to be able to record that this view has prevailed.

With the choice of Dr. C. K. Clarke, there can be no objection. He has had long experience in the management of such institutions. He has the reputation from many years at the head of some one or other of our asylums of being able to work in harmony with those associated with him, and to be able to get the best service from those under his control.

But he has also a wide knowledge of medical literature and will be able to make good use of his extensive reading and observation in his new field of labor. He has travelled a good deal and has observed how public institutions are managed in other countries. He, therefore, comes to his new duties with a special equipment of good qualities.

So far in his connection with our public institutions we can apply to him the words of Samuel Johnson said of Oliver Goldsmith, *nihil erat quod non tetigit, nihil tetigit quod non ornavit.*

THE STERILIZATION OF CRIMINALS.

The medical profession cannot shut its eyes to the fact that the unfit procreate their unfortunate class all too readily. Those of the higher grades in society often remain single till late in life, or are careful to limit the number of children to those within their means of support and education. Not so with the low, degraded and criminal classes.

In looking around for ways and means of lessening this output of the objectionable element into the stream of human life. It has been found very expensive to find homes and asylums for all these. Then, again, many of them are not of the class that could be very readily committed to an institution. They can not be taken and thrown over the Tarpeian Rock into the sea, as was done in ancient times.

In the United States considerable progress has been made in the direction of the prevention of the birth of this undesirable element. In the State of Illinois we find the following in the statutes: "Every applicant for a marriage license shall state, under oath, whether either of the parties is an imbecile, epileptic, of unsound mind, or has been an inmate of an insane asylum, and whether either of the contracting parties is afflicted with tuberculosis, syphilis, or other transmissible diseases, and such application shall be accompanied by a certificate of a reputable practising physician that the parties contemplating marriage are in sound bodily health, and free from any recognizable indications of transmissible disease."

In the States of California, Indiana, and Connecticut, there are laws for the sterilization of these defectives. In the male vasectomy is performed, and the female a portion of the tubes is removed. Just quite recently New Jersey has enacted a sterilization law. This is the fourth State to pass such a law. A board of examiners is appointed to administer law. In these States much stress is laid on the fact that a person had even been in an asylum. It is regarded that temporary insanity unfits one for parenthood.

THE FLY AGAIN UNDER ATTACK.

The fly is now having all it can do to maintain its existence. The time was when the fly was regarded only as a sort of nuisance at meal times by getting on to food, and in the morning by disturbing those who wished a quiet hour's sleep.

But the times change and we change with them. People began to think that the house-fly might be more serious than a means of annoying those who wished to enjoy a sleep or bother the fastidious at meal times. It became common knowledge that the fly was not in the habit of taking a bath nor washing its feet after being in rather questionable places. That is, it did not seem to give the fly any qualms of conscience to light on the cream jug, or on a lady's cheek after it had just been travelling over and feeding upon a piece of decayed carion in some one's lane.

Then the scientist began his investigations, when it was soon found out that the fly carried on its body many forms of disease-producing bacteria. Indeed, it was discovered that the fecal matter from the fly was very dangerous and often contained many bacteria. It was observed during the South African war that flies had a good deal to do with the spread of typhoid fever in the military camps. We are glad to see that what we have advocated so long is now being acted upon.

Much can be done and at very little cost. Organic matter can be removed in cities at such intervals as will prevent the breeding of these insects. Regulations can be adopted with reference to the disposal of garbage. Useful regulations could be enforced to prevent the exposing of food to contamination. Good will come of the discussion.

A HOSPITAL FOR CONSUMPTIVES.

For many years we have urged that governments and municipalities should unite in doing their duty in the prevention and treatment of tuberculosis. At a time when few would give ear to such teaching we were urging that consumption was a contagious disease. We do not need to urge this view now.

We are of the opinion that all large cities should own and conduct a sanatorium for the treatment of consumption. This is the sound view. The cost would fall on every one in proportion to what he owns in the city. To none would it be a heavy burden, and everyone should be willing to pay his share with right gladness. Every death from consumption means an average loss of several thousand dollars, apart from the loss due to impaired earning power of those who are ill and waiting their turn to die.

It is impossible to do big things on small means. Toronto is now a big city and growing rapidly. There must be special accommodation found somewhere for our consumptives. We think it would be much better for the city to spend $175,000 now in securing the accommodation needed for the present than to hand over $200,000 as was proposed to the sanitarium association, and have no direct control over the situation.

We must give our support to some such plan as that advocated by Dr. Hastings. It is the one that will yield, in the end, the best results; and will also prove the most economical. There would be some who could pay some or all the cost of their maintenance. This would reduce to the public the total cost. The real question, however, is not one of cost solely, but having suitable accommodation at any cost. We have been too long in the habit of talking about the wealth of our mountains, streams, lakes, forests, mines, etc., and saying nothing about the wealth of our country and the people it contains. On the value given to each life of all ages and occupations by the committee of one hundred in the United States, the people in Canada represent an aggregate wealth of $13,012,500,000. Such figures stagger one.

Dr. Hastings stated that in the next ten years there would die in Toronto of tuberculosis, 6,000 persons. Now, suppose we put no higher

value on each life than that of the committee of one hundred, namely, $1,735, this would represent a grand loss by death in ten years of $10,410,000. Dr. Hastings is only asking for $175,000 to help in checking this fearful waste of life and its value.

We do not agree that the city's giving this sum would stop private benefaction. It was not so in the case of the General Hospital, nor in the cases of St. Michael's Hospital and the Western Hospital. These institutions received sums from the city, but they also received generously from their friends as well. We are inclined to think that when the city gives it acts as a stimulus to the rich. These latter say to themselves, "If the city will do nothing, why should we do all?" When they see the city as a whole doing some things for its sick poor, then they too are willing to help. No alderman will ever have to face an angry electorate because of his support to such expenditures as this.

Toronto is a big city, and let the people become big with it. Here is a plain duty before the people, and it is to be hoped they will not be found wanting.

JUVENILE COURTS.

It is with feelings of pleasure that we notice that progress is being made towards the establishment of a juvenile court.

Experience has shown that where such exists, the benefits are quite apparent. Children should be tried by different methods than those adopted for adults.

So many instances of crime on the part of the young person are due to bad environments, it becomes necessary to reform rather than punish.

VACCINATION OF SCHOOL CHILDREN.

This question was up before the School Board of Toronto, and, after a good deal of discussion, the foot note was attached to the rules that vaccination is not compulsory.

Dr. Noble, one of the trustees, made a strong plea for vaccination. It was a foregone conclusion that he would not succeed in his contention. Toronto people have been thoroughly educated by the antivaccinationists, and, therefore, for the time being ignorance rules.

It is much to be regretted that so little attention is paid to this important subject. If one will take the trouble to ask the chief medical officers of our life insurance companies what is their experience, he will find that

a very large percentage of our people are not vaccinated. This is a veritable danger.

In Britain the deaths from smallpox runs from 600, and 700, and 800 a year to 2,545 in 1902, and this on a population of 44,000,000. In Germany for the past ten years the highest number of deaths in any year was 65, and this on a population of 62,000,000. In Germany there are no smallpox hospitals, as such patients are accommodated in the wards of any general hospital.

It does seem strange that Britain which gave the world the benefits of vaccination, still keeps smallpox. The plea for exemption under "conscience" is only another name for ignorance. We should do better in this country.

A MEDICO-LEGAL PUZZLE.

Mrs. Maybrick was found guilty on 7th August, 1889, after an eight days' trial, of having poisoned her husband by administering to him arsenic. Sir Charles Russell defended her and always maintained that she was innocent. He afterwards became Lord Chancellor of England, and was raised to the Peerage as Lord Killowen. After his elevation, he twice recommended her release.

She was made the subject of many petitions for her reprieve, and the day before that fixed for her execution the sentence was commuted into one of life imprisonment. The papers commuting the death sentence contained the words that the evidence did "not wholly exclude a reasonable doubt whether his death was in fact caused by the administration of arsenic." Sir Charles Russell (Lord Killowen) then Chief Justice, in 1895, urged her release and said "the foundation on which the whole case rested was rotten, that in fact there was no murder, that, on the contrary, the deceased had died of natural causes."

Here was doubt, indeed. The wording of the commutation from the death sentence to that of life imprisonment admitted this by saying, "not wholly exclude a reasonable doubt." She either murdered her husband or she did not. If the evidence did not entirely prove that she was guilty of murder, it failed entirely, and she should not have been kept in prison. It is just as wrong on evidence that did "not wholly exclude reasonable doubt" to imprison for life as it would be to hang any one.

As a medical journal dealing with matters of health, life, and medico-legal evidence, we believe that this case will ever stand on record as one where the doubt of guilt was very great, indeed; and, yet, the prisoner was, at the time of the trial and for long afterwards, denied the benefit of this "reasonable doubt."

The logic of the case seems unanswerable, that in this case British justice broke down and hopelessly failed.

THE PREVENTION OF TUBERCULOSIS.

Some very good work was done at the recent meeting in London by the association for the prevention of tuberculosis.

Dr. J. G. Adami, of Montreal, took the ground that small sanitaria in each county would do much more good than a large one far away from most of the population. This is a logical position. If sanitaria are to do any good, they must be reasonably near the afflicted and their friends.

There are now 20 sanitaria in Canada; and of these, 12 are in Ontario. The death rate from tuberculosis in Canada has fallen from 150 per 100,000 of the population to 112, during the past 15 years.

It was urged that this question should be made a national one. It was necessary that the Federal Government should take the matter up along with the provinces, and arrive at some definite plan of action. Good is sure to come from this agitation.

THE CHURCHES AND TUBERCULOSIS.

That the churches have a great influence on the social life and welfare of a country, all will at once admit. How far they should embark upon the subject of hygiene and preventive medicine may be open to some argument.

We do not hesitate to express the opinion that the churches can do few services of greater value to man than to continually preach the doctrine of John Wesley that "cleanliness is next to Godliness." A great amount of disease might be prevented by merely insisting upon this simple truth. To this teaching of Wesley we might add the breathing of pure air, the drinking of pure water, and the eating of wholesome food.

In the United States, two churches have gone into active work for the prevention of tuberculosis and the management of early cases of the disease. Emmanuel Church in Boston, and St. George's Church in New York have classes for the study of the prevention of the disease and the proper care of those who may have contracted it. These classes are well attended and doing very good work. In St. George's Church, in addition to instruction, financial assistance is given to those who should have a rest, but could not afford to take such, as they might have families dependent upon their earnings.

It is found that persons are willing to come to these classes for information. That they profit by this information, there is no doubt. Persons are also more ready to avail themselves of the treatment offered at the church dispensary than they would be at the ordinary dispensary.

In Boston this has been very apparent. This class work is not limited to members of the church. It is open to all, regardless of race, creed, or sex. The home conditions of those affected is made the subject of careful study.

MEAT AND DAIRY INSPECTION.

The time is not far off when there will be a much more thorough system of inspection of the meat and milk supplies for the people. The present system of meat inspection is only of use when the meat is to be exported. It is of no use in the case of home consumption. Steps will have to be taken to make sure that tuberculous cattle and hogs are not slaughtered and their meat placed on the market, and the milk from tuberculous cows cannot find its way to the table.

MEDICAL AFFAIRS IN ONTARIO.

That things medical in Ontario are not quite what they ought to be is apparent to all who look below the surface. We have referred to these topics in the past and do so again.

The medical degree of the University of Dalhousie carries with it the right to practise in the Maritime Provinces. The medical degrees of McGill and Laval do the same for their holders in Quebec. The University of Manitoba is accepted by the medical council of that province. Thus the medical degrees in all these provinces entitle their prossessors to practise in their own provinces.

Turning to Ontario, we find quite a different state of affairs. The graduates in medicine of the University of Toronto, of Queen's University, and the Western University must pass the examinations prescribed by the Ontario Medical Council before they can enter upon practice in Ontario.

But this is not all. The amended Roddick bill, creating a Dominion Medical Council, states in section 8 (a) that "No candidate shall be eligible for any examination prescribed by the council unless he is the holder of a provincial license, or unless he presents a certificate from the registrar of his own Provincial Medical Council that he holds a medical degree accepted and approved by the Medical Council of the said province."

The medical graduates of all the provinces of Canada may go up to the Dominion Medical Council and secure a Dominion qualification if they wish, with the exception of those from the province of Ontario. This is a serious handicap on the Ontario Universities. It is the plain duty of the government to see that this is remedied.

We believe it will be remedied, but we believe it should be remedied so that all the universities in Ontario would be on equal footing. There must be no monoply in education. The Ontario Medical Council should have powers to regulate the standard, and have some control of the medical education of the province, but only to the extent that the universities maintain a proper standard.

The Ontario Medical Council would still hold the right to examine those who sought to practise in the province, and who came from other places with which there is no reciprocity in degrees or licenses.

That the hedge now is gradually being cut down is quite apparent to all. The concern is to see that in the trimming the hedge is not destroyed. The sooner foolish restrictions are done away with, the better, and useful regulations retained the better.

In Great Britain the medical council only sets a standard. The degrees of all the universities and the diplomas of all the colleges are accepted. This is so now in all the provinces of Canada, with the exception of Ontario. The Medical Council of Ontario, the government, and the universities had better come to an understanding without delay on these important issues.

Outworn ideals are fading fast away,
Beyond its buried past the world has ranged,
And new influences shape its trend to-day.

ORIGIN OF THE BARBER'S POLE.

How many of us know what the barber's pole really signifies beyond that it's a sort of a beacon for the stranger who wants a shave or a hair cut or for a convivial individual to hang on to while he is waiting for the policeman?

Formerly the barber added to his duties as hair dresser that of surgeon, especially in simple cases such as blood letting.

According to an authority who has long since quit the business the profession of barber-surgeon was incorporated first in England by Edward IV in 1461, and was united with the surgeons under Henry VIII, but the connection was dissolved in 1745 by George II. Possibly the barbers had been cutting up a little bit too much, as some do at this date.

Barber surgeons existed in France as a corporation from 1371 to the Revolution. Although history does not record it, they may have been the cause of the revolution.

However, the fact remains that the gaudy pole outside the barber's means something.

ORIGINAL CONTRIBUTIONS.

EXCESSIVE BLOOD-PRESSURE—A PROMISING SPHERE FOR PREVENTIVE MEDICINE.

By ARTHUR BIRT, M.D (Edin.),
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FOR the last few years, since beginning the more or less systematic use of the sphygmo-manometer, the writer has been struck by the number of patients (chiefly middle-aged males) whose activities are being limited, and their expectation of life being shortened, by the existence of a persistently high blood pressure. The recognition of this condition early, whilst it is still in the functional stage and before definite arterial degeneration has resulted therefrom, is of the greatest practical importance, for this is the period when under proper dietetic and medicinal treatment the condition is remediable, and its possibly tardy, yet inevitable and disastrous sequelae may be indefinitely postponed.

At the very outset the writer would plead for a more general use of the manometer. Clifford Allbutt says, it is as futile to talk about blood pressure without a manometer as about temperature without a thermometer. It is humiliating to find, as the writer has frequently done, how far astray one often is in the estimate of a pulse tension. Only in pronounced cases of high tension does the wave tarry unduly under the finger and is the artery full between the beats. (L. Williams.) Total force seems to be all that the finger can appreciate; it cannot appreciate such refinements as amount of force in relation to unit of surface. Therefore, it is only possible for even the most educated finger to be sure of very pronounced abnormalities. The normal is that no one can afford to be without a manometer.

The Manometer.—The writer has used for several years Cook's modification of the Riva Rocci, and has had only a limited experience with one another, the Janeway. Other modifications of the Riva Rocci are C. J. Martin's, Mommery's, Sahli's, Oliver's, and Theodore Janeway's instruments are also good patterns, the latter having the advantage of every solid tubing, and being only a little less portable than the Riva Rocci. A broad armlet is essential 12 c.m. It is better to take both systolic and diastolic pressures. The latter is too often neglected, but it is important, and it gives one the constant minimum tension on the artery. The diastolic pressure is found by gradually pumping air into the armlet and observing the point at which the oscillations of the indicator reach the maximum. The principle is this: when the pressure inside the vessel is greater than that in the armlet, the pulsations are not

fully transmitted; when the external pressure is greater than the internal the pulsations are being overcome. Therefore, at the point where the internal and external pressures are equal, the indicator shows the widest excursions. This, therefore, is the mean diastolic pressure. Systolic pressure may be put on an average, at from 25 to 40 mm. higher than the diastolic. The normal diastolic pressure in a healthy young adult is about 100. In women it is lower, say 80 to 90. In children it is lower still, say 75 to 80. In the elderly it is higher, apart altogether from degenerative changes in the vessels—it may reach 120 mm. If a small armlet be used, it is necessary to add 15 to 20 mm. In taking observations, mental activity and excitement must be eliminated as far as possible, for it is very apt to vitiate results.

As to what constitutes abnormally high pressure, 40 mm. of mercury in excess of the above mentioned approximate normals is to be regarded with suspicion, and, when ascertained by repeated examinations, anything over 50 is definitely pathological. (Leonard Williams.)

In the absence of a manometer the writer has found the following three signs taken together, seldom fail him in indicating pathological high pressure: (1) Outward displacement of the cardiac apex, indicating enlargement of left ventricle; (2) Accentuation of the second aortic sound, telling of increased peripheral resistance, and (3) Huchard's sign—normally the pulse rate is quicker by six to eight beats per minute in the upright than in the horizontal position. When there is excessive arterial pressure, this difference tends to disappear, the rate becoming the same in the two positions. In extreme cases the figures may be reversed, the number of beats in the recumbent position exceeding those in the upright. These three signs taken together are more reliable than palpation of the artery at the wrist—here the tension is probably high if much pressure be required to feel the pulsations, and low if they are more easily appreciated by a light touch. (Leonard Williams.)

As regards the charges of inaccuracy made against the armlet methods. These have been scientifically investigated by that keen observer Leonard Hill, and Martin Flack. They concluded that the obliteration pressure is correct within 5 mm. of mercury. They found also that the results corresponded closely both in cases of normal and sclerosed arteries. Theodore Janeway has also shown that the resistance of the soft parts can be disregarded.

The Causes of Sustained High Pressure.

It is generally accepted that constriction of the branches of the arterial tree is due to toxins circulating in the blood, which by acting upon the vessel walls, or upon the vaso-motor centres, cause a state of chronic contraction. What exactly these toxins are, we do not yet know.

Some refer them to preversion of the internal secretions of certain glands, such as the super-renals, the thyroid and pituitary body. The majority consider them to be of gastro-intestinal origin. Many believe the toxin is merely "gout" in one of its protean forms. It seems proven that the producers of gout, viz., excess of proteid foods and alcoholic drinks, are very frequently associated with the condition we are considering. Huchard believes the free ingestion of meats, often combined with the abuse of tobacco, insufficient exercise and consequent sluggishness of the excretory organs to be the determining factors. He does not commit himself as to the exact nature of the poison. Allbutt, Leonard Williams, and other writers seem to hold much the same views. According to Williams, one fact strongly supports the view that the ingesta are to blame—the constancy of dyspnœa as a symptom. He says the surplus food above the needs of the organism is laboriously metabolised. This process gives rise to an increase of carbonic acid in the blood, causing heightened blood-pressure, and its most common symptom—dyspnœa.

The indictment against excess of meat foods seems abundantly proved. When a person in the pre-sclerotic (functional) stage of high tension is forbidden meat and reduced to a lacto-vegetarian diet, the tension immediately falls and remains at normal so long as this regime is maintained.

Langdon Brown pictures the course of events somewhat as follows: "The toxin, whether formed by perverted metabolism, or absorbed from the bowel, irritates the muscular coats of the smaller vessels to contraction, particularly in the splachnic area, where it will be present in the highest degree of concentration. Finally it is excreted by the kidney. If this condition is allowed to continue, and the irritated vessels maintain their contraction, muscular hypertrophy must occur here as elsewhere, when increased work has to be done. The new muscular tissue soon undergoes degenerative changes. The increased resistance thus brought about necessitates, for similar reasons, hypertrophy of the heart. The kidney has to excrete the toxin, and suffers in the attempt, so that interstitial nephritis is apt to follow. The pressure now has to rise still more, causing more cardiac hypertrophy in order to drive enough blood through the remaining glomeruli for urinary excretion. Even so elimination becomes defective, and the toxin is therefore kept in more prolonged contact with the tissues it is damaging. Thus the diffuse arterial change steadily progresses. On this view the cardiac hypertrophy is purely secondary. Allbutt protests against "the accusation of these striving hearts of complicity in the arterial disease..... They are stout and faithful to the end, even in defeat."

It may here be stated that death in high-pressure cases results usually from one of three causes—apoplexy, cardiac defeat, or intercurrent

acute pneumonia. Until lately these two factors—a general excess of intake and abuse of meat foods—were regarded as sufficient. The researches of the French physicians have taught us that a third factor has to be considered—excess of sodium chloride in the system.

We have all been taught that in pneumonia and other acute febrile diseases, chlorides are retained in the system, to be discharged rapidly when convalescence is established. It has also been long known that œdematous fluid, even when of cardiac origin, is highly charged with common salt. Widal has found that certain persons have difficulty in excreting common salt, though they may be able to excrete all the other normal constituents of the urine. In these persons he was able to produce œdema by increasing their consumption of Na Cl. He also caused disappearance of œdema of renal origin by witholding common salt. Further researches have shown that retention of chlorides, presumably by causing œdema of the kidney itself, produces general renal inadequacy, so that not only the chlorides, but urea and the other results of metabolism are retained in the circulation, to give rise to uraemia and other toxic states. Ambard and Beaujard found that retention of chlorides or an excess of chloride medication is always followed by high arterial tension, which rapidly subsides when the chlorides have been excreted. Moreover, Widal shows that meat without salt was harmless to his œdematous patients, whereas meat with salt aggravated the œdema. (Leonard Williams quoted "Med. Review," 1906). Thus salt beyond a moderate amount, such as 100 grains daily, is a circulatory stimulant, increasing the tissue lymph flow, and increasing the viscosity of the blood. Probably in this way the arterial blood pressure is raised by a diet rich in salt. (G. Oliver.)

The view that sustained high pressure is due to the gradual entrance of kidney substance into the circulation, which is based chiefly on injection experiments in animals, seems to be losing ground. Lastly, the observations of Huchard on the premature onset of arterio-sclerosis in athletes, from *excessive* physical exercise, e. g., in alpine climbing, may be borne in mind; and a gouty heredity may explain an otherwise puzzling case.

The Causes of Sustained Arterial Pressure.

In the writer's student day, high arterial tension would have been translated as meaning renal inadequacy, generally in the form of the granular or arterio-sclerotic kidney. We now recognize, thanks to the teaching of Clifford Allbutt and Huchard, that this latter condition is more often the result than the cause of the high pressure. One has been greatly helped in understanding these conditions by the adoption of

Huchard's classification. The sequence of events, as he takes it, is as follows:

(*a*) An initial stage of functional high pressure with intact heart and vessels. This may be present for months or even years before it merges into the second. In this stage, and in this stage only, the condition is remediable.

(*b*) A stage of definite arterio-sclerosis with the heart not yet seriously involved.

(*c*) A stage of cardio-sclerosis in which through excessive strain and affection of the coronaries, the heart muscle also is involved, and the symptoms centre more and more around that organ.

(*d*) The stage of mitral-sclerosis, in which the heart has acknowledged defeat, there is superadded mitral insufficiency, and the clinical picture of broken compensation begins to present itself.

It is to be noted that the stress on the vessels seems to be from the earliest stages selective. The special areas of incidence are the aorta and coronaries, the renal and hepatic systems of vessels, whilst the cerebral vessels are exposed to the shocks of the high pressure by their anatomical peculiarities, and possibly by their relatively weak vaso-motor control. As the condition progressively advances, aneurism is predisposed to by the constant impact and stress on the aortic arch, causing degeneration and ultimate stretching. The partial obliteration of the coronaries and their finer ramifications leads to sclerosis of the myocardium, and the involvement of the renal and hepatic area may ultimately lead to degeneration and sclerosis of these vital organs. In this way the final picture, if life be prolonged, becomes very composite and the train of events may be anything but clear, unless the inevitable results of prolonged excessive pressure be kept in mind.

High Blood Pressure in Women at the Menopause.

In a recent article by that attractive writer, Leonard Williams, attention is called to the occurrence of excessive blood-pressure in women about the menopause. These patients have usually put on weight rapidly. Williams shows that menstruation is to be regarded first as a haemorrhage, secondly as an excretion, and thirdly as the result of an internal secretion (ovarian), one of the effects of which is a partial vaso-dilatation, which is normally compensated for by a vaso-constriction elsewhere (vessels of skin). At the menopause, these activities cease, and the cardio-vascular system has to adjust itself to the profound change. If the vaso-dilator ovarian secretion gradually diminishes to the point of disappearance, while the balancing vaso-constrictive secretion remains constant, an increase of general blood-pressure must ensue.

Manometric readings of 180 mm. and upwards are by no means rare, and they are more frequent in those whose menopause is effected without the relief afforded by occasional floodings. Dr. Oliver has remarked that what he calls a "wet" menopause is much more favorable than a dry one, and Dr. Mary Jacobi regards an occasional menorrhagia followed by several months' intermittence of menstruation as the typical method of establishing the menopause. But although high blood-pressures are common, they are by no means invariable. Normal or slightly super-normal readings may occur in women in whom from their appearance, from the fact of the sudden cessation of the catamenia, and from the nature of their subjective symptoms, a high pressure would be expected. In such cases, says Williams, careful examination of the heart will reveal evidence of dilatation. The retained toxins seem to have concentrated on the myocardium, which was consequently bending under more or less normal blood-pressure. It is also to be noted that women at the menopause not infrequently show signs of the minor degrees of hypothyroidism, viz., loss of hair, premature greyness, loss of outer third of eyebrows, dry scurfy skin, subnormal temperature with constant chilly feelings and some mental lethargy. Now the thyroid secretion is also vaso-dilator—working in the same directions as the ovarian in some respects, whilst in others the two are antagonistic. Apparently then hypothyroidism may also be a factor in producing excessive blood-pressure at the menopause.

Williams concludes as follows: "Women at the menopause suffer from many distressing symptoms. Some of these are merely subjective, whilst others are objective, but they are always circulatory. Their mechanism is, for the most part, obscure, but the manometer affords a method of distinguishing between, at least, two classes, and a means therefore of treating them with some intelligence.

Symptoms of high arterial tension are very variable and very indefinite. In retrospect the writer can recollect a number of cases diagnosed as *neurasthenia* and treated as such, which he feels sure he would to-day classify as cases of high blood-pressure or early arterio-sclerosis. The patient may only complain of a general feeling of "seediness," insomnia, headaches, bilious attacks, dizziness on stooping, lethargy, and somnolence after meals, and supra-orbital neuralgia or sciatica are other symptoms that are complained of by individual patients. The head symptoms are probably due to local vaso-constriction, causing anaemia—they may be transitory, as though produced by an extra spasm in a particular set of vessels. One of the most constant symptoms is *polyuria*, which often occurs independently of granular kidney, from excessive blood-pressure due to other causes. One should not be thrown off the scent by the presence of albumen, which may or may not be present in small

amount. One very important point to remember is the presence of mental irritability due to the variations in intracranial blood-pressure. The periods of somnolence and listlessness are apt to alternate with periods of buoyancy and well-being, for a moderate degree of high pressure is very stimulating. In the predisposed, these symptoms of depression are liable to pass quickly into hypochondriasis and melancholia.

The heart soon shows the minor effects of its overstrain, and attacks of palpitation and irregular action and tachycardia are apt to occur from time to time. They come and go, and like the next symptom are provoked by slight effort. (L. Williams.) Most constant and important of all the danger signals in the writer's experience, is dyspnœa on slight effort. It may not at first be felt subjectively, when the increased respiratory rate is obvious to the observer. It is paroxysmal. It may occur at night; but is most typically excited by exertion shortly after a meal. Its occurrence should always lead to a thorough examination of the cardio-vascular system. On examination of the heart no dilatation or murmur is found in the early stage. Later there may be both. There is, however, one reliable sign in every case of high arterial tension in which the heart is still intact—accentuation of the second aortic sound at the base. If, with this sign, there is also outward displacement of the apex beat, there is almost certainly present high arterial pressure in its early and remediable stage, and every effort should be directed to its correction. Cold weather, east winds, "bracing" climates and cold baths will often provoke the cardiac symptoms. Vague *gastro-intestinal symptoms* form another group, and of these flatulence has seemed to the writer the most characteristic. The treatment of these various indications of dyspepsia is important, as they are common causes of intercurrent pressure, especially in the elderly. Another sign which should excite suspicion is epistaxis. A person with abnormally high pressure may bleed from anywhere; the high pressure will find out the weak spot, thus haematuria, haematemesis, or menorrhagia may occur; but as Williams remarks, the most suggestive of these haemorrhages is the recurrent epistaxis of middle age. Symptoms might be multiplied; but if the pathological history and the areas of *special* incidence be borne in mind, it is easy to see that at one time the cerebral, at another the cardiac, hepatic or renal ones may dominate the clinical picture.

Treatment of Excessive Blood-Pressure in the Pre-sclerotic Stage.—(Hyperpiesis of Allbutt).

According to Leonard Williams there are three rules to be followed, and these the writer endeavors to enforce:

1. Reduce the whole intake; (2) Restrict animal foods. This restriction should in the first instance, at any rate, amount to absolute

prohibition. Until the blood-pressure falls to something approaching normal the diet should be severely lacto-vegetarian; (3) Forbid the addition of salt to the food. If the diet is lacto-vegetarian, and the vegetables are cooked without salt, it is not, as a rule, necessary to order salt-free bread. To these the writer sometimes would add; (4) Restrict moderately the total intake of fluids. Alcohol, according to Williams, *per se,* is practically harmless. Indeed it has the advantage of being itself a vaso-dilator; but it leads to dietetic excess, the alcohol drinker eats more than he requires. It excites the circulation in many people, even in small doses, and it predisposes sometimes to auto-intoxication. Tea and coffee in ordinary quantities are relatively harmless; but the percentage of the purin bodies they contain, and their exciting effect on the cardio-vascular system is worth bearing in mind. Tobacco is known to raise blood pressure, and so great an authority as Huchard attributes great importance to the abuse of tobacco in the causation of arterio-sclerosis. But tolerance is very easily acquired. The habitual and moderate smoker shows no rise of blood-pressure after a cigar beyond a slight rise of four to five millimeters. (Langdon Brown.)

According to Emerson Lee, this immunity is brought about by the production in the liver of some substance—probably a ferment—that destroys nicotine. We therefore cannot throw much of the blame for arterio-sclerosis on to tobacco, though strict moderation in its use is very desirable. The use of buttermilk, or of the artificially prepared "soured" milk is theoretically sound, though the writer cannot say that he has seen any striking results which could be attributed to it. As a matter of fact, recent analyses have shown that the lactic acid bacilli are pretty sparse in most of the tablets on the London market. One or two pints may be given in divided doses daily. Hygiene treatment is very important. Sufficient exercise must be taken to metabolize the food. With free exposure to the open air the patient gets plenty of oxygen and is less likely to suffer from dyspnoea, and therefore less likely to suffer from high arterial tension. The idea is to bleed the patient into his muscles, which can accommodate a very large quantity of blood. In cases caught early—and as the use of the sphymomanometer becomes general —we shall be catching them earlier and earlier—patients may be encouraged to take more and more exercise. The graduation of this exercise requires the greatest caution and the closest supervision, especially in the initial stages. Gentle walking is the best until the heart relieved of stress has pulled itself together, and the blood-pressure is moderate, say 140-150 m.m. This may be succeeded by the climbing of moderate slopes, golf, easy cycling or similar mild sports. The main point is that these should involve no sudden effort, which can hardly be avoided, for instance, in tennis. As things progress still further, and when there are

no signs of arterial degeneration, regulated hill-climbing after Oertel's method is claimed by Allbutt to surpass in its effects all medicines. In prescribing exercise, much must be left to the discrimination of the physician, since no two cases are alike. Massage is very useful in the stage of definite arterio-sclerosis, and in the initiatory stages of milder cases before the natural exercises are started. It opens out the muscular area and accelerates the lymph flow. It should be done patiently and gently, beginning with short séances. Another very useful measure is the practice of slow self-induced tension of the muscles of the arms and then of the legs, lasting a minute with measured intervals of absolute rest for several minutes twice or thrice daily. Slow, deep breathing exercises (four or five respirations a minute) are also useful in reducing arterial pressure (Geo. Oliver), Rumpf, of Bonn, in a recent communication urges the importance of diaphragmatic breathing in persons with over-strained or dilated hearts. His physiological premises are as follows: For several years he has been observing the two types of respiration, and the effect of each upon the size and action of the heart. According to his observations, every respiration produced by elevation of the chest walls tends, by the increased negative pressure generated, to dilate the cardiac cavities, especially the auricles. Diaphragmatic respiration on the other hand, with the thorax held immobile, acts in a different manner. The lung, following the diaphragm downwards, presses upon the heart from above and the side, the organ assumes a more erect posture, and tends to be contracted rather than dilated. The contents of the abdomen are pressed upon; the veins and lymphatics therein are compressed, while those of the thorax are dilated and the circulation is materially aided, and the reduced abdominal pressure during expiration further aids by refilling the splanchic vessels. Thoracic respiration, causing further dilatation of the already disturbed heart, he regards as a dangerous procedure, while breathing of the abdominal type is an aid to circulation and tends to reduce cardiac dilatation; ergo, all patients with heart disease should breathe, as far as possible, with the diaphragm.

It will be noticed that as regards the treatment of the stage of "hyperplesis" the writer has mentioned nothing about *rest*. Rest and exercise should indeed be well distributed, and recumbent or semi-recumbent rest should be taken for half an hour or so after the mid-day and evening meal. But these cases are often kept at rest for prolonged periods for a "weak heart" with injurious results. Exercise up to the individual capacity and without strain should be encouraged, for exercise is, as a rule, followed by a fall in blood-pressure. *It must be graduated to avoid those tell-tales of strain—hurry of pulse or breathing.* (Allbutt). At intervals, especially in cases where the pressure is near

the 200 m.m. mark or over, a few days absolute rest in bed with free aeration and an exclusively milk and fruit diet (five to six pints daily) will be found very useful in the reduction of high tension—meanwhile judicious massage may be employed. The pure milk diet permits dietary waste products to clear away, reduces intestinal fermentation, and the numbers of microbes in the faeces is diminished. *Diapharesis* would, at first sight, appear to be a useful method for securing a fall in blood-pressure; but although some authorities advise it, the writer has been disappointed by its results and the difficulty in carrying it out in private practice—and has abandoned the special use of any kind of bath. A warm immersion bath for twenty minutes (on rising) cooled down gradually during the last five minutes—cold bathing being avoided—has the endorsement of George Oliver. One has seen it produce faintness at the time, and marked general "seediness" the next day. Other forms are the electric light bath and the artificial Nauheim bath taken twice or thrice a week, followed by an hour's recumbent rest. Of these the writer cannot speak from personal experience. Warmth in clothing and climate also lowers pressure, and our cold and changeable winter is a severe strain on high-pressure cases.

Medicinal Treatment.—In a high pressure case it is most important to keep the excretory organs in the best possible working order. Constipation and faecal retention cause increased arterial pressure, and looseness of the bowels favors a fall: therefore the bowels should be kept looser than in normal subjects. The writer prefers to use either Pil. hydrarg. or calomel, followed by mild saline, such as sodium sulphate, the next morning. If "blue pill" be selected he gives a 5 gr. freshly made blue mass on each of two or three alternate nights about once a fortnight. Calomel may be given in ¼ gr. doses twice daily for four or five days, and this course repeated say twice a month. It tends to check intestinal fermentation and to lower blood-pressure. A new remedy of some promise is "Regulin," of which from one to two drams or more should be taken daily along with any soft food, such as stewed apples. This preparation consists of agar-agar (Japanese isinglass made from a sea-weed), with a small percentage of cascara. The former excites a flux of fluid in the bowel, which softens the faeces, and the latter aids the lax ative effect and tones the intestinal muscular fibres. It is best to alternate the laxatives, though "regulin" may be used, it is said, indefinitely with unimpaired effect.

The most useful all-round drugs in high-pressure condition are the iodine preparations, notably, potassium and sodium iodide, and iodipin, which is a compound of iodine and sesame oil. In definite arterio-sclerosis, these must be taken for years with certain intervals, best in the following way: ℞. Potass. (or Sod.) Iodid. aq. dest āā 10.0 (155 gr.) Sig

Ten drops to be taken three times daily after meals for a fortnight and then a pause for another fortnight to be made. The writer has for the past two or three years frequently substituted iodipin (Merck) either in 5 gr. tablets three times daily, or in dozes ʒ ii—ʒ iii of the 25 per cent. solution (20-30 grs. K. I.). He finds less skin and digestive troubles resulting, than with the iodides. Iodipin has received strong endorsement from Senator's clinic and elsewhere. It is stated to form a more or less stable combination in the tissues, so that iodine in small quantities is slowly given off, thus securing a mild, continuous action. Iodine has been detected in the urine for weeks after the suspension of iodipin medication. It is somewhat expensive, and is thus limited to the better class of patients or hospital use. Of course potassium iodide shares with other potash salts the property of relaxing to some extent the arterial wall and so promoting a fall of blood-pressure. Bunge showed that potassium replaces sodium in the blood, and Sir Thomas Fraser taught that iodides improve the nutrition of the arterial wall, and diminish the viscosity of the blood, thus iodide of potassium may indirectly assist in clearing out toxins. Twenty grains thrice daily in the writer's ordinary limit in the class of case under consideration.

The pure vaso-dilators, amyl nitrite, nitroglycerine, erythrol tetranitrate, etc., bulk largely to-day in the treatment of super-normal pressures; but the writer has come to place little faith in their power to *permanently* lower blood-pressure. They are useful emergency drugs for sudden attacks of dyspnoea, or for the often troublesome insomnia, though even in the latter one has found Paraldehyde more efficacious. It lowers blood-pressure like chloral, but without any depressing effect on the heart. If objections to its repugnant taste and odor can be overcome, it is seldom vomited in the writer's experience.

Chloral hydrate deserves a word of special commendation. At any stage, from the functional one to the terminal one of cardio-sclerosis it may prove a useful ally. Given in small doses of five grains two or three times daily for a limited time, it tends to lower blood-pressure, take the edge off the nerves and secure adequate rest. With an intact heart, one uses it alone in the terminal stages (mitro-arterielle) in combination with strophanthus or digatalis—a formula much used by the late George Balfour of Edinburgh. When using the nitrites, two useful formulas may be borne in mind, viz., Lauder Brunton's combination of sodii nitrit grain one-half, with potass. nitrate, grains ten-twenty, and potass. bicarb. gr. X in a tumblerful of water every morning, and that recommended by G. Oliver (tabloid prepared for him by Burroughs, Wellcome & Co.): Sodii nitrit, gr. ½, erythrol tetranitrate, gr. ¼, mannitol nitrite, gr. ¼; ammon. hippurat., gr. i. One or two of these tabloids may be taken for lengthened periods, if omitted for a few days each

month. In one of Oliver's cases, under this tabloid, the pressure fell in seven days from 210 m.m. to 160, and was still found to be 160 after twelve months' treatment.

When definite arterio-sclerosis has developed, the nitrite and iodine medication show no very remarkable results. As Osler in his recent Lumleian Lectures remarks, there is nothing more difficult than permanently to reduce persistent high blood-pressure with arterio-sclerosis. Take a man with a persistent pressure of 230 to 240 m.m. of mercury, and you may get the record to 210 or 220, but get it back to 150 or 160 and keep it there is not often within our power. Under these circumstances one turns with some hopefulness to a new preparation, which has the strong endorsement of Franze, one of the physicians at Bad Nauheim, and the use of which is based upon entirely different considerations to that of the above mentioned remedies. This preparation consists of the normal blood salts, and is either used as Trunecek's inorganic serum, or as "Antisclerosin" (Natterer) in tablets. The tablets are the more convenient and contain sodium sulphate, chloride, carbonate and phosphate, magnesium phosphate and calcium glycerophosphate.

The idea is not to decalcify the arterial walls, or to prevent the formation of lime salts in the blood—this must be discarded. The idea is that of purifying the blood and giving it back its normal composition, which in this condition (arterio-sclerosis) is impaired. Franze has found that the distressing cerebral symptoms, and, after these, the general condition and nutrition, strength, appetite, digestion and sleep are relieved and improved. The heart and circulation also seemed to him to be benefited. He quotes illustrative cases. He gives two tablets of "Antisclerosin" dissolved in half a tumblerful of water one hour before meals. It is given for one month and then suspended for a fortnight, and then taken for another fortnight and so on. He often alternates the remedy with the iodine treatment—a fortnight of each. The writer means to give this method a trial in the near future. Finally one must register a protest against the abuse of digitalis, strychnine and other pressor drugs in the treatment of functional excessive blood-pressure. When the still fairly intact heart is laboring under a heavy strain, and gallantly doing its best, it is not flogging that it needs, but a lessening of its burden. These cases are far too frequently treated as "weak heart," and the load still further increased by the use of the above mentioned drugs—often with disastrous results. The indications for digitalis are in the terminal stages—when the heart has acknowledged defeat, and mitral insufficiency is being established. Then digitalis and quite moderate doses of the iodides or iodipin often assist in prolonging the struggle. I am loth to be drawn into the wide subject of arterio-sclerosis and cardio-sclerosis; but a few points in treatment may be emphasized.

When definite organic disease of the arteries, the heart, or both can be determined, treatment can only be palliative, though marked prolongation of life may be secured in individual cases. It has to be a compromise. On the one hand are the risks of excessive strain on degenerated arteries, with its chief catastrophe, cerebral hemorrhage; on the other is the danger of cardiac insufficiency, and a failing peripheral circulation, and back-pressure symptoms on the venous side. The peripheral capillary areas, including that of the coronaries, are now restricted by the vessel changes and a higher pressure than the normal, often much higher, is required to drive the blood through them. Passive venous congestion and oedema are indications for the use of digitalis (preferably in the form of fresh infusion or a standardized tincture) whatever the primary cause of the failing ventricle and however high the antecedent pressure may have been. Theodore Janeway's observations show that cardiac failure supervening on prolonged hypertension is more frequently accompanied by a more pronounced fall in pressure than under any other conditions. Experience has taught him that these cases react to digitalis surprisingly well, and that a rising blood-pressure usually accompanied improvement. Mackenzie states that digitalis acts chiefly on the function of tonicity of the heart muscle. Loss of tonicity is indicated by increase of the transverse dulness at the level of the fourth interspace, and this may be taken as a useful clinical guide to its use. As regards strophanthus—whilst the writer considers it distinctly less useful than digitalis, he agrees with the claims of his old teacher (Sir T. Fraser) who introduced it to the profession, that it acts but slightly on the vessels and is more easily tolerated by the stomach. It is important not to discredit the remedy through the use of an inactive preparation. He prefers the tincture put on the market by Burroughs, Wellcome & Co. A useful drug in states of high-pressure with arterio and cardiosclerosis is Theobromine. Osler quotes the noted Roman clinician Marchiafava as using it with success in angina pectoris. This observer gives Theobromine in doses of twenty to thirty grains daily. Personally one generally uses "Diuretin" (Theobromine sodio-salicylate) which is also a powerful diuretic when back-pressure symptoms are supervening. It is said to dilate the urinary and renal vessels especially.

When cardiac sufficiency has once been restored through the use of digitalis or strophanthus and other measures, it is to be borne in mind that quite small doses of the remedy may be enough to maintain the cardiac tone, and that these may often be kept up with advantage for prolonged periods. Franze, of Nauheim, recommends the following formulae as valuable in anginal attacks:

R. Fol. Digital Pulv. gr. one-sixth; Caffeine Pur. gr. 3; Diuretin (Knoll) gr. 7½; Morph., Hydrochlor. gr. one-twelfth.

M. ft. pulv. Dat. tal. dos. No. 5 in caps amylac.

Sig. One capsule to be taken in the attack or when its onset is noticed; if no relief, another one after half an hour.

The response to treatment varies greatly, judging from one's own limited observations. Yet the very discrepancy of results suggests that cases of definite arterio and cardio-sclerosis are being classified with those in which no definite organic changes are demonstrable. When these are present and well-marked, the end is not likely to be long deferred as the recent observations of O. K. Williamson have shown. Of seventeen cases showing a blood-pressure of upwards of 200 m.m., which first came under his observation in the years 1906 and 1907, he had been able to follow up thirteen, of whom eight had died and five were still living (Feb. 1909). Two of the cases died from cerebral hemorrhage, three as the result of chronic interstitial nephritis, one from "heart trouble" (this patient had aortic incompetence), and two from unknown causes. Moreover, the longest interval between the date of the first observation and that of the death of any of these eight cases was a year and a quarter. But treatment in the functional presclerotic stage should give far different results, and we must be alert to detect the early changes. It is on our business and professional men at the height of their activities, and on women about the menopause that the chief incidence of this condition occurs. A routine examination once or twice a year at which the blood-pressure, the position of the cardiac apex, and the character of the second sound of the aortic cartilage were ascertained, would doubtless detect many cases in the incipient stage, a stage offering a fair and most hopeful field for properly planned hygienic, dietetic, and therapeutic effort. As in every other sphere of preventive medicine our clientèle must be educated up to it; but we must be alive to its early detection, and have the courage of our convictions in issuing our warning as to its inevitable results if neglected.

Summary.—1. Excessive blood-pressure in the functional stage often exists for very considerable periods before any permanent damage has affected the arteries and heart.

2. In this stage it is remediable, and every effort should be directed to its detection.

3. If undetected, it persists and progressively advances to the stages of arterio-sclerosis, cardiac-sclerosis, and mitral insufficiency—incurable conditions—unless indeed life be earlier terminated by accidents such as cerebral hemorrhage or intercurrent pneumonia.

4. That in cases with a gouty heredity or a personal history of infective fevers, notably syphilis, repeated attacks of influenza, or typhoid fever, the occasional review of the circulatory apparatus from early middle-life onwards, is especially desirable.

5. That excessive blood-pressure is not uncommon in women about the menopause—due, probably, to the suppression of the depressor effects of the monthly flow, and the retention of pressor substances which have been excreted at menstruation. Organotherapy may prove helpful.

6. That a permanently super-normal pressure can be, and *should* be safely attacked in the presence of intact heart and arteries.

7. That when definite arterio—and cardio-sclerosis has taken place, treatment is palliative and has to be a compromise, *since the optimum pressure required for the best possible circulation may be much above the normal.*

8. That in the functional stage little reliance must be placed in drugs. A re-adjustment of the patient's mode of living on the broadest lines of general hygiene is the plan to be relied on. "Go easy—eat less" is Osler's advice.

9. That so-called "weak heart" carrying a high blood-pressure (i. e. in the "pre-sclerotic" stage) should not be treated by prolonged rest and digitalis. The load should be lightened, not the furnace stoked.

10. Our clientêle must be educated up to periodic "reviews" in middle age, but not frightened. Worry and anxiety can do infinite harm and are notable pressure-raisers.

11. That no up-to-date practitioner can afford to be without a manometer.

Illustrative Cases.

Case 1, showing good results in "pre-sclerotic" stage.

Male, aet. 40, actor, living the strenous life—sallow, medium weight, fairly muscular. Excess of tobacco, possibly also of alcohol. *Complaints* —headaches (hemicranic type), sudden loss of memory for words when on stage, insomnia, no complaint of dyspnoea; but slight increase of respiratory rate noticeable. B. P. (systolic)—180—apex hardly displaced—second aortic at base accentuated. Arteries appear quite soft. Urine 50-60 oz. pale, trace of albumen, and two or three hyaline casts, excess of indican. *Treatment*—Lacto-vegetarian diet—directions "go easy," restriction tobacco and alcohol. Iodipin—lavage of colon with a weak antiseptic solution, (1-600 Chinosol after Savill) and careful regulation of bowels. *Results*—Two years afterwards was in excellent trim —cerebral symptoms had disappeared, color good—B. P. 130-140 m.m., apex beat in normal position and no accentuation of aortic second sound. Urine good sp. gr., no albumen or casts, no excess indican.

Case 2. Showing very marked results even when evidence of nephritis present.

Male, aet. 47—business man—sedentary life—history of typhoid twelve years previously. Moderate smoker—excessive use of C. H. O. *Complaints*—Slight dyspnoea on exertion—attack of dizziness and "faintness"—nose bleedings—weight 218 pounds—waxy pallor—mucosae pale. B. P.—220—arteries not thickened, cardiac apex outside nipple line, marked accentuation of second aortic—systolic murmur; liver—three inches below costal margin—smooth—not tender on pressure. Urine about 90 oz., pale, low, hyaline and granular in plenty. 60 per cent. red cells—3,500,000. *Treatment*—stop work—alcohol rapidly cut off—careful apportionment of rest and exercise. Lacto-vegetarian diet—moderate restriction of fluids—salt restriction to second degree. Pil hydrarg and salines for the bowels. Iodipin—iron and arsenic at periods for the anaemia. *Results*—Sixteen months later. Weight 195—looks younger, and color greatly improved. No subjective symptoms whatever, complained of. B. P.—120 m.m. Cardiac apex in fifth space within nipple line, no accentuation of second aortic—no murmur detected. Liver not below costal margin—urine about 50 oz. Urea normal—albumen slight trace 04 per cent., no casts found. No alcohol for fourteen months. This case is unique in the writer's limited experience. He has never seen such a marked improvement both in subjective symptoms, and in objective signs in any man whose organs were apparently so damaged.

Case 3. High pressure in the female about the menopause.

Female, aet. 45, large frame—adipose and very fleshy. Anaemic. Excess of highly seasoned foods and marked excess in the intake of fluids, especially tea and coffee. *Complaints*—loss of memory, attacks of breathlessness on slight exertion, and fainting spells with partial loss of consciousness, attacks of bronchitis. B. P.—190—arteries fairly healthy, cardiac apex one inch outwards, systolic murmur at mitral area not well conducted. Second aortic sound accentuated at base. *Treatment*—Attempted regulation of diet and of intake of fluids; graduated rest and gentle exercise, regulation of bowels—strophanthus and iodides in small doses, at times small doses of thyroid extract. *Results*—A few years subsequently was in moderate health, twenty pounds less in weight. Capable of much more exertion. Blood-pressure about 170 m.m. Further improvement would undoubtedly have been secured had the patient been more amenable to treatment.

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The writer especially acknowledges his indebtedness to the writings of L. Williams, Clifford Allbutt, and Langdon Brown from which he has quoted freely.

PELVIC FINDINGS IN THE FEMALE INSANE WITH RESULTS FOLLOWING TREATMENT.*

"The saddest chapter in the history of disease—insanity—probably the greatest curse of civilized life."—Osler.

THE introduction of this subject means a resurrection of a discussion which occupied the attention of many gynaecologists and a few alienists, some few years ago, and, if I may presume to express any con-

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victions, a subject that has not yet received at the hands of our profession the consideration which it merits.

Two years ago while visiting a museum of the Royal College of Surgeons in Edinburgh, I was much interested in reading the label upon a jar containing a large uterine fibroid, which ran: "This was taken from a woman who died from softening of the brain." This reminded me of another case of "softening of the brain" that I examined in a Canadian asylum, finding a tumor of similar nature, of which not even the asylum physicians had any knowledge. Six weeks after a subtotal hysterectomy, she left the asylum for her home where she has remained twelve years, not wholly normal, but contributing to the domestic welfare, instead of, as before, being detrimental to it.

Now it is not my purpose to either infer or conclude from one case. Dr. Will Mayo says, "Draw your conclusions before you have many cases, for as your experiences enlarge, your conclusions will be less definite." Fifteen years ago with the experience of two cases of insanity, both given up by asylum physicians as incurable, and both responding to the applications of the surgeon's knife, with a rapid, complete return to normal mental health, I dreamed of medical idealism, and spoke in terms of enthusiasm and assurance so characteristic of those who claim an insight into the obscurities of life, clearer than that of their fellows. To-day after a greater experience, and wider range of reading and reflection, I speak more conversatively and I hope more reasonably, not that there has been one step of retreat from the position originally taken, viz.; That *the presence of mental abnormality is no excuse for the neglect of physical examination, nor the treatment of physical disease,* but the prognostic element has become considerably modified.

In listening to this paper do me the justice to admit that it is not the writer's thought that a woman's mind resides in her pelvis, and is conditioned solely by the functioning of its contents, nor that there are not other causes of mental abnormality than those found in the abdomen. Insanity being, as Clouston states, the product of heredity and strain, or possibly more clearly expressed as the product of strain, plus the phychic sense of some physical abnormalities, the pelvic disease may be, but one of the physical factors which contribute as towards that strain, but however small that factor, it may be that which turns the balance from the normal to the abnormal mentality. Upon these matters one can speak but feebly and relatively, expressing too often our ignorance rather than our knowledge. We can but hope that through our efforts, mind and body may make on music as before.

Allow me to state at the outset that I am not unmindful of the functional derangements of the sexual system, accompanied with and

dependent upon the lowered vitality and alteration of metabolism, which is evident in not a few cases of insanity, but that is not a part of the question under discussion.

As to the first division of the subject—the pelvic findings in the female insane,—we may at once clash in regard to what constitutes the abnormal. Allow me here to state superficial lacerations without erosion and that versions without adhesions are not considered, and as a pupil of Price Kelly and August Martin, I find no necessity for including in the pathological list, conditions not universally considered as abnormal.

In the examination of 154 women with well marked mental aberation, I have found 88 per cent. with well marked pelvic lesions. I do not presume to state that 88 per cent. of our female insane require gynaecological treatment, but I do say that 88 per cent. of those who have come under my observation required pelvic treatment. Of the 154 examined, 130 were married and 24 single. Of the married, 118 were diseased, of the single, 19.

In a Canadian asylum, in which I had extended to me that courtesy of examining an unselected number of inmates, I found out of 31, all but two showed well marked pelvic disease. The conditions found in these cases were: Fibroids 2, deep laceration of cervix 15, perineal lacerations 10, enlarged and cystic ovaries 10, retroversion with adhesions 5, conical cervix and pinhole os 2, myometritis 4, erosion of cervix 2.

In no case was there present any distinct indications of degeneracy, assymetry of features, high arched palate, irregular ears, defects of speech, deafness, chorea, wavering eyes, or twitching of the facial muscles, these were conspicuous by their absence.

Nor are these statistics unique. Dr. McGuigan, of Kalamazoo Asylum, states: That of the female inmates examined, less than 10 per cent. have normal peivic organs.

Pique quoted by McNaughton Jones found 88 per cent. of gynaecologic affection among the insane.

Now as to the results of treatment, treatment not for insanity, but for the removal of the pelvic lesions. 71 were submitted to operation, with the result of physical recovery in all but 4, and mental recovery in 28, or 39 per cent., and additional 22, or 30 per cent., were improved mentally, 17 not improved, and one not heard from.

With a more careful elimination of organic brain disease, and greater operative dexterity, the operation mortality should be lessened.

In two cases the patients died from central conditions which were present previous to the pelvic operation, but undetected. One died from bowel strangulation, and one from pelvic abscess. These patients bear operative procedures as well as our ordinary cases. In no case was the mental trouble increased by the operative treatment.

In the evolution of gynaecology we have passed through several stages, and to-day we are in the stage of the most extreme conservatism with regard to normal structures, and the most extreme radicalism in the presence of structures hopelessly diseased and nowhere do these principles apply with greater aptitude than in the department we are now discussing, normal ovaries or uteri are as sacred here as in those whose minds are not affected. The day of mutilation is past, but I here stop to make one exception. Recognizing the hereditary factor in the causation of insanity, it is my practice after obtaining the consent of the husband or friends to remove the tubes cutting a V-shaped piece out of the uterine parietes. I consider the eliminations of this potential of insanity justifiable. With this one exception, pelvic conditions in the insane are to be treated as in the sane. Of course I refer only to major gynaecology, as minor treatment, the application of electricity and fitting pessaries are not to be considered in the vast majority of these cases.

But some will ask are the functions of the pelvic organs more closely related to the psychic activity than are other organs of the body?

Your physiologists will answer that question. Let me reinforce that answer by stating that one of my cases of removal of a moderately large ovarian cyst complicated with adhesions who had been unbalanced for 7 months, was practically sane when she recovered from the anaesthetic. Dr. Hobbs, late of London Asylum, gave records of 32 cases of general surgery done upon the insane, including such operations as hernia, tumors, depressions of the skull, appendicitis, and excision of joints.

In all these there was no mental relief following the operations, but in 111 suffering from pelvic disease, representing curettings, 38 trachelorrhaphies, and amputation of the cuvix, 26 suspensions, 12 ovariotomies, 17 hysterectomies, 2 laparatomies for tubercular peritonitis, 1 removal of broad ligament haematoma, and 17 perineorrhaphies, with the following results: 40 or over 36 per cent were restored mentally, 32 or 29 per cent. showed improvement in the mental condition, while in 35 or 32 per cent. no mental improvement followed, 3 or less than 3 per cent. died. Dr. Hobbs states that a number of those operated upon would have died had it not been for the timely assistance given by surgery. Read Byron Robinson on the abdominal brain for further proof, or consult your own psycho-sexual system.

Now for a few corroborations. I have in my hand a letter from Dr. J. H. Kellogg, of Battle Creek, Michigan, who in reply to my request for any experience of his in this domain, writes: "I have yours of recent date. I recall only three cases; one that of a woman who suffered from melancholia and had severe endomitritis, treatment for the pelvic disease resulted in a cure. The treatment consisted of massage, regu-

lation of the diet, etc., which unquestionably improved her general health aside from what beneficial influence may have been exerted by the treatment of the pelvic disorder.

A second case, that of a young woman who suffers from periodical hystero-epilepsy, was cured by ovariotomy.

A third case, a woman who was insane, having illusions and frequent attacks of maniacal excitement, was cured by hysterectomy, the indication for which was the existence of a fibroid tumor of moderate size.

Another letter from Dr. Manton, of Detroit, who states: "I have been operating upon insane women during the past ten or twelve years, and I should judge have operated upon ten to twenty cases each year, in many instances doing several operations upon the same patient. These operations have included most, if not all the major as well as the minor abdominal and pelvic procedures. During this period I have lost by death only two patients, one from hemorrhage following extensive vaginal operation, and one from the opening of the abdominal wound by the patient, with escape of portions of the intestines followed by peritonitis.

In scarcely a case operated upon has there been a failure as regard improvement of physical health, with, in very many instances, accompanying alleviation in some degree of mental condition.

There has also been a great number of "cures" mentally speaking following operations, but this relief to the brain disorder I attribute as much to other factors as the operation.

Dr. McGuigan, of Kalamazoo (before quoted), states that mental cases require little mental treatment, he says that surgical relief is indicated when we have abnormal conditions present, and that recovery is usually blocked to a serious extent by physical conditions only.

Read, late of Maryland State Hospital, favors surgical procedures in every case of pelvic disease, and reported out of 34 cases operated upon, 14 mental recoveries and 5 improved. McNaughton Jones, late president of Bt. Gynaecologic Society states: "The correlation of insanity and disordered sexual functions of the generative organs is a factor to be taken into serious consideration in the treatment of the mentally afflicted.

Sir Halliday Croom, of Edinburgh, Echoltz of Vienna, have reported cases of insanity recovering after the removal of the cystic ovaries.

Horman, physician of Pittsburg Insane Hospital, speaking of the proven work done along this line by Rohe, Manton, and Price, says: "I feel that they have opened up a new field for the gynaecologist and established the beginning of a new era for the alienist." He goes on

further to state that we should be more concerned about our patients, especially of the neurotic type, who are suffering from uterine disease. Many times, if the uterine disturbances were relieved, the insanity would be removed. I cannot do better than to give a paragraph from one of his articles.

"No fact has been more clearly established by physchologic investigation and neurologic anatomy than that the human anatomy is wholly dominated by the sympathetic nervous system. The whole physical structure is subservient to its influence. It is a despotic force with compulsory requirements. There is no stasis, either active or passive, no modification of the activities, no irritation, however slight, but will manifest itself through the sympathetic nervous system. I have seen, as already stated, in the treatment of insanities, the result of uterine disease, the local or surgical treatment of the trouble not only cure the uterine disease, but effectually cure the concomitant disease occurring in the brain, thus showing the mysterious (?) and unaccountable (?) connection between them. A woman becomes the victim of nymphomania, amenorrhea, dysmenorrhea, or some one or more of the many forms of uterine disturbances; it may take on one of the amatory phenomena, especially of nymphomania, a religious turn, devotional enthusiasm of so violent a character as to necessitate a removal to a lunatic asylum—and these are not fictitious cases—and all this because of local irritation? Finally, we may have a uterine trouble, an irritation, transmitting through the hypogastric, spermatic and other ganglia and plexuses, from cell to ganglion, passing onward to the sacral, to the cord, the medulla oblongata and cerebellar and cerebral ganglia, finally by coronata radiate fibres to the cortex of the brain, that most valuable distribution of nervous matter, the seat of mentality and intellectuality, ending in a complete over-throw of the noblest propensity of woman, driving her to a madhouse, there to drag out her existence within the walls of her life prison. Thus, we have the beginning and end of a very sad picture."

Dr. C. A. Kirkley, of Toledo, says, in speaking in favor of operative treatment in the female insane: "The future of Gynaecology in this field is full of promise."

With regard to insanity, we have passed from the theory of diabolical possession, through mental to physical disease, and for a time the attention centred upon the brain, then the pelvis, and now we recognize that wherever there is sufficient irritation from functional derangement or structural disease, intestinal toxemia or meningeal inflammation, there we may find the exciting cause of "mental disease."

The hypothetical basis of alienists, and the classifications based upon external manifestations, need but a momentary consideration, neither need we trouble ourselves with vexatious queries as to mental and physi-

cal relationship, interdependence, or unsolved psychological problems. But when the rudder chains of life are weakening, and the frail craft no longer obeys the will, our duty is immediate action, knowing that the standard of tissue-integrity has been lowered, and that the abnormal mentality is but the erratic effort of irritated or poison-ladened organs to discharge their functions. A large majority of these cases respond readily, and the sooner the case receives treatment, the better are the results. No case should be given into the care of the state hospital, or worse still, confined to gaol awaiting the action of the authorities until every diagnostic means has been used, and reasonable therapeutic attempts made. To exercise as much care in the treatment of incipient insanity as in a given case of typhoid fever, would be to very largely diminish our asylum commitments.

When, as so often has occurred in the writer's experience, suicidal mania of several years' duration has vanished after the removal of an ovarian cyst, when acute mania, hopelessly "incurable" is restored immediately upon convalescing after removal of adherent appendages; acute mania, certified by two physicians for asylum commitment relieved by the extraction of an ulcerated tooth; and delusional insanity, case after case restored to health after the removal of pelvic pathology, is there not encouragement for the physician to consider carefully whether or not he has discharged his full duty to the sufferer, if he has failed to interrogate any organ or function to the fullest extent of his power. The development of mental symptoms should not define the limits of our jurisdiction, but on the contrary should be a call to more careful examination and closer scrutiny.

Now, gentlemen, this is the condition regarding our female insane as it has appeared to one with somewhat limited opportunities for observation during the last fifteen years. My conclusions are before you for consideration and criticisms. If there be a measure of truth therein contained, or if in your judgment a heavy discount must be imposed, and instead of 88 per cent. of our female insane suffering from conditions which can easily be rectified, we admit 44 per cent. or even 22 per cent. amenable to treatment, and if your state hospitals make no adequate provision for such treatment, is it not a matter that should demand the consideration of the profession.

As to the best methods of administration in your state, it would be presumption for a new comer to suggest, but I make bold to say that the entrance of the gynaecologist into the state hospitals would mark an era of therapeutic progress. And while I plead for this specialty, I plead for the general surgeon, the physician, and for the specialist in nervous diseases. The state hospital should have a consulting staff of specialists who could meet at stated intervals and examine all inmates.

This long neglected department of medicine invites us to exercise our best and noblest efforts. The alarming increase of insanity demands this; our duty to our patients, and our interests in the welfare of humanity encourage us. What shall be the voice of this society regarding this most important matter?

In conclusion I may state that the results herein stated are the privilege of and can be duplicated by many of the excellently qualified men before me this evening who realize the possibilities in this department, and it appears to me that it is incumbent upon us all to leave no stone unturned in investigation, nor no measure of relief neglected before placing any of our mothers, sisters or wives within the confines of the state hospital. Now, let me repeat that I do not say that insanity in women depends upon disease of the pelvic organs, but I do say that many cases recover their mental grasp after such disease has been removed, neither do I recommend surgical measures indiscriminately, but one thing I do believe, and shall advocate so long as there are additional worlds of conservatism to conquer, that the principles of surgery and humanity unite in demanding that the insane receive at least the measure of consideration that their diseases call for, that these helpless sufferers from pelvic disease who are confined in our asylums have extended to them the benefits of modern treatment, that asylum life be no barrier to the application of modern therapeutics, and that our female insane receive treatment equally as skilful as that given in daily practice by hundreds of your best physicians. If this be done, a large per cent. of your asylum population can be sent to their homes, households united, and given "beauty for ashes, the oil of joy for mourning, and the garment of praise for the spirit of heaviness." This is no idle dream, no strain of the imagination, what has been done elsewhere can be done here.

Then what can we do when confronted with a patient giving evidence of abnormal mentality? Remove obstructions, repair structures, restore functions, and thus extend to this invalid class the measure of mercy that an enlightened sentiment desires and the spirit of justice demands.

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MEDICAL THOUGHTS, FACTS, FADS AND FOIBLES.

By JAMES S. SPRAGUE, M.D., Perth, Ont.

WHILE homeward bound from Toronto, several years since, I met a veterinary surgeon—whom the vulgar people *down our way* commonly saluted as *"Doc,"* and most truly he experienced much pride

in being thus addressed. "*Doc*" was in much mental anguish, for his complaint was that he had been unsuccessful in persuading the members of our Provincial Legislature and a few members of Toronto University concerning the necessity of legislation in favor of the establishment of a *Dental College for Veterinary Surgeons* which should be empowered to grant the degree of "Doctor of Veterinary Dentistry." The reasons leading to his failure have never yet been explained to me, and *why* he should not have succeeded, will forever remain somewhat of a mystery. Very recently the *Empire College of Opthalmology* sought to be chartered and allowed important powers. How will the same wise legislators, in due time, listen to the appeals of the Ostheopaths, Chiropractists, Christian Scientists, Graduates of Moller's Barbers' Colleges, Chiropodists, etc., and grant them incorporation, charters and rights to grant degrees—in these our most enlightened days, even if fakerism is abroad in our land? If we Canadians are to live up to, and maintain the ideals and ancient piety of our forefthers as regards our educational institutions and learned professions, one fact is evident to all educated men, who have their own and our nation's honor in respect and guardianship, that our legislators either have to be better educated or given instruction in matters relating to the aims and labors of men in our profession, if not, our university degrees, hallowed by the centuries, acquired by many sacrifices, full evidences of completion of lawful, authorized and essential studies, will necessarily, by our enemies, be dragged in the dirt from which they are making their mud idols—which they desire the vulgar to worship—which, too, they, the iconoclasts want to place in our great universities, or to seek affiliation with or recognition by our state or well known and endowed universities for purely commercial aims.

The first and most important aim of the intelligent legislator is that referring to the health of the commonwealth, and his next duty is in regard to the establishment and maintenance of the state university and other well established universities, in fact, all higher, and not commercialized or fake schools.

Weak legislation enabled many fake cults and "University" charters to be allowed in the United States, and their promoters or disciples have for many years been struggling to secure legislation in this law-abiding land, whose people must be well guarded and taught to recognize fakerism in education, in fact, in all interests pertaining to our National welfare, and if ever, it becomes us as medical men, especially *now*, to oppose all false medical cults of whatever character, if not, our newly formed Western Provinces, and our older provinces will become hot beds for false and misleading cults, born and unborn.

We should not recognize or in any sense encourage faker cults—whose births are registered in states where medical requirements were held in low estimation and allowed to exist through indifference or the

want of a thoroughly established State Board of Medical Examiners, or through the ignorance of the State legislators. No! we Canadian M.D.'s do not want, nor will we tolerate mud gods in our temples—erected or to be erected, for our own universities already dedicated to the shades of Hippocrates—the gods, and demi gods of prehistoric ages, should be, as they are,—exemplars of that purity so well illustrated, preserved, and maintained by those of the British Isles. The multiplication of meretricious degrees and the conferring of the same adds no honor to any university.

The affiliation of cheap colleges, whose object is the teaching of cheap and useless cults—injures the life work of university graduates, dishonors their alma mater, and brings reproach which the laity too often notices and sorrowfully considers as evidence of the degeneracy of that former honorable period when universities gave, and only gave degrees in *Law*, in *Divinity*, in *Philosophy*, and in *Medicine*. The dear people are now considering many universities as departmental stores, and an illustration is before me—it is the announcement of university Philadelphia, with its fifteen or twenty faculties, and its numberless courses leading to degrees and certificates from Doctor of Sacred Theology, LL.D.,—M.D., to Cooking, Dancing, etc., yet, I notice no courses for Opthalmologists, Osteopathists, or Optometrists, or Christian Scientists. Its correspondence courses afford cheap rates to preachers who are ambitious and studious, and who covet the "Dr." after the "Reverend," thus to become, or appear of greater worth to their flocks. The Reverend "Doctor"—*he* of the D.D. or S.T.D. correspondence type and *he* whose newspaper advertisement states: D.D.S. (*Honor* Graduate of Toronto University), and *he*, the Osteopath (the D.O.), and he the D.O. (Doctor of Opthalmology,) and he the C.S.D. (Doctor of Christian Science) will bring the blush to our diplomas when we are addressed as "Doctor," and we will petition our universities to discontinue the gift of M.D. to medical graduates, for, after several centuries, the title has lost its original honor and significance, but its restoration can be obtained not only by our universities, but by wise legislation, and by ourselves, if we are not too indifferent to the movements and designs of those seeking titles—more or less medical in subjects embraced or should be embraced, if worthy, in every medical course, and in practice, for no one can become a specialist —that is, a safe one—unless he is a regular M.D.—has had several years in active professional and general work—and embraces a specialty, for which he is well prepared by nature, by study, and from choice. In these our days, it is pleasant to read the words of Dr. Albutt, of Cambridge: "Never was there a time when the study of medicine offered such visions of reward—social—scientific, and beneficent—as at present," if so, the golden period will be inaugurated when matriculation shall be that

named in an Arts or Science degree and in possession of applicant, then and not until then, when there shall exist uniformity in such preliminary exactions as are the rulings of Harvard and three other distinguished universities—will appear the brilliant dawn, yet, but a repetition of an early period in the life of Oxford and of Cambridge, during which medicine had many eminent men, whose labors are not forgotten and serve as inspirations to us who, even in the minority, are jealous in the efforts to preserve not only the professions integrity, its stability, and to secure its elevation and efficiency to that condition in and to which it may be said, the glory of all Nations shall be brought, and physicians become, according to the words of Gladstone, the future rulers of commonwealths. In referring to the *Optometry* Bill, the CANADA LANCET, April, 1911, says: "To select glasses for one is not even a full branch of medicine. Let us have an end of this creation of Osteopathists, Optometrists, etc., etc. Legislators owe it to their constituents to protect them."

Dr. F. J. Shepherd, in his address at Montreal, 1902, before Canadian Medical Association, said: "In some universities they are advocating allowing men to graduate in special lines, such as Opthalmology, Dermatology, Medicine, Surgery, Gynaecology, etc. This seems to me to be most pernicious, tending to develop much narrowness, and also to exaggerate the importance of certain specialties, and the *public will suffer accordingly.*

No university, as far as we know, has publicly encouraged or announced such inane innovations, but there are among regular graduates those, whose aspirations are specialisms, which if commenced without the experience of several years in general practice, very quickly assumes the commercial or trade qualities, and the result is, higher and nobler professional interests and instincts have become dwarfed, if not utterly destroyed thereby. No professional man, engaged in practice, has any inclination to give to the public press an expression of any of his petty or personal grievances in which the honor of medicine is, or may become, in any sense assailed, for the proper publication is the medical journal, and it only, if designed for consideration and opinion of one's fellows in practice. The public press, as we all know, has been too frequently the publisher of complaints medical, very antagonistic to our interests—which the vulgar admire to read, farseeing in them the reign of Socialism. Religious controversies with which our daily and monthly jounrnals have too many illustrations—which reflect no honor to the text, the church or the writers, have produced more infidels and doubters than otherwise would have existed or been created yet one can console himself in religion by the comforting thought that "there is more faith in honest doubt than in half the creeds." We must not look to the church for authority or necessity or as an exemplar for newspaper notoriety. We

have paid long and well for our doctor's degree. The Reverend "Doctors,"—those of the purchased, cheaply earned and bought correspondence degree courses and classes, now and then get notoriety and as often a better pulpit, yet *we* get the censure of our profession, and it is well deserved payment—and nothing more, except a self humiliation. You and I, brother, have not yet seen, and probably will never see the public criticisms by barristers of interests relating to their vocation and from them we should learn to preserve honored and professional reticency as regards publicity of views in non-professional journals.

Several medical journals, published in the United States, and having many subscribers in our Dominion, are devoting much consideration to subjects which relate to medical education, and professional ethics; the maintenance and establishment of higher qualifications for practice; to the exposure of the many schemes in stocks, mines, etc., which have so easily and so widely entrapped us—as "easy marks" and without protest, in their meshes; to fakir colleges, fakir journalism, and rampant quackery tolerated, and licensed by unwise legislation, and in fact to the silencing of pernicious, pseudo-medical cults and concerns, religious and otherwise, which are not demanded for the peace, or welfare, or morals of the commonwealth; to the national appeal for the sterilization of idiots, the criminal class and other incorrigibles and syphilitics; to the necessity of medical inspection of men and women before marriage, and to other vital matters which profoundly concern the nation's existence, and of which each one of us is more or less our brother's keeper and legalized guardian, not for greed or self interests, as first incentives. Such are among few essential considerations now being discussed which eclipse discussions wherein "Salvarsan" is or may be made the subject of study, but owing to the want of a National Medical Journal which should reach every brother and should be read by him, and to the absence of a well defined leadership of distinguished men whose decisions should control medical publications and literature by a National Board of Censors, we, as subscribers to journals of no standardized merit or authority, more or less controlled by proprietary concerns, are without leaders, and thus the establishment of cults and divisions herein named, whose designs, too often, if inspected, will appear not a blessing, but stumbling blocks—a curse to our nation's progress in medicine and in all movements tending to higher civilization to which, we as medical men—when freed from the shackles of ecclesiasticism, have, in all ages, been unselfish and most zealous patrons; the signal dispellers of myths and falsities, and the unpaid instructors of the ages, warning men not to trust "too much into suggestions from reminiscential amulets or artificial memorandums;" that "life is a varied bright illusion, joy and sorrow—light and shade," and that "it is not the miles we travel, but the pace that kills."

To those in our profession and to legislators who wish to know the origin of Osteopathy and become, in a manner, acquainted with its founder, I would suggest the reading of page 115, *Medical World*, 1904, and to the reader, page 359, *Medical World*, 1905, article "Refraction," and Dr. Geo. M. Gould's address, "Vocation or Avocation." One fact is all well arranged and properly endowed medical colleges have professors who can or should teach all subjects relating to refraction, etc., and as regards Osteopathy, Chiropractics, Vitopathy, Mental Science, Emmanuel movements, etc., etc., full explanation, criticisms, denouncements, reception or adoption, if possible, of any grain of truth that may be worthy, should be presented to medical students by able professors, in order to instruct the dear people who surely need instruction, and who too readily admire the worship of unknown gods, and if we meet with but ordinary success, we can console ourselves by remembering the words of Lincoln as to the credulity of mankind.

To this journal, in 1868, when Dr. John Fulton was editor, at his request I gave my first contribution, and having watched very carefully its editorials ever since my medical school life, one fact is this, the CANADA LANCET has been a staunch defender of our faith in medicine and all its interests, and I am of the belief, if many of its editorial, or "original" articles had been or were given to the public press, our profession would be better honored; the dear people, better informed of our intelligent and altruistic movements; legislators more enlightened; and the fakir class and their vulgar following would become dazzled and dispersed in their nefarious acts by the flash lights of deserved censure and exposure.

"With malice towards none," said the immortal Lincoln, "with charity towards all, with firmness in the right, let us strive to finish the work we are in," and with life long devotion to ideals, such as our venerable masters and master minds:—Haeckel, Huxley, Virchow, Koch, Pasteur, Lister, Stokes, Metchnikoff, Lorenz, Jacobi, Osler—not forgetful of the venerable fathers of earlier centuries have given us "and we sustained by steadfastness of purpose" in our *profession*, our *vocation*, let us be true to its historic and ancient honor and integrity—to God—to each other, and equally true to himself. Such is my apology in my fourth decade in practice and in observation, for this medley of thoughts, facts, fads, visions and foibles medical, to which brief reference is given, for further study and reflection by those whose ink horns are deeper than mine, whose potentiality of expression is more dignified classical, and of greater influence among, and with men in actual practice for our country's welfare.

"To teach, to learn, to live," and to teach others how to live is the devine mission for which our State Universities prepared us, and to which work we have given the proper names—*profession* and *vocation*,

self assumed by those whose aims and objects are selfish, mercenary, even commercial. "Trade is occupation for livelihood; profession is occupation for service of the world. Trade is occupation for joy in the result; profession is occupation, for joy in the process. Trade is occupation where anybody may enter; profession is occupation where only those who are prepared may enter. Trade is occupation, often taken up temporarily, until something better offers; profession is occupation with which one is identified for life. Trade makes one the rival of every other trader; profession makes one the co-operator with all his colleagues. Trade knows only the ethics of success; profession is bound by lasting ties of sacred honor," says President Faunce, of Brown University.

Dr. Robinson, editor of *Critic and Guide,* in his address: "Is anything the matter with the doctors?" says: "There is nothing the matter with the doctors, they are all right." You and I, reader, agree with our brother, our complaint is directed toward defective legislation and ignorance of legislators in matters medical; and to the absence of co-operation of state and national bodies medical. The majority among us hold our profession as *holy* and as a *vocation,* and a few, termed leaders, use it as an *avocation*—as a tool for success, who, as professors and no practice, have never weighed their duties to the profession, and have never felt that warmth of heart, which, with the country doctor is always present. To those who are zealous in professional interests and have ideals and want to live up to them and want others to encourage the study of them, I would refer my brother to Dr. Osler's *"The Growth of a Profession,"* page 65, CANADA LANCET, 1885, not only to this, but to his *"Chauvism."* Montreal address, Sept. 17th, 1902, which more fully illustrates considerations herein named, to which brief reference is given, and other interests worth study and observance—as segments from the swirl of time and circumstance.

One reflection is, says *Philistine*:

"To escape criticism: do nothing, say nothing, and be nothing."

The question or query is: Has our Ontario or Canadian Medical Association ever given, or will it give these reflections any discussion? No!

Note.—Since writing the above Dr. W. C. Abbott, Chicago, in answer to query in *Medical World,* May, 1911, sends the following:

"If you will look at the first volume of American Alkalometry, page 558, you will find what still himself termed a scientific roast, which may give you some material to be used effectively against this delusion."

[The medical profession must be more vigilant in the future than it has been in the past. Every organization is aggressive.—EDITOR CANADA LANCET.]

HOSPITALS FOR INEBRIATES.

By A. M. ROSEBRUGH, M.D., Toronto.

Great Britain there are three classes of institutions for the treatment of inebriates, as follows:—

1. The "Retreats."
2. The "Certified" Reformatories, and
3. The "State" Reformatories.

1. The "Retreats" are private hospitals under Government inspection. There are twenty-two of these institutions in England.

2. The "Certified" Reformatories are established by Counties or Union of Counties, but the expense of maintenance is borne wholly by the Government. They receive cases committed to them by the Courts, and they are under Government inspection.

3. The "State Reformatories are Government Institutions for the segregation of imbecile and unmanageable drunkards, transferred from the "Certified" Reformatories. On account of the encouragement given by the Government through the "Inebriates" Act of 1898, the number of Certified Reformatories has increased from three to eleven, and during that period over 3,000 patients have been received from the Courts. The twenty-two "Retreats" receive on an average, 500 cases a year.

Australia is profiting by the example of Great Britain in the public care of inebriates.

In New South Wales reformatory efforts were commenced by the Government in 1907. Institutions for this purpose have been established in connection with jails.

In Victoria an Institution for Inebriates was founded in 1907. At Lara a mansion has been purchased by the Government for the reformation of inebriates. The land covers one square mile.

In New South Wales a portion of Darlinghurst jail has been set apart for the reception of habitual inebriates or indeterminate sentences.

Germany has no State Hospitals for Inebriates, but private hospitals are assisted by the German Imperial Insurance System. There are about fifty private institutions for inebriates in Germany. They receive aid from local poor Commissioners as well as from Insurance Companies.

Denmark has five private Institutions for the Reformation of Inebriates and which receive Government aid.

Hungary subsidizes a private Inebriate Hospital near Budapest.

Switzerland has eleven "Colonies" for the treatment of alcoholic cases. They receive aid from the Government monopoly in alcohol. Switzerland leads the world in the scientific study of alcoholism, and a large percentage of cures are reported.

United States, although there are at present but two State Hospitals in the United States for the treatment of inebriates, steps are being taken in a number of the States with a view to their establishment.

In Massachusetts, a hospital at Foxborough for the medical treatment of inebriates has been in operation for a number of years, and at Knoxville, Iowa, a hospital has been in operation for two or three years

Two years ago the Legislature of Minnesota adopted a bill providing for the establishment of a Hospital or Reformatory, and at the last session of the New York Legislature a bill was adopted authorizing the establishment of a Farm Colony by the City of New York.

Farm Colonies.—At Cleveland, Ohio, there is a Farm Colony located on a very extensive tract of land for the reformation of inebriates. There is also a Farm Colony at *Bridgewater, Massachusetts,* with ample grounds, which is used for the detention on indeterminate sentences of vagrants as well as for the defective and apparently hopless criminal drunkards.

A New Departure.

Massachusetts is making a new departure in its provision for the care and cure of its inebriates. A second Farm Colony is being established on a large tract of land as will permit of three classes of inebriates, widely separated, receiving distinct and separate care and treatment as follows: (1) A hospital and grounds for men; (2) A hospital and grounds for women; (3) A detention colony for observation and care of inoffensive but seemingly hopeless chronic inebriates.

The Situation in Ontario.

When the late Sir Oliver Mowat became Premier of Ontario, he was strongly impressed with the great need of provision being made for the reformation of drunkenness, and he proposed establishing an institution for their reformation at Hamilton. Much to his regret, however, he was obliged to abandon the project as he found that public opinion did not seem to him to be sufficiently ripe to justify incurring the necessary expense; for which reason the proposed institution was changed to an Asylum for the Insane.

In 1891 the Prison Reform Commission appointed by the Ontario Government reported very strongly in favor of the establishment of at least one Reformatory in Ontario for the reformation of drunkards. When, however, the attention of Sir Oliver was called to this recommendation, he stated that his Government would be pleased to co-operate in the establishment of one or more Reformatories in the Province but that the initiative could not be undertaken by the Government. However,

as this offer was never put in such a form by the Government as could be made use of as an incentive to voluntary effort either on the part of the municipalities or private individuals, nothing came of the offer.

The Situation in Toronto.—A Hospital Required.

The Ontario Society for the Reformation of Inebriates was organized in Toronto five years ago. The object of the Society is:

(1) To promote the reformation of indigent inebriates in Ontario, (*a*) by making use of the public hospitals of the Province for the purpose, and (*b*) by combining therewith the Massachusetts Probation System.

(2) The second object of the Society is to promote the reformation of inebriates in Toronto as follows:

A Medical Officer and a Probation Officer attend the Police Court and offer medical treatment and a helping hand to inebriate prisoners found desirous of such help. The medical treatment is given by the Medical Officer either in the home, at the office of the physician, or in a ward of one of the public hospitals of the city. The Probation Officer acts the part of a Friendly Visitor, assists in finding employment when necessary and helps to a better life. By means of these combined efforts, much good has been accomplished. There are in Toronto to-day many restored homes due to the work of the Society. The work is heavily handicapped however, from the lack of proper hospital accommodation. The public hospitals are frequently overcrowded, and moreover, are not equipped for affording facilities for the up-to-date scientific treatment of inebriates. A small special hospital—a "Cottage Hospital"—is urgently required in Toronto for this purpose. It is true that the City Council is committed to the project of establishing a farm colony within say 8 or 10 miles of the city for the detention and scientific treatment of inebriates, but two or three years may elapse before this boon can be realized. Moreover, a reception hospital in the city will be required in connection with the proposed farm colony, and a cottage hospital such as proposed could be used as such. Under the circumstances, the Executive Committee of the Society consider the time ripe for grappling with the problem. To this end it is proposed to ask the Ontario Government to contribute one-third the amount required, the City Council one-third, and an appeal made to the benevolent public for the remaining one-third. May we not count upon the medical profession giving the project a helping hand?

[The good work of the Society for the Reformation of Inebriates cannot be too highly commended. It is worthy of support and assistance. —EDITOR CANADA LANCET.]

CURRENT MEDICAL LITERATURE.

SURGERY.

Under the charge of H. A. BEATTY, M.B., M.R.C.S., Eng., and A. H. PERFECT, M.D., C.M., Surgeons to the Toronto Western Hospital.

SURGERY BEFORE LISTER.

A short time ago, at the Fishmongers' Banquet, Mr. H. T. Butl President of the Royal College of Surgeons, spoke as follows in reply the toast to the Royal College of Surgeons:

"I think it might interest the Wardens and the Livery of the Cor poration to hear my own personal experience of the great revolution which has been effected in surgery, and to which reference has been made. In order that you may understand it, I must carry you back to the sixties of the last century, when I was house-surgeon to that eminent man, Mr. (Sir James) Paget. At that time the ordinary course of events was in this wise: Mr. Paget would perform an operation, such as the resection of a joint, on the Saturday; it would be performed properly, and the limb would be fixed upon a splint, and all would go well for a few days. But perhaps on the following Thursday the house-surgeon would receive a message from the Sister of the ward to come at once because the patient was shivering. He would find the Sister by the patient's bed, the child wrapped in a warm blanket, but still shivering from head to foot so that her teeth clattered, and he knew at once that this was the almost certain presage of that terrible blood poisoning, pyaemia, which would surely end fatally in the course of five or six weeks. Sometimes it meant septicaemia, not less deadly but more merciful, because it did its work in five days instead of five weeks. And the best hope was that it might only mean an attack of erysipelas, which would probably not be fatal. It was not only after large operations that these blood poisonings occurred. I have seen a child die within forty hours of the division of a tendom, and a strong and healthy man die within five days of the removal of an ulcer from his arm. There were always cases of blood poisoning in the surgical wards at that time. Nor was this all. For there were horrible diseases of wounds which spread with singular rapidity, and one of them, hospital gangrene, spread from bed to bed until there was not a wound in the ward free from it. It may well be understood that the surgeons of those days were very sad over such conditions, and constantly wondering what could be done to prevent or remedy them.

It was at this time that Mr. Paget came down one day and found in his wards a man with a crooked spine, and an abscess by the side of

it, a kind of case which was the terror of the surgeon, for he was between the devil and the deep sea. If he opened the abscess the patient would almost certainly die of blood poisoning. If he left it to open by itself there was no knowing when and where it might choose to open. When he saw the case Mr. Paget said: "Now, Butlin, we will treat this by a new method. There is a man called Lister in Scotland who has recommended a method for the treatment of such cases. I will bring down the description of it to-morrow." On the next day he desired me to have a kind of putty made of certain ingredients, among which the most important was carbolic acid. The opening was to be made beneath a piece of lint soaked in a solution of carbolic acid; then the putty was to be put upon it, and over that a piece of sheet lead. The principles of the treatment were not explained to us. All the directions were carried out: the putty was applied with the sheet-lead over it, and was fixed with plaster and bandage. But as it was only a lump about as large as a small fist, it soon slipped down, and slipped down again and again, until the usual blood poisoning occurred and the patient died, as he might have done with the old treatment. This was the first time we had ever heard the name of Lister, and you may be sure we were not favorably impressed by what had happened under his name.

Ten years later the name of Lister was well known, and surgeons all over the world were divided into two great camps—those who were for Lister and those who were against him. It was very interesting to trace the part which he himself took in the contest. Born of a Quaker family, a man of peace, of kind and courteous manner, incapable of a harsh word, he did more for his cause by his persistent and quiet advocacy than he would have done had he been eloquent and a born fighter.

Every one now knows how, some tweny years ago, the fight was practically over, and every one no knows what the condition of surgery is. There are men of the younger generation in the room to-night who have never seen a case of blood poisoning after operation and who have no idea what hospital gangrene was like. Operations are practised so well and so frequently that the public has come to regard then almost as a form of innocent recreation. They are confident even to rashness.

This vast result, greater in its effect upon every civilized country than the French Revolution was in France, was accomplished by one man upon the work of another man—a Frenchman—and I have often thanked the kind fate which brought me into surgery when Providence had given to the world such men as Pasteur and Lister, so that I should actually have known and conversed with one of them.

I should like to say that these great results were not procured without experimental investigation. Not only did Professor Lister think

himself justified in testing his methods on animals before he applied them to men, but he would not have thought himself justified in applying them to human beings unless he had first tested them on animals, where that was possible. I say this not with any intention to apologize for this great man—there is no need for that—but because this is a period of maudlin sentimentality, when there are many persons going about the world objecting first to one thing then another. They might well be called "antibodies." They object to many of those things which have made this dinner so agreeable—to the eating of flesh, to the drinking of wine, to the smoking of tobacco. They are antivaccination, antivivisection. Many of them are opposed to thrift and some object to religion. And they believe they have not performed their daily round of duty unless they have passed some part of their time in shouting out their own opinions, and shouting down those persons who do not agree with them.

APPENDICITIS.

Ali Krogius (*Finska Läkaresallskapet's Handlingar,* October, 1910, p. 283) gives an analysis of all the cases of appendicitis treated in the Helsingfors Hospital during the years 1901-8. There were 1,283 cases admitted, of which 1,033 were operated upon. In 129 cases operated upon for acute appendicitis with or without localized peritonitis there were 6 deaths, or a mortality of only 5 per cent. In 177 cases complicated by diffuse peritonitis there were 68 deaths, or a mortality of 39 per cent. In 146 cases in which a late operation was performed for such complications as localized abscess there were 26 deaths, or a mortality of 18 per cent. In 581 cases in which the appendicitis was quiescent at the time of operation there were only 2 deaths, or a mortality of 0.3 per cent. One of these deaths was due to heart failure in a patient with congenital stenosis of the coronary arteries; the other death was due to strangulation of the small intestine owing to old adhesions; 62 per cent. of the patients were between the ages of 10 and 30; 60 per cent. were men, 40 per cent. were women. The incidence of appendicitis month by month during the period 1901-8 was compared with the incidence of angina (or croup), influenza, and enteritis during the same period. It was found that appendicitis and angina followed strikingly similar curves, whereas there was no similarity between the curves followed by the former and by influenza or enteritis. Fæcal concretions were found in 12 per cent. of the cases in which operation was performed in the quiescent stage of the disease, but they were found in 32 per cent. of the cases operated upon in the acute stage. Seventy-five per cent. of

all the cases operated on for an acute attack showed signs of an old inflammation about the appendix. With regard to early operation the writer considers that each case must be judged on its own merits, but that, as a rule, the indications for an early operation are given by any sign pointing to an exacerbation of the original symptoms, or when the disease is very acute and violent from the beginning. An analysis of the cases of peritonitis showed that of the 79 cases operated upon within 36 hours of the onset of peritonitis there were 14 deaths, or a mortality of 18 per cent., whereas of the 70 cases operated upon from 36 to 72 hours after the onset of peritonitis there were 33 deaths, or a mortality of 47 per cent. The mortality was as high as 75 per cent. among the 28 cases operated upon after the third day of the appearance of peritonitis. The mortality from peritonitis was far higher in the years 1901-3 than in the subsequent years, being 62 per cent. in the former and only 28 per cent. in the latter; but this difference was due not to any improvement in technique, but to the fact that after 1904 patients were sent to hospital at an earlier stage of he disease. As a rule, tampons were employed to drain the abdominal wound, the use of long drainage tubes and lavage of the peritoneum being usually dispensed with. Of the 146 cases in which a late operation was performed the majority were operated upon for localized abscess. Pelvic abscess occurred 139 times, subphrenic abscess 6 times, retroperitoneal abscess 8, and pylephlebitis 5 times. The 100 deaths from acute appendicitis were due to the following causes: Peritonitis, 65 cases; hæmatemesis, 4 cases; subphrenic abscess, 5 cases; retroperitoneal phlegmon, 5 cases; pylephlebitis, 5 cases; intestinal obstruction, 4 cases; pneumonia, 7 cases; pulmonary embolism, 1 case; heart failure, 4 cases. The writer concludes that the chief cause of the high mortality which still prevails in appendicitis is to be found in the physicians who attempt palliative treatment till the most favorable time for operative treatment is lost. "A patient who suffers so much pain as to require an injection of morphine is first and foremost in need of surgical help."

DELAYED UNION OF FRACTURES.

Dr. H. G. Wetherill (*Denver Med. Times,* Jan., 1911) thinks that delayed union does not always mean non-union, nor does it demand or justify early and ill-considered wiring and clamping operations. The first and essential prerequisite for the union of broken bones is to place the fragments in correct apposition and the limb in line, and keep them so. The old-fashioned resort to friction and attrition between the fragments is not to be despised, and, if judiciously used, it may accomplish

much. The point between the lower and middle thirds of the leg is the weakest portion of the leg, and is, consequently, most frequently the seat of fracture. This portion of the tibia is also most subject to pathologic processes, and delayed union or non-union is most to be feared here because of the poor nutrition of the bone at this point and because of its structural weakness. Beware of the modern craze for operation. Be sure of satisfactory reduction and fixation, then watch and wait. If, in addition, the patient and his friends desire to pray, by all means encourage them to do so.

CARBOLIC INJECTIONS IN PILES.

Dr. H. Schiemann (*Med. Rec.*, Dec. 10, 1910), who has had considerable experience with this method, employs a carbolic acid solution of 5 to 10 per cent., to which is usually added glycerine 5 to 10 per cent. The piles should not be too tightly distended, and not injected during an acute attack.

A FATAL CASE OF QUINSY IN AN ADULT.

Prowse (*Laryngoscope*, Feb., 1911) tells of a very interesting case which shows the importance of immediate attention to septic conditions of the throat. Dr. Prowse was asked to see a patient who was suffering from sore throat of three days' duration, the last fourteen hours of which were spent on the train. On alighting from the train the patient was able to walk to the cab, and was driven immediately home, about a mile away. During this drive the patient became very short of breath, and died by the time he reached the house, death having been preceded by violent struggling for air and violently clutching the throat while in the cab. The post-mortem examination showed edema glottidis. The quinsy was a double one, the abcesses extending far down the neck, practically enveloping the whole larynx laterally and anteriorly; the characteristic doughy swelling was quite evident before the section was begun, and there had been no rupture of the abscess into the air passages.

CONTRAINDICATIONS OF INTRAVENOUS SALINE INFUSIONS.

Dr. R. Berthelamann *Zentbl. f. Chir.*, No. 44, 1910) cautions against large saline infusions in general infections associated with cardiac weakness, because saline solutions tend to destroy the bactericidal

properties of the blood. On the other hand, large intravenous infusions are permissible in peritonitis with paralysis of the vasomotor centres, provided the heart is still intact.

OBSTETRICS AND DISEASES OF CHILDREN.

Under the charge of D. J. EVANS, M.D., C.M., Lecturer on Obstetrics, Medical Faculty McGill University, Montreal.

GENERAL CONSIDERATIONS REGARDING THE EFFECTS OF VACCINE.

S. McC. Hamill, in *Archives of Pediatrics,* February, 1911, gives a brief review of the vaccine treatment of infective diseases. The author gives an epitome of the method designed by Wright, and of the improvement, which experience has demonstrated as valuable, upon his first exposition of this method of treatment.

Details are given as to the ordinary method of preparing vaccines and of the application of these, to the treatment of disease in children. The dose varies according to the organism injected.

A review is then made of the literature on this method of treatment in children, first of all dealing with the subject of gonococcus infections. On the whole the application of this method of treatment, particularly to chronic vulvovaginitis, a most intractible disease, is promising, and it certainly is a much more satisfactory method of treatment than the ordinary local treatment in the case of female children.

Reference is made to the study of prevention of scarlet fever. In the experience of the majority of the writers, a large proportion of the cases occurring after vaccination developed the disease before the second vaccination could be given. The treatment will probably never become popular on account of the severity of the reaction symptoms.

Pneumonia, Ludwig's angina, staphylococcic abscesses are then referred to, and all offer promising fields for treatment.

With regard to tuberculin, the author states that general indications are that the dose for the treament of tuberculosis in early life should be a small one. From 1-12,000 to 1-8,000 mgs. for children of about one year are generally favoured, though Schlossman strongly advocates remarkably high doses, 1-100 to 1-10 mg. He divides the tuberculin treatment into two stages:

1. That in which the organism should be brought to a point of tolerating the amount of tuberculin necessary for the production of anti-bodies.

2. The maintenance of anti-body formation by the use of sufficiently large quantities of tuberculin at suitable intervals. He acknowledges that

bad effects occasionally occur, but he believes that such accidents can be avoided.

With regard to the prognosis he states that he regards it in the main as very unfavorable, but if a child is suitably fed and scientifically treated with tuberculin, it may be regarded as favourable in the sense that such infants, if they are in good condition, may be carried through the difficult period of infancy. Thus milliary diffusion is prevented which is the common termination of untreated cases.

Engle is quoted as stating that in the treatment of children suffering from benign forms, as the glandular and osseous, it is perfectly safe to give 1 mg. as the initial dose. With two or three such doses immunity is usually accomplished. In pulmonary tuberculosis Engle, in mild cases, begins with 1-10 gm., but in severe cases 1-100 to 1-1,000 mgs. is better. The intervals between the doses should be not more than four or five days. The time required for producing immunity to large doses of tuberculin is from 2 to 3 months.

He concludes that tuberculin exercises a favorable influence upon the disease, and that it may be positively asserted that it tends to impede the progress of the disease, and that it can be given without in any way injuring the child's development.

Carmalt Jones is quoted as obtaining favorable results in many of the tuberculous conditions of children, but the most favorable cases for treatment are those of lymphatic tuberculosis.

The author sums up that the results from vaccine treatment are much more satisfactory in early life than in later life and localized tuberculous lesions, especially the glandular types of tuberculosis, are much more favorably affected than the pulmonary type, especially those with generalized symptoms. He states that the impressions which one gathers from a thorough study of the literature of vaccine therapy as it relates to both adults and children are that it has been clearly demonstrated that localized infections with the staphylococcus, pyogenes aureus are quickly cured, especially when autogenous vaccines are used; that generalized infections with this organism are favorably influenced; that gonococcal joint infections, which are relatively rare in children, are usually benefited, and as to other forms of infection that there are not data at hand to justify one in drawing conclusions as to the value of bacterial vaccines in their treatment.

CAESAREAN SECTION IN THE UNITED KINGDOM.

Armand Routh, M.D., in the *Journal of Obstetrics and Gynecology of the British Empire*, January, 1911, in his paper includes tables of 28

cases of Caesarean section by over 100 obstetricians and gynecologists of the United Kingdom, who were living on June 1st, 1910, and it was originally presented as a report to the Fifth Annual Congress of Obstetrics and Gynecology at St. Petersburg in September, 1910. The whole subject of Caesarean section is gone into very fully, and the paper is an authoritative exposure of the present condition of thought concerning this method of procedure.

The indications for the operation have been arranged into three general headings:

1. Obstructions to labor.
2. Uterine hæmorrhage.
3. Constitutional crises.

By far the larger number of indications come naturally under the first heading. In each case there is a brief historical summary dealing with the matter of each sub-heading, and where there is difference of opinion the names of English obstetricians are given who hold one or the other view.

Naturally the paper deals to a considerable extent with statistics.

Discussing the induction of premature labour for contracted pelvis, the author shows that the maternal mortality is less than 1 in 200, and that the foetal mortality after the 35th week is extremely small if spontaneous delivery be accomplished.

The high morbidity of the various operations for pelviotomy render this form of treatment undesirable except in very special instances. The maternal mortality may be taken as somewhere between 4 and 6 per cent., while the foetal mortality is between 6 and 10 per cent., but it is not so much the maternal mortality that predisposes against the operations, but the high degree of morbiditiy which attends them. This morbidity is somewhat over 40 per cent.

With regard to Caesarean section, the mortality has steadily diminished until at present, under favourable circumstances, it is about 2.9 per cent.

The question of Caesarean section in "septic cases" is discussed at considerable length. The author's statistics show that where attempts have been made to deliver by forceps, etc., or where repeated examinations had been made, the mortality is 22 out of 64 cases, equals 34.3 per cent., and in 166 cases where it was stated that a patient was in labour and the membranes were ruptured, but no attempts had been made to deliver, the mortality was 18, equals 10.8 per cent. On the other hand, in 224 cases where the patient was in labour with membranes unruptured, the mortality was 5, equals 2.2 per cent., and in 245 cases not in labour, the mortality was 9 or 3.6 per cent.

Whereas the mortality in the most suitable cases was only 2.9 per cent. in 230 cases where the membranes were ruptured, or where frequent examinations or attempts at delivery had been made, the mortality was 17.3 per cent.

The suggestion of Maxwell that in the cases where rupture of the membranes has occurred, the amniotic cavity should be irrigated per vaginam, with some mild antiseptic solution, is mentioned as being possibly a useful method which should prove serviceable in reducing mortality in these doubtful cases. In such cases all forms of symphysiotomy, hebosteotomy and extraperitoneal Caesarean section are at present not considered suitable. In these the operation of choice is supravaginal amputation of the uterus with intraperitoneal treatment of the stump.

In 230 cases of Caesarean section for contracted pelvis which the author has collected where the membranes had been ruptured before admission or where frequent examinations or attempts at delivery had been made, Caesarean section was performed in 216 cases with 40 deaths, a mortality of 27.7 per cent.; whereas in the other 14 cases which were further treated by supra-vaginal hysterectomy with intraperitoneal treatment of the stump, there was no mortality.

With regard to the examination of the contents of the cervix, and upper vagina in suspected cases when the membranes are ruptured, with the idea of obtaining definite knowledge as to the form of bacteria present, the author states that he has been able to get an answer within half an hour from the bacteriologist, stating the presence or absence of pathogenic organisms, by means of smears taken from the upper vagina.

He states in this connection that if reliable bacteriological data can be thus forthcoming within an hour of the patient's admission, and the presence or absence of infection certified and the variety of germs present identified, it seems to him that the exact form of the operation required would be indicated with much greater scientific accuracy than is at present possible. Thus, classical Caesarean section would be performed with perfect security if the fluid were sterile. Caesarean section preceded by some variety or some evolution of Maxwell's intra-uterine irrigation and by eventration of the uterus, might be considered safe if only putrefactive germs were found; and a radical hysterectomy would probably be considered desirable if pathogenic micro-organisms were discovered.

With regard to sterilization of the patient at the time of operation, the consensus of opinion seems to be that the operator has no right to sterilize a woman without her consent and approval, and on the other hand he should consent to sterilize her if after the situation is fully explained to her, she and her husband demand it.

Extra-peritoneal Caesarean section is discussed, but it is doubtful whether this form of operation will ever replace the classical, and the opinion is steadily giving ground that it is a dangerous proceeding.

The author summarizes the line of treatment followed in the United Kingdom of cases of contracted pelvis as follows:

1. *If the patient be seen early enough during pregnancy.*

Induction of premature labour at or after the 35th week if the child be living and the head be found to be presenting and not to be relatively too large. If the pelvis be too small for induction at the 35th week, or if the head be not presenting and the external cephalic version prove unsuccessful, await full term with the patient's consent and perform a conservative Caesarean section.

2. *If the patient be only seen at full term or in labour.*

(a) *Where no attempts have been made to deliver.* Conservative Caesarean section if the child be alive, with the possible alternative of publotomy or symphysiotomy if the head were impacted and apparently only a little more room were needed. At present this alternative course is adopted by very few, owing to the large post-operative morbidity.

(b) *Where attempts have been made to deliver or where the membranes are ruptured, frequent examinations have been made, and infection is presumed to be present.* Here the favorite treatment in the hands of experts would be Caesarean hysterectomy, if the conjugata vera is under 2¼ inches (6.2 cm.) and the child alive, in preference to any variety of extra-peritoneal Caesarean section. If the conjugata vera is over 2½ inches (6.2 cm.), the choice would be between Caesarean hysterectomy and craniotomy. Most obstetricians would prefer craniotomy in "suspect cases" of apparently mild infection, and some variety of hysterectomy if virulent infection were thought to be present. The ultimate decision would sometimes have to be left to the parents who may prefer the extra risk of Caesarean hysterectomy in the immediate hope of having a living child. In general practice or in the hands of all but gynaecological experts, craniotomy would be the definite choice.

Pubiotomy or symphysiotomy, even by the subcutaneous methods, are considered by most operators to be unsuitable in general practice and in cases supposed to be septic, and the same opinion is largely held as regards all varieties of extra-peritoneal Caesarean section, even as regards Sellheim's utero-abdominal fistula operation, in all of which the uterus is retained as a channel for a general infection, in addition to the tissues opened up by the operations.

Discussing the question of Caesarean section in cases of fibroids complicating pregnancy and labour, the author advises that such patients should be encouraged to go to full term unless the pressure symptoms become severe and intractible, or unless evidences of degeneration of the fibroid are present. Abortion should never be induced in these cases. Myomectomy should in suitable cases be undertaken, though in about 40

per cent. of the cases operated upon where the tumor is embedded, labour follows the operation.

When the pelvis is definitely obstructed by a fibroid, Caesarean section is required.

The question of Caesarean section in cases of cancer of the genital passage is then discussed, and the various forms of operation dealt with.

In cases where ovarian tumors complicate pregnancy, the author prefers vaginal ovariotomy where this operation is possible. When the tumors are not discovered until the time of labour, unless the pelvis is interfered with, the case should be left to mature. If a removal is necessary by the abdomen, the delivery should be left to nature. In cases where the tumor is in the pelvis and is solid and is too large to be pushed out of the pelvis, Caesarean section must be undertaken. The conditions which render Caesarean section necessary in cases of complicated by ovarian tumors are extremely rare.

Discussing Caesarean section for placenta previa, the author states that in cases where there is a rigid undilatable cervix where free haemorrhage occurs upon any manipulation, where the mother is not collapsed and the child alive and nearly at full term, it may be right to attempt to save both mother and child by abdominal Caesarean section, but there is no place for Caesarean section in the treatment of placenta previa other than these, save exceptional cases.

The paper concludes with a brief review of the operation of vaginal Caesarean section. It is very seldom justifiable under any circumstances at full term or even after foetal viability, the classical operation having many points in its favor as compared with it.

Statistics are then given, dealing with 1,282 cases, and a variety of tables conclude this extremely interesting and valuable contribution.

PERSONAL AND NEWS ITEMS.

ONTARIO.

Dr. W. T. Shiriff has been appointed Medical Health Officer of Ottawa.

Dr. James A. McCamman has been made sheriff of the counties of Leeds and Grenville.

Dr. Hastings, of Toronto, is urging an entirely new Isolation Hospital for Toronto, as the city has outgrown the present one.

The campaign for funds for the Homes for Aged Men and Women in Toronto has realized, so far, $23,000

Berlin, Ontario, is to have an isolation hospital for smallpox, scarlet fever and diphtheria. The local Board of Health has agreed upon the plans, and the cost will be $4,500.

Dr. D. Buchanan, of Galt, was married recently to Miss Josephine Lundy. Miss Lundy graduated as nurse from Toronto General Hospital a few years ago.

The new Royal Hospital in Newmarket is prepared to take into its wards medical, surgical and obstetrical cases. The location is a healthy one, and the management is in competent hands.

The counties of Stormont, Dundas and Grenville will build at Cornwall a House of Refuge to cost $44,000. It is to be of concrete blocks, and will accommodate 100 persons. It will be 132 by 40 feet.

One of the official reporters at the House of Commons, Ottawa, was taken ill with smallpox. There was quite a commotion among the members. So far no bad results have arisen, and the House went on with its usual work.

Dr. F. R. Miller, of Toronto, who has been studying in Germany for the last five months, has just secured the degree of doctor of medicine from the University of Munich. Dr. Miller is the son of Mr. A. F. Miller, Secretary and Treasurer of the Toronto General Hospital.

Mr. Labertus and Walter Cromwell, both colored, were find in the Toronto Police Court for practising medicine illegally. The former was fined $50, and the latter $25, or imprisonment for 30 days in each case. There may be an appeal.

The cases reported in Toronto for April of diphtheria, scarlet fever, and typhoid fever respectively, were 89, 326, and 20. These figures show considerable reduction on those for March, which were 101, 441, and 58.

It turns out that the chlorine treatment of water does not destroy bacteria, but only weakens them so that they do not cultivate so rapidly. It is claimed, however, that some of their disease-producing qualities are lost. More time is required to settle this.

Dr. Michael Clark, M.P. for Red Deer, was taken by surprise at Ottawa a short time ago, when the Liberal members of the House presented him with a handsomely engraved walking stick on the occasion of his fiftieth birthday.

The Grand Jury has again condemned the Toronto gaol and the Asylum for the Insane in Toronto. There is hope that both these buildings will soon be replaced by something better. The asylum grounds are now offered for sale. A new site will be chosen and a modern asylum erected thereon. This cannot come too soon.

Dr. Mitchell, Assistant Superintendent at the Hamilton Asylum, will become Superintendent at Brockville, and Dr. McNaughton of the

Brockville Asylum will be placed in charge at Hamilton. Dr. Neely, medical assistant at the Brockville Asylum, is promoted to be assistant Superintendent there.

Of 143 applicants to the City of Toronto Relief Officer during April for admission to hospitals, 102 were approved, 73 of the applicants being men and 70 women. Of 13 applying to be admitted to a consumptive sanitarium, 6 male and 7 female, 11 were admitted. There were 97 special orders for provisions to quarantined homes. Six applications for deportations were forwarded to Ottawa.

The officers of the Ottawa Valley Medico-Chirurgical Society are: Honorary President, Sir James Grant; President, Dr. C. H. Brown, Vice-President, Drs. J. D. Courtney and J. R. O'Brien; Secretary, Dr. T. W. C. Mohr; Treasurer, Dr. A. S. McElroy; Curator, W. S. Lyman; Librarian, Dr. C. E. Preston; Council, Drs. Small, Cousens, Gibson, Argue, and Smith.

At a recent meeting of the Peterboro Medical Society, Dr. J. G. Fitzgerald read a paper on immunity. The officers elected are: Dr. G. S. Cameron, President; Dr. E. V. Frederick, and C. H. Amys, Vice-President; Dr. W. D. Scott, Treasurer; Dr. E. A. Hammond, Secretary; and Council, Drs. W. Colville, F. P. McNulty, and G. E. Marshall. The society is in a prosperous condition.

Plunging down a short incline at the foot of Ferry Street, a big touring car in which L. R. Lalor, a member of the Canadian Parliament, of Dunnville, Ont., and two members of his family, was saved from going into the Niagara River by a small post catching in one of the wheels. It might have been death to the occupants of the car had the machine leaped into the river.

A fund of $1,000,000 will be raised for the purpose of giving free treatment to indigent consumptives at home and abroad by Canadians. The work, which will be undertaken before fall, is intended as a memorial to the late King Edward VII., who was profoundly interested in the fight against this disease. Some years ago, upon receiving a gift of $1,000,000 from Sir Edward Cassel, he gave it all to found a great consumptive hospital.

The organization of the Canadian scheme took place at a recent meeting of the National Sanitarium Association at which were present: His Honor the Lieutenant-Governor (in the chair), Hon. J. J. Foy, Hon. I. B. Lucas, Mr. W. A. Charlton, Messrs. W. K. McNaught, M.P.P., H. P. Dwight, W. P. Gundy, Edward Gurney, Ambrose Kent, T. H. Bull, K.C., J. L. Hughes, Dr. W. P. Caven, Dr. N. A. Powell, and W. J. Gage.

Dr. J. M. Forster, Medical Superintendent of the Brockville Asylum for the Insane, has been appointed to succeed Dr. C. K. Clarke as Super-

intendent of the Toronto Hospital for the Insane. Dr. Clarke's successor has been engaged in work connected with asylums for about twenty years, and is thoroughly acquainted with the modern methods of treating the insane, having spent some time studying the subject in Europe. Dr. Forster graduated from the University of Toronto in 1886.

Dr. J. F. Honsberger, of Berlin, Ont., has been appointed by the Dominion Government to represent Canada at the International Hygiene Exhibition, to be held in Dresden, Germany, during June and July. He will have charge of Canada's exhibit.

By the will of the late Charles Champion, retired hardware merchant, of Brantford, $45,000 is distributed among local religious and charitable organizations, although it is provided they shall receive only the interest on the capital sum invested until the death of Mrs. Champion, when the bequests will be paid in full. The organizations benefiting are the Brantford Y. M. C. A., $10,000; Brantford Widows' Home, $5,000; Brantford House of Refuge, $5,000; Children's Aid Society, $5,000; Brantford Salvation Army, $5,000; John H. Stratford Hospital, $5,000.

The Kingston General Hospital Board, after encouraging and aiding in the collection of a big fund to build the Sir Oliver Mowat Memorial Hospital for Tuberculosis, has, in view of the public clamor against the erection of the sanitarium on the hospital grounds, abandoned the scheme by expressing the conviction that it is desirable that some corporation or trust other than the Hospital Board secure and maintain the tuberculosis sanitarium and that the money subscribed to the Mowat memorial be made available for these purposes with the consent of the subscribers.

QUEBEC.

Dr. M. R. Alcock, formerly lecturer on physiology in St. Mary's Hospital Medical School, has been appointed to the choir of physiology in McGill.

Infant mortality is high in Montreal, and has been for many years. The births for 1909 were 14,678, and the deaths under one year were 3,238. The average infant mortality for past 25 years has been about 25 per cent., or 250 per 1,000 births.

McGill Medical Faculty reunion will be held on 5th and 6th of June. Those intending to attend, should secure a first class ticket not earlier than 3rd June. A through ticket to Montreal should be purchased, with a standard certificate. If 49 or less attend, the return fare shall be two-thirds, if 50 to 299, it shall be one-third, if 300 or over, the return trip shall be free.

At the fourth annual convention of the sanitary services for the Province of Quebec, a good deal of attention was given to the subject

of tuberculosis and how best to combat the disease, and also to the formation of a league for its prevention. It was contended that there ought to be a general executive and local organizations under this for the parishes, and counties, etc.

In the Alexandra Hospital, Montreal, for contagious diseases, there were treated during 1910, 820 cases. The deaths numbered 47. There were 233 cases of scarlet fever, 227 of diphtheria, 210 of measles, 63 of erysipelas, and the remainder were examples of mixed infection, and some cases that were non-contagious and admitted on observation. The hospital receives $35,000 a year from the city, which entitles the city to 35 beds. The officers are: Dr. T. G. Roddick, President; Messrs. C. F. Smith and C. R. Hosmer, Vice-Presidents, and J. R. Wilson, Treasurer.

MARITIME PROVINCES.

The Halifax Branch of the British Medical Association is making good progress, and the meetings are of much interest.

The report of the Nova Scotia Hospital for the Insane shows that 194 were admitted during the year. There were discharged 112, and the deaths numbered 55. The report expresses the opinion that there is a steady increase in the ratio of the insane to the general population.

The Provincial Hospital for the Insane, St. John, N.B., had 526 inmates last year. The admissions were 136, and 82 were discharged. The average age of the inmates was 48 years. Heredity was traced in 55 per cent. of all.

WESTERN PROVINCES.

The Medical Association of Vancouver, is making substantial progress. It has made a payment of $2,300 on its site for a library.

Chiliwack, in British Columbia, is going to erect a hospital. Hon. Dr. Young gave a $1,000 check to the building fund.

Dr. H. G. Pickard, of Minto, Manitoba, has been chosen to fill the position of Medical Health Officer for Brandon, Man.

The annual meeting of the Manitoba Medical Association will meet in Portage La Prairie on 22nd and 23rd of June.

Dr. Thomas Dawson, Medical Health Officer of Calgary, has been appointed to the position of Medical Superintendent of the Asylum at Ponoka.

The Alberta Medical Council is: Dr. C. F. Stewart, Calgary; Dr. Brett, Banff; Dr. Mewburn, Lethbridge; Dr. Park, Edmonton; Dr. Crang, Strathcona; Dr. Malcolm, Frank.

There is a large amount of money in the hands of the Saskatchewan Medical Council. It has been suggested that some of this be used for the establishment of a medical library for the province.

The Saskatchewan Branch of the St. John's Ambulance Society is forming a Provincial organization. Drs. Law, Black, Morell, and others have been chosen to give lectures.

The Board of Governors for the Saskatoon General Hospital have decided to go on with a new four-story hospital, at a cost of about $150,000. The old building will become the nurse's home.

The officers of the British Columbia Medical Society are: S. O. Weld, President; Dr. C. E. Doherty, Vice-President; Dr. J. D. Helmcken, Treasurer; Dr. A. S. Monro, Secretary; Drs. G. S. Gordon, R. B. Boncher, J. E. Spankie, Executive Committee.

FROM ABROAD.

Dr. E. Doyen, of Paris, son of Professor Doyen, who did much work on cancer, paid a visit recently to Toronto.

The Walker prize of £100 has been awarded to Dr. Ernest Francis Bashford, Director of the Imperial Cancer Research Fund.

Dr. Charles Stedman Bull, the eminent ophthalmologist, died 17th April, in his 66th year.

The Chinese Government has taken an advanced position on the opium evil, and has adopted legislation for the supression of the traffic.

The Russian Douma has voted the sum of $2,000,000 for the purpose of combatting the cholera and the plague.

Dr. Herman Knapp, the distinguished ophthalmologist of New York, died on 1st May, at the age of 79.

Columbia University has received a gift of $40,000 for surgical research work.

Dr. L. F. Barker, Physician-in-Chief, Johns Hopkins Hospital, was operated on recently for appendicitis, and made a good recovery.

The Local Government Board has issued regulations calling for the reporting of all cases of tuberculosis in the London, England, hospitals. either the internal or external departments.

A bill was introduced in the British House of Commons to introduce into the public schools elementary teaching in hygiene to the boys and to girls instruction on the care and feeding of infants.

The United States Government has made vaccination very general in Cuba, with the result that the Island is now virtually free from smallpox.

From the *Transvaal Medical Journal* it appears that very marked progress is being made in medical affairs. The various medical councils are in some questions working in harmony.

The chief secretary for New South Wales has expressed himself as in favor of nationalization of hospitals as soon as the finances of the province would permit of such being done.

The Commonwealth of Australia has organized an Interstate Conference to deal with tuberculosis with the leading-up-to measures for its prevention.

Dr. Jessie Allyn of Smith's Falls, who is a medical missionary in Pithapuram, India, and who took her degree at the University of Toronto, has been attacked by typhoid fever, and is seriously ill.

During the past ten years in many of the large cities of the United States there has been a steady increase in the number of suicides. They have increased from 12 per 100,000 to 20 in the same number.

The Rajah of Rutlam has given land for a site for a hospital for men. The letter to this effect was received by the Foreign Missionary Committee of the Presbyterian Church.

It is claimed by experts in Honolulu that the careful but continued use of carbon dioxide will cure leprosy. Already cures have been effected in this way.

The Bayne Bill which would have restricted very seriously experiments on animals in the interests of medical research, was defeated in the New York legislature by a vote of 34 to 11.

Dr. Leartus Connor, Professor of physiology, clinical medicine and ophthalmology in the Detroit Medical College, died at the age of 68, 16th April.

Mr. James A. Patten has given to the Northwestern University, Chicago, $2,000,000 for the purpose of studying the best methods of preventing and treating tuberculosis.

Mr. J. P. Morgan has donated $50,000 for the addition of a new wing to the hospital at Aix-les-Bains. He had on several former occasions donated sums to the hospital.

The Emperor of Germany has conferred upon Professor W. H. Welsh, of Baltimore, the Order of the Crown, second class, for the interest the latter has taken in the German language in the American Medical Colleges.

The birth rate for 1910 in France was only 774,358, and the death rate was 703,777. This is the lowest birth rate for a century, and only exceeds the death rate by 70,581. The outlook is very gloomy. The birth rate in Germany exceeded the death rate by 884,061.

Mount Moriah Hospital, say the *Boston Medical and Surgical Journal*, advertised for a male that would allow a quart of blood to be drawn for transfusion purposes. The price was to be $25. More than a hundred applied, and one was a woman.

Dr. Pastia, of Bucharest, gives a new symptom for the detection of scarlet fever. This consists of two or three transverse lines in the fold of the elbow. They are of rose-red color at first, but in a few days become red or wine colored.

Some of the States of the American Union have voted as much as $2,000,000 for the control of tuberculosis. In New York State this disease causes 14,000 deaths, and creates a loss of $64,000,000 a year to that state.

During the past year, Wales had organized a movement to raise $1,000,000 as a memorial fund to the late King Edward, for the treatment of consumptives. The sum was secured within a few months, and has since been increased to $1,500,000.

Dr. James E. Pilcher, well known as a former editor of the *Military Surgeon,* died recently at Carlisle, Pa. He had been in failing health for some time. He was a major in the Army Medical Corps of the United States.

Discoveries of Ancient Egypt show that pheumatoid arthritis was prevalent at a very early period of that country's history. Gouty deposits have been found, and also urinary calculi with urates and phosphates. The remains of adhesions around the appendix establishes the fact that the ancient Egyptian was a victim to appendicitis.

The Women's Imperial Health Association of Great Britain has issued some excellent circulars dealing with health matters. This movement will do good. Knowledge is power. The President is Muriel Viscountess Helmsley. The offices are at 3 Princes Street, London, W. A health fete and congress will be held on 5th, 6th, and 7th July.

Much progress has been made in the United States in the suppression of the hookworm disease. The various states where the disease prevails have expended considerable money, in addition to that contributed by Mr. Rockefeller. The disease is caused by the soiling of the hands and feet with fecal matter. The solution is in the sanitary privy.

An interesting case was tried recently in Paris. A doctor issued a work on popular medicine. There was a mistake in one of the formulae. This was used in a certain instance, and the user died. The doctor and the druggist were prosecuted for manslaughter and both found guilty and sentenced to imprisonment for a short time. Damages were also awarded the widow and children.

BOOK REVIEWS.

PUBLIC HYGIENE.

By Thomas S. Blair, M.D., Neurologist, Harrisburgh, Pennsylvania, Hospital; author "A Practitioner's Handbook of Materia Medica," "A Practitioner's Handbook of Modern Medical Treatment," etc.; assisted by numerous contributors. In two volumes. Vol. II., with 158 Illustrations. Richard G. Badger, The Gorham Press, Boston. Price, $10 for the two volumes.

In our previous issue we mentioned the first volume. The present volume deals with immunity, epidemics, disinfection, tuberculosis, home

hygiene, pure drugs and foods, public works and corporations, public carriers and sanitation, laboratory methods and sanitation, medical societies and sanitation, and an appendix dealing with the diseases of animals. Throughout this volume, as in the first volume, there is found the same careful preparation. Turn to any portion of the work and the useful character of the contents are at once apparent. If a work such as this could only find general circulation and wide range of readers, the results would be most potent for good. The illustrations in this volume, as in the first volume, are very well executed and of very useful character. Those who are devoting some time to sanitary subjects cannot afford to be without these two volumes. The publishers have performed their share of the work well. We, again, recommend these two volumes.

DERMATOLOGY.

The Principles and Practices of Dermatology designed for Students and Practitioners, by William Allen Pusey, A.M., M.D. Professor of Dermatology in the University of Illinois; Dermatologist to St. Luke's and Cook County Hospitals, Chicago; Member of the American Dermatological Association. With five plates, one in color, and three hundred and eighty-four illustrations. Second edition. New York and London: D. Appleton & Company, 1911. Price, $6. Toronto: D. T. McAinsh & Co.

Trustworthy matter, good paper, clear typography, and artistic binding are the elements of a good book. They are all found here. The work extends to over 1,000 pages. In this amount of space one should be able to tell much. The classification is simple and scientific. The arrangement of a work on the diseases of the skin is of the utmost importance. In the past classifications have often been made too complicated. In the present work this is carefully avoided. The first section deals fully with the anatomy, physiology, etiology, pathology, symptomatology, diagnosis, treatment, and classification. Each disease is taken up under the several headings etiololgy, pathology, diagnosis, prognosis, and treatment. The outline of treatment in each disease is careful and concise. The author gives very many valuable suggestions on the management of skin diseases. We can advise this work to our readers.

PLASTER OF PARIS AND HOW TO USE IT.

By Martin W. Ware, M.D., N.Y., Adjunct Attending Surgeon, Mount Sinai Hospital; Surgeon to the Good Samaritan Dispensary; Instructor of Surgery in the New Qork Post Graduate School. Second edition, revised and enlarged. Price, cloth, square form, $1.25; De Luxe leather, $2.50. Surgery Publishing Co., New York.

The exhaustion of the first edition and the persistent demand for this helpful book were the incentives for this second edition, which has

been completely rewritten and enlarged, and thus its scope of usefulness has been greatly extended. Complete new drawings and marginal side notes in red embellish the book, and ninety illustrations are used to more clearly put up to the eye of the reader the intent of its subject matter.

Such information as history, materials, manufacture of bandages, storage, bandages of commerce, calot plaster bandages, the immediate preparation of bandages, application and precaution, removal of bandages, etc., are all given under the contents of The Plaster of Paris Bandages. Then follows such chapters as Application of the Plaster of Paris Bandage to Individual Fracture, Fractures of the Upper Extremity, Fractures of the Lower Extremity, Moulded Plaster of Paris Splints, Plaster of Paris in Othopedic Surgery, etc., and all presented in such a comprehensive manner as to make this book of particular service to every doctor. The mechanical features of the book are decidedly striking.

BOOK ON HEALTH.

Health Hints and Health Talks. By E. R. Pritchard, Secretary of the Chicago Department of Health. Publishers, the Reilly and Britton Co., Chicago. Price, 50 cents, net.

This is a neat little book and will prove useful to the lay reader. It would be a useful manual for nurses to read. Many interesting topics are covered by the author, such as air and breathing, biliousness, cleanliness, consumption, contagion, eating, digestion, food for infants, infection, light, out-doors, rest, sleep, etc. The information is reliable and clearly stated.

PLASTIC AND COSMETIC SURGERY.

By Frederick Strange Kolle, M.D., Fellow of New York Academy of Medicine; Member of Deutsche Medicinische Gesellschalpt, N.Y., King's County Hospital Alumni Society, Author's Committee American Health League, Physicians' Legislature League, etc.; author of "The X-Rays: their Production and Application," "Medico-Surgical Radiography," "Subcutaneous Hydro Carbon Protheses," etc. With one coloured plate and five hundred and twenty-two illustrations in the text. New York and London: D. Appleton & Company, 1911. Price, $6. Toronto: D. T. McAinsh & Company.

The author states that he has made an attempt to give the latest and best methods of cosmetic surgery. He has been encouraged in this effort by the many requests that he give the profession his methods and practices in this branch of surgery. Much of what is in this volume is the outcome of many years of careful study and constant practice in this work. A glance through the contents shows how careful the author has

been to cover the whole field. As to the matter we must very heartily congratulate the author upon the manner in which he treats his subject. His text is concise, clear and accurate. The illustrations are really fine works of art. The perspective is excellent, and their variety ample. We cannot mention all the good features of this book. Such an attempt would end in reprinting it. It is so concise now that it admits no abreviation in statement. We can safely say that it is a very handsome and valuable volume, and will add much to any library where it may find a place. A good word for the publishers. They have spared no pains in making this book first class.

PATHOLOGICAL REPORT.

Report from the Pathological Department Central Indiana Hospital for Insane, Year 1908-1909. Indianapolis: Wm. B. Burford, 1910.

This report, like the others, from the same institution, is carefully prepared, and contains much useful matter. The pathological findings in cases whose clinical histories are fully recorded, is bound to be interesting to all who care to know the reasons why such symptoms did appear. The report is neatly got up.

CONSUMPTION.

The Conquest of Consumption: containing advice to sufferers before, during and after Sanatorium Treatment, with practical suggestions for the avoidance of infection; and as to the conduct of the Campaign Against Tuberculosis. By E. W. Diver, M.D., M.R.C.S., Eng., L.R.C.P., Lond., etc. With six illustrations. London: John Bale, Sons & Danielsson, Oxford House, 83 Great Titchfield Street, W., 1911. Price, 2s 6d.

This little book covers the ground of what is the present state of our knowledge regarding consumption and how to prevent and treat the disease. The book contains several chapters dealing with heredity, resistance, sanatoria, etc. The interesting topics of rest, exercise, food, temperature, recreation, and treatment are gone into with care. The author adheres firmly to the importance of heredity. Certain families show a lowered resistance against the disease. It is not that they inherit the disease, but they do inherit a tendency to contract it. Sanatorium treatment receives full and careful consideration. The author is a strong advocate of this method of caring for the consumption. The book is a very useful one and should be widely read.

THE HEALTH AGE.

The Dawn of the Health Age, by Benjamin Moore, M.A., D.Sc., M.R.C.S., Eng., L.R.C.P., Lond. J. & A. Churchill, London and Liverpool.

Dr. Moore deals with his subject in a broad and practical manner. He speaks out in very strong language about the way in which government and municipalities keep on tinkering with disease. He speaks of the terrible loss of life and waste of money due to present methods, and advocates a national system of medical treatment. In Britain, consumption causes an annual loss in wages of £4,000,000, and a life loss of 75,000 a year. After going over a number of important subjects, such as follies of the present system, doctor and patients, hospital systems, the white plague, a national medical service, etc. This latter position is the main objective of the author. He advocates a paid medical service, in order that the sick may be able to secure efficient attendance free. In this way it is claimed an immense amount of sickness would be prevented, and the outlay on such medical service would yield an enormous return. The book is well worth reading, and the author is to be congratulated on the results of his labors in the direction of preventive medicine.

THE TREATMENT OF DEAFNESS.

An Address on the Treatment of Deafness in Persons who Hear Best in a Noise (Paracusis Willisii), by Charles J. Heath, F.R.C.S., Surgeon to the Throat Hospital, Golden Square, London, 1911.

This is a reprint of the author's address before the West Kent Medico-Chirurgical Society. The address has been considerably amplified. He deals with the subjects of tightening the loose drums, the raising of labyrinthine tension, and the mechanism of aural accommodation. The author goes over the various methods of treatment in a clear and lucid manner.

1,000 SURGICAL SUGGESTIONS.

By Walter M. Brickner, B.S.M,D., Adjunct Surgeon Mount Sinai Hospital, Editor in Chief *American Journal of Surgery*, with the collaboration of James P. Warbasse, M.D., Harold Hays, M.D., Eli Moschowitz, M.D. and Harold Neuhof, M.D. 225 pages. Cloth Bound Semi-de Luxe, $1.00. Full de Luxe, Leather, $2.25. Surgery Publishing Company, 92 William Street, N.Y., U.S.A.

This is one of the biggest little books ever presented to the profession. In its 225 pages are found a collection of 1,000 epigrammatic succinct, virile and instructive hints based upon actual experience and everyone a lesson in itself.

The suggestions are so arranged and indexed that all subjects covered can be immediately referred to and the particular hint upon any particular subject immediately found. It bristles with pointed and useful suggestions which in many cases might just turn the scale from failure to success. If one wishes something really very fine to read, just open this book at any page and begin. Any page is as good as any other page, and every page of the best. To any one who has not read this book, we can say in the words of Shakespeare, "He hath not fed of the dainties that are bred in a book."

Its mechanical presentation is a feature worthy of mention. It is square, cloth bound, stamped in gold, printed upon India tint paper with cheltenham type with special marginal side headings in red. A dollar could not be better invested than in the purchase of this book.

GENITO-URINARY SURGEON'S REPORT.

The Transactions af the American Association of Genito-Urinary Surgeons, Twenty-third annual meeting held at George Washington University, Washington, D.C., May 3rd, 4th and 5th, 1910. Vol. V. Published for the Society by Frederick H. Hitchcock, Publisher, 105 West Fortieth Street, New York.

This report contains much useful information on diseases of the genito-urinary organs. It is well illustrated. The form of the volume is creditable to the association, which is doing excellent work in furthering the interests of one branch of surgery. Meetings of specialists must yield valuable experiences to the general profession.

THERAPEUTICS.

Ordinary Therapeutics for the Practitioner. By Professor Albert Robin, of the Academy of Medicine, Paris. Second Series. Vigot Brothers, Editors, 23 Place de l'École de Medicine, Paris. Price, 8 fr.

This volume of 530 pages is based entirely on the cases seen in the Beaujon Hospital during the year. These cases are grouped in the headings, infectious maladies, maladies of nutrition, maladies of the respiratory organs, maladies of the nervous system, and maladies of the skin. The usual diseases met with in actual practice only receive attention. Where the author differs from the general methods of treatment he is not afraid to say so.

REPRINTS RECEIVED.

The Personal or Business Side of a Doctor's Life, by J. MacDonald, Jr., M.D., New York.

The Treatment of Neurasthenia and Other Allied Conditions of the Nervous System with Sanatogen, by Robert J. Carter, M.D., Lond., D.P.H., Eng.

Tonsillectomy, by Burt Russell Shurly, M.D., Detroit, Mich.

Some Phases of Asthenopia, by Dwight W. Hunter, M.D., New York.

Hyoscine Hydrabromide as an Adjunct to Cocain Anesthesia and as a Preventive to Cocain Poisoning, by Myrom Metzenbaum, B.S., M.D., Cleveland.

Submucons Resection for the Correction of Septum Deflections with a Description of the Author's Special Instruments and their Use in 130 Cases of Myrom Metzenbaum, B.S., M.D., Cleveland.

El Conmmorativo Euel Tabardillo Porel, Dr. Genaro Escalona, Mexico.

Report from the Pathological Department, Central Indiana Hospital for the Insane. This report contains the record and pathological findings of a number of very interesting cases.

OBITUARY.

D. A. SINCLAIR, M.D., M.R.C.S.

The death of Dr. Daniel Archibald Sinclair, of 315 Spadina Avenue, Toronto, occurred recently, after a week's illness. Dr. Sinclair was thought to be recovering until a day or so before death, when heart trouble developed.

Dr. Sinclair was born in Lochgilphead, Argyleshire, Scotland, on May 24, 1843, but was educated in Elgin County, Ontario, where he taught school. He entered the Rolph School of Medicine in 1860, and graduated as an M.D. in 1864. His first practice was at Nilestown. He moved to Wallacetown and Fingall, and later to Melbourne, West Middlesex. Dr. Sinclair went to London, England, in 1870, and took a post-graduate course at St. Thomas' Hospital, obtaining the M.R.C.S., Eng. From England he returned to Melbourne, and in 1895 he came to Toronto. He practised his profession for 47 years.

Dr. Sinclair was a Mason, a Presbyterian, and a Reformer. Mrs. Sinclair died in 1901, and a son, Dr. D. A. Sinclair, died last October. One daughter and three sons survive.

A funeral service was held at the family residence conducted by Rev. G. R. Fasken. The interment took place at Longwood Cemetery, Melbourne.

WILLIAM McGEACHY, M.D., C.M.

Dr. McGeachy graduated from McGill in 1867, and practised in Iona, Ontario, for over thirty years. He was 72 years of age. He had been in ill health some years.

T. D. WHITCHER, M.D.

Dr. Whitcher died at his home in Stanstead County, Quebec, in his 71st year. He was taken ill with pneumonia, and died in the latter part of March.

SAMUEL T. GREEN, M.D.

Dr. Green died in Denver, Colorado. He had practised at different times in Calabogie, Maynooth, and Arnprior, Ontario. He was born near Ottawa.

T. D. ROSS, M.D.

Dr. Ross, of Moncton, N.B., died there in his 72nd year. He was one of the best known practitioners in the Maritime Provinces.

W. N. WICKWIRE, M.D.

Dr. Wickwire was 72 years of age at the time of his death. He held the position of chief medical officer of the Port of Halifax for 35 years. He retired about 10 years ago.

ALEXANDER BETHUNE, M.D.

Dr. Bethune had been in practice for many years in Winnipeg. He was, at the time of his death, in his 77th year. He graduated from Queen's University in 1858, and was from 1869 to 1880 a member of the Ontario Medical Council.

DALTON McCARTHY, M.D.

Dr. Dalton McCarthy, eldest son of Judge M. McCarthy, County Judge of Dufferin, died there on 15th May, aged forty-two years. Dr.

McCarthy returned home from Los Angeles only three weeks before in a critical condition. Messrs. M. S. McCarthy, M.P., Calgary, and M. M., Bank Inspector of Winnipeg, are brothers of deceased.

DUNCAN D. McQUEEN, M.D.

Dr. McQueen died in Winnipeg recently. He was in his 48th year, and was one of the best known practitioners in that city. Pneumonia was the cause of death.

MISCELLANEOUS MEDICAL NEWS.

THE OUTLOOK FOR THE COUNTRY GENERAL PRACTITIONER.

Mr. Parkinson read a paper on this subject. He said the term "general medical practitioner" was so wide that he felt it necessary to explain that he did not in this case include those fortunate men who could afford to do without the worry of public appointments and the drudgery of ill-paid practice among the poorer classes, nor the type of practitioner found in the slums of great cities, where the conditions of practice were known to them only by hearsay. He referred to the old country doctors dotted over the country in the small towns and villages, who were being gradually deprived of the means of earning a livelihood by legislation and other causes. The shrinkage of population in the rural districts, which had been going on for so many years, had, of course, had a great effect, but the advent of the motor car had become an even greater source of loss, for the better classes sent to the town doctor, and the big houses and the wealthiest class to the semi-consultant of the large towns or cities, now that by means of the motor a twenty-mile visit could be done in less time than six or seven miles in the old days; and instead of the local man attending and the consultant coming as required, the so-called consultant took the case over, and the local man had the satisfaction of attending the servants or perhaps being called in on emergency or some trivial illness. These were, however, not all the changes, and the doctor, trying to eke out a scanty living from attendance on the small farmers, tradesmen, and artisans by the aid of appointments of various kinds, found this source of employment gradually taken away by recent legisla-

tion. "The old order" (said Mr. Parkinson) "changeth, and our old and honoured institutions are being swept away one by one; individualism gives way to collectivism, and officialism is rampant. But is it in the interests of the people that the village doctor should be swept away with the parson, and replaced by a raw official employed by the state to attend the poorer classes only? Take a typical case—a man living in a large village in the centre of a scattered population (decreasing every census) of about 1,500 people, ten miles to the nearest station, six miles to the nearest doctor, and twelve miles to the nearest town; a district with a radius of five miles or more, with two or three large houses who send to a town for a doctor, and the rest—farmers, small tradesmen, and artisans, booking about £500 a year at the outside, half from appointments and clubs, and perhaps after paying rent, etc., and horse and carriage, netting £300 a year. Take away any of his public work and he must give up. What would the poorer classes do then in cases of sudden illness, to say nothing of the loss of the man who knows and is known to all, and to whom everyone looks not only for medical skill and kindly attention, but (with the parson, perhaps) for advice, and sympathy, and guidance?" Mr. Parkinson went on to say that the British Medical Association professed to look after the interests of the profession, and especially of the general practitioner; and some time since there was an outcry that the association was not doing its duty, and a new constitution was drawn up. What was the result?

He indicated some recent measures which showed that the action of the association in recent years had not been on right lines. The Midwives Bill was strenuously opposed for many years and successfully, on public as well as professional grounds. It was urged that every woman should have skilled medical assistance in her trouble, and that, although labor might be considered, as a rule, a natural process not requiring any special skill, an emergency might arise at any time in the simplest case, and delay in procuring skilled attendance might lose a valuable life. On the other hand, the registration of midwifery nurses was advocated—women who would not only be useful in emergency by knowing when to send for the doctor and by assisting at the birth, but would also be skilled in the care of the newborn infant and in nursing the mother, and thus supply a great want and save many lives of infant and mother. On the professional side it was felt that midwifery could only be learnt by experience, that young men entering on general practice could only fit themselves for the various emergencies of labor by adding to the theoretical knowledge gained at hospital the practical experience only to be gained by attendance on many cases—preferably at first as assistants to some experienced man—and the experience of a large number of cases could not be hoped for in the ordinary practice if the poorer classes were

attended by the midwife. But the new counsellors were content with inserting provisions restricting the midwife's action, and directing her to send for a doctor in certain events and forbidding the use of drugs or chloroform, although the provision for the doctor's fee was left in an unsettled state. What had been the result of this Act? The midwife attended more and more patients every year—not only the poor, but the lower middle classes—and with increasing practice gained greater skill and rarely sent for a doctor, and, if the doctor lived far off, had generally got the job over when he arrived, while the use of drugs was pretty general. Moreover, the midwife was also a sick nurse, and was called in by all classes in minor ailments, and often continued until some alarming symptom set in and the doctor was sent for in view of a death certificate; in short, the midwife "on her own" now did the work the unqualified assistant did in old days under the supervision of his principal. After referring to public vaccinators, Mr. Parkinson went on to speak of the medical inspection of school children. He said this Act, which no doubt would do great good if properly administered, was much helped forward by the action of the British Medical Association. But those who took an active part in furthering the measure knew only the conditions which obtained in great cities, especially London and its suburbs, and they had prepared a plan of whole-time medical inspectors as the rule, with some part-time appointments which no doubt might be necessary or advisable in crowded cities, but was unsuitable for country districts with a scattered population and large areas. Their own County Council, which knew the difficulties, desired to appoint district medical officers, but the Local Government Board insisted on wholetime appointments. It would have been more satisfactory if the local men had been appointed, who were travelling over their district daily in their practice, and who could visit more frequently at a smaller cost, and would also know the home conditions of the children's life and must be responsible for the treatment, and the work could have been carried out more efficiently at less cost to the State, and at the same time add somewhat to the incomes of the medical men. For the country medical man differed from the town general practitioner. He had only himself to rely on, and must be a man of resource and ready for any emergency and in every way fitted for the various duties required of him. With regard to the coroners' law amendment, Mr. Parkinson said he was a member of the association committee for many years, and the only member cognizant of the work in country districts. It was resolved by the committee that a medical expert should be attached to each coroner, and in the case of a sudden death where no doctor had attended and a certificate was therefore not obtainable, the medical expert should be sent for to make an examination and necropsy if necessary. This would practically take this coroner's work away from

the general practitioner, and in a district like his own (and of course there were many much larger) it would mean a journey of perhaps twenty to thirty miles; it would take a day and require a heavy fee and travelling expenses, for work which, in his experience, had always been done satisfactorily by the local practitioner. Only in one or two instances during the last twenty years had he found it necessary to employ a strange doctor, and then at the request of the general practitioner where the case was of a criminal character and likely to entail attendance at assizes. This, of course, might be desirable in London, where the conditions differed. Then came the question of the doctor visiting to certify the fact of death, and this had been urged on the Government by the association. In his opinion the need of such a certificate rarely arose, and in any case where the doctor had any reason to doubt the fact, he would, for his own protection, visit and inspect; but was it necessary for a doctor to take a journey, perhaps six or seven miles out, to make sure that a person who had been suffering from long-standing incurable disease had passed away? Anyhow, if so compelled by the state, the state should pay a fee, not only the 2s. 6d. suggested, but fair mileage, while the bill of Sir William Collins laid the obligation on his brethren without any fee.

Passing to the subject of clubs and public medical service, Mr. Parkinson said he considered that the British Medical Association had gone on dangerous lines, and that their policy of throwing these appointments open to all qualified men who applied to be placed on the list tended to various abuses injurious to the dignity of the medical men and the interests of the societies. He granted that in those places where medical men had joined together to start a medical service under their own control, and where they only admitted as medical officers men they knew they could trust, things generally went pleasantly and satisfactorily; but, he maintained, the old custom of the members of a society electing one or more men was preferable, and the doctor chosen could rest content that, as long as he did his work faithfully to the men and looked after the interests of the society, he would continue to retain the confidence of the majority, although he might offend some of the shirkers. But, if the work was thrown open to all and sundry, there was the great chance that some unscrupulous person would by unworthy acts take members away from their more honorable brethren, and lead to competition in what can never be an overpaid branch of practice. Fresh dangers were hanging over the general practitioner, and the future position of the Poor Law and workhouse medical officer depended greatly on the action taken by the British Medical Association. The fear was that the present officers would be replaced by whole-time officials, and the present part-time men, who, underpaid though they generally were, lived among and were known by rich and poor alike, would be starved out of existence. They had seen

lately the association reverse the policy of many years and surrender the part-time medical officer of health, and, accepting the principle of security of tenure for "whole-timers," leave the part-time men, who required protection as much, if not more, to the mercy of the district councils, ever averse to spending money on sanitary work.

The part-time medical officer of health must continue to exist, for the smaller urban and rural districts would strenuously oppose the power of appointment being taken out of their hands, and, as it was a matter of votes, nothing would be done. Surely the association should press the necessity for their being given that security of tenure which alone would enable them to do their work fearless of consequences to themselves. Now if, as he maintained, the action of the association in late years had done great injury to the country practitioner, tending to make it impossible to gain a living in sparsely populated districts, and if the loss of a resident doctor would lead to suffering and want of medical help to the poorer classes, what could be done to bring these facts to the notice of those who directed the policy of their association? Something might be done by uniting together and passing resolutions, and sending them to the council and the representative meeting, and by choosing representatives in the country districts who knew the conditions of existence and could speak with knowledge, for a great deal was due to the ignorance of the representatives, who were chiefly men who could afford the time and money to give up to the work—specialists, consultants, and so on; but unless something was done soon it would be too late, and if the association would not or did not help, the only thing would be to form a new society, embracing all those part-time officers whose living was being gradually taken away, and instead of half a dozen or more small societies simply looking after their own small interests and having little weight or authority, uniting for mutual defence in one large body. The discontent was growing on all sides, and efforts were being made to form such a society; and if the association did not take quick action the number of members, not increasing now, would fall away considerably.

He himself had retired from general practice some years, so that he was not personally affected; but he did feel deep interest in the future of a body of men who were the "salt" of the profession and a blessing to the community.—*British Medical Journal*, 14 January.

THE TORONTO ACADEMY OF MEDICINE.

The annual report which was submitted to the fellows at their meeting on 2nd May, was a very gratifying one. There were reported 330 fellows paying fees amounting to $3,178.95. The receipts from these

sources brought the total up to $4,857.17. The expenditures amounted to $2,455.64. Thus leaving a balance of $2,401.53.

The savings account showed a credit balance of $1,164.04 on 30th April, 1911.

The assets were given as $20,645.25, of this $5,420 is in the form of debentures or Canada Permanent shares. The equity in the property is set down at $14,231.25. The cash on hand makes up the balance. The disbursements on the new home of the academy were $7,025.07.

Donations were made as follows towards the renovation of the building: Dr. A. A. Macdonald, $26; D. A. Primrose, $26; Dr. W. A. Young, $36; Dr. R. A. Reeve, $42; Dr. N. A. Powell, $26; Dr. H. A. Bruce, $46; Dr. J. F. W. Ross, $114.

It is estimated that the books, pictures, plates, etc., in the library are worth at least $25,000. There are now about 6,000 volumes. Some of these are very rare, and possess a unique value.

The officers for the coming year are as follows: President, Dr. N. A. Powell; Vice-President, Dr. R. A. Reeve; Past President, Dr. Albert A. Macdonald; Hon. Secretary, Dr. Harley Smith; Hon. Treasurer, Dr. W. A. Young. Chairmen of Sections—Medicine, Dr. Graham Chambers; Surgery, Dr. H. A. Bruce; Pediatrics, Dr. J. T. Fotheringham; Pathology, Dr. J. J. McKenzie; Ophthalmology, Dr. C. Trow; State Medicine, Dr. J. W. S. McCullough. Elective members—Drs. John Ferguson, John Malloch, H. J. Hamilton, J. F. W. Ross, W. P. McKeown, A. McPhedran, F. N. G. Starr, and E. E. King.

Arrangements are now being made for a formal opening to be held the autumn.

The new premises of the academy are known as 13 Queen's Park. The building is much more commodious than was the former home No. 9 Queen's Park. It is hoped that the time is not very far off in the future when there shall be erected a handsome new building.

ALBERTA MEDICAL COUNCIL ELECTION.

This election was held March 20th, and resulted in the following gentlemen being elected for the ensuing four years: District No. 1, (Edmonton City), Dr. John Park, Edmonton; District No. 2, Dr. F. W. Crang, Strathcona; District No. 3, Dr. C. W. Field, Vegreville; District No. 4, Dr. R. C. Brett, Banff; District No. 5, (Calgary City), Dr. C. J. Stewart, Calgary; District No. 6, Dr. G. H. Malcolmson, Frank; and District No. 7, Dr. F. H. Mewburn, Lethbridge.

The election was held under the new method of voting, each district electing its own representative independently of other districts. In the

previous election, the successful candidates were elected by the vote of the Province at large, which method was not satisfactory to the great majority of the profession, as it was possible for a candidate to be elected by the votes of medical men of other districts even though he might obtain a very small minority of the votes in his own district. A well-founded impression prevailed throughout the Province that the late Council favored the old method of election of members and that the new legislation was obtained only on account of strong pressure being brought to bear on the Government by the Provincial Medical Association.

In regard to this matter and also with respect to other considerations, strong opposition to the late Council developed which has resulted in the overwhelming defeat of four out of six of the old Council who had opponents in the field.

Dr. R. C. Brett, the veteran old-timer of Banff, having no opponent, was elected by acclamation.

THE ONTARIO SOCIETY FOR THE REFORMATION OF INEBRIATES.

Dr. A. M. Roseburgh, on behalf of the Society, has issued a statement on this work that is being done and that is mapped out for the future.

Some one in connection with the society visits the police court regularly and renders what assistance may be given to these who express any desire to give up their drinking habits. Medical treatment is furnished such as require it. The probation officer keeps watch over these cases for a lengthy period after they leave the hospital.

Considerable attention of late has been devoted to rescue work among children; but the question is asked if the case of the drunkard is not equally important? The City of Toronto is now committed to the project of an industrial farm. This will be of much value in working out the treatment of these people.

The Society is in need of funds, and an appeal is made for aid. The good work done by this Society is very great, and its efforts should meet with support.

ORDER REGARDING WATER POLLUTION.

Strict regulations to the end of procuring pure drinking-water in public places have been drawn up by the Ontario Health Department, and went into effect on May 15. These regulations provide that all hotels,

restaurants, trains, depots and boats which provide drinking-water for the public shall be obliged to insure that such water is pure and wholesome.

In order to prevent the pollution of the inland waters of Ontario, sanitary precautions must be taken by people at all health and summer resorts and on all boats on the inland waters. These regulations are intended to apply chiefly to the Muskoka and Temagami districts, which are becoming more and more popular as summer resorts.

The throwing of garbage, manure and other filth into the lakes and rivers of Ontario by the residents of health and summer resorts and by boats is prohibited, and the regulations say that all such garbage must be disposed of in such a manner that it cannot possibly enter or pollute any of the waters.

WESTERN MEDICAL COLLEGE GRADUATES.

The results of the Western Medical College, London, examinations have been public by the Faculty.

The following is the list of graduates:—Cyril Imrie, Johannesburg, Mich., gold medallist; A. Duncan, London, silver medallist; Neller T. George, Muncey; Allison R. Gordon, Weyburn, Sask.; W. J. Knight, Exeter; Edwin C. Axford, Talbotville; C. T. Dunfield, Petrolea; Alfred McRitchie, New Scotland; E. A. Neff, Ingersoll; J. P. Johnston, Fingal; Wilfred Thurtell, Ingersoll; Seymour Ross, London; C. G. Bell, Merlin; W. Anderson, Montreal; N. A. Stuckland, London; J. A. Jardine, Nottawa; Ivan Annett, Watford; H. J. Stephens, London; H. B. Boyd, Salford; Elmer W. Brown, Neustadt; John F. Duncan, London; C. Gibson, Allandale; Roy R. Smith, Galtz, Alberta.

Scholarships.

First year—Charles Cornish, Crampton. Second year—Lee Elliott, St. Thomas. Third year—James Moriarity, Orillia.

First-class Honor List.

First year—Cornish, Hudson, Allison, Bean, C. McBane, McPherson.

Second year—Elliott, Bowman, Turner, Muterer, Wright.

Third year—Moriarity, McAuley, Morand, McRoberts, McFadyn.

Fourth year—Imrie, A. Duncan.

CONTAGIOUS DISEASES IN ONTARIO.

Diphtheria and scarlet fever made up a large proportion of the total of infectious diseases throughout the Province during the past month. There were 543 cases of scarlet fever, or 208 cases more than in the corresponding month last year. Diphtheria accounted for an increase of 71. There was slightly more typhoid, but considerably less tuberculosis, measles and whooping cough.

The reports of local Boards of Health are:—

Diseases.	April, 1911. Cases.	Deaths.	April, 1910. Cases.	Deaths.
A. Polio-myelitis	9	9	....	....
Spinal Meningitis	8	8	....	....
Smallpox	52	1	84	....
Scarlet Fever	543	41	335	18
Diphtheria	220	25	149	23
Measles	356	13	584	25
Whooping Cough	25	2	119	14
Typhoid	82	15	72	23
Tuberculosis	122	85	192	168
Totals	1,417	200	1,535	371

OPEN AIR SCHOOLS.

Dr. John Auden, Medical Superintendent of the Schools of Birmingham, gave an illustrated lecture in the Physics Building on the subject of open-air schools, after Mr. A. H. U. Colquhoun, Deputy Minister of Education, had officially welcomed the visitors to Toronto. Dr. Auden stated that the physiological basis of the development of the minds and bodies of school children was nutrition. If a child did not get sufficient nutrition, his mind and body did not grow and develop as they should. He spoke of the open-air schools, and stated that they did more good than any other thing to prevent and cure disease. Speaking of the spread of disease among school children, he stated that children in the schools did not contract consumption from each other, but from older persons. The school children did not expectorate in school-rooms, but older people did so on the streets and in their crowded homes, and thus the disease was spread to the little ones.

THE EDINBURGH CONFERENCE ON TUBERCULOSIS.

The transactions of the Edinburgh meeting of the National Association for the Prevention of Consumption and other Forms of Tuberculosis

affords some interesting reading. The report deals with the avenues of infection in tuberculosis, incidence in childhood, the preventive measures and administrative control of the disease, and with many other matters worthy of consideration. With regard to the paths of infection, the consensus of opinion was in favor of the lungs as the most common site of entry of the bacilli into the body, though some speakers held strongly the view that the infection was usually internal. Professor Adami pointed out that "if in a district like Edinburgh, the number of cases of so-called primary abdominal tuberculosis was much above the normal, and if in the same district a notable proportion of the cows suffer from tuberculosis, and further it is the custom to feed the children on milk that has not been sterilized, then the increased incidence of abdominal tuberculosis is presumptive that the disease is primarily of alimentary origin, and due to the consumption of infected milk." The same speaker contended that it was useless to declare a city milk harmless because microscopical examination of the milk had failed to demonstrate the presence of acid-fast bacilli. The only sure demonstration of the harmlessness of a milk supply was by the inoculation of guinea pigs. It was also maintained that environment and food are more potent factors in the causation of tuberculosis than congenital infection. If the calves of tuberculous cows are allowed to remain with and be fed by their mothers they develop tuberculosis; if, however, they are separated from their mothers, and fed on non-infected milk, they remain healthy.

THE CANADIAN HOSPITAL ASSOCIATION.

Delegates from widely separated points of the Dominion gathered at Niagara Falls, on 23rd May, for the fifth annual convention of the Canadian Hospital Association. The meetings were held in the Public Library. The closing session was a joint one, the Hospital Association combining with the Association of Training School Superintendents and the Association of Ontario Graduate Nurses.

The delegates received an official welcome from the mayor, who congratulated the association on the good work it was doing for the hospitals of Canada. Three interesting addresses were given—Dr. W. J. Dobbie, of the Toronto Hospital for Consumptives at Weston, spoke on hospital fire protection, using the recent fire at Weston Hospital to illustrate his remarks. He pointed out the importance of having the hospital staff thoroughly instructed as to action in case of fire, and advocated fireproof construction in all hospitals.

Dr. W. B. Kendall, of the Muskoka Hospital for Consumptives at Gravenhurst, gave some instructive observations on the sanatoria of the

old country, and Miss Bertha Miller, Superintendent of the Amasa Wood Hospital, St. Thomas, described the general management of a small institution.

Dr. H. A. Boyce, of Kingston, in commenting upon Miss Miller's address, laid stress upon the importance of making the patients feel at home in the hospital, and urged that extra efforts be taken to win over the "hard-to-please" patients, a course that Mr. J. Ross Robertson of Toronto considered was apt to lead to too much "coddling."

A resolution from a special committee was laid before the convention favoring the amalgamation of the Hospital Association of Training School Superintendents.

At the evening session, Dr. Wayne Smith, Superintendent of Washington University Hospital, discussed modern methods of handling contagious diseases, illustrating his address with lantern slides of the Pasteur Hospital at Paris, where individual isolation has taken the place of isolation by wards. "Box wards," as they were known in the Pasteur Hospital, have, according to Dr. Smith, reduced the percentage of deaths to a very low mark and have practically done away with cross-infection. Dr. Smith advocated imposing penalties upon physicians who failed to report infectious diseases. His address was followed by a general discussion.

The Canadian National Association of Trained Nurses met also in the Public Library. Addresses were delivered by Miss Stuart, of the Toronto General Hospital Training School, and Miss Goderich, President of the American Federation of Nurses. Miss Goderich paid a warm tribute to the worth of Canadian nurses.

MEDICAL PREPARATIONS, ETC.

FORMAMINT TABLETS.

These tablets are prepared by Wulfing & Company, and are now becoming popular in the treatment of a variety of throat affections, more especially those of an infectious type, such as from streptococci, staphylococci, pneumococci, etc.

Dr. Meredith Young, in an exhaustive article in the *Lancet* (British) relates his experiences with formamint tablets. He regards this medicament as a distinct value as a preventive measure as well as a curative agent. The formamint tablets are taken readily by children, as the taste of the formaldehyde is carefully disguised. From six to ten a day may be taken.

Philip De Santé, F.R.C.S., Surgeon to Throat, Nose and Ear Departments, Westminster Hospital, has made use of these tablets. One tablet

may be taken hourly, and one at night as the patient happens to be awake. These tablets are of value in inflammations of the throat, diphtheria, scarlet fever, and in acute septic infections. The conclusions drawn in the article are: The tablets are antiseptic, non-toxic, more efficient than washes or gargles, pleasant in taste and suit children, entails no pain, and they are easily carried by the patient.

THE BUGBEAR OF "INDIGESTION."

"It is often said that ours is 'a nation of dyspeptics.' Medical men appreciate how apt this statement is, and never was there a time when it was more true. Only yesterday one of them remarked, with a touch of humor, that 'people are living so fast to-day that they do not stop to masticate their food'—a wise observation, we must admit.

"And besides—in the matter of eating have we not as a race departed from the so-termed simple life? Have we not in more than one way become denatured rather than civilized? It seems that the things people eat to-day are censored to tickle the palate, rather than nourish and upbuild the body,—and the consequence of such pleasurable and improper eating is a disordered stomach."—*From Brochure on Taka-Diastase.*

One is tempted to quote further from this booklet, so interesting is the story—in subject-matter and in the manner of its telling. To do so, though, were to defeat the present writer's object, which is to insure a wider audience for the booklet itself—a booklet which is well worth having, whether or not one expects to avail himself of its therapeutic suggestions.

As the quoted paragraph attests, the brochure is well written. Its literary flavor, however, is but half its charm. In its physical make-up, the booklet is a distinct novelty, its quaint cover design, its fitting inner embellishments, and its oriental suggestiveness lifting it well out of the casual and commonplace.

The brochure tells how Taka-Diastase came to be—tells how it is made, and in the language of the distinguished chemist and scientist who evolved and gave to the world this valuable ferment. It explains, in attractive, readable form, how Taka-Diastase acts in defective starch-digestion, in gastritis, in diarrohea and constipation, in wasting diseases, and in the diet of infants. It contans a full list of Taka-Diastase products and gives hints as to dosage. Altogether it is an important little work, and one that readers of the CANADA LANCET are advised to send for. A copy may be obtained by any physician by addressing a request for the "Taka-Diastase Brochure" to the publishers, Parke, Davis & Co.,

Walkerville, Ontario, providing, of course, the edition has not previously been exhausted.

ENDOMETRITIS.

By J. J. O'SULLIVAN, M.D., New York City.

Being a friend of Glyco-Thymoline for many years, I have no hesitancy in endorsing it at any time. As regards my experience with it in Gyneacology, will say that I have a record of some ninety cases in which I have used Glyco-Thymoline to a greater or less extent, and have always found it of great value in reducing engorgements and promoting a healthy condition of the tissues. The following cases serve to illustrate the usual method followed in applying this agent:

Case 1.—Mrs. H. G., aged 24, married three years, multipara, occupation, housewife; gave the following history: Begun menstruating at the age of 14 years and had always been very regular during the menstrual period, had always had some pain which had, however, become intense during the last two. Past two months had suffered severe backache and pain throughout the pelvic region; bowels constipated. Digital examination showed the cervix to be very tender and engorged with some slight congestion of the uterus itself, accompanied by a profuse whitish discharge. Diagnosis of cervicitis being made, a tampon of cotton soaked in pure Glyco-Thymoline was applied and patient directed to inject small amount of Glyco-Thymoline pure into vagina twice a day. Tampons of cotton and Glyco-Thymoline were repeated every other day and patient discharged in one month cured. Aside from an occasional laxative, no other treatment was used.

Case 2.—Mrs. M. H., aged 21, married; multipara; occupation, housewife; came to me complaining of intense pain throughout the pelvic region, feeling of weight and bearing down sensation; bowels constipated, and frequent micturition, having to void her urine from five to six times nightly which was accompanied by severe burning and tenesmus. An examination disclosed a lacerated cervix with considerable inflammation of the endometrium. Treatment consisted of tampons of cotton and pure Glyco-Thymoline applied every second day with intra-uterine douches of a hot 25 per cent. solution of Glyco-Thymoline applied by means of Chamberlain's glass tube. This patient has been under my treatment for three months now, and the laceration has almost healed, which I expect to be complete in two or three weeks when I will discharge her, the inflammation of the endometrium having long since disappeared.

THE CURE OF ENURESIS IN CHILDREN.

According to some, the cause is a hyperplasia of the central nervous system. The immediate cause is a hyperexcitability of the detrusor vesicae, with relaxation of the sphincter of the urethra, or a lack of development of the prostrate and failure of the bladder orifice to close. The therapeutic measures must depend upon the conditions that exist. General hygienic and dietetic measures are appropriate in all conditions. For hyperexcitability of the detrusor, deficiency of the sphincter and lack of development of the prostrate causing deficient closure of the bladder orifice, to eight ounces of sanmetto add eight drops of belladonna and eight drops of tinct. nux vomica, and of this one-half to one teaspoonful given before each meal and at bed-time will be found useful. For reflex enuresis the removal of the cause followed with sanmetto.

PROPER MEDICATION AND CHEERFUL COMPANY.

During the past two months, we have met with more la grippe than anything else, and the number of cases in which the pulmonary and bronchial organs have been very lightly or not at all involved, has been greater than we have noted in former invasions. On the contrary, grippal neuralgia, rheumatism and hepatitis have been of far greater frequency, while the nervous system has also been most seriously depressed.

With each succeeding visitation of this trouble we have found it more and more necessary to watch out for the disease in disguise, and to treat these abnormal manifestations; consequently we have relied upon mild nerve sedatives, anodynes and tonics rather than upon any specific line of treatment. Most cases will improve by being made to rest in bed and encouraging skin and kidney action, with possibly minute doses of blue pill or calomel. We have found much benefit from the use of antikamnia and salol tablets, two every three hours in the stage of pyrexia and muscular painfulness, and later on, when there was fever and bronchial cough and expectoration, from an antikamnia and codiene tablet every three hours. Throughout the attack and after its intensity is over, the patient will require nerve and vascular tonics and reconstructives for some time. In addition to these therapeutic agents, the mental condition plays an important part, and the practitioner must not lose sight of its values. Cheerful company, change of scene and pleasant occupation are all not only helpful, but actually necessary in curing the patient.