

The Canada Lancet

VOL. XLVII.

TORONTO, JUNE, 1914

No. 10

EDITORIAL

THE MEDICAL LIBRARY AT WASHINGTON.

It is to be sincerely hoped that the proposed law to merge the Surgeon-General's Library at Washington into the General Library of Congress may never become an act, or, if it does, that it will soon be repealed.

This library of medical books is the largest in the world, and has been conducted under rules that have made it most useful and helpful to the medical profession. There is much reason to fear that under the proposed conditions there would be placed upon the loaning of books and the use of the library many restrictions.

For many years the library has published its catalogue and the index medicus. These two publications are of the greatest possible value to the medical profession. These may be discontinued if the proposed change goes into effect.

We fail to see why the Government of the United States should desire to change a condition of affairs that has worked so admirably. The Medical Library of the United States is known all the world over.

MONTREAL HEALTH DEPARTMENT.

A number of important changes have been made in the Health Department of Montreal. The vital statistic work will make an effort to show causes of disease and how certain factors play a part in causation.

Another important phase of the work of the department will be the inspection of food, and make the milk analyses. It is proposed to place the care of the water supply under the Health Department.

The medical inspection of public school children will also be looked after by the Medical Health Officers, who will have charge of infectious diseases. It is suggested that these inspectors should be full-time physicians.

It is hoped that an oculist and a neurologist may soon be added to the staff. The prevention of tuberculosis is also to be made an important feature of the work of the Department of Health. It is also proposed to issue a bulletin, giving useful information for the staff and the public.

THE DEATH PENALTY.

Some time ago we referred to this subject, and took the position that the death penalty does not deter from murder. This is amply borne out, both by science and history. The insane person has no fears, the man in passion is forgetful for the moment, and the man killing for gain plans to escape. History shows that those places that have discarded capital punishment have no more murders than similar peoples that retain the practice.

In the United States in some portion or other of the Union there are eleven crimes for which the death penalty may be imposed, namely: Robbery, burglary, arson, second degree murder, rape, first degree murder, treason, piracy, rescue of a convict going to execution, burning a vessel of war, and corruptly destroying a private vessel.

In England there are four crimes for which a person may be put to death. France and Austria have five.

A number of countries do not have capital punishment. These are Italy, Portugal, Switzerland, Holland, Tuscany, San Marino, Roumania, Belgium, Columbia, Ecuador, Costa Rica, Germany, Michigan, Maine, Rhode Island, Kansas and Wisconsin. In the State of Maine for twenty years before the abolition of the death penalty there were 253 murders while in the twenty years following its abolition there were only 162, and yet the State was becoming more populous.

Rhode Island, without capital punishment, had seven murders, while the State of Connecticut had 28 executions. Both States are of about the same size. In ten years prior to abolition Belgium had 921 murders, and in ten years after there were only 703. In Italy during ten years before abolition there were 16 murders per 100,000, and in the ten years following the rate fell to 11.

The history of England is very interesting. When there were some 600 offences for which the death penalty was meted out these offences were committed very frequently. Gradually as the law abolished the death penalty for these crimes the commitment of them became less frequent. This quite proves that this form of punishment is not a deterrent. But another matter of the utmost importance is that when the punishment is the death penalty a very large number of cul-

prits escape altogether. In countries where this form of punishment has been discontinued, a much larger number of accused persons are found guilty and receive some punishment. This is much better than to escape scot free.

RADIUM TREATMENT.

From time to time the press despatches carry around the country the reports that radium treatment, so far as cancer is concerned, is a complete failure. But these statements only contain half truths.

They do not inform us as to the location of the cancer, nor its stage of advancement before treatment was commenced. It would be a very easy matter to select cases that the radical operation by the scalpel would assuredly fail. Does this declare that the scalpel has no place in the surgery of the disease?

Then, again, some operators resort to too heroic applications of radium. This may destroy much good tissue, or it may cause the necrosis of so much cancerous tissue that the patient succumbs to toxic conditions. This is the fault of the method of application and not of the agent itself. Surgeons who have not got a supply of radium, but have scalpels, are often loudest in their condemnation of radium.

ALCOHOL AS A STIMULANT.

On clinical grounds many years ago the late Sir W. T. Gairdner threw much doubt on the value of alcohol as a stimulant. The clearly reasoned out work of Dr. F. E. Anstie also did much to tell us what alcohol could or could not do. Observations made on the army during marches made it quite clear that alcohol lowered the power to resist the onset of fatigue. There have been many reliable tests that it also lowers the power of the body to resist cold.

Quite recently Prof. Emil Krapelin, Munich University, has made very many careful observations and conducted many experiments with the view of once more clearing up the ground. He has made hundreds of tests with individuals and groups. These tests were made on persons who had taken no alcohol on the same persons after various doses. The loss of strength was quite noticeable after a glass of Bordeaux wine. The loss would be about 7 or 8 per cent.

The same results were obtained when the experiments were made with persons. By closely watching the effects of alcohol on mental

processes, as well as on muscular action, he came to the conclusion that it affects injuriously the brain as well as the muscular system. This is revealed by the loss of activity and accuracy in the performance of arithmetical calculations, as well as in the presence of muscular weakness. As the time over which the alcohol was given increased the impairment of capacity for thought and action also increased.

Drinking at meal times is not so injurious as is its consumption between meals. Heavy drinking before going to bed is very harmful, and lowers the working power for the day following by at least one-quarter its normal capacity.

All this excellent work goes to show that those who have been advocating the food and stimulant value of alcohol have been living in a sort of fool's castle, and have been playing the part of the blind leading the blind.

THE VALUE OF PERIODICAL EXAMINATIONS.

It is well known that prevention is better than cure, and with this object in view Dr. Goldwater, Commissioner of Health for New York City, urges that people should go to their doctor at regular intervals for a careful examination. By this means many diseases would be detected at their commencement.

In the State of Pennsylvania persons who work in lead factories are supplied with free state medical examinations. In this way the earliest indications of disease are detected and the proper steps taken. Drs. Edsall and Thompson, of Cornell University and the Massachusetts General Hospital, have been making test examinations of many persons in different occupations, and with the result of finding that many of these were in need of treatment for a number of conditions, that, if left alone, might give rise to incurable diseases.

Dr. Goldwater declares that the early detection of cancer would cut the death rate from this disease in two. The only way to secure early diagnosis is regular examinations of the people.

POINTS REGARDING CANCER.

Dr. E. F. Bashford, the well-known authority on cancer, in a recent address said that cancer is not infectious, and that there is no risk in occupying a house where a cancer patient had died, nor in being in a hospital for cancer cases.

This disease caused the death of one woman in seven and one man in ten after the age of 35 years. In man the heredity of the disease had not been proven. So far no solid proof has been advanced to confirm the older views of the potency of heredity.

Wide observation goes to prove that cancer is mainly caused by repeated irritation of a part. This accounts for the fact that certain occupations tend to cause the disease in certain parts of the body. In like manner, portions of the body often irritated frequently suffer.

Cancer can be transferred from one animal to another of the same species. The process is not, however, a process of infection, but an actual transplantation, comparable to the transplantation of plants in a garden. All the forms of cancer common to men occur in mice, yet during the last twelve years healthy mice, young and old, had been housed with mice naturally suffering from cancer and mice inoculated with it without there resulting in any case a higher frequency of cancer among those healthy mice than occurred in mice not so exposed.

The property of progressive growth is the characteristic of cancer which must be controlled if a cure is to be found. Every animal tissue produces, when growing, resistance to its growth. Growth is accompanied by resistance. When the growth of a tumor becomes very rapid it simply means that this power to produce resistance has been lost. It is erroneous to suppose that a stimulus to growth is necessary to a cancer; the truth is that continuous growth becomes possible because of the loss of a hindrance to growth. The whole problem focuses itself into the question of the study of growth and of the forces which correlate it and control it in the human body.

Two interesting facts have emerged. It is certain that an increase of cancer is not taking place in some parts of the body, while a large increase, on the other hand, is recorded for other parts. The question of diagnosis has, however, to be considered. The second fact is that in certain localities—face, lips and breast—disease increases up to the end of life, but in others after attaining to a maximum growth the disease falls off to the end of life.

THE HEALTH OFFICIALS' CONVENTION.

The convention of the health officials of Ontario, which was recently held in Toronto, was a decided success. Many questions of real interest were discussed, and a forward spirit prevailed throughout. One hardly realizes how much progress has been made along sanitary lines of late years. Food, milk, abattoirs, sewage, over-crowding, rail-

way trains, hotels, schools, etc., etc., have all been passed under review, and valuable suggestions offered, that have found their way to statutes of the country.

It is by meeting with each other and taking up the difficulties that lie in the way of preventive medicine that real progress can be made. What one cannot do becomes easy to the many. This year a good deal of attention was given to the condition of the rural school-house. This is where much good work can be done. There is no doubt but that far too many schools are in a very unsanitary condition, and do much harm by the spread of disease.

DR. J. PRICE BROWN.

Some time ago, Dr. Price Brown, a well-known specialist in diseases of the nose and throat, and who has followed his chosen field of practice in Toronto for about twenty years, became afflicted with glaucoma. The condition became so severe that he was compelled to give up his practice. Dr. R. A. Reeve, of Toronto, performed an iridectomy on one of his eyes. This, however, did not bring as much relief as was hoped for. Dr. Price Brown went to New York and had the eye removed by Dr. Knapp. He has been free of pain since the operation. It is hoped by this means to save the sight of the other eye. His many friends extend to him their warmest sympathy.

FAITH HEALING.

The subject of spiritual faith and mental healing are dealt with in a report of quite recent date that came from the hands of ten representatives of the Church of England and ten noted medical men under the chairmanship of the Dean of Westminster, Rev. Dr. Ryle. Among their conclusions we find the following:

“The committee desire to express their belief in the efficacy of prayer. They reverently believe, however, that divine power is exercised in conformity with and through the operation of natural laws. Spiritual ministrations should be recognized equally with medical ministrations as carrying God’s blessing to the sick. Health, bodily and mentally, is capable of being influenced for good by spiritual means.

“The physical results of what is called faith or spiritual healing do not prove on investigation to be different from those of mental healing or suggestion. The committee recognize that suggestion is

more effectively exercised by some persons than by others, and this fact seems to explain the gifts of a special character claimed by various healers. While the religious influences do not essentially differ in operation from the non-religious appeals to the mind, yet the former may often be a most potent form of suggestion. The committee is forced to the conclusion that faith or spiritual healing is like all treatment by suggestion. It can be expected to be permanently effective only in cases of what are called functional disorders as distinct from organic ailments.

“Those who resort to healers, therefore, are warned that they may thereby be postponing until too late medical treatment which might serve to arrest organic disease. The committee desire to see increased importance attached to spiritual ministrations as a contributory means to recovery, but they strongly deprecate the independent treatment of disease by irresponsible and unqualified persons.”

Such views, coming as they do from such a committee, after lengthy and careful consideration, must command the respect of all, and go a long way to clear the ground. Those who are guided by some strange emotion or even delusion can be set right by an appeal to this expression of opinion. It will also prove of much value in clearing the minds of court officials.

NATIONAL REWARD FOR MEDICAL DISCOVERIES.

It is very seldom that nations reward the members of the medical profession who make discoveries that have a far-reaching life-saving influence. In the United States on a few occasions money has been voted for this purpose. In Britain it was done in the case of Jenner on account of his investigations on smallpox and the preventive value of vaccination. In Germany some noted discoveries have been rewarded with positions of various kinds. The commonest way of rewarding these savants is by conferring upon them some title, or for the universities to give them honorary degrees. There have been a few noble examples where the medical profession and the public have done something by way of private subscriptions.

We have recently had a departure from these methods. The opening of this new movement was made a few days ago by Sir Ronald Ross. He has sent to the Chancellor of the Exchequer a petition to this effect and invites other men who have made useful discoveries to follow his example. Among other things he said in his communication the following:

“I take my stand upon two propositions,” said Sir Ronald in an

interview recently. "The first is that it is not honorable for a nation to use the discoveries of a private professional man without substantial recognition when such utilization brings advantages to the Government which avails itself of them.

"Secondly, such a course tends automatically to prevent research. By far the most valuable scientific work that has ever been done has been performed by private individuals, many of whom were practically amateurs. It is to the interest of the State that such work should be encouraged in every possible way.

"Salaried scientific work often tends to become automatic and seldom yields the remarkable results achieved by voluntary investigators. A long list of names in proof of this contention will at once occur to anyone with any knowledge of the subject.

"In my opinion, it is a shameful thing that the country should not pay for benefits received from such men as these. The medical profession is particularly badly treated in this respect. If I am now taking the lead in acting for myself it is only because this is the sole way in which public action can be forced.

"If the petitions fail men of science will at least know that the country refuses to pay them honestly for their work. On the other hand, should they succeed, a great impetus will be given to all forms of scientific work at present unremunerated."

If the Chancellor should turn a deaf ear to this request, then medical men will know what to expect. In the midst of the huge expenditures by the great nations on all sorts of objects altogether too little has been devoted in this way.

SPECIAL WARDS FOR NERVOUS PATIENTS.

Much credit is due to Dr. Campbell Meyers for his persistent efforts to secure suitable facilities in hospitals for the treatment of nervous patients. Dr. Meyers is not referring to those who are mentally afflicted, and who should be sent to a detention ward or pavilion, nor such as would come within the meaning of a psychiatric clinic.

He is urging proper accommodation for the early stage of neurasthenia. He contends that the brain is as important as the lungs or other organs, and should be furnished with a proper chance of recovery when threatened with serious disease. He holds that to put such patients in a psychiatric pavilion would be a great mistake, as they are so prone to be influenced by suggestion.

Dr. Meyers is of the opinion that the only proper way to treat such early forms of nervous diseases is in wards for the purpose, and properly equipped. All large hospitals should have such wards.

RADIUM A CAUSE OF CANCER.

Dr. Walter S. Lazarus-Barlow a short time ago addressed a meeting of medical men and stated that he thought radium could cause as well as cure cancer. He expressed the opinion that radium in the human body might do this. It is reasonable that there is some one cause, and said that radium and radiation may be that cause. He pointed out the influence of radium on bacteria and thought it might have a similar stimulating effect on the cells of the body. Under certain conditions the radium present in the body might be gathered into one part and excite the cells into the formation of cancer.

The theory is an ingenious one, but must go through a lengthy period of trial before it can be accepted. In support of it he said that irritation had a marked tendency to cause bacteria to appear in the location irritated. He then pointed out that bacteria had a very marked affinity for radium, and could gather it into their cells from any solution containing the element. His theory then is that repeated irritation cause bacteria to appear in a part. These in turn attract the radium of the body to that part, and this stimulates the cells into the formation of cancerous growths.

SCIENCE HEALING BILL VETOED.

After due consideration, Gov. Glynn of New York, on April 23 placed his veto upon the bill passed at the last session of the Legislature, which was intended to legalize the practice of Christian Science healing in the State. The Governor stated that the bill which permitted "any person who ministers to or treats the sick or suffering by mental or spiritual means without the use of any drug or material remedy" to practise in this State without interference, would "open the gates to all kinds of medical pretenders, who would swarm across our borders and pretend to practise medicine upon our citizens." "Under this phrasing of the proposed law," he added, "I am precluded from passing upon the claim of the sincere believers in Christian Science." The Governor also refused to sign Senator Herrick's bill which gave to osteopaths in New York City the right to sign death certificates. The bill exempting drug store employees from certain provisions on the labor law, and fixing a separate schedule of hours for drug store employees was signed by the Governor, who considered the exceptions proposed entirely reasonable.

PRESIDENTIAL ADDRESS AT THE ONTARIO MEDICAL
ASSOCIATION, TORONTO, 26th JUNE

By C. F. MCGILLIVRAY, M.D., Whitby.

LADIES AND GENTLEMEN,—My first duty is to thank you for the honor you have conferred upon me in electing me to preside over this meeting. I do not flatter myself that this honor come to me personally because of individual merit or for services rendered this association; I take it that the honor was conferred upon a representative of that great majority of our profession in the Province—the general practitioners and more particularly the country practitioners in whose ranks I labor.

The voice of the country practitioner is not often heard in this assembly, if we make one notable exception in the person of our esteemed friend, Dr. T. S. Harrison, of Erin, Ont.; for here are met the lecturers and professors of our schools, the clinicians and teachers of our hospitals; the specialists in every branch and department of medicine and surgery; the rotund, well-groomed, prosperous-looking general practitioner of the city; the consultant of Provincial reputation, and members of the Academy of Medicine; so that naturally the country practitioner, overawed by this array of talent, is not very aggressive nor assertive in meetings such as this. But come out with him into his own little bailiwick and learn if his voice is always silent there. There we find occasionally the old-fashioned family physician, looked upon by half the countryside as the wisest of counsellors, the truest and most unselfish of friends and who is oftentimes the social and intellectual beacon of his community. Whilst he is no expert in skiagraphy or the making of the Wasserman tests, in bacteriology or the microscopical examination of the blood, yet he must have a good working knowledge of obstetrics, of gynecology, of internal medicine, of minor surgery, of therapeutics, of affections of the eye, nose and throat, of hygiene and the public health, and a special knowledge of pediatrics, a subject too often overlooked in the schools. But what of his other duties? He must know how to draw a will, I have known him to act as judge of the prize babies at the fall fairs. He will be coroner, Medical Officer of Health, examiner for half a dozen life insurance companies, member of the library board, or more probably of the school board—this is a very common duty. He will be a member of the town or township council, or even of the Legislative Assembly. He is probably well known in social circles, and odd though it may seem to some of you, well known in religious circles. He must be prepared at any time to take the platform, make a speech. Such are some of the activities, medical, social and municipal, of the country practitioner who is so unobtrusive and

non-aggressive in assemblies such as this. In the name of these men scattered all over the Province I thank you for the honor conferred upon one of us by electing me to preside over this meeting.

I wish further to thank those who have labored so faithfully and given so much of their time and thought in preparation of this annual meeting. The programme is extensive and varied. It is the menu card of the annual feast prepared for you. I trust you have come here with appetites keen-edged for the discussion of things professional, old and new. For at this feast, as at all others, *fames est optimum condimentum*.

For a portion of this programme we are indebted to our medical brethren of the great neighboring Republic. To them I extend a warm welcome from this association. We are indeed pleased to have them with us. Reciprocity in medical thought is and always has been, the world over, one of the outstanding landmarks of the profession. This is one kind of reciprocity that we have no objection to in this country.

Without encroaching upon the field of the committee on necrology I would like to recall the names of many of our brethren who have gone down "through the valley of the shadow" since our last meeting, but will content myself by mentioning only three—Dr. Daniel Clark, who for thirty years was superintendent of the Queen Street Asylum, and was in my day the Lecturer in Mental Diseases; Dr. Fred Fenton, the genial, kindly, companionable friend, whose sad untimely death cast such a gloom over us all. He was with us last year in London and at that time promised a long and successful career in his chosen work; and John Caven; what shall I say of him? I knew him best as I knew him first, as the young and boyish-looking lecturer in pathology in the University of Toronto, twenty-five years ago. At that time I thought I myself knew something of teaching, as I had been engaged in that work for many years, but I was glad to sit at the feet of John Caven and learn afresh the art of making obscure things plain and difficult things easy for the student, I have heard it said, and I can quite believe it true that he was the best teacher of pathology that the University has ever had. His intellect was ever keen and alert. His witty remarks, quick repartee, sharp criticism and boundless enthusiasm endeared him to his students and made his subject, dry and tiresome as it is apt to be, the best-liked on the curriculum. He was a great teacher, I like to remember him as such.

I do not propose to enter into a detailed survey or review of the many advances made in medical or surgical treatment during the last two years. I could not if I would. Many of you are more competent to do that than I. I am rather going to content myself with a few remarks on matters which have interested the profession during my

term of office. To act the bystander as it were, watching the trend of events, rather than as one in *medias res*.

The annual meeting of the Medical Officers of Health and the annual meeting of this association have this year both been held in the month of May. For the first mentioned of these meetings, practitioners are brought to Toronto from every part of the Province, even from the remotest parts. Would it not be wise for the officers of the two societies to get together and arrange that, on any future occasion when both meetings are due to meet in Toronto, a united meeting be held, or, if that be found unwise, that at least the meetings be held in the same week. Such an arrangement would be of mutual advantage. We might then have at our annual meetings some whom we rarely see here.

Sir James Whitney, in his short address at the opening ceremonies of the new General Hospital, announced that "The Provincial Legislature had decided to appoint a Commission to investigate the whole subject of medical education and the practice of medicine in the Province." Two most important questions over which so many wordy battles have been fought, viz., medical education and what constitutes the practice of medicine. "The term medicine," said Sir James in his announcement, "will include all plans or means of alleviating or curing human defects, disorders, diseases or wounds. The powers of the Commission will include the rights and by-laws of the College of Physicians and Surgeons, of all universities, colleges and schools, and the teaching therein; also of the osteopaths, dentists, opticians, Christian Scientists and members of any other class or creed engaged in the practice of any branch of medicine." This announcement of the Premier was a most satisfying one. Whether or not such a Commission would be helpful in solving the vexed problem of what is absolutely essential in the way of medical education of the future practitioner is very doubtful, for the view of those physicians graduated by the College of Physicians and Surgeons and the views of the irregular practitioner are as far apart as the poles. Let me illustrate the difference by a concrete example of two boys from my own town; in small communities it is easy to follow the career of our boys. One, A. B., passed up through the high school, matriculated into Queen's University, took two years in arts and medicine and graduated this year B.A. and M.D. At the end of his six years' university course, standing on the threshold of the practice of medicine, knowing his own limitations and disagreeably conscious of how little he knows of the great field of medical knowledge which lies before him, much of which is still a veritable "terra incognita," he has resolved on another year of study and has become an interne of one of the Montreal hospitals. The other young man, C. D., barely reached the fourth reader in the public school, never got

within hailing distance of the high school, went into life, got married, married a nurse is said to have taken a six months' course in chiropraxy by correspondence, then hung out his shingle in one of our flourishing western towns as a full-fledged, duly qualified chiropractor, not as in the case of the former young man, conscious of his own limitations, but bold, aggressive, cocksure; the poet's mixim:

"A little learning is a dangerous thing,
Drink deep or taste not the Pierian Spring."

does not appeal to him, and worst of all is recognized by the people as a regularly qualified practitioner. How long will this deplorable difference in the medical education or lack of medical education of the regular and irregular practitioner be allowed to continue? Down through the centuries the medical profession has claimed to be, and has prided itself in being, one of the learned professions, and this claim down to the present time has been universally recognized as a just claim. How long will the world continue to recognize us as one of the learned professions if the door to our profession is wide open to all who have little or no primary education before the study of medicine is begun and whose technical studies are practically negative? Let us keep our ideals high; let us strive to live up to the reputations that the centuries have given us. I believe that the Medical Council and the universities are and have been alert on the question of medical education, of what is required for the entrance or matriculation examination, and what is required of students after their special study of medicine begins. Year by year the matriculation examination has been getting harder and harder. Many advocate that it should be still further raised so as to correspond with the examination at the end of the second year arts course of the university. And year by year the time for the technical study of medicine required of students is being prolonged until the three-year course has been discontinued for the four-year course, and the four-year course for the five-year course. I repeat that I do not think that the Medical Council and the universities have been remiss in the matter of the education, primary and technical, of those whom they can control. What about those over whom they have no control? The Christian Scientists, the osteopaths, the chiropractors, *et hoc omne genus*. These are those of us who in our innocence, confidently thought that the Medical Council could control throughout the Province every form and variety that the practice of medicine could assume. But such confidence has long vanished into thin air. Welcome the suggestion of Sir James Whitney. Let us have a Commission, let us have it clearly declared:

- 1st. What is meant by the practice of medicine.
- 2nd. What primary education is required before entering upon the study of medicine.

3rd. What technical education is required after the study of medicine has been begun.

The following quotation from one of the medical journals embodies my view of this question: "If Sir James Whitney establishes a Commission made up of men of the highest type, who know the situation and who are likely to back up the Medical Council and the universities in their endeavors to make medical education in Ontario worthy of the great Province, good will result. We would humbly suggest that there is but one way to bring about the desired result, that is, establish a high standard and make all 'pathies' and faddists conform to this standard. It is a simple matter to answer the query, how many of the 'pathies' would remain if this rule were adopted? The eclectics have disappeared, the homeopaths are almost extinct, and the osteopaths, chiropractors, faith healers and other peculiar sects will cease to exist just as soon as they are forced to spend five years in study and pass examinations of the stringent kind. Under these conditions very few will be anxious to remain under the shelter of the charlatan banners. Scientific medicine has no apologies to offer for its existence and any government failing in its duty to uphold it will be guilty of interfering with the best interests of the public it serves."

It is very pleasant to comment upon the fact that since the last meeting of this association the Dominion Medical Council in accordance with the conditions of the Canada Medical Act, has been organized, and the first examination held. Dr. Roddick, whose courage, diplomacy and untiring perseverance brought this result about, must be more than gratified. It was in 1902 that the Roddick bill, or Canada Medical Act, was introduced into and passed by the Dominion House. The first and apparently insuperable difficulty that met this bill in its progress came from the Provinces. They, and not the Dominion House, had complete control of all matters pertaining to education, and they were unwilling to give up their prerogative. It took nine long years of continuous effort on the part of Dr. Roddick and those associated with him to persuade the Provinces that it was to their advantage to accept the Act. In 1911 the Act was amended and became operative when a so-called "enabling clause" had been passed by each of the Provinces. This was done in 1912 and the Canada Medical Act was in operation. The next step was to form the Dominion Medical Council in accordance with the terms of the bill. On November 7th, 1912, the members of the Council, representing every Province and every university and college in the Dominion, met in Ottawa for the purpose of organization. They very properly elected Dr. Roddick as their first president, formed committees, laid their plans and adjourned to meet again in the same place in June, 1913. At the adjourned meeting they

completed their organization, selected July 1st, 1913, as the first day of registration for practitioners holding provincial diplomas for ten years or more, and appointed October 10th to 17th, 1913, at Montreal, as the time and place for the first examination under the Act. It must have been particularly pleasing to Dr. Roddick to have been present at and to have witnessed, in his own well-loved University of McGill, and in his own city of Montreal, the holding of the first examination under the new Act.

Now that the Dominion Medical Council is an accomplished fact it is merely a mild expression of the truth to say that only a big man would have tackled the job and that only a big man could have brought it to a successful issue. If ever a man deserved the gratitude of the medical men of Canada, that man surely is Dr. T. G. Roddick. I trust that a resolution, expressive of the appreciation of this association for service done, will be presented to Dr. Roddick before the sessions close.

In the official programme which you have in your hands you will see that notice of motion has been given for the separation of this association from the Canadian Medical Association. The Provincial Association of Ontario was the first to affiliate with the National Association and all the other Provinces, with the exception of Quebec, have followed her good example. Is Ontario to be the first to separate, and will the other Provinces follow her bad example? President after president of yours, in his annual address, has urged the formation of city and county associations all over the Province. You are going to have a report on that very subject to-day, and that such associations become affiliated with the Provincial Association, just as the Provincial Associations are affiliated with the National; and further, that membership in the city and county associations would entitle to membership in the Provincial Association, just as membership in the Provincial Association would entitle to membership in the National. Thus the various medical associations of the whole Dominion would be cemented together by bonds of common interest. Was the whole scheme as laid before you by your former presidents a possibility, or was it merely a beautiful dream? The whole scheme will be guillotined, its head cut off, as it were, if this association approve of the motion of separation of which notice has been given. We do not disagree with the advocates of separation, who say that affiliation has worked in some respects to the disadvantage of the association, but surely there have been some compensating advantages, if our agreement with the national association, made at the time of affiliation, has worked to our disadvantage, if we have grievances, as I believe we have, if we have suffered in the loss of our annual meetings of 1910 and 1913, and also in our

financial arrangements, as claimed, surely those grievances can be remedied without recourse to such drastic measures as separation. The whole question will be before you this afternoon for discussion. Let wise and sane counsel prevail. If permitted to make a suggestion I would suggest that prudent representatives from both associations be appointed, that they meet, adjust their differences, make a new agreement if deemed wise, and report to their several associations for approval at the first possible opportunity. But whatever you do, don't to-day approve of a motion of separation. Ever remember that the friends of the one association are the friends of the other.

By again referring to your programme you will see that a resolution will be submitted to you re Workman's Compensation Bill. At the recent session of the Provincial Legislature an Act was passed entitled "Laws relating to the liability of employers to make compensation to their employees." You are all familiar with the agitation which this proposed legislation caused amongst medical men. The members of the Medical Council and of the Academy of Medicine of Toronto were especially energetic in their opposition to the passing of the bill; we take this opportunity of thanking the members of these two societies for the opposition they put up, for the campaign of instruction as to the nature of the bill which they carried on, for the pressure they brought to bear upon the Government by argument and by appeal in order to secure a proper recognition of the rights of the medical man and a proper guarantee of remuneration for services performed.

No one has any fault to find that such an Act should be on the statute books. There was an Act somewhat similar on the statute books before, viz., "The Employers' Compensation Act," but in it the medical or surgical expenses became an important part of the claimant's account for his injuries, whereas in the new Act no provision is made for the medical or surgical expenses. The basic principle of the whole Act is that neither the injured, nor his friends, nor the municipality shall bear the expenses due to the injury, and yet *mirabile dictu*, the first thing the injured is called upon to do is to contract an expense for medical or surgical aid. To the one that has been injured some things can be dispensed with, some things are luxuries, but the prompt and skilful attention of one or more members of the medical profession is a necessity, a first and absolute necessity; and yet no provision is made for these who by their presence may save life or limb, they are, however, left liable as before for suits for malpractice. This omission to provide medical help for the injured is the weak spot of the Act, and if the weak spot be not strengthened the whole Act may prove unworkable.

The members of the Medical Council and of the Academy of

Medicine in particular, and the profession in general, pointed out to the Legislature this weakness in the Act, suggested amendments which would strengthen it, directed their attention to similar acts in various States to the south of us, but to no purpose. The Act went through as originally drafted. Amendments must surely come. Sir William Meredith, who drafted it, has said: "He does not claim that the Act is perfect or that the last word has been said." That the last word has not been said is the view of many. Let us therefore persist in our endeavor to secure what we deem our due. I bespeak a cordial reception and support for the resolution about to be submitted.

I must not close without making some reference to the Hospital for Insane, which is in the course of erection at Whitby.

Perhaps some of you will remember a very interesting article on the "Ontario Hospitals for Mental Diseases," read before the Canadian Medical Association in 1912 by Dr. Ryan, superintendent of Rockwood Hospital, Kingston. I am taking the liberty of repeating some of the information contained in that article.

Prior to 1905 therapeutic measures, laboratory work, research work and pathological work were almost unknown in the hospitals for the insane of the Province. Few records of patients, if any, were kept. The disturbed patients were restrained by drugs, locked doors and iron bars. The Government, through the Department of the Provincial Secretary, the Hon. W. J. Hanna, took advantage in 1905 of the retirement of a number of the superintendents to bring about a radical change of method in connection with these hospitals. A commission was sent to Europe to examine the system used in Germany and other countries. Three times commissions were sent to visit the most advanced state hospitals in the neighboring Republic. Fortified with information thus obtained, a conference of the superintendents, assembled for the purpose, adopted a new system of classification and of treatment which was at once put into operation in all the hospitals of the Province. Now, patients are carefully examined, both as to their mental and physical condition. Laboratories have been established, pathological experts appointed, dietitians engaged, complete records kept, and training schools for nurses established. Therapeutic measures are employed. Hydrotherapy, electrotherapy, massage are in constant use. In a word the inmates who require treatment are treated as patients in any other hospital are treated.

What are the results? Restraint disappeared, straight-jackets burned, drugs used for therapeutics only, bars gone from the windows and locks from the doors, the noise and turmoil changed to the calm quietness of the sick room, the percentage of recoveries substantially increased, the people losing their dread of these hospitals, physicians

sending in patients for treatment, voluntary patients received and treated—the “open door” to these hospitals established.

Dr. Ryan in closing his address paid a graceful tribute to the Provincial Secretary as the man above all others who had made this change possible for us in Ontario.

Mr. Hanna must have been gratified at this open recognition and public acknowledgement of the good work done in and through his Department for the patients of the hospitals of the insane, and might have rested on his laurels and been content; but just about the time Dr. Ryan's address was delivered new and still greater opportunities for service presented themselves, and the Provincial Secretary rose to the occasion. The Queen Street Asylum, in Toronto, had been sold, the old system of housing so many and such varied cases under the one roof had long been condemned. New quarters must be secured. This was Mr. Hanna's opportunity. If good results had been accomplished under the old conditions, still better results might be expected under the new. The Government can now pick out their own site, can erect a hospital in accordance with the very latest view as to best methods of classifying and housing the patients. A block of land of six hundred and forty acres, including several farms, was secured at Whitby. The site selected is an ideal spot, on the lake front, just such a place as is chosen for a summer resort, with beautiful Lake Ontario to the south, the sheltered waters of Whitby Bay to the east, the town of Whitby to the north. If environment means anything in the treatment of the sick, what site could be more desirable than the one selected?

On this site the Government propose to erect a hospital village. A good deal of the work has already been done, farm lands under-drained, roads made, walks laid, a railway spur from the Grand Trunk Railway put in, sewage system installed, light and water system installed, seven cottages erected and almost ready to be occupied. A good start has been made. I cannot enlarge fully upon the plan of the Government as to what buildings are to be built and how arranged, as their plans as yet are merely tentative and subject to many changes; but in general terms I might say that they propose erecting close to the lake front several hospitals for all acute cases, for all newly admitted cases and for cases sent in by physicians for treatment in which hospitals all patients requiring treatment will receive the care and attention that the most modern hospitals afford.

At some considerable distance away from the lake front, a whole series of cottages are to be erected for patients not requiring medical treatment, but merely supervision of personal hygiene, the most easily managed patients and those who will work. Off in another direction a number of cottages for private patients are to be built.

In all the buildings are a hospital proper; not only will liberal provision be made for the treatment of patients, but liberal provision will also be made for medical research work, for pathological research work, for laboratory work, and for general neurological study or investigation. In a word the Government is resolved to make the Whitby Hospital for the Insane the most complete of its kind, so that when finished it will be a credit to the Province, the pride of her people, the best on the continent.

Many visitors, especially visitors interested in psychiatry, have already visited Whitby to see the site, and to learn something of what is proposed to be done. Let me in his own words give you the impression of one of these visitors, Dr. H. I. Kloff, superintendent of the Hospital for the Insane at Alleutou, Pa., who before leaving for home, being interviewed, said: "I came to Toronto for the purpose of inspecting the plans and site for the Hospital for Insane at Whitby. I regard the site as ideal, in many respects superior to any other similar institution in America. The plans, which have been prepared with great care and studying the latest improvements in buildings both in Europe and America, embrace all the best facilities for hospital treatment and custodial care of the insane. The arrangement of the different buildings and the site selected will certainly make the new institution a model, which will be most creditable to Ontario. The great work being done in Ontario in your reformatory, industrial farms and hospitals is often commented on in the United States, but it requires a personal visit such as I have made to demonstrate what is being done in the Province."

Perhaps I have dwelt at too great length on this subject, but I have no apology to offer, for I have felt that whilst the work of Mr. Hanna and his Department have done in prison reform and matters pertaining to the public health in rescue work and the establishment of shelters for neglected children is pretty well known, his work in connection with hospitals for the insane is not generally recognized.

En passant I should perhaps mention that much of the work at Whitby is being done by prison labor—a camp of one hundred and twenty to one hundred and fifty men from the Central Prison being always present—the whole question of the prison farm and prison labor being an intensely interesting one—one that has come much under my notice during the last two years, but I shall add nothing further on the subject as we hope before the sessions are over to hear from Mr. Hanna himself on that question.

In conclusion I thank you for your attentive hearing and trust that you will find all the sessions of this annual meeting both enjoyable and profitable.

A CASE OF SYPHILITIC SPLENOMEGALY RESEMBLING
BANTI'S DISEASE.*

BY H. B. ANDERSON, M.D.,

Assoc. Prof. of Clinical Medicine, University of Toronto.

H. P., aged 33 years, Lake Captain. Father died at 67 years of age from heart trouble; mother living and well, aged 69. Four brothers and two sisters living and well; one sister dead from Grave's disease.

The patient was a strong, vigorous man, weighing 205 lbs.; has used tobacco and alcohol, but both moderately.

Had two or three attacks of gonorrhoea ten years or more ago but no history of syphilis. In the autumn of 1907 he suddenly lost 25 lbs. in weight, but otherwise felt quite well. For the past six or seven years he has suffered occasionally from attacks of severe diarrhoea, lasting about a week, but had no attack during last year. He had a persistent jaundice during the winter of 1909, but no pain, chills, sweats or vomiting. For some years his weight has remained about 172 lbs., and in the intervals of his diarrhoeal attacks he has felt quite well.

A year ago he began to suffer from severe headache, referred to the left side of the forehead. This lasted for three weeks, then disappeared for three weeks but returned and has persisted until the time I first saw him with Dr. A. MacKay on Feb. 27th, 1914. The pain extended so as to involve the left side of the forehead, face, jaw and back of head on the left side. At times he suffered very much. A year ago following a blow on the right leg, some ulcers appeared which did not heal for six months and left deeply pigmented scars. In October, 1913, his appetite began to fail and he began to develop anaemia. The liver and spleen were found to be much enlarged. The scrotum became swollen and oedematous—mostly in the skin which was tense and glossy. The skin became yellowish tinted, but there was not much discoloration of the conjunctiva. Ten days before I saw him his left thigh, leg and knee began to swell. There was no redness and not much pain, but the knee was stiff from synovial effusion, and there was pitting of the skin of the leg. He had occasional attacks of chills and sweats during the past winter.

At the time of my examination on February 27th his condition was as follows:—

He is a large framed man, somewhat emaciated; looks pale with a

*Read at Ontario Medical Association, May, 1914.

somewhat yellowish cast to the skin and conjunctiva; weight, 166 lbs. He walks with difficulty, owing to the swelling of the left knee and leg. Scrotum is greatly swollen, tense and shiny; left testicle is slightly enlarged and tender. The lower part of the chest and upper part of the abdomen are very prominent and bulging forward. The spleen is greatly enlarged, extending from the fourth inter-space in the axillary line to below the umbilicus; the liver is also enlarged, extending from the fourth rib in the right mammary line to a hand's breadth below the costal margin. The spleen is firm in consistency, smooth and not tender. The liver also is firm in consistency and without evident nodulation. There is no enlargement of the lymph nodes to be made out. Heart and lungs show nothing abnormal. Hæmoglobin, 70 per cent.; red cells, 4,800,000; leucocytes, 4,000. There is a moderate poikilocytosis; no nucleated reds; no myelocytes.

Examination of the nervous system, apart from the headaches, showed nothing abnormal.

There was some oedema of the left side of the abdominal wall, with prominence of the superficial veins.

Pigmented scars on the front of the right leg. A provisional diagnosis of syphilis was made, which was confirmed by a Wasserman test by Dr. R. W. Mann. The patient was put on hydrarg. cum creta, increased gradually up to 10 grs. daily when the gums became tender. The general symptoms all improved. The spleen and liver reduced in size, and the swelling in the scrotum, knee and leg receded. The neuralgia and headache, however, continued, and after a fortnight became exceedingly severe, requiring morphia for relief. A blood examination on March 12th showed hæmoglobin 60 per cent.; reds, 3,600,000; white, 3,000; some irregularity in size of red cells; no nucleated forms. Differential leucocyte count showed cells in normal proportions. An intra-venous injection of salvarsan .2 grm., was given March 18th. This was followed by an intense general reaction with chills, temperature of 104; rapid pulse, prostration and repeated vomiting of large quantities of blood; diarrhoea; bleeding from nose and gums and fatal result was feared. The symptoms, however, subsided in a few days and the patient began to make rapid improvement. The liver and spleen reduced rapidly, the abdomen became less prominent. The neuralgia and headache improved and the swelling of the scrotum, knee and leg began to disappear. Since that time the patient has had four more injections of salvarsan by Dr. Mann—the last two of .6 grm. without any unfavorable symptoms. Continuous improvement followed. He weighs 195 lbs., and feels better than he had for years. The spleen and liver are scarcely palpable, and on May 18th he left Toronto to resume his ordinary occupation.

The history of the patient, physical signs, Wasserman reaction and response to mercury and salvarsan leave little doubt as to the underlying cause of the patient's condition being syphilis. It is therefore important to bear in mind that in cases presenting a clinical picture of splenic anæmia or Banti's disease, syphilis may be the underlying factor, and should, therefore, always be considered in the differential diagnosis.

THE VALUE OF RADIUM IN MALIGNANT GYNAECOLOGICAL CONDITIONS.

BY DR. W. H. B. AIKINS,
Toronto.

THE employment of radium in therapeutics dates from the latter part of the year 1901 when it was used by Dr. Danlos, physician to the Hospital of St. Louis, Paris, in the treatment of cutaneous tuberculosis. Shortly after this Foveau de Courmelles demonstrated its analgesic properties, applying it to external and deep cancer, and in 1904 he published some cases of uterine cancer in which improvement had resulted from this method of treatment. Subsequently successful results in various gynaecological conditions were reported by Oudin and Verchere, Dominici, Cheron, Rubens-Duval, Wickham and Lacapere, Fabre and Bender. In the United States it was first used in 1905 by Abbé for two cases of cancer of the cervix.

Amongst the gynaecological conditions in which successful results have been reported by different writers are cancer of the uterus, fibroid tumors of the uterus, fibroid tumors associated with metrorrhagia, or with metritis and blenorrhagic urethritis, cancer of the vagina, metritis, and more especially hæmorrhagic metritis, acute and chronic adnexitis, chronic pelvic cellulitis, chronic salpingitis, salpingo-ovaritis, cancer of the ovary, chronic urethritis, inflammation of Bartholin's glands, and pruritus of the vulva. It has also been recommended for irregularities of menstruation, including membranous dysmenorrhoea, in which Jacobs₁ reports good results. It will thus be seen that radium now has a very extensive field of application in the domain of gynaecology.

De Courmelles₂ points out that in regard to the technique employed in gynaecological conditions it is indispensable—whatever form of apparatus is selected—that the A rays and the soft fraction of the B rays should be arrested by means of a metallic screen of suitable thickness, and that the secondary rays emitted by the metallic screen itself should be arrested by an external sheath of India-rubber, gutta-percha,

gum or tarlatan. In vaginal dressings, either tubes or flat apparatus should be used, sufficiently protected and of suitable size, and should always be inserted with the most strict aseptic precautions.

Cancer of the Uterus. Radium treatment has been of great service in cancer of the uterus and other organs, and in inoperable cases not infrequently reduces the size of the growth, and results in considerable improvement of the general condition, thus rendering it possible to subsequently remove the tumor by a surgical operation. It has also been recommended from a prophylactic point of view, with the object of preventing or delaying recurrence of a malignant growth after a radical operation.

As has previously been said, Dr. Abbe, of New York, was the first to employ radium in the treatment of cancer of the cervix uteri, and he has since reported many successful results in this connection. Both Abbe and Wickham, are of opinion that in uterine cancer radium plays its most important rôle, and that the most brilliant results are to be anticipated from its use in this particular condition.

The selective action of radium rays makes this mode of treatment very applicable to gynæcological conditions. They also possess a greater power of penetration than the X-rays, and are therefore capable of influencing the neoplastic cells in the deeper portions of the growth. The recent advances in our knowledge of the physical qualities and dosage of radium also contribute to render the treatment more effective and more certain in its results.

As regards cancer of the uterus I have employed radium with satisfactory results in the following conditions: (1) In inoperable cases, with the object of rendering them operable, or if this cannot be done, of relieving the distressing symptoms; (2) When the general condition of the patient is so unfavorable that it appears inadvisable to incur the risk of an operation; (3) After operation, with the object of preventing or retarding recurrence of the growth.

Wickham and Degrais have published a large number of successful cases of cancer of the uterus. In their opinion the ideal procedure in inoperable cases is to first remove the growth partially or completely by surgical operation, and to subsequently give applications of radium.

They have treated successfully cases previously operated upon by Pozzi, Hartmann, Monod and Tuffier. In their experience irradiation has resulted in excoriation of neoplastic nodules, relief of pain, cessation of hæmorrhage and foetid discharge, and disintegration of the cancer cells in the deeper parts of the malignant growth. They report a case of recurrence after operation, in which improvement practically amounted to cure, the patient being well and free from recurrence four years later.

Degrais, states that these satisfactory results have been confirmed by further experience, and that radium treatment has given marvellous results in inoperable cases and recurrences. In a case in which it was used for vaginal recurrence after hysterectomy the patient still remained free from recurrence six years after operation. He has observed a considerable difference in the susceptibility of different varieties of cancer to radium, the budding forms usually responding most favorably, whilst the infiltrating forms of cancer are much less susceptible.

Some time ago Rubens-Duval and Cheron, reported very satisfactory results in inoperable cancer of the cervix after treatment by ultra-penetrating radium rays. The malignant process retrogressed, ulcers healed, and the general condition improved to such an extent that operative removal became possible. Microscopically there was disintegration and destruction of the cancer cells.

In a more recent paper they report several cases of cancer of the uterus treated by radium, in the majority of which the diagnosis was confirmed both clinically and histologically. In a case in which the patient died fifteen months later from another disease no trace of malignancy could be discovered on post-mortem examination, and in several other cases the patients remained free from recurrence for two, three or four years.

Their experience indicates that in very extensive and advanced cases the improvement is usually of comparatively short duration, but that in more circumscribed cases complete fibrous transformation is generally obtained. They agree with Wickham and others in emphasizing the imperative necessity of performing hysterectomy immediately a growth becomes operable, and point out that even when the uterus appears microscopically to be perfectly free from cancer a focus of disease may still remain in the deeper tissues, and lead to subsequent recurrence of the growth. If radium does not result in increasing the mobility of the uterus, and thus rendering the case operable, the treatment should be persevered in until cicatrization is obtained.

Foveau de Courmelles, reports more than a hundred cases of inoperable cancer of the uterus, which he treated by the introduction of tubes containing radium into the interior of the tumor. The treatment invariably resulted in relief or disappearance of metrorrhagia, leucorrhœa, foetidity and pain, increase in mobility of the uterus, retrogression of exuberant buds, and sclerotic transformation of the tumor.

Abbe, who has had very extensive experience in this field, is absolutely certain that intensive irritation of a recurrence developing in the scar of an operation for uterine cancer results in the substitution of a healthy cicatrix for the cancerous tissue.

He reports a case of typical cancer of the cervix, in which the diagnosis was confirmed by repeated pathological examination, and in which the patient remained perfectly well eight years after radium treatment. Several very advanced cases, treated by curettage and radium, have remained without recurrence for three or four years. In one case, in which there was a second recurrence in the scar of operation, radium treatment resulted in complete disappearance of the pelvic disease, the patient remaining free from recurrence several months later.

Forssell₉ has used radium in 40 cases of malignant growths in the female genital organs. Seven are too recent for any definite conclusion to be arrived at as to the results, and two of the patients have not been seen since the treatment was discontinued. A sarcoma of the clitoris was apparently cured after three series of applications of radium, as was also a sarcoma of the uterus, the latter not having recurred eight months later. The 29 cases of sarcoma of the uterus showed both subjective and objective improvement, with microscopical disappearance of the tumor in about a tenth of the cases. He is of opinion that cure is more or less permanent.

Schauta₉ has applied radium in six cases of carcinoma of the uterus, with rapid local disappearance of the tumor, and microscopical disintegration of the neoplastic cells. He thinks that a combination of radium and vaginal hysterectomy gives the most satisfactory results.

Latzko and Schulen₁₀ have treated five cases of cancer of the cervix and one of cancer of the ovary. In addition to considerable clinical improvement three stages of histological changes were observed, namely: (1) Inflammation and necrosis of the superficial tissue; (2) Degeneration of the neoplastic cells, ending in complete resorption and phagocytosis; (3) Increase of connective tissue elements and vascular changes.

Latzko₁₁ further reports a series of cases treated by intensive irradiation, including cervical carcinoma, carcinoma of the body of the uterus, carcinoma of the vulva and epithelioma of the labia. The results lead him to the conclusion that carcinoma of the cervix in an early stage responds well to radium, but he strongly emphasizes the necessity of removing the growth immediately whenever possible, as there is a risk that it may become inoperable during a trial of radium treatment. He finds that epithelioma of the vulva and vagina is usually susceptible to the influence of radium, but in the former case he advises removal of the inguinal glands.

Doederlein₁₂ has had good results in 6 cases of inoperable cancer of the uterus and also in recurrences, but is of opinion that very advanced cases should not be treated by radium as they are difficult to influence.

At a meeting of the Society of Physicians at Vienna Wertheim₁₃ showed a case of cauliflower-like carcinoma of the cervix, with infil-

tration of the parametrium. He used a tube of radium. In a few days the tumor had diminished in size. Secretion was abundant, but without any unpleasant odor, and in eight days the growth had become easily operable. Histologically there was marked vacuole formation and destruction of the nuclei of the cancer cells six days after the commencement of the radium treatment. He also reports 19 cases of inoperable cancer of the uterus, of which 9 became operable under radium treatment. He has decided in future to avoid using large doses of radium owing to the fact that in some of these cases considerable local injury resulted.

Bumm¹⁴ reports twelve inoperable cases of cancer of the female genital organs. In a squamous-celled carcinoma of the cervix and vagina all stages of degeneration of the cancer cells were present twenty days after the commencement of radium treatment, together with marked hyaline degeneration and sclerosis of the connective tissue. Eight weeks later hæmorrhage, discharge and infiltration of the parametrium had disappeared, the site of the cancer being occupied by firm tissue which could not be removed by curettage. In another case of carcinoma of the cervix there was cessation of hæmorrhage and secretion, with ultimate replacement of the growth by a firm cicatrix, the only evidence of the disease being some slight tenderness over the cervix. In the other ten cases the disease might clinically be regarded as cured, although it cannot be assumed that a permanent cure was effected in all of them. The above cases show the extraordinary results of the radium in advanced and inoperable cases of uterine cancer.

Ahlstrom¹⁵ has had good results from partial removal of a carcinoma of the ovary and subsequent irradiation. Kroemer¹⁶ reports satisfactory results in cancer of the uterus, vagina and ovary, and Kastle¹⁷ and Opitz¹⁸ cessation of hæmorrhage and discharge after treatment by radium.

Scherer and Kehlen¹⁹ advocates a combination of X-rays and radium treatment in malignant tumor, and report 77 cases of cancer of the uterus, in which they practised prophylactic irradiation after radical operation, the subsequent history being ascertained in 58 cases. Of these ten died, five remained free from recurrence for three years, twelve for two years, twenty for one year, and eight for six months after treatment.

Sir Alfred Pearce Gould has treated several cases of cancer of the uterus, some of them being secondary and inoperable. M. E. Schmidt reports successful gynæcological cases. Kroemer and Jacobs have treated successfully cases of cancer of the vulva, and Jacobs considers that cancer in this region is as susceptible to radium as superficial cancer elsewhere.

In 120 cases of small fibroid tumors of the uterus, reported by Cheron and Bouchacourt, intensive radium treatment resulted in definite hæmostasis in 117 cases, with subsequent retrogression of the tumor in 108. The menopause was produced in 12 of 25 cases of medium-sized fibroids. In five large fibroids treated by the combined method the menopause was produced in three cases, with marked reduction in the size of the tumor in two cases. In 12 small or medium-sized pelvi-abdominal fibroids there was production of the menopause and marked diminution in the tumor.

Kronig and Ganss₂₀ report 56 cases of uterine fibroids treated by radium or the combined treatment, the results indicating that the hæmostatic action in radium equals, and is sometimes superior to that of the X-rays. Radium sometimes produces amenorrhœa with extraordinary rapidity and their experience indicates that this result is chiefly due to the action of the rays upon the uterine musculature and ovaries, and not so much to their influence upon the uterine mucosa. On the other hand, radium appears to be less effectual in reducing the size of the tumor than the X-rays.

Ledoux-Lebard₂₁ has used injections of insoluble sulphate of radium in inoperable cancer of the uterus.

With the object of increasing the influence of the radium rays Werner₂₂ makes a preliminary intravenous injection of enzytol, which renders the tumor more susceptible, so that a comparatively small amount of radium suffices to produce the desired change in the malignant growth. He has had extremely satisfactory results in very severe inoperable cases and recurrences. In five cases of carcinoma of the uterus there was diminution in the size of the growth, and retrogression of diffuse infiltration of the parametrium and floor of the pelvis. In a case of severe recurrence the tumor was reduced from the size of a child's head to that of an apple, and a metastasis in the upper part of the leg disappeared. In spite of these extremely good results, however, he does not feel justified in regarding the cures as permanent, as there have been severe and refractory recurrences in a series of cases treated some considerable time ago.

Practically all writers on the subject are agreed that as regards gynæcology radium has its chief field of usefulness in inoperable cases and as a prophylactic against recurrence after radical operation, and that in such cases its value as an adjunct to treatment is inestimable. The growth should be completely or partially removed in all cases in which such a procedure is possible, and radium treatment in such cases should replace operation only when the particular circumstances in a given case under the risks of operation greater than those which would be incurred by the possibility of an operable case becoming inoperable.

whilst radium treatment was being tried. When using the combined form of treatment Cheron recommends a preliminary application of radium, which produces more or less sensitization of the tumor, thus rendering it more susceptible to the action of the rays.

The advantages to radium, as compared with the X-ray, are that radium possesses greater power of penetration, the facility with which it is applied, and the fact that in radium we are dealing with a substance the dosage of which can be easily controlled.

Bumm concludes that amputation is indicated in every case of rapidly growing soft carcinoma of the cervix in young women, as in this way only can the infected lymphatic glands be effectually dealt with. Up to the present the action of radium upon deeply-seated growths remains uncertain, but the rays have a satisfactory influence upon the operation scar, which is so often the site of a recurrence. He strongly recommends post-operative radium treatment as a routine procedure after amputation of the uterus, and is of opinion that its general adoption would lead to a considerable reduction in the number of recurrences. Slowly developing malignant disease of the cervix in elderly women, and carcinoma of the vagina, external genital organs and urethra, are eminently suitable for immediate radium treatment, with or without a preliminary incision through which to introduce the apparatus. Inoperable cancer of the genital organs responds more satisfactorily to radium rays than to any other form of treatment. Recurrence after operation should be treated by radium rather than by a second operation, as the latter often hastens the dissemination of the malignant process.

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DIFFICULTIES OF DIAGNOSIS IN DISEASE IN CHILDREN.

(SELECTED)*

BY J. PORTER-PARKINSON, M.D.

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IN *The Practitioner* for July, 1913, I dealt with some of the difficulties of diagnosis arising in certain diseases of the heart and lungs. I propose now to begin with one or two other lung diseases, and then proceed to the abdomen.

Lobar Pneumonia, though a very common disease, is frequently undiagnosed for various reasons. In many cases, nervous symptoms are very prominent, at the onset, such as vomiting, headache, delirium, or convulsions, and there may be also opisthotonos and general rigidity, so that meningitis may be thought of. Sometimes, gastro-intestinal symptoms, such as vomiting, diarrhoea, and abdominal distension, render a diagnosis of typhoid likely; at others, nephritis marks the beginning of the illness, with hæmaturia, albuminuria, and dropsy. The physical signs may present difficulty; for a time, the local signs in the chest may be absent, and in a child breathing shallowly bronchial breathing may never be heard. One must remember the apices are affected as often as the bases in pneumonia in children, so they should be carefully examined back and front, not forgetting the axillæ. General diseases likely to be mistaken for pneumonia are typhoid fever, scarlet fever, influenza. Tonsillitis, pyelitis and acute gastro-enteritis may give rise to a mistake, if the lungs are not frequently examined. To the experienced, pneumonia is frequently suspected from general signs, such as the flushed face, pungent heat of skin, and breathing, which is rapid, shallow, abdominal, and of inverted type, the pause occurring between inspiration and expiration.

Chronic Interstitial Pneumonia is usually due to a previous attack of broncho-pneumonia, which has never completely cleared, and has left fibrous thickening, in which contraction takes place, and dilatation of the bronchi comes on. If it occurs at the apex, it is practically impossible to distinguish it from tuberculous disease, but it is more common at the base. Dullness and pulling the heart over to the affected side are the most important physical signs, for the breath sounds vary in the most puzzling way, owing to the different physical conditions which may be present. The diagnosis from pleural effusion rests on the flattening of the chest and the displacement of the heart towards the affected side, etc. It is often diagnosed as chronic pulmonary tuberculosis, but is very different from the usual variety of that in

**Practitioner*, London, April, 1914.

children, though a superadded tuberculous infection is not unusual. It is strongly advisable not to perform exploratory puncture in these cases, for this has led to sudden death in a number of cases.

...*Abdominal Pain* is one of the most common complaints in children, and usually arises from dietetic causes or from some affection of the stomach or bowels. The ordinary routine examination of the abdomen should be made, and we should remember that the liver is proportionally larger in the child, normally reaching half an inch below the costal margin, while the spleen is frequently palpable. If there be no sign of disease in the abdomen, the chest must next be examined, for pain in pneumonia or pleurisy is frequently referred to the abdomen. The spinal column should be examined for signs of caries, the pain of which is usually referred to the front of the body. We must not forget that abdominal pain may be due to renal troubles, such as stone or uric acid gravel, or to infection with the bacillus coli, a not uncommon cause of abdominal pain in girls. A bacteriological examination is, of course, necessary to find this. Worms, especially the round-worm, may cause pain, and, finally, we must not forget the abdominal pain in Henoch's purpura, the rash of which may be scanty, or late, in appearing.

Vomiting is one of the most common symptoms in children. In infants, it is often due to overfilling the stomach with food, to gastric or intestinal indigestion, or to obstruction. It very commonly occurs at the commencement of pneumonia, scarlet fever, or other infections in children, taking the place of the rigor of the adult. It is a common, early symptom in acute nervous diseases, such as meningitis, and may be due to toxic substances in the blood, such as uræmia, or to cyclic vomiting. This latter is by no means infrequent. As it is not as well known as it should be, I will give a few of the important diagnostic points. There are periodic attacks of vomiting, apparently without cause. The attack begins suddenly, and vomiting occurs every hour or two; headache, a coated tongue, and great thirst are present. The child gets very exhausted before the cessation of the attacks, which happens usually in two or three days. The breath and the urine contain much acetone, and there may be albuminuria. The history of previous attacks is important, and the absence of blood and mucous from the stools excludes intussusception. Vomiting of blood in children is nearly always due to bleeding from the nose or pharynx; as epistaxis does not always occur these parts should be examined. Hæmatemesis may, however, be a symptom of purpura, scurvy, or hæmophilia, and I have seen it due to gastric ulcer, though this is very rare in young children.

Bacillary Infection of the Urinary Tract is a very common cause

of abdominal symptoms in children, and as only recently has much attention been paid to it, a short description will not be out of place. The organism responsible for over 90 per cent. of the cases is stated to be the bacillus coli; but, though it undoubtedly belongs to this group, our pathologist, Dr. Woodforde, finds that it is usually a non-motile bacillus. 90 to 95 per cent. of cases occur in girls. Four distinct conditions may be present; simple bacilluria, cystitis, pyelitis, or pyelonephritis, and the symptoms may vary exceedingly in different cases. Infants may simply have prolonged fever following a rigor or shivering attack.

Sometimes there may be frequency and painful micturition, or pain and tenderness in the kidney region, with, perhaps, enlargement of the kidney. The pain may be severe enough to suggest renal colic. A child came into the hospital with fever, pain in the right iliac fossa, and rigidity of the right rectus. No tumor could be felt externally or per rectum, and the urine contained pus, albumen, and numerous coli bacilli. Another child was stated to have suffered from repeated attacks of influenza. This diagnosis was given owing to there having been several periods of fever without obvious cause. In the hospital, it was found that during the attacks of fever there was some tenderness and enlargement of the left kidney, and the urine was swarming with bacilli.

Sometimes œdema of the kidney type, fever, and wasting are the most prominent symptoms; there may be nervous symptoms resembling those of cerebrospinal meningitis. There is also a chronic variety with wasting, occasional attacks of fever with vomiting, resembling cyclic vomiting. The diagnosis of these urinary infections depends upon a careful examination of the urine, and the exclusion by physical examination of disease in other organs.

A catheter specimen of the urine should always be obtained, when the organism can easily be seen. Culture is necessary for exact bacteriological diagnosis. The severity of the symptoms distinguishes pyelitis from cystitis. Pyelonephritis is difficult to distinguish from pyelitis, but the enlargement of the kidney may be made out, while alkaline treatment fails to cure, and the fever and prostration are very great. It should be mentioned that a few coli organisms are often present in the urine in tuberculosis of the urinary tract, and also that in pure coli infection there may be no pus in the urine.

Acute Peritonitis is a rare disease in childhood, apart from appendicitis. So much attention has lately been paid to the pneumococcal variety, that it is sometimes diagnosed when it does not exist.

A doctor, with whom I had seen a case of pneumonia, telephoned to me one morning to say that the patient had developed acute peri-

tonitis. When I arrived, I found the abdomen much distended with flatus, causing great distress in breathing, but no symptoms of peritonitis. The distension was due to too large quantities of milk having been given; on modifying this, and giving pituitary extract, the distension soon passed away.

The symptoms in the child, as a rule, resemble those in the adult, but sometimes they may be very indefinite.

Some years ago, a girl, aged 12 years, came to my out-patients complaining of vomiting. She walked in in the usual way. Beyond some distension of the abdomen, I could discover nothing, but the child looked so ill that she was examined under an anæsthetic by a surgical colleague, but again without discovering anything. We kept her in the hospital to watch, and the same night she collapsed; the abdomen was then opened and acute general peritonitis was found, due to a diseased appendix.

Abdominal Tuberculosis is an extremely common disease in children over the age of two years. The expression "consumptive bowels," a term frequently heard in hospital practice, does not mean tuberculosis; it is usually applied to infants suffering from wasting and chronic diarrhoea from bad feeding. In children, ascites with fever usually means tuberculosis of the peritoneum. If the effusion is sacculated, or accompanied by palpable masses in the abdomen, this diagnosis is almost certain. In nearly 20 years' hospital experience, I can recall but few exceptions. In two cases of children, aged 8 and 10 years respectively, the necropsy showed the effusion to be due to new growth starting in the colon. Chronic adhesive pericarditis may cause ascites without much evidence of heart disease, but the liver is certain to be much enlarged, and possibly the spleen also. Cirrhosis of the liver causing ascites is rare, and there is generally jaundice and a history of syphilis. Irregular masses in the abdomen with fever are usually tuberculous, but, if felt chiefly in the right iliac fossa, appendicitis may be suspected. A rectal examination will generally settle the point, and I should like to emphasize the great importance of this method. The finger in the bowel of an infant can explore the greater part of the abdomen, and by it diseases of the female generative organs, appendix abscesses, stones in the bladder or ureter, enlarged glands, intussusception, and abdominal tumors may be made out more readily than by abdominal palpation.

Before the examination an enema should be given, and the bladder emptied; this will facilitate examination, and prevent mistakes in diagnosis. In the healthy abdomen, the finger in the rectum and the hand on the abdomen should feel to be separated by the thickness of the abdominal wall only, but if there is peritoneal thickening the fingers

feel to be separated more than this, especially in certain parts, and any localized lumps can be made out.

Tuberculous Peritonitis.—There are four varieties: First, miliary tubercles in the peritoneum without any symptoms, which cannot, of course, be diagnosed; secondly, the ascitis form with wasting and slight fever; thirdly, the fibrous form, with numerous fibrous adhesions and bands in the abdomen, which is distended with flatus and fluid, the symptoms being mostly those of chronic dyspepsia, and, as there may be no fever, this form is often overlooked; fourthly, the ulcerative form, in which large tuberculous deposits go on to caseation and softening. In the last the abdomen is enlarged and feels doughy, indefinite masses may be felt, which are partly resonant on percussion, and fever, emaciation, and often diarrhœa are present. The omentum may be thickened to form a tumor, and there may be a discharge of blood and tuberculous material from the umbilicus. These types are often mixed. For instance, one often sees a child who is out of health, with an enlarged abdomen and some griping pains, a few hard fixed lumps may be felt in the abdomen, and the omentum may be thickened into a large band stretching horizontally across the upper part of the abdomen, or a mass may be felt in Douglas's pouch on rectal examination. The bowel may be obstructed by tuberculous deposit round it, causing griping pain and sometimes obvious peristaltic movements of the distended gut above the obstruction, which may lead to a suspicion of chronic intussusception, but blood is rarely passed in any quantity.

Intussusception, though not very common, is of great importance, in view of the fact that if an early diagnosis is not made, the chances of the patient are extremely slight. More than half the cases occur in infants under one year old. When I was in the out-patients department, it was my constant fear that, in the rush of cases of diarrhœa and vomiting in the summer, I should miss diagnosing a case of intussusception. The chief characteristic symptoms are, suddenness of onset, with severe pain, vomiting, and stools, containing blood and mucous without fœces after the first few motions. There is collapse or great prostration, and the characteristic abdominal tumor. It may be necessary to examine under an anæsthetic to discover the latter. I have known a case of Henoch's purpura mistaken for intussusception. In this, blood may be passed in large quantity *per rectum*, and there is collapse and much abdominal pain, but there is the characteristic rash on the skin, though this may be scanty. The great secret of not overlooking intussusception is to look out for it, especially in the summer, when gastro-intestinal disorders are so common. Rectal examination is of the greatest importance.

CURRENT MEDICAL LITERATURE

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MEDICINE.
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THE CLINICAL SIGNIFICANCE OF UROBILINURIA.

The investigations of Wilbur and Addis (*Arch. of Intern. Med.*, 1914, xiii. 235) demonstrate the insufficiency of our present methods of urobilin estimation, especially in the urine, and indicate that estimations of urobilin in the stools is a more satisfactory guide to the degree of blood destruction in the body. Among the conclusions to which the writers came the following may be noted: (1) *Hepatic Cirrhosis*.—Urobilinuria is of great value as evidence of a definite pathological change in the enlarged liver of alcoholic persons, and occurs almost constantly in the hypertrophic stage of hepatic cirrhosis. No increase of urobilin was detected in the stools. (2) *Hepatic Stasis*.—Estimations of urobilin in the urine are of value in judging the amount of damage done to the liver parenchyma in chronic venous congestion. A marked increase of urobilin is of ominous significance in cardiac failure. (3) *Jaundice*.—In obstructive jaundice urobilinuria is absent or insignificant. Its intermittent occurrence points to incomplete obstruction, with concomitant damage to the liver. It is present in cases of hæmolytic icterus. (4) *Malaria*.—The great increase of urobilin in the stools and the urobilinuria which occur in severe cases of malaria are of diagnostic importance in obscure febrile conditions. (5) *Anaemias*.—By means of urobilin estimations in the stools and urine, those forms of anæmia associated with increased blood destruction may be differentiated. It is probably in this field that the most valuable clinical results will be obtained. The contrast between the very large total urobilin elimination in pernicious anæmia and the small amount found in secondary anæmias following hæmorrhage or carcinoma is very striking. (6) *Pneumonia*.—The early appearance of large quantities of urobilin in the urine indicates a grave prognosis; its presence in the serum is of the gravest prognostic significance.—*Edinburgh Med. Journal*.

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PARADOXICAL CARBOHYDRATE TOLERANCE IN DIABETES.

F. J. Rathery (in *Paris Médical*) considers the phrase, paradoxical carbohydrate tolerance, applicable in all cases of diabetes in which increase of glycosuria does not occur in proportion with increased ingestion of carbohydrates. In the secondary form of paradoxical toler-

ance, this tolerance is readily explainable either on the basis of differences of tolerance of various kinds of carbohydrate food, or through variations either quantitative or qualitative, in the protein food simultaneously taken. Where both of these factors are excluded, one may speak of a primary or at first sight inexplicable paradoxical tolerance. The only explanation for such cases is either that there occurs a retention of sugar in the tissues whereby the output of sugar is temporarily less than the intake (this to be followed later by a paroxysmal sugar discharge), or the patient's coefficient of carbohydrate oxidation is undergoing marked fluctuations, as is undoubtedly the case in some instances. In the cases which the author classes as "simple diabetes"—those in which glycosuria will disappear entirely upon reduction or removal of carbohydrates from the diet—paradoxical tolerance is of favorable prognostic significance. Such cases are best to be kept aglycosuric by carbohydrate reduction, if their coefficient of carbohydrate utilization is relatively high; if not, the dieting should be less severe, and slight glycosuria allowed, except at a certain periodic interval. In cases of "consumptive diabetes," in which aglycosuria cannot be retained by carbohydrate interdiction alone, reduction in the proteins may procure the desired result. If not, the patient may still take a certain amount of carbohydrate without increasing the sugar more than a few grams daily. In such event, the paradoxical tolerance may with advantage be availed of, up to a certain limit, to feed the patient carbohydrates, though the prognosis should be guarded, as signs of acidosis may soon appear. On the whole, study of the paradoxical tolerance is of considerable value for rational dieting in diabetic cases.—*New York Medical Journal*.

CHRONIC INTESTINAL STASIS.

Sir W. Arbuthnot Lane, Bart., M.S., F. R. C. S., London.—By chronic intestinal stasis I mean that the passage of the contents of the intestinal canal is delayed sufficiently long to result in the production, in the small intestine especially, of an excess of toxic material, and in the absorption into the circulation of a greater quantity of poisonous products than the organs which convert and excrete them are able to deal with.

In consequence there exist in the circulation materials which produce degenerative changes in every single tissue of the body and lower its resisting power to invasion by deleterious organisms.

As confirmatory evidence, the author mentions the remarkable experiments of Carrol in the growth of living tissue, in which he has shown that tissues are immortal, and grow to the greater advantage if the drainage of their toxic products is carried out effectually.

The symptoms that result directly from the auto-intoxication of chronic intestinal stasis are:

1. Loss of fat.
2. Wasting of voluntary and involuntary muscles.
3. Degenerative changes in the skin associated with alteration in its texture and color, the development of pigmentation, especially in certain localities, and a more or less offensive character of the perspiration. The pigmentation is so marked in some cases as to have little doubt that the patient is suffering from Addison's disease.
4. The temperature of the body in case of uncomplicated stasis is subnormal, and that of the extremities is particularly so. In some cases the condition of the extremities is such that they become bloodless, so that no blood can be obtained by pricking the hand or foot. In such circumstances the patient seems to lose common sensation in the part more or less completely. There is no abrupt line of separation between this condition and so-called Raynaud's disease. Occasionally the hands may be quite bluish in color.
5. The mental condition is one of apathy, stupidity, or misery. This may be come exaggerated into a state of melancholia, or even apparent imbecility. These patients are very liable to commit suicide. They sleep very badly, and awake feeling they had derived no benefit from their night's rest. Neuralgic symptoms and so-called neuritis are frequently present in varying degrees of severity. Epileptiform tic is not frequently the result of intestinal stasis, as evidenced by its disappearance after colectomy. Headache is a very frequent feature, and may render the patient's life unendurable. One of the most serious symptoms which results from the damage to the nervous tissues by toxins is the want of control over the temper, which makes the sufferer very difficult to live with, and leads to much misery and crime. It is a much more frequent cause of serious crime than is generally imagined.
6. The patient complains of so-called rheumatic aches and pains in the muscles and joints, and often in the skin.
7. The thyroid gland wastes, so much that in marked cases no evidence of its presence can be detected by the finger.
8. The blood pressure may be raised or depressed.
9. The breasts show very definite degenerative changes. These are most marked in the upper and outer zone, and especially in the left breast. Cancer readily develops in this condition of the breast.
10. The several organs prolapse and alter in shape, partly because of the loss of fat, partly because of the wasting of muscular fiber. These changes are illustrated very well by the acquired mobility of the kidneys and the prolapses and bends of the uterus.
11. The patient becomes breathless on exertion. This may be so

marked as to be regarded as asthma, while it also may be produced by the distention of the stomach or intestines interfering with the action of the heart.

12. Most of the degenerative changes that effect the muscle of the heart appear to be due to autointoxication.

An examination by the X-rays shows frequently a dilatation of the left heart and of the aorta with degenerative changes in its coats. Dr. Jordan has demonstrated this condition very clearly, while Dr. James MacKenzie has elaborated the clinical aspects in his remarkable work on the heart which has revolutionized our knowledge of cardiac conditions. Associated with the atheromatous degeneration of the large vessels there are similar changes in all the smaller vessels.

13. The kidneys are liable to become affected by the abnormal strain thrown on them, and degenerative and inflammatory changes result which are roughly grouped under the term "Bright's Disease."

14. The hair of the head loses its color early in life and tends to fall out. A strange fact is the influence which the color of the hair has upon most of the changes just described. The darker the hair, the more marked is the tendency to degeneration under the influence of autointoxication. In the case of red hair the objective symptoms are but slightly marked. It would seem to be a great advantage to have red hair, and this varies with the brightness of the color and with the extent of its distribution. While the hair of the head tends to degenerate, hair grows excessively on places in which it is usually absent, or inconspicuous, as on the cheeks, chin, upper lip, forearms, about the nipple and along the middle of the back. It becomes occasionally a source of much annoyance and distress to the patient.

15. The pancreas becomes infected directly by extension from the stagnating contents of the duodenum. This results in chronic induration, inflammation, and finally cancer of the organ. Pancreatic diabetes may also ensue.

16. In a similar manner the ducts of the liver and gall bladder are infected, and gall stones, cholecystitis, and cancer may be produced, besides many acute or chronic diseases of the liver.

17. Those diseases of the eye which are degenerative in origin are produced by and vary with the degree of autointoxication.

The indirect changes are those which result from the lowered resisting power of the tissues to the invasion of organisms produced by autointoxication, can hardly be separated abruptly from all those conditions described as being caused directly by it.

The most obvious are:

(a) Infection of the gums causing the condition commonly described as pyorrhoea alveolaris.

(b) Tuberculosis infection, when not produced by direct inoculation.

(c) Rheumatoid arthritis. This, like tubercle, cannot develop except in the presence of defective drainage of the gastro-intestinal tract.

(d) Infection of the genito-urinary tract, either directly or indirectly, through the blood stream, by organisms other than tubercle, producing nephritis, pyelitis, endometritis, salpingitis, etc.

(e) Development of changes in the thyroid gland, whether as adenomatous tumors, general enlargement of the thyroid or exophthalmic goiter.

(f) Still's disease.

(g) Infections of the skin of a pustular nature.

(h) Infection of the large intestine by organisms which produce the several varieties of mucous and ulcerative colitis.

(i) Ulcerative endocarditis.

The treatment of chronic intestinal stasis and its results must vary with the stage which the condition has reached and also with the nature and degree of the superadded indirect result should such be present also.

The author advocates parafin and spring supporter which presses on the abdomen below the umbilicus and short-circuiting by dividing the ileum and putting it into the pelvic colon.—*British Medical Journal*, November 1, 1913.

OBSTETRIES AND GYNÆCOLOGY

UNDER THE CHARGE OF S. M. HAY, M.D., C.M., GYNÆCOLOGIST TO THE
TORONTO WESTERN HOSPITAL.

ANTE-NATAL PATHOLOGY.

At a meeting on April 2nd, of the Royal Society of Medicine, Dr. W. S. A. Griffith in the chair, a discussion on the need of research in ante-natal pathology was opened by Dr. Amand Routh.

Dr. J. W. Ballantyne (Edinburgh), in the course of a contribution read in his absence, said that the problems to be studied included the physiology and pathology of pregnancy as it was seen in the pre-maternity wards of any hospital, the physiology and pathology of the offspring in the germinal, embryonic, and fetal stages of its existence, and the physiology and pathology of the decidua. Without a serious study of ante-natal pathology there could be no marked improvement in race health, and race health was the watchword of the present day;

eugenics was attempting to solve it, but eugenics without obstetrics and ante-natal pathology and hygiene would have but small success.

Dr. F. W. Mott dealt with a number of facts bearing on ante-natal pathology which he had noted during the course of an investigation of the family history of cases of juvenile paralysis carried on by him for many years. His remarks, which were supported by diagrams and charts, included the history of 34 syphilitic women who between them became pregnant 175 times. Of the resulting children, 104 were either born prematurely or died in early infancy; 41 were more or less seriously diseased in some way or other, and thirty were apparently healthy. It was possible, however, that many of the latter had suffered subsequently to the date of the investigation, and it was certain that a considerable percentage of them would have given a positive Wassermann reaction. Four of the mothers had not become infected with syphilis until they had between them become pregnant 15 times, each of these pregnancies resulting in the birth and rearing of a healthy child. After infection the same women became pregnant 22 times, such pregnancies in 13 instances resulting either in abortion, stillbirth, or death of the infant in early infancy; in the remaining 9 cases 5 of the children were seriously diseased, and there was no proof that the other 4 might or might not be healthy. The speaker agreed with Neisser that the mother of a syphilitic child was herself syphilitic, even if she showed no signs of it. He had examined 22 stillborn and prematurely born fetuses received from Shoreditch Infirmary, and the *Spirochaete pallida* was found in 11 of them.

Dr. Darwell Smith having described his investigation of the influence of the nutrition of the mother on her delivery, puerperium, and the infant, drew the conclusion that if the mother was in a bad state of nutrition at the time of her labor the percentages of stillborn and prematurely born children and of the post-natal infantile mortality were increased, while the average weight of a full time child was reduced. On the other hand, a good state of nutrition increased the mother's supply of milk, and also the average weight of the child at birth.

Dr. Leith Murray (Liverpool), after stating that the present occasion seemed one less for the discussion of particular problems than for the enumeration of those which had to be faced in connexion with the subject, confined his remarks mainly to the relation of immunity to pregnancy production. A study of this subject, he thought, would lead to pronounced alteration in the existing appreciation and treatment of the toxic conditions arising in pregnancy; his own work had convinced him that complement fixation and sensitized reactions occurred in pregnancy. The main part of the research to be done on ante-natal

pathology was work for experts, more especially in serology and biochemistry.

Dr. Eric Pritchard (London), speaking of tuberculosis, said that this was difficult to demonstrate in newborn infants and must be still more difficult to demonstrate in unborn babies. In one case he had seen a viable child born of a mother who two days later had died of tuberculosis. Holt of New York had maintained that the so-called broncho pneumonia of new infants was often of tuberculous origin, and the speaker himself believed that in newborn infants latent tuberculosis often existed. For a time such children appeared to be healthy and often of a superior nutrition, but later on they developed symptoms of a tuberculosis nature.

Dr. Camac Wilkinson contended that the infection of syphilis was similar to that of tuberculosis, and there appeared to him irresistible evidence that tuberculosis could not be conveyed by the paternal element. Infection of the embryo or fetus, though rare, certainly occurred through the mother. Tubercle bacilli, being non-motile, could only be forced into the tissues of the fetus under extraordinary conditions. In rare cases tuberculosis of the placenta had been observed, especially in cattle, and this would account for the rare cases of congenital tuberculosis. He was a convinced advocate of the great value to tuberculin, and had observed on several occasions that during a course of tuberculin women who had been sterile for many years became unexpectedly pregnant, and he held that pregnancy was no contraindication to the tuberculin treatment.

The subject having been further discussed by others present.

Dr. Amand Routh, in his reply, said that the discussion had made it evident that very little was certain as regards ante-natal disease, either in respect of its relative incidence, the source and method of infection, or its prophylaxis and treatment. In regard to syphilis, the very existence of paternal infection was denied by such an authority as Dr. Mott, whose speech and diagrams clearly showed that paternal infection was, at any rate, infrequent; on the other hand, many of his diagrams showed that a mother who presented no clinical evidence of syphilis might yet be delivered of infected children. The speaker did not think that latent syphilis was the explanation of all such cases. When Dr. Mott had collected further pedigrees with Wassermann reactions his figures would be more conclusive. The speaker saw no particular reason why paternal infection and fertilization of the ovum should not be simultaneous, nor did he see why the fertilized ovum, freshly implanted upon the uterine mucosa, could not be easily infected by the male parent's infected semen. It was true that the cases in which tuberculosis could be proved to have infected the embryo or fetus

in utero were relatively few, but if tubercle did attack the embryo—and this he thought very likely—its effect upon the delicate cellular three-layered blastoderm would be considerable, and could easily cause dystrophic abnormalities which would lead to early and perhaps unrecognizable abortions. Research must decide these points, as well as the curious fact that in syphilis spirochaetes were but rarely found in the early embryo, and were yet found in abundance in the fetus. Possibly the excellent results ascribed by Dr. Wilkinson to the use of tubedulin injections during pregnancy were partly due to the tuberculin being used at a time when the physical condition of the tuberculous mother was undergoing that improvement which almost always attended pregnancy. Dr. Leith Murray's remarks on the placenta as an immunity producer were very subtle, and showed that an experienced expert must undertake research work in this department. Dr. Darwell Smith's conclusions would greatly encourage those who were trying to ameliorate the lot of pregnant women. The discussion, the speaker hoped, would greatly stimulate research.—*British Medical Journal*.

THERAPEUTIC

TREATMENT OF EARACHE.

J. F. Crump, in the *Journal of the Arkansas Medical Society* for September, 1913, advises, in the commoner forms of earache for children, the instillation every three hours of five drops of the following anodyne combination:

℞ Atropinæ sulphatis gr. $\frac{1}{4}$ (0.015 gram)
 Cocaine hydrochloridi gr. v. (0.3 gram)
 Phenolis gr. v (0.3 gram)
 Epinephrine (1:1000 sol.) ʒi (4 grams)
 Glycerini, q. s. ad. ʒiv (16 grams)

M. et. ft. solutio.

This will relieve the pain in almost every case. If, however, it fails, and a purulent condition supervenes, incision of the drum membrane and drainage are indicated.

TREATMENT OF BRONCHITIS IN ASTHMATIC CASES.

Babcock, in the *Journal of the Michigan State Medical Society* for August, 1913, emphasizes the efficiency of apomorphine hydrochlor-

ide in doses of one-fourth to one-half grain (0.015 to 0.03 gram), by mouth, in syrup of hydriodic acid as an expectorant in cases of asthma with chronic bronchial catarrh. These, and even larger doses of apomorphine, can be tolerated by mouth without producing nausea. A combination which is likewise often useful is the following:

℞ Tincturæ lobediæ 5v (20 c. c.)
 Fluidextracti grindeliæ ʒi (30 c. c.)
 Syrupi acidi hydriodici, q. s. ad. ʒiv (130 c. c.)

M. Sig.: One teaspoonful in water three or four times a day.

TREATMENT OF DIFFUSE ALOPECIA.

S. Ernest Dore, in the *Clinical Journal* for January 21, 1914, points out that the treatment of commencing baldness is chiefly that of the seborrhea with which it is associated. A feature to be remembered is the inaccessibility and impermeability of the hair follicles to drugs, so that the treatment of seborrhea is similar to that of ringworm, and no mere perfunctory dabbing on of a little lotion or ointment can be expected to eradicate what is really a deep seated disease.

Sulphur and tar are objectionable because of their unpleasant odor. In most cases a lotion is all that is required, and is much preferred by the patient. A useful one is the following:

℞ Hydrargyri chloridi corrosivi . . gr. ss-ii (0.03-0.12 gram)
 Resorcinolis vel acidi salicylici . . . gr. v-x (0.3-0.6 gram)
 Olei lavandulæ ℥i-ii (0.06-0.12 c.c.)
 Olei ricini vel glycerini ℥v-x (0.3-0.6 c.c.)
 Alcoholis, q. s. ad ʒi (30 c.c.)

M. et ft. lotio.

If the scalp is dry the amount of castor oil in the formula may be increased; if excessively greasy, ether or acetone may be added. An alcoholic lotion is the best dressing for the hair of women; in men, water or dilute alcohol with glycerin instead of castor oil is sometimes preferable. Resorcinol discolors white or very fair hair, and salicylic acid should be substituted for it under these circumstances.

In severe cases an ointment may be required at first. It may be rubbed in every night and washed off in the morning, or a small quantity applied once or twice a week after shampooing, e.g.:

℞ Betanaphtholis grs. v-x (0.3-0.6 gram)
 Sulphuris præcipitati grs. x-xx (0.6-1.2 gram)
 Resorcinolis grs. x-xx (0.6-1.2 gram)
 Olei lavandulæ ℥i-ii (0.06-0.12 c. c.)
 Petrolati, q. s. ad. ʒi (30 grams)

M. ft. unguentum.

To this oil of cade or other agents may be added. When seborrhea is not a marked feature, as in toxic and nervous cases, pilocarpine may be substituted for the mercury salt in the first formula or prescribed with ammonia or other stimulant, e.g.:

℞ Pilocarpinæ nitratis	gr. v (0.3 gram)
Aquæ ammoniæ fortioris	ʒi (4 c.c.)
Tincturæ lavandulæ compositæ	ʒi (4 c.c.)
Alcoholis	ʒiiss (45 c. c.)
Aquæ, q. s. ad.	ʒvi (180 c.c.)
M. et ft. lotio.	

This lotion is also effective in slight degrees of seborrhea, as the ammonia forms a soap with the fat of the scalp. Other useful stimulants are chloral hydrate, acetic acid, and cantharides (the last to be used with caution).

Internal medication should not be forgotten, especially in neurotic and anemic cases; the glycero-phosphates, cod liver oil, iron, strychnine and arsenic are of service.

Vaccines of the microbacillus of seborrhea have yielded only temporary results in the author's hands. Massage and the high frequency current are sometimes of service, but too often are persisted in long after they have ceased to do good.—*New York Med. Jour.*

TREATMENT OF HICCOUGH.

F. H. Mead, in the *Medical Record* for January 10, 1914, reports a case of persistent hiccough in a febrile patient with dilated stomach, enlarged prostate, and interstitial nephritis, in whom, after peppermint water, morphine and atropine, chloretone, and mustard had failed or brought only temporary relief, administration of a saturated solution of menthol in alcohol, in a little hot water, was promptly followed by cessation of the hiccough. Upon administration of three additional doses in the next twenty-four hours, no recurrence took place.

TREATMENT OF SKIN TUBERCULOSIS.

G. N. Meachen, in the *British Medical Journal* for October 18, 1913, commends the use of copper chloride in the treatment of lupus. The nodules are first frozen with carbon dioxide snow, in order to expose the dermis. A one per cent. solution of copper chloride in water is then injected into the nodules to the amount of 8 to 30 minims (0.5 to two c. c.) The same salt is given by mouth three times a day in cachets each containing one-sixth grain (0.01 gram). Local erythema and slight swelling follow, but in two or three days the lesions appear flatter and paler.

THE TREATMENT OF IRRITABLE COUGH.

A. P. Luff has found the following a very useful mixture for the relief of irritable cough, and especially of post-influenzal cough:

℞ Morphine hydrochloride	1.24 grain
Heroin hydrochloride	1.24 grain
Apomorphine hydrochloride	1.48 grain
Dilute hydrochloric acid	5 minims
Syrup of wild cherry	½ dram
Chloroform water	ad ½ ounce

This dose should be taken every four hours. The medicine is very palatable and the presence of the hydrochloric acid effectually prevents the precipitation of any of the alkaloids.—*Lancet*.

TREATMENT OF ANOVULAR VEGETATIONS.

Rudaux, in *Quinzaine thérapeutique* for December 10, 1913, calls attention to the fact that the elasticity of the local tissues is impaired through the presence of these vegetations, which consequently predispose to lacerations in labor. Besides, these growths afford a nidus for bacterial growth, which may be the starting point of puerperal infection or of purulent ophthalmia in the child. It is therefore important to treat these growths as soon as they appear. At first vaginal injections of the following solution are frequently sufficient:

℞ Potassii permanganatis	gr. xv (1 gram)
Aquæ bullitæ	Oiv (2 litres)

Fiat solutio.

Wet dressings of gauze moistened with the same solution should be simultaneously used. Where the growths fail to disappear, each one should be treated with:

℞ Argenti nitrat̄is	grs. xlv (3 grams)
Aquæ	ʒi (30 grams)

Solve.

Or with:

℞ Chromii trioxidi	grs. c (7 grams)
Aquæ	ʒv (20 grams)

Solve.

After the application the following powder should be dusted on:

℞ Zinci oxidi	ʒiiss (10 grams)
Acidi tannici	ʒiiss (10 grams)
Talci	ʒiiss (10 grams)

M. et ft. pulvis.

Where the vegetations are observed for the time at the close of pregnancy, they should first be disinfected with wet dressings of potassium permanganate solution or with hydrogen dioxide solution diluted with two parts of water. Then, five or six days later, they should be curetted and removed with scissors, each pedicle being ligated or, where a ligature would not hold, cauterized with the thermocautery. The rather copious hemorrhage which takes place at times should be arrested by applying pressure and some form of astringent powder.—*New York Med. Jour.*

THE TREATMENT OF CHILBLAINS.

Every evening before retiring the patient should lightly rub the affected part with a piece of gauze soaked in glycerin, and then after having wiped off the latter, he should apply the following ointment:

R	Balsam of Peru	10 grams
	Tannin	2 grams
	Spirit of turpentine	3 grams
	White vaseline	20 grams

—*Bulletin Général de Thérapeutique.*

THE TREATMENT OF MIGRAINE.

M. Allen Starr has recommended the administration of the following pill in cases of migraine associated with intestinal fermentation:

R	Sodium phenolsulphonate	5 grains
	Potassium permanganate	1 grain
	Beta-naphthol	1 grain

This pill should be coated with salol to insure its entrance into the bowel before it is dissolved. The dose is one pill after meals and at night.

THE SUBCUTANEOUS INJECTION OF QUININE.

The following solutions are adapted for the subcutaneous injection of quinine:

R	Quinine hydrochloride	1 gram
	Urethane	0.5 gram
	Distilled water	ad 10 c.c.

One c.c. of this solution contains 0.1 gram of quinine.

R	Quinine hydrochloride	2 grams
	Antipyrine	2 grams
	Distilled water	ad 10 grams

One c.c. of this solution contains 0.2 gram of quinine.

PERSONAL AND NEWS ITEMS

Ontario.

The local Board of Health for Toronto has decided not to do anything towards securing accommodation for measles cases. This disease should be cared for at home.

Dr. George J. Musgrove was unanimously nominated as a candidate for the Ontario Legislature for the Niagara Falls riding.

Dr. Nixon, M.P.P. for Halton, has again been nominated for the Legislature.

The new nurses' home for the sanitarium at Weston was opened by the Duke of Connaught on 29th May.

The Toronto jail has at last been so severely condemned that it will soon be a thing of the past. Those who have been sent to the jail in the past will be distributed according to the classification made to the Central Prison, the prison farm or the asylum.

Dr. H. R. McCullough has been appointed Medical Health Officer of Harriston, in place of Dr. Henry, who resigned to become a candidate for the Mayoralty, and was elected a few weeks ago.

Dr. Hastings, M.O.H., of Toronto, has advised that all stagnant ponds be either drained or have crude petroleum thrown upon them, so as to render them unfit for breeding places of mosquitoes.

Drs. Hastings and Nasmith, of Toronto, differ from Dr. Hodgetts, of Ottawa, and medical adviser to the Conservation Commission, on the injurious effects of chloride of lime in the water supplied for domestic uses. Dr. Hodgetts holds that it is harmful, while the former two claim that it is not. They say that the chlorine has disappeared before the water reaches the consumer.

Lieut.-Col. Farquhar, secretary to the Duke of Connaught, has written to the National Sanitarium Association to say that the Queen will be pleased to accept a souvenir of the opening of the Queen Mary Hospital for Consumptive Children. It will be remembered that her Majesty opened the institution last July by direct electric current from Buckingham Palace to the building, near Weston. The trustees had a photograph souvenir of the ceremony at this end prepared, and begged permission to send a copy to the Queen.

The fifth case of smallpox has developed in Thorold, and (as in the other cases, it is that of a child.

Dr. William Spankie, Reeve of Wolfe Island, will be a candidate for the County of Frontenac in the Ontario Legislature.

Dr. Jessop, M.P.P., of St. Catharines, will again be a candidate for Lincoln in the Ontario Legislature elections.

Dr. C. Sheard, of Toronto, had a two weeks' holiday to Atlantic City.

Recently there was a case of smallpox in Toronto. The patient was removed to the Swiss Cottage.

Conditional upon the raising of another \$4,000 within two years by the town of Stouffville for the extension of the public library, the sum of \$500 is bequeathed to the town under the will of the late Dr. Alexander Sangster.

Dr. W. R. Reeds, of the 1914 class in medicine, Toronto University, formerly one of the physical directors at Central Y. M. C. A. and the Ontario Agricultural College, Guelph, has been sent by the Presbyterian Mission Board, to China.

Dr. G. J. Musgrove will again be a candidate for Niagara Falls riding in the Provincial Legislature.

Dr. R. W. Bruce Smith, Provincial Inspector of Hospitals and Charities, was taken ill three weeks ago with an attack of appendicitis. His many friends will be glad to hear he has made good recovery.

Dr. S. M. Henry was recently elected Mayor of Harriston to fill the place vacated by the appointment of Mayor Spotton to be a county judge.

Dr. G. R. Cruickshank was a few weeks ago elected by the council of Windsor to be Medical Officer of Health to fill the place vacated by the death of Dr. Ashbough.

Dr. J. G. Scott, of Seaforth, had a narrow escape a short time ago. He was driving over the Grand Trunk Railway crossing on one of the streets when the engine of a passenger train struck the rear wheel of his buggy and threw the doctor out. He was badly bruised and sustained some cuts, but he was not seriously injured internally.

Dr. Hastings, of Toronto, said in an address a short time ago that it had cost the United States last year \$1,500,000,000 in preventable diseases. He said if one-tenth of this sum was spent each year in safeguarding the public in ten years a full control would be gained over communicable diseases.

Dr. Hertoghe, of Antwerp, addressed the Academy of Medicine on 28th April, on the subject of hypothyroidism. He has given much study to this condition and his lecture was very instructive and interesting.

The Sisters of St. Joseph gave a benefit performance at the Royal Alexandra Theatre in the early part of May for the Sunnyside Orphanage.

A young woman died in Windsor a few weeks ago after a continuous stupor of 22 days. During this time she never opened her eyes, spoke, nor took nourishment; but sometimes moved in a restless manner.

The Toronto Council made an unsuccessful attempt to induce the Private Bills Committee of the Legislature to place the inspection of school children under the Medical Officer of Health. This was not granted.

Dr. R. A. Jones, of Toronto, has gone to New York for a period of post-graduate study.

The friends of Dr. Charles O'Reilly will be glad to hear of his recovery from his illness this spring.

Dr. M. O. Klotz, of Ottawa, president of the College and Physicians and Surgeons of Ontario, has gone to Europe for the purpose of a few months' study in the German hospitals.

The site for the new City Hospital of Hamilton consists of fifteen acres on top of the mountain.

Mr. W. J. Gage, of Toronto, has recently made a gift of \$100,000 to the National Sanitarium Association for the prevention and treatment of tuberculosis.

The Chatham General Hospital will have a new wing, with accommodation for twenty patients.

A sanitarium will be built at Freeport, between Galt and Berlin. The building will have accommodation for 20 patients.

A private hospital has been completed at Copper Cliff, Sudbury, to take the place of the one destroyed by fire. The present building was erected by the Canadian Copper Cliff Company, at a cost of \$200,000.

At a recent meeting of the Kingston Medical Council the following was adopted: "That this association desires to place on record its unreserved condemnation of the practice of fee-splitting, and that any member of the association found guilty of this practice shall thereby forfeit his membership."

The Ontario County Medical Association was organized some time ago. Dr. J. S. Mellow, of Port Perry, was elected president. The vice-president is Dr. J. M. McClintock, of Uxbridge. Dr. J. Moore, of Brooklin, is secretary-treasurer. The members of the executive committee are Dr. Shier, Uxbridge; Dr. D. S. Hoig, Oshawa; Dr. Broddy, Claremont, and Dr. Blanchard, Sunderland.

The Empire wing of the Kingston General Hospital was opened on 2nd April. It cost \$60,000.

The St. Joseph's Hospital, of London, will expend about \$50,000 on additional accommodation.

Quebec.

The Medical Faculty of McGill University is giving a very attractive course of lectures from 1st to 13th June. This course is arranged with the view of being specially suited to the students who have just graduated.

Sir William Macdonald has been elected Chancellor of McGill University in place of the late Lord Strathcona.

Dr. Pariseau has been appointed Medical Officer of Health for Sherbrooke at a salary of \$2,000 a year.

The annual report of the Jeffrey Hales' Hospital, Quebec, showed that 1,124 patients had been cared for at an average daily cost of \$1.75 per head. Drs. McKinnon and MacIver are the resident surgeons.

There is to be erected in Quebec a Hospital for Infectious Diseases, at a cost of \$90,000.

The Notre Dame Hospital, of Montreal, is to be enlarged. During the year a total of 3,886 patients were treated in the institution.

The Montreal General Hospital treated over 5,000 patients last year. It had a deficit of \$67,000.

Dr. J. R. Dutton has been appointed superintendent of the Alexandra Hospital at Montreal. This hospital is for contagious diseases.

A new pavilion is to be added to the Royal Victoria Hospital, Montreal, to be known as the Ross Memoriam Pavilion. It will accommodate 150 beds. It is to be paid mostly by Mr. J. K. L. Ross as a memorial to his father.

The accommodation of the Montreal General Hospital has been increased from 260 to 324 beds.

Western Provinces.

The trustees of the General Hospital, of Vancouver, B.C., are erecting buildings for maternity cases and infectious diseases, at an outlay of \$700,000.

The General Hospital, Vancouver, B.C., has advanced its rates for patients: Semi-private wards, \$1.75 to \$2.00, and private wards, from \$2.00 to \$3.50 per day.

The Royal Inland Hospital at Kamloops treated last year 1,287 patients, at an average daily cost of \$1.95.

The Alberta Government has made it obligatory on every hospital to maintain a properly equipped laboratory for clinical pathology and bacteriology.

At Summerland, B.C., there is an effort being made to secure a hospital for the place. The Government has promised aid.

Dr. H. A. Gibson, of Calgary, who has been in Britain for some time, has passed the examinations for the diploma of F.R.C.S., Edin.

The Manitoba Government has passed an Act to augment the municipal grant of \$1 a day for indigent patients to \$1.50. Another Act authorizes the Lieutenant-Governor-in-Council to guarantee the bonds of the Winnipeg Hospital to the extent of \$400,000.

The King George Isolation Hospital, of Winnipeg, has been completed, at a cost of \$400,000.

An Act has been passed by the Alberta Legislature making municipalities responsible to hospitals for the support of their indigent sick.

The Regina General Hospital is being enlarged. Last year it cared for 1,976 patients, at a daily cost of \$2.39.

The Saskatchewan Hospital for the Insane at Battleford is now completed. The building and grounds cost \$1,250,000. Attached to the building are 2,000 acres of land. There is accommodation for 600 patients.

The Victoria Hospital at Renfrew has been enlarged and the Isolation Hospital is now finished.

A bill has been passed in British Columbia to enable medical men to be members of the board of the Royal Jubilee Hospital.

Dr. Bapty, of Victoria, has been appointed secretary of the Provincial Board of Health, to succeed Dr. C. J. Fagan, who retired recently.

The report of the Vancouver General Hospital shows a daily cost increase from \$1.98 to \$2.11. The hospital has increased in twelve years from 45 beds to one of 415 beds.

Western cities are making progress in medical inspection of school children. Winnipeg, Calgary, Regina, Saskatoon, Edmonton and other places have adopted the system.

An association has been formed in British Columbia for the purpose of furnishing medical attendance to the employees of the Canadian Pacific Railway. The new association is to be called the Pacific Medical Association.

It is proposed to expend \$100,000 on additions to the Brandon Hospital. There will be a new maternity and nurses' home.

It has been urged that the Government of Alberta should subsidize doctors and nurses who live in remote and thinly populated districts, otherwise there might be no skilled help obtainable.

Calgary will at once proceed with the sanitarium for tubercular patients towards which the people voted \$30,000.

Medicine Hat has voted \$14,000 to improve the hospital and \$5,000 for current expenses.

A small hospital will be erected at Masset, B.C., towards which the Government has made a grant of \$2,000.

A grant of \$225,000 has been made to the Vancouver General Hospital. A portion of the building will be used by McGill University until it secures its own accommodation.

Maritime Provinces.

The Nova Scotia Hospital for the Insane gives the following facts: Admitted, 184; at beginning of year, 457; discharged, 150; deaths, 37. The daily cost was \$234.00.

There has been some consideration given to the Sanatorium at Halifax. The present site is to be disposed of to the Dominion Government. The Province will contribute \$2.00 per week for the care of patients and the city and the Anti-tuberculosis League the balance. The institution is to be managed by a board of four from the city council, four from the citizens, and two from the Government.

The Highland View Hospital at Amherst treated last year 407 patients. There were 241 operations.

The official opening of the Jordan Memorial Sanatorium at River Glade, N.B., will take place at an early date. The property was given by Mrs. Jordan and \$35,000.00 has been expended on improvements by the Government. There is accommodation for thirty.

The late Mr. Starr, of Connecticut, bequeathed half of his estate to Prince Edward Hospital.

Dr. F. R. Gow has been appointed by the Dominion Government to be Chief Medical Officer and Inspector for Immigration at Halifax.

The Sisters of Charity are erecting a dispensary at St. John, at a cost of \$100,000. The old hospital is also being remodelled.

The medical fees of the Council of New Brunswick have been increased, thus: Matriculation, from \$5 to \$10; examination, from \$10 to \$30, and registration from \$10 to \$50. Physicians must pay an annual fee of \$1, or one single payment of \$20.

From Abroad.

Sir Francis Laking, who for many years had been physician-in-ordinary to the royal family, died in London 21st May. He had received many distinctions.

A tablet in memory of John Her Musser, was unveiled at the Uni-

versity Hospital, Philadelphia, on Wednesday afternoon, April 15. Dr. George E. de Schweintiz was chairman and made the presentation address, and Dr. M. Howard Fussell, Secretary of the General Committee, delivered the speech of acceptance. Dr. Musser was founder of the social service department of the hospital.

Dr. Theodore C. Janeway has accepted the offer of the professorship of medicine at John Hopkins University. Under the new plan adopted at the University this will necessitate the giving of full time to teaching to the exclusion of private practice.

The President of the French Republic has conferred the Cross of Chevalier of the Legion of Honor on Dr. Simon Flexner of the Rockefeller Institute in recognition of the services rendered by him to science.

The death of Surgeon-General Sir Arthur Branfoot will cause deep regret to a number of people in India and connected with India in every grade of society. He was a most distinguished example of the all-round physician and surgeon, capable of dealing well with almost any problem in the whole domain of medicine, a product of conditions of service in the Indian Medical Department.

Report from London on March 27, announces that the King's medal of the Royal Geographical Society has been awarded this year to Dr. Alexander Hamilton Rice, of Boston, for his distinguished work in the exploration of the Amazon and Orinoco river basins.

Dr. Daniel McFadin, of Detroit, while ill, went to attend a child suffering from diphtheria. He contracted a severe form of the disease and died of paralysis.

Mr. Arnold Friedlander, of London, England, left in his will a bequest of \$25,000 to aid in the work of cancer research.

Miss Helen Murray, of Edinburgh, has given \$40,000 to the Western Infirmary at Glasgow for the purpose of naming a ward in the memory of her late brother and sister.

The board of aldermen of New York City has passed an ordinance that anyone who publishes an advertisement containing assertions, representations or statements that are untrue, deceptive or misleading shall be subject to a fine or not less than \$25, or imprisonment for not less than five days or more than six months, or to both. It is expected by the New York Medical Record that this will prove most effective against a host of quack doctors operating in that city, as a similar ordinance in Chicago has proved effective against advertising quacks in that city.

Dr. Joseph A. E. Lanouette, one of the foremost physicians in New Hampshire, died recently. He was a surgeon in the Canadian militia from 1873 to 1881, and became prominent in his State through his heroic work during the smallpox epidemic in this vicinity in 1885.

The sixteenth annual meeting of the American Proctological Society will meet in Atlantic City, N. J., on June 22nd and 23rd. The headquarters of the meeting will be the Hotel Chalfonte. An excellent programme of papers has been arranged for.

The American Society for Physicians Study Travels has got its arrangements for the season completed. Those in the party leave Atlantic City immediately at the close of the meeting of the American Medical Association. The cost of the trip is \$180. The party will visit Philadelphia, White Haren, Buffalo, Niagara Falls, Toronto, Montreal, Quebec, Portland, Boston, Saranac Lake, and Saratoga Springs. Visits will be paid to hospitals, colleges, sanitary works, etc. Dr. Alfred Bernheim is secretary.

Nathan Straus said not long ago that the death rate among children under five years had been reduced in New York from 98 per 1,000 to 37 from 1891 to 1913. This meant annual saving of 19,750 lives of children. He claimed this was due in a very large measure to the care given to milk, especially pasteurizing it. He has now been advocating these reforms for 25 years.

The Chicago Medical Society will hold on July 14th to 18th, the third annual meeting of Alienists of Canada and the United States.

Dr. J. D. Blake, of New York, has resigned his professorship of surgery in Columbia University and has been succeeded by Dr. George E. Brewer.

The Mayor of New York City appointed Dr. S. S. Goldwater to the Commission of Health for the city.

The fifth annual meeting of the Clinical Surgeons of America will meet in London on July 27th.

The Director General of Indian Medical Affairs together with the collaboration of a member of medical assistant have commenced the publication of *The Journal of Indian Medical Research*.

The Samuel D. Gross prize of \$1,500 will be awarded every fifth year for the best original contribution on some subject of surgical pathology or surgical practice. The essay not to exceed 150 pages. The candidates to be American citizens. The essays should be sent to the Samuel D. Gross Trustees, College of Physicians, 19 S. 22nd. Street, Philadelphia, before January 1st, 1915. Those intending to compete should write for particulars.

The Medical College of Melbourne celebrated its jubilee in the first week of May of this year. It was the first Medical College in Australia.

There is still a great deal of blindness in Egypt. Of the patients who came to the hospitals 16 per cent have lost the use of one or both

eye. It has been suggested that there ought to be special ophthalmic hospitals in the various provinces with moving tents for the treatment of eye cases.

Dr. S. Schmitter has reported a case of rabies in a large monkey caught in the forest.

The final settlement of the estate of Dr. Lewis A. Duhring, for many years professor of dermatology in the University of Pennsylvania, shows that the University will receive approximately a million dollars, this sum being willed to the university hospital to the general library, the department of dermatology, and the department of archæology. The College of Physicians of Philadelphia is also one of the residuary legatees and will receive probably more than \$100,000.

Dr. William Seaman Bainbridge was the host at a complimentary dinner to specially invited members of the International Surgical Association at the Hotel Biltmore on Monday evening, the 15th inst. Nearly 200 of the most distinguished local and foreign surgeons enjoyed the excellent menu, the superior service, the genial hospitality of the occasion, besides hearing with great interest the communication of Dr. Emil Hertoghe, of Antwerp, on Hypothyroidism, which was illustrated with striking lantern slides.

The British nurses who served in the Greek Army during the recent Balkan War were thanked by the King and Queen of Greece personally and were made the recipients of gifts from both King and Queen and the Government.

The report of the Committee in New Zealand dealing with the question of syphilis shows that during the past two years there have been 1,941 fresh infections.

Dr. W. W. Keen, of Philadelphia, has been elected President of the next Congress of the International Surgical Association to be held in Paris at the end of September, 1917. The officers of the association, re-elected at a meeting held this week in New York, are: President, Dr. Willems, of Ghent; Secretary, Dr. Mayer, of Brussels; Treasurer, Dr. Lorthoir, of Brussels.

The Massachusetts State Senate on April 10 passed an antivaccination bill which provides that any person who has reached the age at which attendance at school is permitted or required, and who presents a written statement from a parent or guardian, or by himself, if twenty-one years old, which declares that such parent or guardian is opposed to vaccination, shall not, as a condition precedent to admission to the public schools, be required to submit to vaccination, except at the time of a threatened or actual outbreak of smallpox, when the school board shall temporarily debar such person from the schools.

Dr. H. W. Armit, well known in London for his research work, has been appointed Editor of the *Australasian Medical Journal*. We wish him every congratulation in the responsible duties of guiding the future of so valuable a periodical.

It is announced that the Fothergill gold medal of the London Medical Society for 1914 has been awarded to Dr. John George Adami, F.R.S., LL.D., Strathcona professor of pathology and bacteriology at McGill University, for his work on pathology and its practical application to medicine and surgery.

It was announced at Albany on April 6th that Dr. Cressy L. Wilbur, of Washington, D. C., chief statistician of the United States census bureau, has been appointed head of the new division of vital statistics in the New York state department of health, at a salary of \$4,000 a year.

Dr. Joseph D. Bryant of New York, professor of surgery in the University and Bellevue Hospital Medical College, died from diabetes in St. Vincent's Hospital on April 7. Dr. Bryant was born at East Troy, Wis., on March 12, 1845, and was graduated from Bellevue Hospital Medical College in 1868. He was greatly honored by the profession, serving at various times as President of the New York State Medical Association, the Medical Society of the State of New York, the New York Academy of Medicine, and the American Medical Association. He was the author of an elaborate work on operative surgery, and collaborated with Dr. H. Buck in the chief editorship of the *American System of Surgery*.

On March 31, the New Jersey state legislature passed a bill permitting outside medical societies to engage in animal experimentation within the state. This was done to enable the location at Rahway, N. J., near the New Jersey Agricultural Experiment Station, of the new department of the Rockefeller Institute for the study of animal diseases, for the endowment of which Mr. John D. Rockefeller has recently given a fund of \$1,000,000.

Sometime ago Sir John Bland Sutton gave £20,000 to establish a pathological department at Middlesex Hospital and Dr. C. H. Browning, of Glasgow, has been appointed to take charge of the laboratory.

The annual report of Mt. Sinai Hospital, shows that during the past year, 7,537 patients were treated in the hospital, 4,037 surgical operations were performed, and the dispensary consultations numbered 231,092. The expenditure for the year was \$469,892, an excess of \$48,507 over the receipts.

After three days spent in taking testimony and forty-eight hours in deliberation, the jury in the case of Dr. Joshua E. Sweet, professor of

surgery in the Medical Department of the University of Pennsylvania, failed to agree on a verdict and were discharged by the presiding judge. Dr. Sweet was indicted last year with five other members of the medical faculty of the University, all being charged with cruelty to animals in that the animals were neglected after having undergone operations.

The foundation stone of the new School of Tropical Medicine at Calcutta, India, was laid recently, the government having appropriated \$195,000 for the site and the erection of laboratory buildings. The school will accept students from all over the world.

We have to record, with great regret, the death of Dr. John Abercrombie, consulting physician to Charing Cross Hospital, to the Foundling Hospital, and at one time assistant physician to the Hospital for Sick Children, Great Ormond Street. Dr. Abercrombie retired from London to reside in Westmorland a few years ago. He had been in failing health for some year or two, and his death was due to cardiac failure.

Statistics recently published show that the mortality of measles per 100,000 is 48 in Chile, 44 in Hungary, 38 in Spain, 35 in Belgium, 33 in Austria, 29 in England and Wales, 10.8 in the United States, 6 in Sweden, 3.4 in New Zealand, and 2.4 in Australia.

It is announced that Mr. James Deering, of Cleveland, Ohio, has made a gift of \$1,000,000 for the endowment of the Wesley Hospital of that city, with the provision that it shall be a teaching hospital under control of Northwestern University. This munificent gift is made in memory of the donor's father and sister.

It is announced that arrangements have been effected for the control by the Cornell University Medical College of the largest cancer hospital in this country. The buildings for this are those of the General Memorial Hospital, at 105th and 106th Streets and Central Park West, an institution which was originally intended for the treatment of cancer. A fund of over \$1,000,000 has already been secured, and \$500,000 of this is stated to have been contributed by Dr. James Douglas, head of the house of Phelps, Dodge and Company, through whom also the hospital will receive a large supply of radium.

We regret to record the death, on April 17th, of Dr. T. J. Griffiths, who was President of the British Medical Association when the annual meetings was held at Swansea in 1903. Dr. Griffiths had been in failing health for some time, and a year or two ago went to reside at Bourne-mouth, where he died. The immediate cause of his death was double pneumonia.

The Rockefeller Commission for the Eradication of Hookworm Disease, it is announced, is to extend its field of activity into Central

and South America; and Dr. Joseph H. White, of the United States Public Health Service is to superintend this work.

On April 29 the All Around Dickens Club, of Boston, celebrated its twentieth anniversary by dedicating a free bed in memory of Charles Dickens at the New Children's Hospital.

Dr. Charles Pickering Putman, who died on April 23 last in his 70th year, was born in Boston, September 15, 1844. He was the son of Charles Gideon Putman, M.D., and Elizabeth Cabot Jackson, both of Boston, and grandson of Dr. James Jackson. He graduated from Harvard College in 1865 and from the Harvard Medical School in 1869; continued his medical studies for a while in Germany, and began the practice of his profession in Boston in 1871. Since that time he had carried on a general practice, though for many years he made a specialty of pediatrics and did some excellent pioneer work in orthopedics. He was a lecturer at the Harvard Medical School on diseases on children from 1873-75 and a clinical instructor on that subject 1875-79. He served the Boston Dispensary as district physician from 1871-1873 and as orthopedic surgeon 1873-57. In 1898 he was elected President of the American Pediatric Society.

The Boston Medical Library is a duly incorporated institution of Massachusetts, having a membership of 700 physicians in Greater Boston, funds amounting to over \$500,000, and a library of 80,000 volumes and 56,000 pamphlets.

It is announced that Brigadier General William C. Gorgas, surgeon general of the United States Army, is one of the first two recipients of the gold medal of the National Academy of Sciences, which is awarded "for eminence in the application of science to the public welfare." The medal is awarded to Colonel Gorgas in recognition of the work done by him in connection with the building of the Panama Canal. The other recipient of the medal is Colonel George W. Goethals. The medals were presented at the annual banquet of the academy, held in Washington, D. C., on Wednesday evening, April 22.

The University of Glasgow has conferred the honorary degree of LL. D., on Sir William B. Leishman.

OBITUARY

JAMES O. EMMETT.

The death occurred on 30th April at Fonthill of James O. Emmett, M. D., one of the older practitioners of Welland County. He was

sitting in his chair when seized with acute dilatation of the heart, and expired a few minutes later.

Dr. Emmett was 71 years of age, and had been practising in Font-hill for 49 years. He was born in the Township of Grantham, and his paternal grandfather was Stephen Emmett, a U. E. Loyalist from Delaware who settled where the Village of Homer now stands. He was for some years Reeve of Pelham Township, and was often solicited to stand as Liberal candidate in this riding.

THOMAS TRENAMAN.

Dr. Thomas Trenaman, city medical officer for Halifax, one of the best known physicians in Nova Scotia, died 27th April. He was a Past Grand Master of the Grand Lodge of Masons, a former president of St. George's Society, and for many years was president of King's College, Windsor, N.S. He was 70 years of age and is survived by two children.

LEVI SECORD.

The death occurred at the Brantford General Hospital 8th May, of Dr. Levi Secord, one of the best known physicians of that city. Dr. Secord who was fifty-nine years of age, was born at Niagara-on-the-Lake, but lived nearly all his life in Brantford. He was only four years old when his father was killed in the Desjardins Canal accident. The doctor began the business of his profession in Brantford in 1884 and acquired a large practice. He was an alderman for several years, and was Mayor in 1893-94. He gave a great deal of attention to the work of the Ancient Foresters, becoming High Court Physician to the order. He was also prominent in Masonic circles, having been a Master of Doric Lodge, A. F. & A. M., and also Past Grand Senior Warden of the Grand Lodge. He formerly was in charge of the medical work on the Indian Reserve. He leaves three sons, Dr. E. R. Secord, Brantford; Dr. W. H. Secord, Winnipeg, and A. O. Secord, Brantford.

W. H. JONES.

Dr. Jones, of Prescott, died on 20th May at the age of 82 years. He was one of the best known medical men in his part of the province. He was born in Prescott and lived there all his life.

J. H. MATHIESON.

Dr. J. H. Mathieson, one of St. Mary's best known citizens, died suddenly on 10th May. He was in his seventy-first year, and for some time had retired from the practice of medicine. Latterly he was in poor health. On the forenoon he went to his office stating that he would return for his dinner. When he did not come Mrs. Mathieson went to his office and found her husband sitting in his arm chair with life extinct. He had been dead about an hour.

Dr. Mathieson was born at Embro, and was a graduate of McGill University, coming to St. Mary's as a young man. In the forty years he resided there he took an active interest in public affairs, among other things serving as an Alderman. His widow and one son survive him.

A. MILTON BEEMAN.

Dr. Milton I. Beeman, well known through Lennox and Addington for 40 years as a medical practitioner, and for many years prominent in municipal and Masonic circles, died 10th May, at his home Newburgh from the effects of a paralytic stroke sustained some months ago. He was nearly sixty three years of age. For many years he was a member of the Provincial Board of Health, also a Major of the 47th Regiment.

Dr. Beeman took an active part in every movement calculated to enhance the interests of the community, and was highly respected throughout the surrounding country. His widow, four daughters and two sons survive.

G. W. HURLBURT.

Dr. Hurlburt, of Thorbury, Ontario, died on 12th May at his home there. He was seventy-seven years of age. He was well known throughout a wide range of country around his home, and was a highly esteemed practitioner.

GEORGE H. CHRISTIE.

Dr. George H. Christie, son of the late Dr. Thomas Christie, who was assistant surgeon at Point St. Charles, Que., during the ship fever epidemic of 1847-48, died at his home in Lachute, Que., on 12th May. He is survived by his wife and four children.

J. A. ASHBAUGH.

Dr. Ashbaugh died at Guelph Sanatorium on 10th May. He was Medical Officer of Health for Windsor, and had been given leave of absence on account of ill health, which had been afflicting him for several years. He was forty-seven years of age, and leaves a widow and one child. He had been in practice in Windsor for fifteen years. He was a graduate of Trinity College, Toronto.

H. JEANNOTTE.

Dr. Jeannotte, of Montreal, died at his home at the age of sixty-five. He was educated in Montreal and practised there since 1877. He leaves a widow and seven children.

WILLIAM CALDWELL.

Dr. Caldwell died at his home in Peterborough. He was a graduate of McGill, and followed his profession for ten years at Lakefield, when he located in Peterborough and took up diseases of the eye, ear, nose and throat for the past twenty-five years. He was medical attendant to the county jail for many years.

G. H. W. RYAN.

Dr. Ryan died at Vermillion, Alta. He was born at Melford, Ont., in 1874. He was a graduate of McGill and practised for a number of years in the state of Maine. He then went to Vermillion. At the time of his death he was Mayor of Vermillion and had held a number of other public offices. He leaves a widow and one daughter.

J. J. BROWN.

Dr. Brown, of Owen Sound, died there in his fifty-fourth year. He had been in poor health for several years. He was a graduate of Toronto University.

J. O. STEWART.

Dr. Stewart, Montreal, was a graduate of McGill. He practised in Montreal where he died. For a number of years he practised his profession in Cazaville, Que. He leaves a widow and two sons.

WALTER CARTIER.

Dr. Cartier died in Montreal. He had followed his profession duties at Coteau Landing.

J. LANCTOT.

Dr. Lanctot, one of Montreal's physicians died there in his sixty-fifth year. He was taken ill in London, Eng., eighteen months ago and has been in poor health ever since. He represented Quebec at the French Medical Congress just prior to his illness.

H. JEANNE.

Dr. Jeanne, of Montreal, died there in his 65th year. He had been editor of *Le Concours Medical* for some years.

Dr. EVANS.

Dr. Evans had been in practice for a short time at Barry's Bay. He took ill and died suddenly at Eganville from an attack of heart failure.

CHARLES B. LAKE.

Dr. Lake, of Ridgetown, Ontario, died 18th March. He was born in the County of Frontenac in 1842, and graduated from Queens in 1866. For some time he lived in Thamesville and latterly in Ridgetown. His widow and three sons survive.

A. L. McLAREN.

Dr. McLaren, of Point Edward, Ont., died in the latter part of March, in his 67th year. He was a well known physician of Lambton County. He graduated from the University of Toronto. At one time he practised in Port Huron. He left a widow and adopted daughter.

G. L. LAFOREST.

Dr. Laforest, of Montreal, was born in Quebec in 1857. For thirty-five years he had lived in Montreal, where he died on 20th March. He is survived by his widow and three children.

W. C. COUSENS.

Dr. Cousens, of Ottawa, died on 12th April, at the age of 59. He graduated from McGill in 1882, and afterwards took a post graduate course at Edinburgh. He had a large practice and took a keen interest in St. Luke's Hospital. He was a man of many accomplishments and of a most benevolent nature. He left a widow and five children.

 BOOK REVIEWS

BROWN'S JUNIOR NURSE.

The *Junior Nurse*. By Charlotte A. Brown, R.N., Instructor in the Boston City Hospital; Graduate of the Boston City Hospital and Boston Lying-in Hospital Training Schools for Nurses; late Superintendent of the Hartford Hospital Training School, Hartford, Conn. 12mo., 208 pages, illustrated. Philadelphia and New York: Lea & Febiger, 1914. Cloth, \$1.50 net.

Brown's Junior Nurse is a volume which should be read and kept for reference by everyone who enters upon the course of training for the nursing profession. It is full of valuable information which is particularly useful to the beginner, and which is sure to be of service not only throughout the entire course in the training school, but afterwards in actual nursing of any kind. The book is characterized by clearness and simplicity. In the presentation of each topic the clinical features are emphasized throughout. The volume opens with chapters on the qualifications of the nurse, and her personal hygiene, on bed-making and the admission of patients. Then follow discussions of all of those subjects, a knowledge of which is necessary for the discharge of the nurse's everyday duties. The sections on bandaging, on emergencies and on infectious and contagious diseases are worthy of special attention. A convenient glossary is placed at the end of the volume. The illustrations are extremely helpful, especially those in the section on bandaging.

 THE PRINCIPLES OF PATHOLOGIC HISTOLOGY.

By Frank B. Mallory, M.D., Associate Professor of Pathology, Harvard Medical School, and Pathologist to the Boston City Hospital. Octavo of 677 pages, with 497 figures, containing 683 illustrations, 124 in colors. Philadelphia and London: W. B. Saunders Company, 1914. Sole Canadian agents, The J. F. Hartz Co., Ltd., Toronto. Cloth, \$5.50 net.

This excellent work on pathology is divided into two parts, general and special general pathology is made to cover inflammation, retro-

grade processes, special injurious agents, and tumors. The portion devoted to special pathology takes up the morbid changes in the various organs. The principle the author had in mind in the preparation of this work was to ascertain the cell elements at fault, and then to trace the lesions from the simplest to the most complex types. This is what the author calls the morphological method. This, of course, is a very natural way to proceed to unravel the intricacies of pathology. In this way one can see how one lesion may lead on to another, as an acute inflammation ending in sclerosis of the organ. Dr. Mallory is a trained pathologist and an experienced and cultured writer. This work is one of much more than ordinary merit. It is very well illustrated and printed on very superior paper. The publishers have done all that could be expected. The work will command respect from all its readers.

CHEMICAL PATHOLOGY.

Being a Discussion of General Pathology from the Standpoint of the Chemical Processes Involved. By H. Gideon Wells, Ph.D., M.D., Professor of Pathology in the University of Chicago, and in Rush Medical College, Chicago. Second edition, thoroughly revised. Octavo of 616 pages. Philadelphia and London: W. B. Saunders Company, 1914. The J. F. Hartz Company, Toronto, sole Canadian agents. Cloth, \$3.25 net.

Chemical pathology for some years has been growing steadily in importance. It now requires a large volume to tell what is known about the chemistry of disease. There is the chemistry of the cell, of enzymes, of bacteria and their products, of animal parasites, of plant and animal toxins, of immunity, of inflammation, of the blood, of edema, of tumors, of secretions, of excretions, of metabolism, of the glands, and so on. The author has spared no pains to bring this edition well up to date, and has followed up the literature of the subject with assiduity. Coupled with this careful study of what others have done comes in his own wide experience and practical knowledge. There is no portion of the human body into whose chemistry, both in health and disease, the author has not gone with enthusiasm. The chemical method of studying the changes wrought by disease has now become a real and valuable aid to the elucidation of pathology in its widest sense. For the task of writing such a book, the author possesses special qualifications. It would be impossible to enter into the many excellent features of this work. We can praise it without hesitation, and speak in equally high terms of the publishers' part.

THE PRACTICE OF PEDIATRICS.

By Charles Gilmore Kerley, M.D., Professor of Diseases of Children, New York Polyclinic Medical School and Hospital. Octavo of 878 pages, 139 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. The J. F. Hartz Company, Toronto, Canadian agents. Cloth, \$6.00 net; half morocco, \$7.50 net.

Some time ago the author gave to the medical profession his work on "The Treatment of Children's Diseases." This gave rise to many requests for a systematic treatise on the whole field of pediatrics. The present volume is the answer to these requests, and covers nearly nine hundred printed octavo pages. The diseases of the several systems and organs and communicable diseases are fully covered in these pages. The work is of a very practical character, and treatment forms a prominent part of what the author has to say. A number of infectious diseases are taken up under the system affected, as serebro-spinal meningitis in the section devoted to nervous diseases, and dysentery in the section on diseases of the intestines. The work is written in an easy and clear style, and is of a most practical character throughout, and many prescriptions appear as guides to what should be given. The book is very fully and very effectively illustrated. A glance through the contents makes it quite clear that there has been nothing omitted. The book is an attractive one from every standpoint of paper, binding and typography. This volume is worthy of a place along with the best of books.

STATE BOARD QUESTIONS AND ANSWERS.

By R. Max Goepf, M.D., Professor of Clinical Medicine at the Philadelphia Polyclinic. Third edition, thoroughly revised. Octavo volume of 717 pages. Philadelphia and London: W. B. Saunders, 1913. Sole Canadian agents, The J. F. Hartz Co., Ltd., Toronto. Cloth, \$4.00 net; half morocco, \$5.50 net.

This large volume contains the questions that have been set by the medical examiners of the Pennsylvania State Board of Health. The author has prepared answers to these. The work is a very useful guide to students preparing for examinations, as these answers serve as a help to students by giving valuable information and also furnishing models for students to follow in answering questions.

WRIGHT'S HISTORY OF LARYNGOLOGY AND RHINOLOGY.

By Jonathan Wright, M.D., Director of the Department of Laboratories, New York Post-Graduate Medical School and Hospital. Second edition, revised and enlarged. Octavo, 357 pages, illustrated. Philadelphia and New York: Lea & Febiger, 1914. Cloth, \$4.00 net.

This work belongs to the type of medical book which is but rarely published, and then only in limited editions, which appeals to the physi-

cian for its literary and historic value rather than for its practical usefulness in his everyday professional life. It is a book which will afford him pleasure and recreation in his leisure hours, and from which, nevertheless, he will obtain much that will be of value to him in his daily routine. It will broaden his point of view, and give him a better perspective, not only of the specialty in which he may be engaged, but also of all branches of medicine, to see how the particular department reviewed herein has grown from crude beginnings to one of the most highly perfected of all the specialties. The author is not only a gentleman of eminence in the medical world, but also a litterateur and a historian, and he has portrayed his subject in an interesting and charming style. Beginning with Egyptian medicine, and continuing until the advent of modern procedures, Dr. Wright has given the reader a story full of entertainment and historic interest.

This is a very interesting way of studying the history of medicine, by taking it up under the headings of diseases rather than periods, schools, countries, or names of noted men. Each of these ways of studying the history of medicine has its value, but the one chosen by Dr. Wright is especially useful. We could wish that other fields of medicine were covered in a similar manner.

ASHHURST'S TEXT BOOK OF SURGERY.

For Students and Practitioners. By Astley Paston Cooper Ashhurst, A.B., M.D., F.A.C.S., Instructor in Surgery in the University of Pennsylvania; Associate Surgeon to the Episcopal Hospital; Assistant Surgeon to the Philadelphia Orthopedic Hospital and Infirmary for Nervous Diseases. Handsome large octavo, 1141 pages, with 7 colored plates and 1032 illustrations, mostly original, in the text. Philadelphia and New York: Lea & Febiger, 1914. Cloth, \$6.00 net.

This new text-book of surgery is without question the most important publication of the year in any branch of medical science. It has been designed and prepared by one of the foremost surgeons and teachers of the present time. It represents the most modern thought and practice, and reflects the unusual qualifications, literary as well as professional, of its talented author. Dr. Ashhurst has presented clear and accurate statements of facts, and has placed emphasis on the underlying principles; he has given particular attention to pathogenesis, diagnosis and indications for treatment, and has completed the whole with adequate descriptions of operations. A remarkable feature of the work is the magnificent series of 1,032 illustrations, which are almost entirely original, and have been prepared especially for it. Each one has been

chosen for the information it conveys. The sections on Fractures and Dislocations and on Diseases of the Bones and Joints will be appreciated by those familiar with the author's excellent monograph on "Fractures of the Elbow." Genito-Urinary Surgery, Gynecology and Orthopedics are discussed at sufficient length to meet the requirements of general surgeons.

This volume is a complete text-book on surgery. In a somewhat condensed form it covers all that the general surgeon will be called upon to cope with. The author, however, though fairly brief, is never obscure, nor does he omit anything that is essential. His wide experience as a surgeon and a teacher enables him to say what is really valuable and leave out all unimportant detail.

THE HYPODERMIC SYRINGE.

By George L. Servoss, M.D., editor Nevada Medicine; Member of the Nevada State Medical Association; Fellow of the American Medical Association. 317 pages. Newark, N.J.: Physicians' Drug News Co., publishers. Cloth, \$2.00.

This book is a truly timely and useful one. There is a general introduction on the value of drugs administered in this manner. This is followed by a chapter on the syringe itself, the best kind and how to use it. Then come the remedies of all sorts and how to use them and for what diseases. First, there are the many drugs and chemicals. Then follow the antitoxins and serums. Several chapters are devoted to bacterins. The book is closed by a chapter on shock and one on syphilis and the new treatment. The book is a most valuable one.

NEW JERSEY BOARD OF HEALTH.

Thirty-sixth Annual Report of the New Jersey Board of Health, 1912, and Report of the Bureau of Vital Statistics. Union Hill, N.J.: Despatch Printing Co.

The report of the New Jersey Board of Health is always a valuable volume and contains much useful information on health topics. The present report discusses very fully sanitation, creameries, foods, inspections, water, sewage and such like. The tables are numerous.

A MIND REMEDY.

By John G. Ryerson, M.D., Boonton, N.J.

The author puts forth a plea for the use of lactose, sugar of milk, as a remedy for many ailments, such as eczema, goitre, arteriosclerosis,

chorea, chronic nephritis, diabetes, etc. It is stated that disease is one with varieties. He contends that lactose is a mind remedy and in this way cures these disorders. It is said that it will cure the severest forms of disease in from a few minutes to a few weeks. Even spinal curvature yields to this remedy. It is more brilliant among remedies than the diamond among gems!

COAL IN CANADA.

Conservation of Coal in Canada, with Notes on the Principal Coal Mines, from the Commission of Conservation. By W. J. Dick, M.Sc., Mining Engineer for the Commission. Toronto: The Bryant Press, 1914.

This volume from the Commission contains all the information possible on the coal of Canada. The volume goes fully into the different varieties of coal in the country, where they are to be found, and the methods of mining. It urges the utmost conservation of our supplies, as the day may not be far distant when the United States may prohibit the exportation of anthracite coal. It is pointed out that areas of this variety are rather limited in Canada. The report is worthy of careful study.

MISCELLANEOUS MEDICAL NEWS

ANTIVIVISECTIONIST MERCY.

Dr. Samuel M. Brickner, for many years an honored editorial assistant to the *New York Medical Journal*, contributed the following striking verses to the *New York Times* for April 23rd:

The counterpane that covers motherhood
 Too often still becomes a shroud entwined:
 "Let not this sacred act demand our blood
 But spare the dog and all his sacred kind."

Our little children fall a hideous prey
 To motherhood's scourge, and broken, bent, they lie:
 "Blot out this epidemic from the day,
 But spare the monkey and the stable fly."

The White Plague stalks abroad with poisoned breath
 And leaves men prostrate like a broken twig:
 "Oh! spare us from this poignant, living death,
 But do not touch the precious guineapig."

From overseas the pest comes like a ghost,
 And settles grinning on our household mats:
 "Oh! save us from this devastating host,
 But spare the poor mosquitoes and the rats."

A growth malign, with tentacles a score,
 The fairest and most useful friends will claim:
 "Oh! let us suffer from this scourge no more,
 But spare the mouse, we ask, in Mercy's name."

LITERARY NOTE.

Be we financier, industrial worker, navy, scavenger, or merely a gentleman, we all suffer to a greater or less degree from the ills which our vocations or avocations engender. Just how to prevent, ameliorate or cure these but partly understood ills should no longer be a puzzle to the man, employer or physician, because a reliable and essentially practical book is soon to appear, under the joint editorship of Dr. Geo. M. Kober, of Washington, D.C., and Dr. Wm. C. Hanson, of Boston, Mass. Among the contributors are such authorities as Sir Thomas Oliver, Legg (London), Teleky (Vienna), Devoto (Milan), Edsall (Harvard), Alice Hamilton (Chicago), etc. P. Blakiston's Son & Co., Philadelphia, will publish the volume.

THE TORONTO ACADEMY OF MEDICINE.

The various reports submitted to the annual meeting of the Toronto Academy of Medicine were of a very gratifying character. The Trustees announced that at an early date the academy would be in a position to go on with a portion of the entire plan of a building for the academy as a memorial section to the late Dr. J. F. R. Ross, for which arrangements had been completed and the cost provided for. The architect was engaged on a general plan, which had been considered by the Council and a number of suggestions offered. This building will

be a portion of a complete design. It is hoped that there will not now be any undue delay in progressing with the work.

The trustees reported receipts amounting to \$1,049.00 during the year, and expenditures of \$782.61. The assets of the academy amount to \$22,953.86, not including books, journals, pamphlets, etc. These assets are made up of cash on hand, cash invested, furnishings, and building.

The honorary secretary, Dr. W. Harley Smith, reported that the meetings of the academy and its sections had been very well attended. There are now 350 resident fellows on the roll, and 46 non-resident fellows. Drs. Burrett and Stevenson had been made life fellows. Drs. John Caven, C. F. Durand, Fred Fenton, and T. H. Stark died during the year.

The Council reported that much good work had been done. Dr. Goodchild had undertaken the duty of preparing reports of the discussions at the meetings of the academy and its sections.

The Workman's Compensation Act had received a good deal of consideration. The efforts to secure for the medical profession proper consideration from the Legislature had not been successful, though every effort had been put forth. Some excellent work was done by the Council in the matter of the medical inspection of public school children. There was a very full discussion of the whole subject by a committee of the Council and the medical inspectors, and a better understanding will no doubt result between the inspectors and the general practitioners.

The Honorary Treasurer, Dr. W. A. Young, submitted a statement of the finances of the academy. There had been received from fellows in fees \$3,694.40, and other cash receipts of \$833.59, making a total of \$4,527.99. The expenditures amounted to \$3,336.07, and there had been placed in the savings account \$1,100.00. The total amount in the savings account was at the end of the year \$1,619.54.

The chairman of the Library Committee, Dr. John Ferguson, submitted its report. The books in the general library now number 5,738, there are 300 volumes in the Bovell Library and 40 in the Workman Library in addition to the foregoing. During the year 217 volumes had been added. The number of books presented to the academy is steadily increasing. There are now received at the academy 176 periodical publications, of which 61 are purchased and 115 come by gift.

Dr. H. B. Anderson was elected President; Dr. W. H. B. Aikins, Vice-President; Dr. W. A. Young, Honorary Treasurer, and Dr. J. H. Elliott, Honorary Secretary.

ACCOUNT OF THE ONTARIO HEALTH OFFICERS' ASSOCIATION.

The Ontario Health Officers' Association held its third annual conference in Convocation Hall on Thursday and Friday, the 7th and 8th of May last, under the presidency of Dr. Charles J. Hastings, Medical Officer of Health for the City of Toronto. There were about 300 members present, and the programme of papers was a most interesting and instructive one.

On the first morning of the meeting papers were given by Dr. T. W. Vardon, of Galt, on the "Difficulties of the Medical Officer of Health in Town and Country," and by Dr. John W. S. McCullough, Chief Officer of Health, on the "Duties of the Medical Officer of Health in Ontario." These papers were productive of very free discussion.

A luncheon was given by the City of Toronto on the first day, when an address of welcome was given by his Worship the Mayor. This was replied to by Doctors McCullough, of Toronto; Brien, of Essex, and Powers, of Rockland. Controller McCarthy and others also made short addresses.

At the second session the President's address was given by Dr. Hastings indicating "The value of public health matters from the social and economic sides." Dr. H. W. Hill, of the Institute of Public Health, London, gave a very exhaustive paper on "The Transmission of Typhoid Fever," and Dr. J. A. Amyot, Director of Laboratories, had a capital "Interpretation of a Sanitary Analysis of Well Water." The discussion upon these subjects was prolonged, many questions were asked, and we feel sure that the members derived great benefit from these papers.

In the evening the public meeting was held in Convocation Hall, where a series of moving pictures, illustrating public health questions, was given by the Provincial Board of Health. This was followed by a most lucid address upon "Therapeutic Vaccines and Sera," by Dr. J. G. Fitzgerald, Associate Professor of Hygiene, University of Toronto. The doctor described the difference between vaccines, serums and antitoxins, and incidentally pointed out the great value to the Province from the work of the Provincial Board of Health, in placing the means of prevention of rabies and typhoid fever, as well as the treatment of diphtheria, within the reach of the general public at greatly reduced prices. The doctor pointed out that in the treatment of diphtheria, especially in cities, the very poor and the very rich were unlikely to suffer from the non-use of antitoxin in proper doses, the poor being supplied by the Board of Health and the rich by their own ample

means. In the case of those of the middle class the price of antitoxin has been so great that adequate use of it has not heretofore been made. He pointed out that in the Isolation Hospital in Toronto the death rate from diphtheria is 6.45 per cent., while the rate throughout the city is 16 per cent.

The recent action of the Provincial Board of Health in making arrangements for a supply of this product has cut the price to about one-quarter of that heretofore in existence.

There was a large attendance at the public meeting and the audience was amply repaid.

On Friday morning two papers were given upon milk. The first on "Milk Supply of Smaller Cities and Towns," by Dr. D. A. McKillop, Medical Health Officer of St. Thomas; the second, "How Toronto Controls her Milk Supply," by Hoyes Lloyd, B.A.Sc., of Toronto. Both of these papers were most practical and were freely discussed.

The question of the fees paid the Medical Officers of Health in small towns and rural districts was brought up by Dr. W. E. Crain, of Crysler. It was pointed out that in the rural districts, especially, the Medical Officer of Health, although his tenure of office has been made secure under the Public Health Act, still continues to receive a very inadequate salary. The discussion was for the purpose of pointing out some way in which this injustice could be remedied. The subject provoked a very vehement discussion. Some members took the view that a minimum salary for these officers should be laid down by the Legislature, others took the view that the Medical Officer of Health's salary would be increased when he showed the public that he was earning more money than he now received. Finally a committee of seven members, one from each health district of the Province, was appointed to discuss this question and report upon it at the next meeting of the association. The members of the committee are: Dr. J. W. Brien, of Essex; Dr. T. W. Vardon, of Galt; Dr. Emerson Bull, of Lambton Mills; Dr. T. W. G. McKay, of Oshawa; Dr. W. E. Crain, of Crysler; Dr. W. J. Cook, of Sudbury; Dr. C N Laurie, of Port Arthur.

The Question Drawer was opened by Doctors Amyot and McCullough who gave answers to a large number of questions.

At the luncheon, given by the Provincial Board in the Parliament Buildings, the Rev. John McNeill, of Cook's church, delighted the audience by his humorous remarks.

In the afternoon of the second day there were two papers in reference to schools and school children; the first on "Sanitation," by Dr.

S. F. Millen, Medical Officer of Health, Woodslee, and the second on "Inspection of School Children for Efficiency," by Dr. W. E. Struthers, Chief Medical Inspector, Toronto public schools. Dr. Millen made some severe criticisms upon the sanitary conditions of schools throughout the Province, backing up his statements by facts and figures; while Dr. Struthers gave a full description of some of the means undertaken by the Board of Education of Toronto for the improvement of the physical conditions of the children in the public schools. These papers were ably discussed; the remarks of the various speakers showing the greatly increased interest taken in public health matters by the members of the association.

A committee on papers for the next meeting of the association was appointed, to consist of: Dr. D. B. Bentley, of Sarnia; Dr. A. E. Speers, of Burlington; Dr. T. A. Bertram, of Dundas; Dr. J. W. S. McCullough, of Toronto.

Dr. R. W. Hall, Medical Officer of Health, Chatham, and Dr A. W. McPherson, Peterboro, were appointed president and vice-president, respectively.

This association is now on a very substantial footing, the attendance of such a large number indicating the great interest taken in public health questions.

WORK AMONG LEPERS IN INDIA.

An interesting address was delivered recently at the Toronto Auxiliary of the Mission to Lepers, when Dr. Margaret Patterson spoke of the splendid work that had been done by the Leper Mission at Allahabad.

Dr. Patterson said that in 1899, before the mission took over the work in Allahabad, the lepers, who were then cared for by the Government, were dirty, ragged and underfed; the buildings were dilapidated, and the inmates only remained long enough to gain strength to go on their way again begging.

When the mission took over the work, new buildings were erected, a dispensary was opened and the lepers were kept clean and comfortable.

They were each given \$1 a month with which they did their own shopping, and provided with plots of ground in which to plant vegetables.

Their state was so comfortable that the leper here considered him-

self a citizen with a real interest in life, instead of desiring to run away as he did under the previous conditions.

TORONTO'S HEALTH.

Toronto's health was decidedly good during the month of April this year, as the following table of reported cases of communicable disease sets forth:

	April 1914	April 1913	March 1914
Diphtheria	47	70	82
Scarlet fever	164	120	210
Typhoid	14	9	9
Measles	433	611	410
Smallpox	1	10	9
Tuberculosis	5	48	55
Chickenpox	38	49	37
Whooping cough	24	8	25
Mumps	168	...	156
Erysipelas	16	...	14
Diphtheria carriers	2	1	5

HEALTH OF ONTARIO.

The report of the Provincial Health Department for the month of April shows a decided falling off in the number of communicable diseases compared with the same month last year. During the month just closed there were 1,536 cases of all kinds, with 145 deaths, as against 2,236 cases in April, 1913, with 175 deaths.

The fireat reduction in the number of cases is in measles. There were 609 cases last April and 1,522 cases in the same month a year ago. There is a substantial increase in the number of scarlet fever cases, 347 last April, compared with 279 cases last year, with five more deaths. Last year in April there were 23 cases of whooping cough, with three deaths, and this year there were 180 cases, with eight deaths. Smallpox has dropped from 120 cases last year to 31 cases for the month just ended. The deaths from these diseases last year numbered 175 and 145 in April of this year.

The following table shows the increases and the decreases in the various diseases:

Diseases.	1914.		1913.	
	Cases.	Deaths.	Cases.	Deaths.
Smallpox	31	0	120	1
Scarlet fever ...	349	11	279	14
Diphtheria ...	147	13	164	19
Measles	609	5	1,422	10
Whooping cough ...	180	8	23	3
Typhoid ...	55	5	69	14
Tuberculosis ...	145	90	149	105
Infantile paralysis	2	1
Cerebro-spinal meningitis ...	20	14	8	6
	<hr/>	<hr/>	<hr/>	<hr/>
	1,536	146	2,236	173

WESTERN UNIVERSIT MEDICAL GRADUATES.

Twenty-two graduated in medicine from the Western University, London. The gold medaist is C. Cornish, of Ingersoll, and the silver medalist is John McPherson, Dutton. The list of graduates is as follows: George W. A. Aitken, London; Bert Allison, London; A. A. Anderson, Jamaica; Samuel Bean, Byron; M. D. Campbell, St. Thomas; C. C. Cornish, Ingersoll; W. F. Freeman, London; L. Guest, London; Thomas Guilfoyle, Lucan; S. Hudson, London; Alf. Jones, London; Fred Luney, London; J. E. Mason, Red Deer, Alta.; Ed. McBain, St. Thomas; John McPherson, Dutton; A. C. Nixon, Kamloops, B.C.; Albert Phelps, London; A. Poisson, Tecumseh; W. Sorenson, Cardstone, Alta.; F. Steele, Mount Forest; Ivan Wilson, London; Harold Wismer, Manitoulin Island; Wilfrid Wright, Woodstock.

QUEEN'S UNIVERSITY MEDICAL GRADUATES.

The following graduated recently from Queen's University in medicine:

Degree of M.D., C.M.—S. M. Asselstein, M.B., Marlbank; G. D. Chown, B.A., Kingston; G. S. Clancy, B.A., Saskatoon; L. E. Crowley, M.B., Kingston; A. J. Flood, M.B., Sault Ste. Marie, Ont.; J. W. Fraser, B.A., Whitby; M. D. Graham, B.A., Arnprior; C. E. Hanna, Aultsville; A. W. Johnson, M.B., Milwaukee, Wis.; W. M. MacKay, M.B., Cornwall; G. E. MacKinnon, B.A., Wapella, Sask.; A. McCaus-

land, M.B., Rockwood Hospital, Portsmouth; J. J. McKendry, B.A., Mountain; C. E. McLean, M.B., Brockville; G. R. Miller, M.B., Rocklyn; F. J. Murton, B.A., Portsmouth; E. M. A. Oldham, M.B., Chatsworth; W. F. Orok, B.A., Midhurst; L. J. Phillips, M.B., Weyerhauser, Wis.; C. M. Scott, B.A., Edmonton South, Alta.; C. K. Wallace, B.A., M.B., Kemptville; J. P. Walmsley, B.A., Milford; L. E. Williams, M.B., Toronto; Leo Zealand, B.A., Lindsay; W. A. Vanderburg, B.A., Decewsville.

Degrees of M.B.—D. M. Baker, Owen Sound; D. E. Bell, Kingston; W. E. Berry, B.A., Robson, B.C.; Donald Black, Lang, Sask.; J. A. Blezard, Warkworth; J. T. Boyd, Port Arthur; R. M. Cairns, Ottawa; E. M. Carefoot, Collingwood; R. L. Carefoot, Forres, Sask.; F. H. Clark, Victoria, B.C.; G. G. Clegg, Trenton; H. A. Cochrane, Kingston; R. D. Collier, Picton; R. V. Connors, Ottawa; M. S. Driver, Highgate; I. S. Foley, Howe Island; J. B. Galligan, B.A., Eganville; N. M. Halkett, B.A., Ottawa; B. C. Hardiman, Fort William; K. E. Hollis, Hamilton, Bermuda; F. S. Jeffery, B.A., London; J. E. Kane, Kingston; C. B. Kidd, Ashton; J. A. Labelle, L'Original; Edmund Larocque, Alfred; Royal Lee, Cananoque; F. H. Dougher, Kingston; J. W. Mackie, Athens; O. M. Madden, Kingston; H. W. Matheson, Hamilton; J. F. Matheson, Owen Sound; L. J. Murphy, Ottawa; H. M. MacDonald, Hoathhead; J. E. McAskill, Highgate; H. G. MacCarthy, Kingston, Jamaica; S. R. McGregor, B.A., Unity, Sask.; M. A. MeKechnie, Walkerton; I. R. McKendry, South Gower; P. M. McLachlan, Lochaber Bay, Que.; R. W. McQuay, Foxwarren, Man.; F. D. O'Connor, Sydenham; F. K. O'Connor, Kingston; W. C. O'Donoghue, Smith's Falls; Richard Smith, Hopetown, Que.; C. T. Waltbridge, North Port; W. A. Weaver, Dundas; C. K. Whitelock, Davidson, Sask.; S. A. Wilkinson, Owen Sound; E. H. Wood, Peterboro; J. G. Wright, Carn-duff, Sask.

BACTERIAL VACCINE THERAPY.

Treatment of infectious diseases with preparations derived from corresponding micro-organisms is unquestionably growing in favor. Not only do the bacterial vaccines (or bacterins) seem destined to a permanent place in therapeutics, but their field of applicability is constantly broadening. Proof of this is seen in the growing list of these products announced by Parke, Davis & Co., no less than nineteen of the vaccines now being offered to the profession.

There are a number of reasons for the favor which is being accorded to the bacterial vaccines. In the first place these products are

in consonance with the scientific trend of present-day medication. They are being used with a gratifying measure of success. The way in which they are marketed (sterile solutions in hermetically sealed bulbs and in graduated syringes, ready for injection) appeals to the modern medical man, since it assures both safety and convenience. The moderate prices at which they may be purchased also tend to give them vogue.

GERMS NOT CARRIED BY THE AIR.

Whereas thirty years ago it was believed that most infectious diseases were transmitted by the air, it is the general opinion among physicians to-day that few, if any, diseases other than tuberculosis and anthrax can be so transmitted.

It is the science of bacteriology that has brought about this change. The life and habits of bacteria have taught us that nearly all of them die as soon as they are exposed in the air. Those of influenza, for example, cannot resist the air.

The theory advanced by Fluegge that the bacteria were carried on particles of dust has also fallen to the ground, except for those of a very few diseases.

It is Dr. Chapin's opinion that:

Typhoid fever is spread only by contact.

Cholera, dysentery and diarrhoea can be treated in general hospitals freely, without danger of extension to other patients.

Air infection of wounds is not impossible, but practically no wound infection is to be considered except from contact.

Malaria and yellow fever are caused only by mosquitoes.

Typhus fever and plague are carried from person to person by vermin.

It is almost certain that contact alone can spread smallpox.

It is highly probable that influenza may be spread within a few feet of a coughing and sneezing patient by means of visible droplets. That it is transmitted by floating droplets or by dust is not likely.

Nothing is really known about the way germs of pneumonia reach the lungs. Nearly half the population at times carry the germs in the mouth.

Also the English hospital superintendents agree that diphtheria is not air-borne.

Scarlet fever was thought to be air-borne until it became certain that the scaling skin was not infectious. Now the evidence is very convincing that it is not air-borne.

Whooping cough can be nursed in the open wards of hospitals, provided the beds are 12 feet apart and canopies be placed over the heads of the beds.

As for tuberculosis, the weight of evidence seems to indicate that the infection is commonly, if not usually, air-borne, but this is probably because in this disease more germs are likely to get into the air than is the case in other diseases and because the bacilli have a fairly high resisting power.

PRICES AND METHODS OF DISTRIBUTION OF DIPHTHERIA ANTITOXIN.

(1) *Boards of Health, Isolation Hospitals, Dealers and Druggists* may obtain the antitoxin at the following prices:—

		Vials.	Syringe Package.	
1000	Units	.25	.35	
2000	"	.50	.60	
5000	"	1.25	1.35	Not
10000	"	2.50	2.60	Returnable

from Dr. J. G. Fitzgerald, Department of Hygiene, University of Toronto, Toronto, Ontario.

Druggists and Dealers will be allowed to charge 25% in excess of these prices, making the following prices to the public:—

		Vials.	Syringe Package.	
1000	Units	.30	.45	
2000	"	.60	.70	Returnable
5000	"	1.55	1.70	within 12
10000	"	3.10	3.25	months.

(2) *Medical practitioners* will not be supplied directly but may obtain supplies from local Boards of Health handling the antitoxin, from local Druggists, or from Ingram & Bell, Limited, 256 McCaul Street, Toronto, or J. F. Hartz., Limited, 456 Yonge Street, Toronto.

Collection of Accounts. The Provincial Board will undertake the distribution of the antitoxin on a cash basis only.

Accounts to Boards of Health and hospitals will be rendered at end of each month. Accounts to Druggists will be collected by Bank draft, terms net.

The board feel that the success of this plan, insuring a lower price perhaps than anywhere else in the world, will depend largely on the co-operation of local Health Officers, and will be obliged if you will take the trouble to carry out the suggestions contained herein and communicate with the undersigned what view your Board and local Druggists take of it.

Please let me hear from you at your earliest convenience.

Yours faithfully,

JOHN W. S. McCULLOUGH

Chief Officer of Health.

THE NEURASTHENIC INVALID.

Like the poor, the neurasthenic is "always with us," and while the stress and strain of modern life and living continue, the physician will be called upon to treat the more or less chronic invalid who exhibits all sorts of bizzare symptoms, in endless and kaleidescope variety. It is, of course, an easy matter to advise the physician to search out and remedy the operative cause of the disorder, but it is not always as easy to do this, especially when no organic changes are discoverable. While purely symptomatic treatment may be unscientific, it is usually essential, in order to gain and retain the confidence of the patient. There is, however, one pathologic finding in a large majority of cases, and that is anemia of greater or lesser degree. In some instances this may be found to be the essential cause of the neurotic symptoms. In any event, this condition should be corrected, and for such purpose there is no better remedy than Pepto-Mangan (Gude). When a henatinic is indicated for a nervous, cranky man, or a finicky, more or less hysterical woman, Pepto-Mangan is peculiarly serviceable, as the patient cannot consistently object to the taste, which is agreeable to every one. The digestion is not interfered with in the least, constipation is not induced, and the blood-constructing effort of the remedy is prompt and certain. It is always worthy of trial not only in the anemia of the neurasthenic invalid, but also in all conditions of blood and tissue devitalization.

ANCIENT GREEK SURGICAL INSTRUMENTS.

The Times announces that a set of thirty-seven remarkable ancient Greek surgical instruments, discovered near the site of Kolophon in

Ionia, have been given to Johns Hopkins University and will soon be taken to the United States.

The instruments show a type of workmanship unequalled in any other extant specimens, and generally reveal the great progress in surgery which the ancients had made. Their date, though somewhat uncertain, was probably the first or second century A.D. It is possible, however, that it may have been before the Christian era.

An elevator for raising a depressed bone is part of the interesting exhibit. Its presence in the collection would seem to prove that after a battle efforts must have been to treat surgically even the most serious wounds of the skull.

Another still more remarkable brain instrument is a dull bow for operating on the skull.

A NEW URETHROTOME.

BY W. W. BREDIN, M. D., C. M.,

It must be readily admitted by all surgeons, and more especially by those who confine themselves to genitourinary work that there is not a single urethrotome to-day on the market which has in its construction the essentials which they so much desire. These essentials may be enumerated as follows: Simplicity of construction, as well as of application; an absolute safeguard against the possibility of making a false passage; absolute protection of the nonstructured portion of the urethral wall; the accurate mapping out, as it were, of the strictured portion, outlining just what is to be cut as well as the necessary length and depth of the incision, while at the same time protecting the nonstrictured portion from unnecessary mutilation; applicability to all strictures, including those with a filiform entrance only, and to all parts where strictures are usually found; concealed knives with sufficient cutting calibre to readily make way for the passage of a No. 30 French sound, at least. The accompanying cut represents an instrument which seems to possess all these features. It consists practically of three parts: A main shaft in which the knife rod moves backward or forward, and a guide. The guide terminates in a No. 9 French catheter with a filiform tip. The bulbous end of the guide in which the knives are always concealed except when in action, screws on to the main shaft. The knives operate through the grooved portion of the guide in which the knives are always concealed, except when in action, screws on to the main shaft. The knives operate through the grooved portion of the guide, which must pass through the stricture first. The knife rod works within the guide, and the knives cannot take any direction but straight through the stric-

tured portion and cannot penetrate any deeper than the distance they are allowed to protrude through the grooves. The filiform catheter leads the way and harmlessly doubles up within the bladder and the bulb follower until it meets the stricture. The detachable filiform catheter is first introduced into the bladder, when the presence of a few drops of urine gives positive evidence that no false passage has been made. The urethrotome can now readily be screwed on to the catheter and follows in the wake of the catheter until the bulb reaches the stricture. The stricture is now accurately mapped out in front of the bulb and the well portion crowded out of the way. The knives may then be pushed out, say one eighth to one fourth of an inch; the distance can be accurately measured by the set screw on the knife rod and then allowed to spring back, which they will do, being controlled by a strong spiral spring. The bulb is then pushed forward again and the knives are pushed out as before. Repeat these movements until all opposition is overcome and the bulb passes freely through.

It is applicable to all calibres and to all parts where strictures are usually found. It is easily taken apart for sterilization and a tyro can use it with safety, with no change of bulbs or tips. With this instrument the operation of internal urethrotomy is no longer a bungling uncertainty. The parts to be cut as well as the necessary depth and length of the incisions are mapped out with an accuracy hitherto unknown, eliminating all guess work and needless mutilation.

401 WYOMING BUILDING.

UNIVERSITY OF TORONTO'S BIOLOGICAL PRODUCTS.

The department of Hygiene of the University of Toronto has undertaken to prepare and distribute various biological products. These include, diphtheria antitoxin, tetanus antitoxin, anti-meningitis serum, and rabies vaccine for the Pasteur treatment.

The prices of these products are to be only slightly above actual cost. The Department has already entered into arrangements with the Provincial Board of Health of Ontario for the distribution of diphtheria antitoxin and rabies vaccine.

The proceeds of the sale of these substances, after paying the cost of maintenance, will go toward aiding research in Preventive Medicine and Hygiene. Under the plan it is arranged in Ontario all these biological products will be available at exceedingly low prices, and it is hoped that these prices can be reduced still further at a later date.

The work will be under the direction of the members of the Department of Hygiene.