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EDITORIAL.

THE MEDICAL INSPECTION OF SCHOOLS.

We have placed ourselves on record on several occasions as being in favor of the careful medical inspection of the children attending the public schools.

It is but a few short years since anything was done in this matter, and in these few years very marked progress has been made. In many countries in Europe medical inspection has been introduced in some form or other. In Great Britain an Act was passed some time ago making it possible for municipalites to have their schools inspected by a properly qualified medical visitor. Similarly in the United States.

What have the results told us? Much is the answer. Medical inspection has shown that many children are attending school who should be under proper medical care for some disease or deformity. In many instances these diseases are curable, but if left to run on might become incurable.

Then, again, we learn that many children are suffering from infectious diseases of some sort or other. This should be stopped at once.

Then many come from homes where the condition of things is very bad, and the children are neither properly clothed, housed, nor fed, and the moral environment very bad. In some places the free breakfast has been introduced.

In some quarters we hear a great deal about eugenics. This is very good, but there is no use talking about eugenics on the one hand and maiming and marring the child on the other after it comes into the world. This is very clearly a duty resting on the state.

It goes without saying that Mr. Jones has no right nor liberty to place an obstacle in the way of the health or success of Mr. Graham's child; and if he tried to do so he would be restrained by the state. In like manner Mr. Jones has no right to place an obstacle in the way of his own child, and, if he does do so, he should be restrained by the law.

The only way to get at the real facts is by the medical inspection of our schools. If one takes the trouble to examine the reports which medical inspectors have made on the schools in large cities in Britain and

the United States, he will see that the need was very great, and the result very valuable. In Boston alone the inspection has saved more than its cost in the prevention of infectious disease alone.

In another portion of this issue we give the report of a committee of the Academy of Medicine on this subject. We recommend it to our readers.

FIGHTING TUBERCULOSIS.

The public is sometimes very inert and may require much agitation and education to move. It does seem, however, as if the lever of Archimedes was getting under the mass of human inertia, and that it was beginning to rise.

For years we have urged that tuberculosis was infectious and spread from the sick to the well. Over and over again we have stated that from nothing, nothing comes. From the seed the crop is true here as the late Dr. Bristowe said shortly after Koch announced his discovery of the bacillus.

What a noise would be made if smallpox, or the plague carried off 10,000 victims in this country every year, and seriously sickened 40,000 others! The cry would go up from the length and breadth of the land for protection. There would be appointed a whole army of medical officers and nurses, and isolation stations would dot the land, and the pestilence would be stayed.

In the case of tuberculosis we stand and look on. We see the people dying all around us of a disease that is both curable and preventable. We say curable, because the investigations of pathologists tell us of countless numbers who died of other diseases, and reveal in their bodies the evidences of old tubercles from which they recovered. Some eminent authorities say as much as 90% of those on whom careful post mortems are made show the presence of old tubercles.

Then, again, we say it is preventable; and, if preventable, why not prevent it as his Majesty King Edward said once. The reason we do not prevent is because we have not tried. One may make bricks without straw, but he cannot do it without clay. The earthly thing is needed; and so we have been trying to prevent consumption too much on talk, and not enough with money.

Money is needed to erect sanatoria, to care for the sick, to send them away, to remunerate them for enforced loss of time, to disinfect homes, to educate the people, etc. The people in the United States spend annually on tobacco $240,000,000, and on drink $1,500,000,000. It is only fair to suppose that the people of this country keep up about the

same pace. But as countries, the United States and Canada do almost nothing for the prevention of tuberculosis.

A few days ago a League was formed in Toronto for the suppression of tuberculosis. We hope well of the movement. A committee consisting of Dr. Hodgetts, Dr. J. T. Fotheringham, Dr. J. N. E. Brown, Dr. Bruce Smith, Dr. Helen MacMurchy, Miss Josephine Hamilton, Mrs. Torrington, Rev. John MacNeil, D.D., Mr. Frank Sanderson, Mr. E. O'Sullivan, Mr. J. R. L. Starr, K.C., Dr. Bruce Macdonald, Dr. William Oldright, Rev. Father Minehan, Mr. James Simpson, Dr. Harold Parsons and Dr. J. E. Elliott was appointed. We shall watch with interest the outcome of this movement. In the meantime would say *salus populi suprema lex est,* and, therefore, there are heavy responsibilities on the shoulders of our legislators both Federal and Provincial.

OUR DEGENERATES.

What are we going to do about them? The first and most important question is prevention. It is notoriously true that marriages can be effected too easily. The law should demand greater safeguards in the matter of issuing marriage licenses. It will not prevent any marriages that should be consummated to enquire into the sanity and character of the contracting parties. Once married it is very difficult to secure separation. A bond that is so hard to break should not be tied too thoughtlessly.

One immoral, dissolute, insane, degenerate, or criminal parent may start into existence a long line of perverts. These are bound to be a charge upon the state in some way or other. For this reason the state should step in and make it impossible for such as the foregoing to marry. It is a vast deal easier to prevent the birth of children by such marriages than to care for them after they are born.

The report of Dr. Helen MacMurchy on the feeble-minded in Ontario raises many thoughts to one's mind; but the one of all others that will not down is that of prevention. The recent study of heredity at the Royal Society of Medicine, London, showed very clearly that of all groups of diseases, the nervous showed the most definite tendency to descend from "sire to son." Here then is our duty.

Some talk glibly about the liberty of the subject. Certain liberties should be taken from the degenerate, and the first of these that should go would be the liberty to marry, and bring into the world unfortunate children who are not responsible for either their being or their qualities of head, heart or body; and who have not enough stamina to keep from the worst forms of vice.

THE EFFECTS OF ALCOHOL POISONING.

In a very able article in Johns Hopkins Hospital Bulletin for May, from the pen of Dr. Henry J. Berkley, Clinical Professor of Psychiatry, we note a number of very interesting statements. He gives the finding in cases of acute alcoholic poisoning in man, and then those in experimental work on animals. We give the conclusions at which the author of the article arrives:—

1. In acute alcoholic poisoning, the stress of the action of the drug falls upon the tissues of the walls of the blood vessels, rather than upon the nervous elements of the brain.

2. The involvement of the nerve elements is more gradual than that of the mesoblastic tissues, and only becomes noticeable by present methods of staining and examination, after the lymphatic channels are choked with the detritus of white blood corpuscles and other cellular elements.

3. Nevertheless, the deteriorative action of ethyl alcohol on the nerve cell is apparent, and when prolonged, in more moderate doses than was administered to the rabbits, produces well defined cellular changes, as is evidenced by nuclear and dendritic changes.

4. In its action on the nervous tissues, ethyl alcohol may be likened to certain other poisons, such as ricin or the tox-albumins. The administration of these toxins causes the same departures from the normal in the nerve elements, but the alcohol has a much greater destructive effect upon the white blood cells, as well as the cells composing the walls of the blood vessels.

5. The effect of the drug is proportionate to the quantity administered to the animal, as well as to the duration of its poisonous action before death ensues. Limited quantities continued over a considerable time accomplish, in modified form, the same destructive results as higher doses, acting during a few days.

THE TREATMENT OF ECLAMPSIA.

In a recent issue of the *New York State Journal of Medicine*, there appeared an article by Dr. William L. Wallace, of Syracuse, dealing with the treatment of eclampsia.

He contends that the treatment should neither be that of too much interference nor that of do nothing. He does not hesitate to condemn the teaching and practice that is too common, that the matter is summed

up in chloroform and force. By the usual methods of treatment the mortality is 25 per cent. to the mothers and 50 per cent. to the babies.

As to the cause of the eclampsia the writer states that there is some toxin in the system that does damage to the liver and kidneys, causes œdema, and irritates the nervous system. This toxin gives rise to degeneracy in the liver, kidneys and other organs, and that the œdema, blindness and convulsions are results of the damage.

The rational treatment would be to empty the uterus, prevent the further production of toxin, and eliminate what has been formed. In this regard the writer is strong in his advocacy of prophylaxis. Too much of our attention has been directed against the convulsions. The convulsions in themselves do not do much harm, and the child is not killed by the them, but may be damaged by the chloroform, the drugs and the forceps. The use of chloroform is condemned, as it still further poisons the blood and interferes with its oxidation. To stop the convulsions it must be given in large doses, and this is very bad. Further, the patient's lungs are water soaked and it is almost impossible for her to get enough oxygen into the blood. Why give chloroform? Then, again, it is true that the eclamptic liver and the chloroform liver are identical. The form of damage is the same. Why add to the damage?

With regard to morphine the writer is not so strong in his condemnation; but it should be remembered that morphine slows down the respirations, lessens the oxidation of the blood, and favors still further the soaking of the lungs with water. The best treatment is to empty the uterus and not to pay too much attention to the convulsions. When these must receive attention, the best method is morphine gr. ¼, and hyoscine gr. 1-100 hypodermically. This stops the convulsions and produces anæsthesia. Instead of this, however, morphine may be used and some chloral by rectum, with a little ether by inhalation.

Emptying the uterus is not a cure all. Some patients have their convulsions only after labor is over; and in the case of others the convulsions do not stop when the labor is ended. Emptying the uterus is proper, but not for the immediate effect, and the patient should not be sacrificed by too much shock in accomplishing delivery. Some patients who are threatened with convulsions may be thrown into those by the use of chloroform and force.

The treatment then should be:—

1. Alleviate the convulsions as already indicated.

2. Stop the production of more poison by emptying the uterus as soon as possible without too much shock.

3. Combat the poison in the blood. This is done by intravenous injections of salines, from 1 to 3 pints. Wash out the stomach and bowels. Most of these cases are constipated. Hot epsom salts through a tube if

the patient is unable to swallow. Bleeding, if necessary, to prevent apoplexy and pulmonary œdema. If the os and vagina are rigid Cæsarean Section is better than a long and forced labor. Do not put the patient in a hot room and in packs to force perspiration. This removes fluids only and concentrates the poison in the system.

THE INSANE AT LARGE.

On several occasions we have commented on the fact that many insane persons are not properly cared for. Almost every day one reads in the papers of terrible crimes being committed by the insane.

The officers of the law cannot be supposed to know of these persons. What the law can demand, however, is this that if any one harbors an insane person they will be made responsible for the acts of that person.

To save themselves friends of the insane would adopt proper measures to safeguard the public, or have the insane person committed to a proper institution.

CANCER OF THE UTERUS.

In another portion we give the report of the Committee of the British Medical Association on Cancer of the Uterus. We commend it to the attention of our readers and trust that they may be able to render some assistance in this matter. We think that the medical profession has been remiss in its duty in not warning the women patients to note the early manifestations of the disease and give them prompt attention.

THE ACADEMY OF MEDICINE, TORONTO.

The second annual meeting of the Academy of Medicine, of Toronto, was held on 4th May, 1909. The reports of the various officers and committees were of a very satisfactory character, and indicated a very healthy condition in the affairs of the academy.

The officers for the year 1909-10 are as follows:—President, Dr. A. McPhedran; Vice-President, Dr. A. A. MacDonald; Hon.-Sec., Dr. H. J. Hamilton; Hon.-Treas., Dr. D. J. Gibb Wishart; Councillors, Drs. W. H. B. Aikins, N. A. Powell, E. E. King, A. H. Perfect, John Ferguson, J. M. Cotton, W. McKeown, F. N. G. Starr; Chairman of Sections, Medicine, Dr. Harley Smith; Surgery, Dr. A. Primrose; Pathology,

Dr. G. Silverthorn; Ophthalmology and Otology, Dr. R. A. Reeve; State Medicine, Dr. Goodchild; Pediatrics, Dr. H. F. Machell.

The Treasurer's report showed that 255 fellows had paid fees amounting to $2,595.25; and that the other receipts for the year amounted to $1,253.79, or a total of $3,849.04. The disbursements for the year for all purposes amounted to $1,736.95.

The trustees' report showed that the assets of the academy, exclusive of the books, painting, engravings, and furnishings, amounted to the handsome sum of $17,069.37.

The report of the council touched upon the important addresses and lectures that had been given during the year by distinguished medical investigators. References was also made to the splendid work that had been done by the milk commission which had been appointed by the academy; and also by the committee to which had been relegated the duty of reporting upon the medical inspection of schools, and to formulate a scheme for the proper carying on of the inspection.

The academy is growing in numbers rapidly. The additions during the year numbered 41. Death had removed one fellow; and seven had severed their connection on account of removal from the city. The year closed with an active membership in good standing of 255.

Due attention was given in the report of the President and Secretary to the need for a suitable building in which the valuable collection of books, paintings, etc., could be safely housed.

The report of the Library Committee showed that the general library contained 4,675 books, the Bovell library 300, and the workman library 25, or a total of 5,000 volumes. During the year 240 volumes and 72 pamphlets were added. There are 1,400 duplicate volumes not included in the above lists. The library is now receiving 135 periodical publications, of which 6 are German, and 6 French. In the building up of the library the hope was expressed that fellows and friends would contribute books and journals whenever possible.

The House Committee reported that a number of very valuable donations towards the house furnishings had been received from several persons. Among these special mention was made of a fine collection of engravings that had been selected by Prof. William Osler, and donated by Mr. E. B. Osler, M.P.

The committee on the Medical Inspection of Schools made a very full and able report upon the subject.

It was agreed that the services of a competent stenographer be secured to take reports of the discussions at the general and sectional meetings.

ORIGINAL CONTRIBUTIONS.

MEDICAL INSPECTION OF SCHOOLS.

REPORT OF COMMITTEE APPOINTED BY THE ACADEMY OF MEDICINE, TORONTO.

AT the annual meeting of the Academy of Medicine, Toronto, on Tuesday, May 5th, the committee on medical inspection of schools presented the following report. An abstract, and the resolution passed by the Academy, are also given. The committee consisted of Dr. McPhedran (Convener), Dr. J. F. W. Ross, Dr. R. A. Reeve, Dr. H. J. Hamilton, Dr. C. J. C. O. Hastings, Dr. W. L. T. Addison, and Dr. Helen MacMurchy (Secretary).

ABSTRACT.

Inasmuch as the law of this Province now permits and approves of medical inspection of schools, and since such inspection is no longer an experiment, but has been proved in almost all civilized countries to be a measure of great educational, social and economic benefit, your committee feel that on the profession and on our educational authorities now rests the responsibility of proceeding as soon as possible to organize and inaugurate a good system of medical inspection. In our opinion and to our personal knowledge, many children in Toronto are suffering from remediable disabilities and diseases which medical inspection would discover and put the children in the way of escaping or recovering from.

We would also draw attention to the fact that every endeavour should be made to secure, at the beginning of this work, as School Medical Officers, persons of high character, wide sympathies, great tact and consideration, as well as thorough professional training, and that school nurses be appointed to carry out the work under their direction, also that salaries should be paid for this work commensurate with its importance, the time required to do it well, and the salaries paid for other branches of educational and medical work. It is to be remembered that medical inspection of schools is not a charitable work, but an important department of the public service. This work should be co-ordinated in some way with the work of the Board of Health and the Medical Health Officer, and were the Province divided into health districts, each with its Medical Health Officer, giving his whole time to the work, it would evidently be of advantage to have the work of medical inspection of schools under his direct supervision.

It may also be pointed out that in every place where medical inspection of schools has been given a fair trial the number of cases of

illness among children, and especially of contagious disease, has been greatly decreased, and that in this way the pressure on the Isolation Hospital and other hospitals would be markedly lessened instead of the necessity arising, as it otherwise must in a large and growing city like Toronto, of providing additional hospital accommodation. In this and other ways it has been found the medical inspection of schools saves the money of the taxpayer, to such a degree as to more than provide for the cost of medical inspection.

[The abstract here follows page —— giving the duties of the School Medical Officer, and reference (Osler), also a statement that the School Medical Officer must not treat any child.]

The assistance and co-operation of the teachers in health matters, etc., is of the greatest importance, and is indeed indispensable. It is expressly referred to in the new Education Act for Ontario. The teacher can do a great deal to facilitate and aid the work of the School Medical Officer, as has been shown in Great Britain and the United States (*e.g.*, Chicago and Boston). The utmost respect and regard must be shown by the School Medical Officers and School Nurses to the work and routine of the school-room, and the duties of the teacher. Any time taken in medical inspection will be amply repaid by the direct benefit it will be both to teacher and pupils, and it will be found that school attendance records show clearly the direct benefit of medical inspection of schools.

The School Nurse, who is invaluable in medical inspection of schools, should work under the direction of the School Medical Officer, discharging such duties as may be assigned to her at the school, and where necessary, visiting the homes of the pupils, and attending, under the School Medical Officer's directions, to poor and neglected children suffering from minor ailments for which hospital treatment is not necessary.

The following resolutions were carried:—

Resolved, 1. That the Academy of Medicine hereby recommend that medical inspection of schools be carried out in Toronto as an integral part of our school work and of the public health service.

2. That steps should be taken at once, so that on the re-opening of our schools in September, 1909, a beginning might be made in at least a few schools, for example, Elizabeth Street, McCaul Street and Hamilton Street Schools, in the older and more central portions of the city, where the school population is large, and the foreign-born and recently-emigrated citizens are numerous, and where there is much room for improvement in the housing conditions.

3. That as a beginning, two School Medical Officers (to give their whole time to the work) should be appointed, to act under the direction of the Medical Health Officer of Toronto, and that as many School Nurses as may be found necessary should also be appointed.

4. That copies of this abstract and report be forwarded to the Hon. the Minister of Education, His Worship the Mayor of Toronto, the Medical Health Officer of Toronto, the Board of Education, and the Local Board of Health, and that at the same time we would respectfully draw their attention to the fact that Toronto is woefully behind in this matter, and that its rapid growth, and its large foreign population call for immediate action, so that a state of things unworthy of a metropolitan city like Toronto may no longer be permitted or perpetuated.

REPORT.—INTRODUCTION.

On April 20th, 1907, an amendment made to the Act 1st Edward VII., Chapter 39, Section 65 and paragraph 14, was assented to by the Lieutenant-Governor of the Province of Ontario. The amendment empowers school trustees in this Province "to provide in their discretion, and pay for dental and medical inspection of pupils."

Medical Inspection of Schools is no longer an experiment. Wherever it has been introduced it has soon met with the hearty approval of the public. In Canada we are behind in this, as in some other matters. We have hardly emerged from the experimental stage in Medical Inspection of Schools. It is a good thing, a useful thing, and we should avail ourselves without further delay of its benefits. Medical Inspection of Schools is a reasonable thing. "It cannot be right to compel children to attend school, and wrong to make it possible for them to learn. It cannot be right to force their brains, and wrong to correct their bodies. It cannot at one and the same time be right to compel the education of children, and to perpetuate conditions of disease."—W. Leslie MacKenzie, M.D.

It cannot be wise to provide large sums for education and to allow this money to be wasted because a certain number of the children, through defects, and remediable defects, in eye-sight, are unable to see enough to learn. It cannot be economy to allow the teacher to spend 50% of her time on 5% of her pupils, because these are special children should be handled in "special classes."

'If rightly administered it is economical in the best sense of the word. Its justification is not to be measured in terms of money, but in the decrease of sickness and incapacity among children and in ultimate decrease of inefficiency and poverty in after life arising from physical disabilities."—Board of Education (Eng.)

It may also be added that when we consider the actual cost of sickness and disablement, the direct money value of any effective means of reducing such expenditure is evidently great.

It cannot be right for the profession and the public to stand idly by while communicable diseases are often spread in the school-room.

Medical Inspection of Schools being thus permitted and approved by the law of this Province, and provision being made for the necessary payment, the first question that arises is,—

By Whom is Medical Inspection to be Done?

There can be but one answer to this question. By a duly qualified physician.

While this is true, it is equally true that though medical inspection must be done by a duly qualified physician and under his or her direction, the physician cannot do it all. An indispensable qualification for a School Medical Officer is the power of enlisting the cordial, even enthusiastic, co-operation of the pupil, the parent, the teacher, and the School Nurse. It would be hard to say which of all these wields the greater influence. But the aid of every one of these is essential to the ideal result. And this means leadership, sympathy, unselfishness, and high aims on the part of the School Medical Officer. No small or second-class person will succeed here. The kind and courteous presence that reassures a frightened school-child, apprehensive of impending tragedy when he realizes that something unusual is about to occur, the fair mind that recognizes the force of the objection urged when this subject was discussed in the Ontario Education Association in 1908, to the effect that "If we have Medical Inspection of Schools the doctor will be paid more for a ten minutes' visit than the teacher is paid for teaching all day," the organizer who can arouse, enlist and put to the best use the energy, skill, special knowledge, and interest possessed by the School Nurse, parent and teacher—these things, combined with thorough knowledge of medical work, are not to be seen every day. They are beyond price, but we should not therefore expect to secure them for nothing.

Salary of School Medical Officers.

The council of the British Medical Association advise that the remuneration of a medical inspector should be calculated on the principle of a definite rate per working hour, and that the School Medical Officer should be paid at the rate of £50 a year for an attendance of one-half a school day a week, half a school day being defined as two hours. Where whole-time appointments are contemplated, this recommendation may require some modification, but it will afford a basis for calculating the salary.

The latest deliverance on this subject from the British Medical Association, (*B. M. J.*, May 9, 1908, p. 243) is to the effect that if the

Local Education authority desires the services of an experienced medical officer who is well qualified by—

1. Familiarity with the diseases of children.

2. Particular training in general hygiene.

3. The faculty of rapid diagnosis depending on special practice in this art; they are not likely to secure such an officer for a lower salary than £500 per annum.

If on the contrary the Local Education authority desires only to establish Medical Inspection of Schools at the lowest possible cost, an inexperienced or newly qualified School Medical Officer, who would otherwise be filling the post of house physician or house surgeon might be secured for £250 to £300 per annum—a relatively large salary because the time spent in this position opens but little future prospect.

The Chief School Medical Officer of a city like Toronto should rank with the Inspectors of Schools in matters of authority and salary. We have in Toronto and we ought to have in all parts of Ontario, a Medical Health Officer who gives his whole time to the work and is not in the ordinary practice of his profession at all. It is almost a necessity that the School Medical Officer should be equally independent. In regard to the matter of the salary paid to Medical School Inspectors elsewhere, it varies, from about $200 (for occasional inspection) to $2,400 per year, or more in the case of the Chief Medical Officer, and the cost per pupil is from 48 ce· .s to 9 cents. There is, of course, a great difference in the work done and time given. The number of pupils to each Medical Inspector varies from 400 to 9,000.

"The School Medical Officer must be a leader in—

1. The actual inspection of the children.

2. The prevention and cure of infectious and other diseases in children.

3. Securing a high standard of personal cleanliness.

4. Searching out and separating into special classes mentally and physically defective children.

5. The investigation of home conditions and the diffusion of hygienic teaching.

6. The examination of the sight, hearing and teeth of children.

7. Making anthopometric measurements and records.

8. Securing the hygienic state of the school."—Dr. McPhedran.

"If we are to have School Inspection, let us have good men to do the work and let us pay them well. It will demand a special training and a careful technique. It cannot be done by second-class men, and the work is of sufficient importance to warrant the payment of good salaries."—William Osler.

Medical Treatment.

The School Medical Officer should not treat any children, except that minor ailments may well be dealt with by the School Nurse, under the Inspector's direction.

A sub-committee appointed recently by the Education Committee of the London County Council reports that as a result of Medical Inspection many preventable but unremedied evils have been discovered.

It is known that the health of many children is impaired, temporarily and permanently, for want of medical treatment, and it is perhaps necessary that some reference should be made here to what must follow after Medical Inspection. The Medical Inspector finds children suffering from errors of refraction, from adenoids, from ulcers, from pediculosis and many other ailments. What is to be done with them? Their parents should be notified in a polite and private manner, and they should be asked to take them at once to the family physician. This will dispose of about 50%. There are some parents who are able to do this and will not. They should, in some suitable manner, be persuaded or compelled to do it. There are many parents, especially among the poor, and the newly arrived immigrants, who have no family physician. The School Nurse can do much for them. But in many cases we must rely on dispensaries and the Hospital Outdoor Departments for the treatment of the poor. We are fortunate in possessing, in Toronto, a number of hospitals where great interest is taken in outdoor patients. These hospitals will doubtless be the centres where the work of treatment for the children of the poor, following upon medical inspection of schools will naturally be carried on. But it must be remembered that the work of Medical School Inspection, as such, and the school clinic, if that is ever established, is not charitable work. It is a branch, and an important branch of the public service, and as such should be properly paid.

Teeth.

Medical inspection should, of course, include inspection of the teeth of the children, and it is important that the parents should be notified of defects in the teeth, and requested to consult their own dentist forthwith. Fifty per cent. will probably do so at once, and the School Medical Officer, School Nurse, and teacher should all continue their supervision of the case until the parent attends to the proper treatment.

Housing Conditions.

Housing problems and slum conditions in Toronto, almost unknown a generation ago, are now upon us, and we cannot deal with this matter

too soon. The School Nurse will bring back with her from her visits to the homes of the children who above all need the services of the School Doctor and the School Nurse, an account of home conditions that will not only be of immense value to the school authorities, but will make us all open our eyes. There is probably enough money and to spare, spent in this city in charity, but it is not made effective. It is not given wisely. The School Nurse would be a valuable addition to our means of reaching those who need help. There are a good many families in Toronto living in one room. It is time that municipal, educational, medical and charitable authorities realized this and worked together to find and apply a remedy.

The effect of housing conditions on the school child was one of the first things that Medical Inspection of Schools elsewhere dealt with. To quote from the Glasgow report:

"It cannot be an accident that boys from two-roomed houses should be 11.7 pounds lighter on an average than boys from four-roomed houses, and 4.7 inches smaller. Neither is it an accident that girls from one-roomed houses are, on the average, 14 lbs. lighter and 5.3 inches shorter than the girls from four-roomed houses."

In London, Thomas has shown that though the physique of the children unquestionably varies with the number of rooms occupied, it bears a still closer relation to the number sleeping in each room.

The Working of Medical Inspection.

A great deal of perseverance, judgment, and common sense must be used in the working of Medical Inspection of Schools. In the *British Medical Journal* of November 7, 1908, the following description occurs: "In some of the schools, on entering the hall a row of miserable children sitting doing nothing may be observed. This is, as it were, the school sick-room; the children are too ill to do lessons, and their homes are so bad that it would be a cruelty to send them there. The existence of a doctor in charge of particular schools appears to be unknown to the teachers, and the hospitals are known to be over-crowded. So for days at a time these unfortunate children wait there doing nothing and quietly suffering. Sore eyes, sore throats, abscesses, tuberculosis, these are a few examples of the sufferers who sit waiting for something to happen—a heart-break to the teachers, and a misery to themselves. It might be thought that no inspector, manager, or School Nurse could bear to pass in and out and to see this going on, but every one complains that there is no one responsible."

Among the 30,000 school children in Toronto we have only too good reason to know that there are some sore eyes, sore throats, and worse

things, and some of their homes are very poor. It is time we made some one responsible to attend to these suffering and disabled little ones for the community. And when this doctor is put in charge, it will be his duty to adopt suitable measures to make the teachers aware of his existence. The teacher should be the doctor's right hand and the doctor and the School Nurse should be the teacher's great friends and allies.

Instruction of Teachers in Training.

One very great difficulty in our way at present is the fact that little or no attempt is made in our Normal Schools, or in the Faculty of Education at the University of Toronto to train teachers in hygiene or to give them access to the inspiring achievements and hopes of Modern Preventive Medicine. Rightly understood and rightly presented, what romance can exceed in interest the story of Modern Preventive Medicine! What martyrs it has lost! What victories it has won! Where surgery has saved its thousands, Preventive Medicine has saved its ten thousands, and yet the teacher who alone can fix the laws of health in the minds of the next generation has no more opportunity to learn or to teach these great matters than the ordinary layman. And both before and after the Government of this Province takes steps to set right this grave defect in the training of teachers, we must look to the School Medical Officer to find, make and use every opportunity, by lecturing himself and by organizing and arranging lectures by others, and in every other good way to put and keep the teachers in touch with this great department of progress in the work and welfare of the world, so that our children may have a living daily relationship to the laws of health.

Reports of Medical Inspection.

The relation of the School Medical Officer to the school must be a close and organic one. Reports, statistics and records there must be, but it is to be hoped that our Board of Education will not allow any School Medical Officer to think, according to the famous phrase of a famous authority on hygiene (Sir John Simon), that "a free consumption of stationery may serve instead of skilled visitation." It is also to be hoped that we shall not allow ourselves to be dominated too much by so-called "Results," either our own or other people's. Statistics are proverbially unreliable. "Figures will lie and liars will figure." In Tasmania, instead of presenting the total number of all defects, trivial and otherwise, the important matters are collected under the heading I. E. P. (Interfering with Educational Progress). School Medical Officers in other countries have adopted the Card Index system of records to their

use with admirable results, and we are thus in the happy position of having had our experiments made for us and being able to avail ourselves, if we will, of the experience of others.

Difficulties with the Home and Parents.

There are sometimes difficulties with the home and with the parents. Some parents need to be civilised. Some undo at home a large part of the good that children get at school. Some act as a dead weight on every proposal for the child's welfare. Some forget or neglect to carry out efficiently what they have actually promised to do in order that the child's physical wants and defects may be attended to. Here the School Nurse is again indispensable. She forms the connecting link between the home and the school on the one side and the home and the hospital or other medical agency on the other. She shows the overburdened mother how to nurse the sick child, or dress the sore finger, or dispense with the presence of certain well-known fauna on the children's heads. She enables the child to stay at school or to get back to school in the shortest possible time. In New York, in 1902, before the advent of the School Nurse, the School Medical Officers sent home 10,000 children. In 1903, after the advent of the School Nurse, they sent home only 1,100 children.

Frequency and Scope of Inspection.

Another question which arises is—Should every child be inspected? and if so, how often?

The regulations adopted by the Board of Education, (England), Circular 576, contemplate that every child shall be inspected (1) on admission; (2) about the 3rd year of school-life, (3) about the sixth year of school-life and, if possible, (4) before the child leaves school.

Certainly the first may be taken for granted, if we are to have medical inspection at all, and the parent and School Nurse should both be present, if possible, and lend their aid. The other three inspections are also of great importance, and in addition, it is obvious from what has been already said, that the School Nurse and school doctor should always be in close touch with the school. Probably one or both of them, in the case of some of our schools at least, should pay the school a daily visit.

It is also necessary that some room be provided where the School Medical Officer and School Nurse may work.

Medical inspection should take account of the child's height, weight, development and general physical condition. It should especially observe and record the condition of the "organs of education," (the eye, the ear,

etc.). It should note any deprivation, defect, disease or disability interfering with educational progress, and should point out and secure such conditions and treatment for the child as may best minimize, cure or remove such disease, defect or deprivation.

Appointment of School Medical Officers.

According to the Act quoted above, the School Trustees are to pay for Medical Inspection of Schools and in many places, the Board of Education also appoint the School Medical Officers and School Nurses. In other places, the Board of Health makes appointments.

Regarding the school hygiene as an integral part of national health, the Board of Education (England), state in their celebrated memorandum of November 22, 1907, that Medical Inspection should be carried out in intimate conjunction with the public health authorities and under the direct supervision of the Medical Officer of Health.

This has been unfavorably commented on in England.

The preferable mode of appointment would perhaps be to organize a School Medical Department or Department of School Hygiene in direct connection with the Education Department of Ontario. The head of this Department of School Hygiene would, of course, hold his appointment from the Government, and it would perhaps be best to appoint School Medical Officers for different parts of the Province in the same way. On the other hand it is clear that in some way this Department of the Public Health Service must be co-ordinated with that of the Board of Health and the local Medical Health Officer in every case.

The Board of Education in England have decided to recognize "School Medical Officers," and therefore, presumably, also possess the power of refusing, if they wish, to recognize any officer so appointed.

Communicable Diseases.

The Ontario Public Health Act, Chapter 34, 1 Edward VII., 1901, and Order-in-Council, March 5th, 1903, provides—

"Whenever a case of diphtheria has occurred in a child attending any school, the Medical Health Officer shall personally, or through another physician, cause a daily examination to be made of all the children of the school-room for at least one week from the date of the occurrence of the last case amongst such children.

If any children are absent from such school, a medical examination shall be made of them in the same manner as if they were in attendance at school."

"A regulation of precisely similar character and wording is made in regard to scarlet fever. The words "through another physician," as above, might readily be amended to read "through the School Medical Officer."

There is no reason to doubt that in Toronto, as in other cities, routine medical inspection of schools would reduce the number of cases of communicable disease. This has been proved again and again. "A school-child in the early stages of diphtheria is as much a public danger as the highwayman or the burglar."—*Lancet*, March 6.

This public danger should not be neglected. The following report from Chicago (1908) is conclusive:

"The Chief Medical Inspector reports 117 cases of diphtheria and 89 of scarlet fever. The corresponding week last year showed 150 cases of diphtheria and 109 cases of scarlet fever.

"The showing for this year is decidedly favorable as compared with last year when we take into account the fact that cases are far more generally reported this year than was the case last year. The School Medical Inspectors were not employed a year ago, and if cases were not reported we had no means of knowing it except through the reports made by neighbors or school teachers. Through the vigilance of neighbors, school pupils, school teachers, and a hundred medical inspectors very few cases of contagious disease at the present time are or can be concealed. We uncover about all cases which are not promptly reported.

"The value of the School Medical Inspectors in staying the headway of epidemics is in evidence almost daily. The exclusions of children on account of infectious diseases were 455. The work of the Medical School Inspectors has not only stayed the threatened epidemic, but is decreasing the number of such diseases at a time and under conditions favorable for the extension of infectious diseases."

The Open Air School.

In England, the United States and Germany, the Open Air School is one of the good results of Medical Inspection of Schools. Tuberculous children (and we know there are not a few of them in Toronto), and those who are threatened with tuberculosis, may, through the outdoor school escape life-long invalidism or early death, and, instead of falling behind in their classes and losing touch with the schools, get a good education, while their health is being recovered and restored. This is economy. It is also humanity and modern medicine and progressive education, but it is no less economy.

The Teacher.

The teacher can make or mar Medical Inspection almost as much as the School Medical Officer or the School Nurse. His or her co-operation is practically indispensable to success. Dr. Leslie MacKenzie says he finds that in Scotland the teachers have taken to medical inspection

with enthusiasm. They were indeed the chief promoters of the movement and they found the work full of interest.

The teacher is able to give essential details as to age, occupation of parents, size of house, regularity of attendance, height and weight. But only those who have taught can realise the multitudinous duties of the teacher. And the Education Department is always adding to them but never paying for the addition. Often, too, their classes are large and over-crowded, and so is the programme of studies. And all this means that we must be careful not to add to the burdens of the teacher. Great consideration should be given before he or she is asked to undertake new duties, and these, if at all possible, should be provided for without lengthening school hours or giving the teacher extra work. Clerical assistance from the School Nurse may be a necessity.

As so much of the teacher's time is lost at present on account of many defects that Medical Inspection of Schools will remedy or remove, it is evident that any time given to assist the School Medical Officer or School Nurse will probably be repaid twice over. This remark, indeed, applies to every detail of Medical Inspection of Schools. The cost of each day's teaching of every child is considerable. This money is thrown away every time the child is absent and absence often entails other expenses. If the Medical Inspection of Schools saves, on the average, one school day to every school child per annum, it probably will more than pay for itself, as it were. This should appeal to any country which is governed for the people by the people.

(1) Excerpts from "The Public Schools Act."

1 Edw. VII., c. 39, s. 1, (1909).

Duties of Trustees.

"To provide and pay for such dental and medical inspection of the pupils, as the Regulations may prescribe, or, in the absence of Regulations, as the Board may deem proper."

Duties of Inspectors.

"To report to the Medical Health Officer of the municipality any case in which the school buildings or premises, are found to be in an unsanitary condition."

"To discharge such other duties as are required by the Minister of Education or Regulations."

(2) EXCERPTS FROM "THE PUBLIC SCHOOLS ACT."

1 Edw. VII., c. 39, s. 1, (1909).

Duties of Teachers.

To furnish to the Minister and the inspector any information which it may be in his power to give, respecting the condition of the school premises, the discipline of the school, the progress of the pupils, and any other matter affecting the interests of the school, and to prepare such reports of the board as are required by the Regulation.

To give assiduous attention to the health and comfort of the pupils, to the cleanliness, temperature, and ventilation of the school house, to the care of all maps, apparatus, and other school property, to the preservation of shade trees, and the orderly arrangement and neat appearance of the playgrounds, and to report promptly to the board and to the municipal health officer, the appearance of any infectious or contagious disease in the school or the unsanitary condition of the school house, outhouses, or surroundings. 1 Edw. VII., c. 39, s. 80 (4, 5, 6, 7).

To refuse admission to the school of any pupil who he believes is affected with, or exposed to, chickenpox, cholera, glanders, scarlet fever, scarlatina, diphtheria, whooping-cough, measles, mumps, or other infectious or contagious disease or consumption, until furnished with a certificate of a medical health officer, or of a duly qualified medical practitioner approved by him, that all danger from exposure to contact with such pupil has passed. 1 Edw. VII., c. 39, s. 80 (8); 7 Edw. VII., c. 51, s. 24.

THE SCHOOL NURSE.

Miss Harriet Fulmer, of Chicago, thus states what the Health Department expects the School Nurse to do in Chicago.

"(*a*) To decrease the spread of contagion, and by so doing protect the entire community. By a close observation of the children at the school through routine inspection, and the supervision of all excluded cases at their homes.

(*b*) To promote cleanliness and personal hygiene by putting the children's stamp of disapproval on a second attack of vermin and skin diseases resulting from dirt and neglect, and putting a premium on the continued freedom from these things.

(*c*) To instruct and teach the mothers how to look after their children.

(*d*) To find many cases of deprivation and want, otherwise not known.

(*e*) To make more valuable the work of the Medical Inspector by the follow-up plan at the home.

(*f*) To bring back to Medical Inspector, principal and teachers such information of the home conditions as shall give them a better understanding of the pupils in their care.

(*g*) To see that no child remains from school for minor ailments by establishing a plan whereby these may be looked after at the school.

(*h*) To carry to the homes the gospel of cleanliness, fresh air, sunshine and right living every day in the week, so that in the very near future we shall receive our reward for this same gospel in a better, stronger citizenship."

In a great city the school and the homes seem far apart. The School Nurse is one of the factors which will bring the two together.

Wherever Medical Inspection of Schools has been established, the School Nurse has either been associated with the School Medical Officer from the beginning, or else, as in London and New York, it was soon found that she was indispensable. In a circular issued by the Board of Education (London) to the Local Education Authorities the School Nurse is described as "Capable of performing very useful and important functions, both in assisting in the work of medical inspection and—under medical instructions—in applying or showing the parents how to apply remedies for minor ailments."

FRACTURES OF THE LONG BONES IN INFANTS.*

By A. J. MACKENZIE, B.A., M.B., Toronto.

I WISH to deal here with fractures of the new born infant and chiefly with those of the femur.

Various estimations have been made of the incidence of fractures in the different homes at different ages but they vary very much from one another, according as they include out-patient or only in-patient reports, and I have been unable to find any statistics with regard to the frequency of fractures in the new-born; were there any such they would have only a relative value, as the proportion occurring in hospital practice would probably outnumber very much that in private practice from a variety of reasons.

They may be divided into those occurring in utero, during parturition, and after parturition, and the characteristics of all occurring in the first year will be much alike, *i.e.*, until the child walks. Fractures in

*Read at the Academy of Medicine, Toronto.

utero may be due to external violence to the mother, to violent uterine contraction, or even to violent muscular action on the part of the foetus. It would seem improbable that the latter two should occur except in the presence of some dyscrasia which renders the bones much more easily broken than in the normal state, as fragilitas ossium, but there are many cases on record in which at birth various bones are found to have sustained fracture, in some spontaneous union is found, and the faulty position of such has in cases necessitated surgical interference.

Apart from causes in the bones themselves fractures occur during parturition by direct violence applied for the purpose of effecting delivery, most frequently in breech presentations, where either leg or arm is brought down, or where traction is made on the flexed limb by some instrument; pelvic presentations occur in 2 to 3 per cent. of all cases, and as they result in still-born children in from 10 to 20 per cent. of cases it is probable that this is a rather common accident, I mean that in a large number of such cases the condition is so serious that active measures must be tried to save the child with the chance of a fracture; but I have been unable to find any statistics as to the frequency. The bones most frequently injured are the femur and humerus.

Injuries in the first year may be due to direct violence as from falls; and syphilis, scrofula or, according to some, rickets may be etiological factors.

Ossification in both femur and humerus begins in the second month, and the shaft is completely ossified in the healthy child at birth, the line of fracture is usually more or less transverse, and near the middle of the bone, they are frequently sub-periosteal, and Hirst says they are usually green-stick but this does not agree with the opinion of other observers. Attention may be directed to the accident by the distinct cracking sound, or an angular deformity may be noticed on washing the child, sometimes the injury is not discovered until the fretfulness of the sufferer leads to a careful investigation and the finding of the swollen and deformed limb. The parts unite readily, cases of spontaneous union have been found, and there is a deposition of a great deal of callus, but there is considerable difficulty in adjusting an apparatus which will keep the fragments in place owing to their shortness and the softness of the tissues. If successful in this two to three weeks will suffice for a cure and the callus quickly disappears. In the humerus a simple angular splint (internal) with the arm bent at right angles, and reinforced by posterior and anterior short splints, with immobilization secured by fastening the arm to the body is the method advised by Keating and others, but some difficulty will be experienced in keeping them in place, and care in nursing is required. The requisites as laid down for an

apparatus for fracture of the femur by Stern (*N. Y. M. J.*, May 20, 1905), may be quoted as applying here:

(1) Ability to nurse.

(2) Cleanliness.

(3) Ability to hold fragments in apposition without deformity.

(4) Freedom from pain on moving child for necessary changes of clothing.

(5) Ability to prevent shortening.

The method of treatment of the fractured femur which meets these indications most completely is the so-called Schede's method of Vertical Suspension, but while this name has been given to it, and used by American writers, it was described first by Bryant, at Guy's Hospital, in 1870, seven years before, according to Hamilton, it was adopted by Schede, Bryant described it as he had used it in 28 cases, aged from 8 months to 5 years. Hamilton's description is as follows:—

A long continuous band of plaster is fixed to both sides of the injured limb as high as the seat of fracture, and applied so as to form a free loop below the sole. The long strip is then secured by means of circular strips of plaster, and by circular turns of a bandage. The leg having been elevated is then kept in the vertical position with the corresponding side of the pelvis suspended by means of a piece of cord fixed to the loop of the plaster and attached either to some object above the bed or to a pulley.

This method has now the approval of most authorities; ordinary methods meet the first indication of ability to nurse, but they readily become soiled, and do not hold the fragments on account of their shortness and the softness of the tissues—anyone who has tried to apply a splint to an infant's femur will agree with this. Horizontal extension is uncleanly and affected by the movements of the child in crying. Scudder in his work on fractures, 1907, advises this method of treatment of all fractures of the femur in young children, and suggests that the child be placed on a Bradford bed-frame—he illustrates it with one leg suspended. Stimson in his last edition gives it the preference illustrates it by a picture of a child lying in a crib with both legs suspended.

In Stern's way of using the method, the child is placed on a stand beside the bed, not higher than the mattress and the affected limb is drawn up by a cord to a hook in the ceiling with a counter weight of 2½ lbs., or just sufficient to raise the hips of the bed. The child is nursed by the mother lying at the edge of the bed. He reports good results in 7 cases, ages up to 9 months.

I may mention the Van Arsdale splint as one that has had many adherents, in it the leg is put up in a well flexed position and kept there by a cardboard splint, reinforced by plaster, if necessary. The advantages

claimed are cleanliness as the dressing is well away from chances of soiling, portability of the child and convenience, but it does not provide a means of extension apart from the accurate fitting of the appliance. Many successful cases, however, are reported by this method.

An objection has been urged to the method of vertical suspension in female infants, that a vaginitis may follow from the gaping of the parts, but should such occur, it readily yields to appropriate treatment.

With your permission I will now report a case of fracture of the femur reated by the method of vertical suspension, in which minor modifications are introduced, which I believe are advantageous in cases such as I mention.

Case. Baby, a male, was born on January 6th, 1908. The mother a healthy primipara, was in labor in all about 36 hours, a breech presentation. The breech engaged and after a long time presented in the cervix with the legs straight up in front of the body, legs extended on the thighs; the body of the child so completely occupied the straight that it was impossible to bring down a leg, and attempts to pass a fillet failed, so, as pulsation had ceased in the cord, in the hope of saving the child's life, a blunt hook was passed over the thigh, and the child with great difficulty delivered, a fracture of the femur being evidenced by a noticeable cracking sound. The child was with difficulty resuscitated.

The fracture was apparently transverse at the junction of the middle and upper thirds. For the first two days the child was kept lying on a pillow with the leg bandaged, an attempt to incorporate a splint with the bandage, proving useless, as it soon slipped out of place. The apparatus I show you was then made, consisting of a piece of pine board 2 feet by 9 inches, padded and protected by oiled silk, with an arch 14 inches high of $\frac{1}{4}$ ft. iron rod erected over it, 8 inches from one end and 16 inches from the other.

The baby was laid on the board and fastened to it by safety pins through the clothing, and by passing a broad binder around both baby and board.

Both feet were brought up so as to extend the legs vertically, and suspended to the cross-bar, at first by a cuff of bandage around the ankle outside a sock, but as this caused some oedema of the foot it was abandoned and zinc oxide plaster strapping was applied to the sides of the legs, beginning above the knee, and with a loop over the foot in which a block was placed to prevent pressure on the sides of the foot. These loops were fastened to the cross-bar by strings of bandage at such a height as to raise the both hips off the bed. This soon produced the necessary extension, and the child who had been fretful before now seemed quite comfortable; it was found that when he cried that the action of the ilio-psoas was so strong that the thigh flexing on the pelvis

the bending took place at the point of fracture instead of at the knee, and to obviate this a starch bandage was applied to the thigh and painted over with shellac to protect it.

It was found that the baby could be handled most conveniently on the board—in fact the mother said that it was more convenient there than when taken off—could be nursed from either side without any difficulty even while the mother was in bed, the dressings were not soiled, and the child was most comfortable, and necessary changes in clothing were made by the nurse without trouble. In two weeks the union was complete with the formation of a large amount of callus, and no difference in length could be observed; the extension was kept up for a week longer, when the child was taken off the appliance and only a bandage kept on the thigh. The plaster applied to either side of the leg was fixed with crossstrips alternately, front and back, so as to avoid constriction, it had to be changed once on account of slipping, but caused no injury to the skin.

I would like to emphasize the value of the board in treating these very young infants, instead of placing the child on a bed—I got the idea from the method used by the Indian mother—and the importance of suspending both legs, as if only the injured one is suspended, the child will twist about, tilting the pelvis and causing rotation and torsion at the point of fracture.

I did not think any good purpose would be served by presenting the patient, I examined the leg yesterday (April 20th, 1908,) and found it hard to decide which had been injured, the callus was practically all absorbed.

I have nothing to claim of originality in the treatment, but the entirely satisfactory course and results are my justification for bringing it before you, and I thank you for your interest.

ON-COME OF AGE, PHYSIOLOGIC, PATHOLOGIC, AND PSYCHOLOGIC FACTORS.

JOHN HUNTER, M.B., Toronto.

THE on-come of age is a problem, not only of perennial, but also of universal, interest. While it is true, that a large number of people do not live long enough to reach this period, yet as there will always be living, many who have already passed the half century limit, and a much vaster host coming on, who hope to do so; the problems associated with the on-come of age can never become uninteresting. Quite recently, too, a casual statement of Osler's, caught by those herald

angels of the press—the reporters—and flashed over the world, gave to this question a somewhat hysterical prominence.

The on-come of age could be profitably discussed from many viewpoints. In the industrial world its advent brings ominous forebodings to the artizan. In the eyes of the employer, silver locks stand for failing activity, and loss of mental alertness. Watch the hosts coming out of one of our great industrial plants, and you can almost count the aged members on the fingers of one hand. Go into the offices, and you find only young men behind the desks. If we turn to the financial world, we find young men in the positions of greatest responsibility and activity. In all phases of literary work young men and women occupy a prominent place. In the ecclesiastical, and teaching circles, it has been said, humorously, that "A man who can part his hair in the centre, is in far greater demand than is he, whose hair has departed from the centre of his head." To our own profession, the on-come of age brings up serious problems. It falls to the lot of but few medical men to go very far past the half century line without realizing that their popularity is on the wane. Without a competency, or a lucrative position, the outlook for the aged physician is gloomy enough. However, it is not the purport of this paper to discuss the question from any of these standpoints, but to deal with its physiologic, pathologic, and psychologic, factors.

Physiologic Factors.

Each period of life has its own physiologic metabolism, using this term to cover material and energy exchanges. If it be permissable to use the algebraic symbols (+, =, −) to represent the conditions of physiologic metabolism in the three periods of life—it could be stated that during the first, or developmental period, metabolism is a + quantity. It not only makes provision for "wear and tear" of life's activities, but also furnishes extra material and energy for physical development. In the second, or adult period, normal physiologic metabolism preserves an equality between the income of material, and energy exchanges, and their output, in the various functional activities of the different organs. In the third, or period of senile involution, physiologic metabolism is a negative quantity. The material and energy exchanges are no longer sufficient to prevent tissue degeneration and the impairment of functions.

When senile involution is a physiologic, and not a pathologic, process brought on prematurely by disease, the trend is toward a more primitive, or less highly developed type of tissue. The more complex cells revert to those of the connective tissue type. The skin loses its vascularity, and elasticity, becoming pale, and wrinkled. The muscle

fibres and glandular cells, are more or less extensively replaced by connective tissue. This physiologic involution affects all the tissues of the body and impairs their functions, *e.g.*, the thymus gland atrophies very early, and the ovaries at the climateric. Changes in the ocular and auditory tissues impair vision, and hearing. The nerve cells and neurons become less sensitive, and, as these are the physical factors through which psychic energy manifests itself, it is easily understood why there may be marked changes in the mental and moral attributes of the individual with the on-come of age.

Pathologic Factors.

Statistics show that the average length of life is steadily increasing, but this is due to a greatly reduced mortality during the first period of life. In fact, statistics show that the mortality is rather higher in later life than it was half a century, or more, ago. This pre-senile involution, and higher mortality are due to many causes. Heredity plays a very prominent part. Each individual life inherits a certain potentiality. This is only, too often, utterly inadequate to carry the individual to even the half century mile-post; much less to the biblical "three score years and ten, or if by reason of great strength to four score years." From viability to death, man is at variance with his environments. He has to be protected against sudden, or violent climatic, industrial, social, and national changes. His needs, physical, mental, and moral, are legion. These may be either, inadequately or improperly provided for. Starvation, due either to an insufficiency of food, its improper preparation, or to morbid conditions in the digestive tract, leads to the development of imperfect and unstable tissues that are very liable to break down at any of the "stress periods" of life-puberty, climateric, or at the on-come of age. On the other hand, social customs often lead to over-indulgence in the use of rich foods and strong drinks. The appetite is satiated regardless of the needs of the body. Morbid consequences follow. The system is loaded up with waste products that the eliminative organs cannot dispose of, hence auto-infection from putrefactive changes. The presence of material, that irritates the cells in the vascular walls, excites the morbid tissue change known as arterio-sclerosis. The presence of waste products in the blood, plus the inordinate "wear and tear," incident to what is so fully and tersely expressed in the term "strenuous life," have a very pernicious effect on all the vital tissues. The persistent irritation, and over-strain, are potent factors in impairing the stability of the structures composing the different systems; hence normal metabolism becomes impossible. The essential elements of the cells become disorganized, and their functions in the processes of assimilation and nutrition, are impaired. The quantity and character of

the internal secretions, so essential to vital energy, are injuriously affected. Pathologic changes in the heart, blood vessels, brain, liver, kidneys or pancreas, according to their intensity and degree, usher in the pre-senile or senile involution incident to the on-come of age.

Psychologic Factors.

The nervous system constitutes the medium by means of which mental, or psychic energy is made manifest. Any impairment in the transmission of vital, or electric energy in the various nerve tracts, interferes with the psychic functions. Sensations emanating from objects, or forces external to the body may not reach the sensorium with a sufficient degree of intensity to be promptly and distinctly recognized. On the other hand persistent irritation of the nerve cells by the waste products not eliminated from the system by the excretory organs, may make the sensorium hypersensitive. Retardation in the manifestation of psychic energy, or more or less violent exhibitions of mental irritability, are often the premonitory signs of the advent of senile involution. The nerve cell is differentiated from other tissue cells only in the arrangement of its constituent elements, hence the nervous system is vulnerable to practically the same influences that affect the nutrition, and functions of the other organs of the body. In the nerve tissues, as in the other tissues, a devolution from the more complex, to the more primitive cell structures, characterizes the on-come of age. Connective-tissue cells produce the increase in density and diminution in size, so apparent in senile involution of the brain. Co-incident with these physical changes in the cells and nerve tissues, there appear distinctive types of psychic manifestations. The buoyant, optimistic spirit is gradually replaced by one of suspicion, apprehension, or anxiety. In military parlance it would be called a retreat from the firing line of life's most strenuous duties. This psychic change is very apparent in the great reluctance there is to undertaking new work. It is a well-established fact that not many men can succeed very well in a new calling entered upon after mid-life.

In a recent work by Prof. Minot, of Harvard University, the statement is made that few men learn much after twenty-five. If this be true of the race, en masse, it must be the result of causes, other than those included under the term senile involution.

Another type of psychic disturbance quite frequently met with in later life, is just the reverse of the one already referred to. In this type there is a clamorous optimism; judgment, or actions are not governed by knowledge, or past experience. There are irrational exploitations and morals, property, or an honorable reputation may be irreparably damaged. According to the intensity of the devolution going on in the nerve

cells each feature in either of the above psychic types becomes more manifest. In the former the patient degenerates into a condition, technically known, in psychiatry, as "depressive apathetica." These cases augment the list of suicides. In the latter, or grandiose type, the peril lies in the complications the patient may become involved in before his condition is recognized. Many costly and vexatious litigations follow his irrational exploits.

Between these distinctive manifestations of senile involution we find all shades of psychic aberrations, one of the earliest disabilities to be confronted in the on-come of age is an impairment of the memory faculty. The difficulty in recalling new names, is especially embarrassing for recent impressions are so feebly recorded that they are quickly forgotten. This is very apparent in the conversation of those past mid-life. The most interesting topics are the events of bygone days. The eyes sparkle, and the emotions rise, as the veterans live over again the scenes of other years. Experience, accumulated knowledge, and a changed perspective, are also potent factors in moulding the psychic conditions incident to the on-come of age, and add their charm of statlier graces to the vista of life's sunset.

In conclusion, we as physicians cannot shut our eyes to the fact that the on-come of age is fraught with its perils, as are the other stress periods—puberty and climateric. If it be true, as a recent writer has stated, that "the medical man is himself responsible for the increase of disease, and the degeneration of the race," those of us who have already passed through the portals on the confines of the half-century, should not only rigidly investigate our own habits—but also strongly admonish those over whom we have the medical supervision; in order that we and they may abandon whatever in our lives, or theirs, that militates against normal physiologic metabolism and elimination. In food and drink, not the gratification of morbid appetites, but the actual needs of the body should be considered. The homes, and especially the living and sleeping rooms, should have abundance of air space and sunshine; sanitary schools with adequate playgrounds. All public buildings, factories, stores, etc., should be constructed on sanitary plans. We as physicians should hold fast to this truth, and unceasingly preach it, viz., that the best asset our nation can have, from the moral, intellectual, social and patriotic standpoints, consists in the physical development, and health of its people. We may concede if we wish that the spiritual is above the material, but all history shows that it is absolutely impossible to maintain a high spiritual standard among physical degenerates. History also teaches us that people may reach four score years and beyond, with scarcely a perceptible diminution in their moral and psychic energies. Such is the goal and consummation toward which every life

should be directed. It is the physician's duty as well as his honorable vocation to so "coach" the voyageurs on life's tempestuous sea that they may reach the calm haven of the octogenarian with their moral and mental powers, not fatally impaired, but mellowed and enriched by the graces begotten of wisdom and experience, for, on the distal side of the silver crest of mid-life, there are as fruitful valleys, fertile plains, radiant, bracing up-lands, and magnificent mountain peaks, as there are on the proximal side.

AN INTRODUCTORY LECTURE UPON THERAPEUTICS.*

By R. D. RUDOLF, M.D. (Edin.), M.R.C.P. (Lond.),
Professor of Therapeutics in the University of Toronto.

THE term Therapeutics is derived from the Greek verb *Therapeuein,* which means to take care of or to heal, and represents naturally the most important subject that can occupy the attention of the practitioner of medicine.

"They that are whole have no need of the physician, but they that are sick," and when a man becomes ill,—feels that the wheels of life are not running smoothly; that aches and pains disturb him; or in any way realizes that he is not himself, he makes for his physician in the hopes that that trusted friend may heal him.

The student of medicine, as he works his way through the mazes of physiology and anatomy, pathology and physical diagnosis, sometimes fails to keep clearly before his mind that all these and kindred sciences, necessary as they are—being indeed the very foundations of his future work, are merely hand-maidens to the chief object that he must keep in view, which is the care of and the healing of the sick.

Of course, there is a body of students who do not mean to practice their profession but are aiming at purely scientific careers, but it is to the great majority that one must here speak, and for them the most important thing while students is to best fit themselves for the saving of life and the relief of human suffering.

Medicine is an art as well as a science, and it is undoubtedly true, as Forchheimer says, that there are "doctors of medicine who are not physicians at all, though they practice medicine; they are pathologists, bacteriologists, what you will, in the disguise of physicians." When a physician is called to the bedside of a sick man, he is there to cure or relieve, and while the more he exhausts every known method of arriving at a diagnosis the better he will be able to help the patient, yet he must never forget that he is there as a therapeutist, and it is only

*Delivered October 6th, 1908.

as such that the eyes of the sufferer follow him and every word that he drops is so eagerly listened to.

The relations of therapeutics to materia medica and to pharmacology are very close. Materia medica deals with drugs as regards their physical and chemical properties, their preparation, recognition, etc., pharmacology is concerned with these drugs as regards their physiological action upon the living organism. The therapeutist does not limit himself to the consideration of drugs. They form a very important weapon in his armamentary, but are by no means his only weapon, and he must concern himself with every physical, chemical, psychical and other factor which may possibly aid in helping the sick man before him in his struggle back to health.

It is not an uncommon thing for the practitioner to best aid the sufferer by stopping all drugs with which the patient may have been unwittingly thwarting Nature in her endeavors to restore him, and thus he may practice the best therapeutics by vetoing all active treatment.

The therapeutist may be likened to a guide trying to lead his party, the patient, to the goal called Health. Sometimes the road is broad and clear, having been surveyed and mapped out by the physiologist, pathologist and other scientific workers, and the guide goes confidently ahead. But it may be that the country is difficult, one into which science has not penetrated and where there are no cleared roads or even blazed trails to help him. What is he to do? Give up his guideship and abandon his party to its fate? No! by all means no! But if he does, perhaps some native may glide out of the bush and taking the patient by the hand may lead him by pathways that are on no map, but which the savage has learned by experience lead to safety, and may save him. Such paths are empirical. They have not been shown by scientists to lead correctly and yet they often do. Many of our best remedies were learned empirically, and after ages of use have been found to be good paths and lead straight to the goal of health. They have since been surveyed and mapped out and often improved and have become scientific facts, but we must always remember that they were there and used by ignorant natives long before they got into the pharmacopœias.

The history and evolution of treatment form a most interesting chapter of medicine.

We know that the lower animals have many simple remedies which instinct has taught them are for their bettering. One cannot watch a dog, which has eaten something that has disagreed with him, select a certain grass (as an emetic) without realising that he has a therapy. In the same way the most primitive peoples found out many things which have since proved to be of the greatest value in the conditions which they took them for. Thus was cinchona used, also opium, and perhaps

the majority of our best remedies. Psycho-therapy, or the curative power of the mind over disturbed conditions of the body or mind, was very early developed, as shown in the driving out of devils and many other (as we would now say), persuasive or suggestive methods of primitive treatment of the sick.

As reason developed, primitive man began to theorise about disease and its treatment. Such theories are almost numberless, but a few chief illustrative types may be mentioned here.

The idea that all disease is of supernatural origin is one of the very earliest theories and held undisputed sway for many centuries, and still holds good in many parts of the world. With this theory of the nature of the ailment prevailing, naturally all treatment was directed towards driving out or tempting out the spirit that possessed the sufferer. By many it was believed that the spirits actually entered the body and indeed *were* the disease, by others that they in some way caused the ailment without actually entering, while "the Babylonian considered the great god Marduk the expeller of all maladies, whereas Urugal, Namtor and Nergal were recognised gods of pestilence."

Where the firm belief exists that a god or goddess (usually the latter) is the cause of the disease, it will not be long before we have evidence that such a spirit has actually been seen, and recently, when the plague was raging in Bombay, due as both the Hindoos and Mahometans believed to the plague goddess, a witness soon appeared in the form of an old woman whose eyes had been cleared by a visit to the sacred City of Mecca. This old woman swore that she had seen the plague spirit in the form of a gaunt female with bloody fangs and fleshless sinewy arms, sheeted in white, stalking through the streets of the city.

The transference of disease is very generally believed in in the East. It is the old idea of the scape goat. When cholera is raging in an Indian village a dreadful noise is kept up by the villagers in the hopes that they may scare away the goddess of cholera. In the surrounding hamlets the people are keenly alive to their danger, and they also make all the noise possible so as to dissuade the spirit from coming their way. The competition is apt to become acute and may lead to bloody feuds between the villagers.

Another variation in the supernatural theory of disease is that there exists a sympathy between the person afflicted and the animal or person who handed on the ailment. One sees the Indian natives preserving with the greatest care, the life of a venomous snake which has perhaps just bitten their child. They think now that there is such a sympathy between the snake and its victim that if the snake dies, so will the person bitten. Somewhat the same idea is seen in many countries where folk-lore tells

of images being tortured and destroyed in the belief that what happens to images will also happen to the individuals which they are made to resemble.

The belief in the supernatural origin of disease gave rise to all manner of strange methods of treatment, many of which survive among civilised people as more or less laughed at, but still persisting, superstitions. Thus many people wear iron rings to keep off rheumatism, and iron comes down from the earliest times as perhaps the best spirit scaring metal known.

Exorcism, or the driving out of spirits, is the way in which most remedies were supposed to act, and an endless variety of means were employed to this end. Naturally the priests were most concerned in thus dealing with the supernatural, and hence they did most of the medical practice in olden times. All manner of things were used, some of which still survive and are of the greatest value although the theory of how they act is now different; while others were very strange. Relics were in great favor, such as the clothing of saints. Tomb stones had special powers, and even the washings of tomb stones were powerful. Gregory of Tours says of such washings: "Oh! indescribable mixture, incomparable elixir, antidote beyond all praise! Celestial purgative, which throws into the shade every medical prescription, which surpasses in aroma every earthly fragrance, and is more powerful than all essences * * * * which not only cures the ailing limbs, but also, and this is more valuable, washes off the stains from the conscience." (Magnus.)

Such a remedy undoubtedly cured, but nowadays we would say that it acted by suggestion, the patient taking some of the tomb washing in perfect belief that it would cure his aching head, and presto! the pain would disappear. But even a purer example of psycho-therapy was the good effect of temple sleep, which for ages held such powerful sway in Europe. This method of treatment was most extensively used during the period of Hellenic civilization in the centuries preceding the Hippocratic era. Sufferers from all manner of ailments would resort to the temples and there sleep for a night or more, sometimes staying about the temple for years, always firmly trusting that the gods would remove the diseases that they had imposed. Later on, when the ancient religions had died out, Church sleep took the place of temple sleep. The phychical effect of such temple or church sleep would be much the same as that produced by sacred pools or springs, and the hope inspired by firm faith no doubt brought many nervous sufferers back to health who would otherwise have remained invalids. As in most things, fraud was apt to creep in in furthering the cures produced by such means, and Magnus relates how Henry II., a German Emperor, who suffered greatly from stone, retired to the Italian cloister, Monte Cassino, which enjoyed an immense

reputation as a place of cure. During an acute stage of the royal patient's sufferings it is related that St. Benedict himself appeared in person and cut him for the disease, and after having pressed the stone that he had removed into the hand of the sleeping Emperor retired to his heavenly residence from whence he took care that the wound promptly healed.

A great and lasting change came over the face of medical opinion when in the 5th century, B.C., the Father of Medicine laid down the belief that disease was due to chemical, physical and other natural and earthly causes. Later, Galen disavowed all theism and relied solely upon physico-chemical methods, observation, experiment and dissection. There was, of course, much and bitter fighting between the two schools,—that which considered all disease as of natural origin, and that which considered it as a supernatural manifestation, but at last a compromise was reached in the form of teleology. By teleology we understand the idea that "all earthly existence is created by a supreme power with a preconceived plan, and that accordingly all organic life in form and action is most perfectly adapted to the task prescribed for it by this power." At the same time it permitted the idea that disease was due to adverse purely earthly conditions, an assumption not involving the slightest doubt of the wisdom and creative powers of the gods. This teleological idea has since become a permanent factor in speculation as to the nature of disease.

The relation of astronomy to therapeutics dates from very early times and was specially marked in the dark ages. Hippocrates himself said "Astronomy is not of slight but of very essential importance in medical art." According to the Babylonian code of Hammurabi, 2200 B.C., a surgeon who operated when the stars were unpropitious should have his hands cut off. It seems that all nations have at some time shown their belief in astronomy as affecting disease and its treatment, and it is almost hard to believe how such a widespread opinion can have no foundation in fact. With astronomy of such importance, almanacs and calendars were of the greatest moment and no medicine could be taken or operation performed without the sufferer's horoscope having first been cast and found to be propitious. We see traces of such belief to-day when people hesitate to start an enterprise upon a Friday, especially if that Friday happens to be the 13th day of the month.

Among civilised people the belief in supernatural influences upon disease has pretty well died out, except where it survives as odd half-laughed-at superstitions, but among millions of the world's inhabitants it exists as strongly as ever and must be reckoned with by the modern practitioner as a powerful influence upon the minds of his patients.

Since Hippocrates placed medicine upon a firm physical basis, theories of the essential nature of disease have come and gone, and

whole systems of treatment have reigned for ages only to be replaced by others often of a quite different nature. Disease has gone on probably much in the same way since the beginning of time, and men have suffered much as their fathers have done, but it is the treatment that has varied, all depending upon the theories prevalent at the time. Theories are necessary in medicine, but the science and even more the art of medicine have suffered much from bad ones,—ones founded upon a few insufficiently investigated facts or even wholly evolved from the fantastic brain of some ill-balanced but influential individual, and then pushed with vigor by his adherents. Such unsound theories have led to extremes of treatment which have done much to stain the fair record of medical progress. Excessive bleeding, excessive drugging, the starving of fever patients, from whom even water was withheld, are a few examples of what the public have suffered from unsound theories, with the treatment founded thereon.

Fortunately, theories are very often, so to speak, only skin deep, and a sort of instinct, call it what you may, seems usually to guide men aright. For example, the natives of South America had a theory that cinchona drove away the evil spirit that was fever and ague. The idea that the disease was of supernatural origin was wrong, but the practice of giving cinchona in such a condition was right. The empirical practice probably preceded the theory by ages. In the same way iron was given from the very earliest times on the theory that it frightened away the spirits that produced the paleness, and thus anæmia was cured at first empirically, then because of the theory and now because we know or think we know how iron acts, but all through, iron has been used to relieve paleness. As an example of recent theory being wrong, but the resulting practice being right one might mention that Anglo-Indians have thought that the malarial miasma, which they considered was the cause of malaria, did not rise high, and hence they always tried to build their houses on high ground or to sleep in an upper story. Now we know that malaria is transmitted by mosquitoes and that these pests do not like to fly high. The observation empirically learned that people who slept well above the level of the marshes were less prone to malaria than those who lay near the water level was a correct one. Next the theory was started that the fever was due to a miasma, this was wrong, but did not alter the good practice.

It will be found that nearly all theories and therefore the practice that is founded on them contain *some* element of truth, and when a new system arises it is well to endeavor carefully to find that germ of truth, and then to discard the thick husk of exaggeration, nonsense and even fraud that may surround and well nigh hide it. Thus, in Homeopathy, in Christian Science and the Emmanuel movement in recent times, and

in temple sleep, exorcism and charms in times gone by there was an element of truth, which it does not do for the modern practitioner to ignore.

Homeopathy, with its infinitesimal doses, did a great service, coming at a time when the dosage of drugs, and strong drugs at that, were heroic. It showed what would happen when a diseased person was left alone, and in that way led to the right recognition of the therapeutist's best friend, the *vis medicatrix naturæ*. Before that time it seemed to be assumed that a disease would go on indefinitely unless treated. Now we know that the living body has marvellous powers of purifying itself of infection and poisoning, and of returning to its normal condition. We also know that the natural course of most diseases is to disappear. Recognising this great and fundamental fact, it remains for the therapeutist to do all in his power to aid nature in the struggle. Sometimes he can by suitable treatment make the difference between life and death, and also it is possible that by unsuitable treatment he can turn the scales the wrong way; usually he can enable the body to carry on the fight under conditions which tend to make its success more certain, and always he can by appropriate means, be they physical, mechanical or psychical, console and comfort the sufferer.

As soon as you have entered practice you will find yourselves inundated with samples of new remedies and accompanying literature. Let me advise you to go warily in using such new drugs. All remedies must once have been new, and hence the fact of a drug being new is no argument against the possibility of its being of great value, but as a matter of fact only a very small percentage of the new preparations that we so constantly hear of survive even a cursory trial. They either are of no use or are of less use than older, similar bodies, or they prove to have some objectionable feature which soon condemns them to oblivion. An old Edinburgh teacher used to advise his pupils to keep two years behind the times in their private practice, and there is a great deal of sound sense in such advice. It is wonderful how many, probably the great majority, of new and highly flaunted preparations disappear into well-merited shade within two years of their first appearance. These newer remedies, or at least those that appeal to the clinician, are best tried in hospitals and institutions where the patients are under constant observation night and day.

The history of our art tells us very strongly of the value of common sense in the handling of diseased people and helping them in their struggle back to health. We should try not to be carried to extremes by any new and insufficiently tested methods of treatment. This is doubly important when such methods involve any risk to the patient. Let us remember that the human body has marvellous powers of fighting

disease, and generally speaking, wins in the fight; that in most cases we are not treating the *disease,* but by placing the body in the best possible surroundings, and conserving the strength, and often treating the symptoms as they arise, we are humbly but often efficaciously assisting the individual in his struggle. Occasionally, as in the case of diphtheria and malaria and some other diseases, we have greater powers than these and can directly attack the invader, but as a rule our powers in this direction are limited. Generally, we are not treating disease, but taking care of a diseased individual, which is a very different thing, and yet the distinction is often forgotten. Such a question as: "What is the treatment of pneumonia?" is asked, and yet the fair way is to say, "This individual, who has certain powers, etc., is attacked by pneumonia; what can you do to aid him?" Pneumonia may exist in a decrepit old already bed-ridden creature, and in a previously healthy young man. They both have the disease, and yet how different must be the treatment! The skilled practitioner always studies the individual as much as the disease from which he happens to be suffering,—just as a pilot, asked to take a storm-stressed vessel to port, will study the ship,—her sails, her hull, her way of acting to the helm, just as much as he will note the storm that is causing the danger. Some vessels will come safely to port, while others, although out in the same storm, suffering so to speak from the same disease, will founder. So it is with human ships.

Our course of Therapeutics in this University will extend over two years, besides which the student will learn much about the treatment of the diseased in his ordinary clinical work. In the first course, in the third year, we will discuss the principles of the care of the sick, taking up various examples of deviation from the normal healthy condition, and then seeing in what way we may help in combating these deviations.

In the final year the class will be divided into small sections, and with each section the various methods of treatment will be considered and demonstrated in a practical manner at the hospital. These small classes will be quite informal, and the various points will be freely discussed as we go along, and the students will be asked to help in the different practical methods, and they will write all the prescriptions.

NOTES ON A CASE OF BRAIN TUMOUR.

By J. T. FOTHERINGHAM, M.D., Toronto, Assistant Physician, General Hospital.

PATIENT J. W. C., *aet.*, 33, carpenter, Englishman. History of family—negative.

Patient's History. Nothing important till July, 1907, when he had a fit in bed at midnight, on which he wet the bed, bit his tongue, and was

thrown out upon the floor. Without any evidence of ill-health he went about his work thereafter until August, 1908 (13 months), when he again had an exactly similar fit; this time, while in the bath-tub, on a Saturday afternoon. On November 3, 1908, he consulted me. He had then no localizing signs, disturbances of vision, of reflexes, or of mental processes. His wife said that he had confusional periods, and that twice or so, he had had "bilious" attacks, with vomiting, which caused much pain in the head at the time. He gave no history of spasmodic vomiting nor of headache, but said that at times he felt a great fullness in the head. He had shown for a few weeks a disinclination to work, though a very industrious, steady man, because he said he did not feel well enough. On November 10, one week later, he returned, and reported no change, except that he had two or three nights previously, while sitting in the street car, lost the use of his left leg for a few minutes, noticing it first on attempting to leave the car, and finding it persist while he walked for a block or two, then pass off. On November 13th he sent for Dr. D. McGillivray, who found him at 7 p.m., suffering tremendous pain in the head, confused, not maniacal, answering correctly when spoken to, but every little while rising and walking out of the room and in again as if dazed by pain. A hypodermic injection of $\frac{1}{3}$ gr. morphine was given, and next morning he was found deeply unconscious, having become so early in the night, during which time he had repeatedly vomited and emptied the bladder and bowel involuntarily. His temperature was high, the pulse full, bounding and frequent, and the face extremely flushed. He had had a series of frequent spasms, sometimes inclined to be clonic, but mostly tonic, affecting mainly the right arm, and sometimes inclining to become generalized. He was admitted in the afternoon of this day to the General Hospital, when his condition was much as above, but rather worse. Temperature 103° F. Respiration 48 and stertorous, pulse 130, and face extremely purple, with frothy oedematous fluid in throat and mouth, and fine râles all over both lungs. White blood count, 26,400. Lumbar punctures showed high pressure (not estimated) and increase in cells contents. A free venesection (14 ozs.) gave partial and temporary relief, but he died at 7.10 p.m.

The *post mortem* report is unimportant except as concerns the brain. In right frontal lobe just above and in front of the Sylvian fissure, and occupying the posterior portion of the lower frontal convolution, was a soft bulging cystic tumour, the cortex overlying it very thin, and the contents semi-fluid translucent yellow gelatinous, much like the soft soap of the country. There was no encapsulation, and in this soft mass was a recent small hemorrhage. Forward, upward, and inward from this area the whole right frontal lobe, though the cortex seemed unchanged, was hard and enlarged without any encapsulation, and little or no flattening

of the convolutions, and bulging across the longitudinal fissure so as to compress the mesial surface of the opposite lobe to the depth of about ¼ inch, was a mass about 1¼ inches across, occupying the middle part of the superior frontal convolution and the bend of the gyrus fornicatus over the genu of the corpus callosum. The shape of the right lateral ventricle was much altered, but the choroid plexus and venæ Galeni seemed normal.

Microscopic examination in the Pathological Laboratory of the University shows the growth to be an angio sarcoma, or, as it is now called, a perithelioma, originating in the cells immediately outside the endothelium of the capillaries.

20 Wellesley Street, Toronto.

SOME OBSERVATIONS ON SURGERY OF THE GALL BLADDER AND BILE DUCTS.

W. G. Hamilton, M.D., *The American Journal of Medicinal Sciences,* 1909, Vol. 137, No. T., page 110, emphasizes the following points. When the disease is confined to the gall-bladder, danger from operation is minimized. When the common duct has become the seat of obstructive and infectious cholangitis, the operative risk is often greatly enhanced, for one may have a patient who is suffering both from chronic sepsis and from cholemic intoxication as well.

The infective character of the bile should be borne in mind in operations upon many of these sufferers from affections of the biliary channel. Failure to bear this in mind may lead to soiling of the peritoneum and a fatal peritonitis.

Rigidity of the right rectus muscle near its upper attachment may have some significance. Either indigestion or something in the way of stomach distress is often manifest in the history of gall-bladder cholelithiasis.

One may find tenderness one inch to the right and one inch above the navel in many of the common duct cases (Robson). Tenderness over the gall-bladder is quite likely to be demonstrable, if there has been a recent exacerbation of cholecystitis.

Cramps or pains through the gall-bladder to the right infrascapular region are often observed in gall-bladder or cystic duct cases.

Increasing experience suggests to us the importance of preserving the gall-bladder when salvable. The question as to the possible ultimate restoration of its function and that of the cystic duct as well should be carefully weighed before doing cholecystectomy.—*Surgery, Gynæcology and Obstetrics,* April, 1909.

CURRENT MEDICAL LITERATURE

MEDICINE.

Under the charge of A. J. MACKENZIE, B.A., M.B., Toronto.

TREATMENT WITH CULTURE OF LACTIC ACID BACTERIA.

In the *Medical Record*, March 27th, North reports the results of 300 cases treated in this manner, which are summarized as follows:—

Disease.	Cases.	Cured.	Improved.	No Result.
Atrophic Rhinitis	56	.....	50	6
Ethmoiditis	34	5	24	5
Frontal Sinusitis	21	11	6	4
Acute Rhinitis	51	14	.....	37
Hay Fever	11	.....	10	1
Otitis Medica	14	.....	10	4
Chronic Rhinitis	5	.....	5	.....
Tuberculous Sinuses	10	.....	.....	10
Antrum	8	.....	4	4
Gonorrhœa	28	2	26	.....
Suppurating Wounds	10	.....	5	5
Peritonitis	2	2	.....	.....
Cystitis	2	.....	2	.....
Leucorrhœa	7	.....	4	3
Diarrhœa	11	2	4	5
Rigg's Disease	5	.....	5	.....
Gonorrhœal Ophthalmia	19	17	.....	2
Conjunctivitis	10	10	.....	.....
Total	304	63	162	86

From this he claims:—

1. That the bacillus of Massol can be grown abundantly in dextrose bouillon by the addition of lumps of calcium carbonate.

2. That the use of these cultures as a wash or spray on inflamed surfaces or cavities often diminishes the discharge upon such surfaces or cavities.

3. That the use of these cultures often diminishes odor caused by putrefaction.

4. That the treatment sometimes reduces swelling, especially in the erectile tissues of the nose.

5. That both acute and chronic inflammations caused by infections sometimes appear to be checked when their seat can be reached by an injection of these cultures.

6. That the use of the cultures seems to be accompanied by no special danger and that they cause no irritation.

Neoplasms are due to interference with normal cell reproduction induced through trauma, pressure, severe inflammations, or constant irritations; these factors act upon cell proliferation by producing abnormal cells which in turn, if the original irritating status is maintained, again generate cells of their own kind.

If trophic nerve impulses are not interfered with, normal conditions may supervene when the irritation or inflammation subsides.

If involvement of the trophic nerve takes place so that efferent and afferent impulses are interfered with or inhibited, riotous development of the new progeny of cells will be invited. If the trophic nerve supplying the part is severed or permanently inhibited, ulceration will supervene.

The above theory place the etiology of cancer formation upon a rational basis, and permits us to guard against its increase by prophylactic measures which readily suggest themselves.—Dieffenbach, *Medical Record.*

GYNÆCOLOGY AND ABDOMINAL SURGERY.

Under the charge of S. M. HAY, M.D., C.M., Gynæcologist to the Toronto Western Hospital, and Consulting Surgeon, Toronto Orthopedic Hospital.

CLINICAL NOTE ON INTUSSUSCEPTION.

Ernest A. Hall, L.R.C.P., Ed., Victoria, B.C., reports the following case:—

A baby four months and three weeks old, bottle-fed and delicate, received his food at 9.20 a.m. and immediately went to sleep. He did not awake at 12 as usual. At 12.45 the mother heard an unusually sharp cry and found the child pale, with the legs flexed upon the abdomen, and screaming.

I arrived with the family physician, Dr. Helmcken, three-quarters of an hour later. One glance at the patient,—the pale skin, pearly eyes, abdominal attitude, and peculiar, high-pitched, intermittent cry,—gave a picture never to be forgotten. A rectal examination with the little finger gave one drop of bloody mucus. On account of the rigid recti no tumor could be felt. Within half an hour the child was upon the operating table.

Under anæsthesia a mass could be felt in the left iliac region. The whole of the ileum had prolapsed into the cæcum, and the cæcum into the colon as far as the signoid flexure. The prolapse being recent there were no adhesions. The first inch of the ileum was bruised and dark for

half of the circumference. This was opened, the extravasated blood removed, the bowel emptied, and the incision closed. The child took food in a few hours. Convalescence was normal.

It is evident that the dead line in these cases is marked by delay. In this case we were fortunate to have the intuitive recognition upon the part of the mother that the peculiar, high-pitched, plaintive yet piercing cry, which as an indication of this condition has not received sufficient emphasis, indicated something seriously wrong. The fact that this cry is synchronous with the vermicular action of the bowel should also be noted. Vomiting is not necessarily a prominent factor, and the passage of bloody stools is a symptom usually too late in the history of the case to be of any value. A tumor can rarely be determined under anæsthesia. Umbilical and inguinal hernia are not to be overlooked.

Had the whole circumference of the bowel been involved I would have fastened it in the wound and drained it externally until we had determined whether there were sufficient recuperative power in the bowel or not. It would then be a question of restoration to the abdomen or resection, which would be done at a later date when the child had recovered from the shock, since the lower end of the ileum can be drained externally without seriously jeopardizing the nutrition. In cases in which adhesions and gangrene have set in various methods given in the surgical text-books may be tried, but the best method is to bring the whole gangrenous mass outside the abdomen, drain the bowel and wait until shock has passed off. By this means the poisonous retained matter within the bowel is gotten rid of with the least amount of manipulation, and the offending mass is where it can be observed.—*Surgery Gynæcology and Obstetrics,* February, 1909.

OBSTETRICS AND DISEASES OF CHILDREN.

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

FREQUENCY OF TUBERCULOSIS IN CHILDHOOD.

Clemens von Pirquet, *Jour. A. M. A.*, February 27th, 1909, claims that his cutaneous method has the advantage over injection of tuberculin that it does not produce any general symptoms; that it produces an entirely harmless inflammatory efflorescence on the skin; and that it can be carried out more quickly and more uniformly. The method of applying the tuberculin test is as follows:—

"The skin of the fore-arm is scrubbed with ether, then two drops of undiluted old tuberculin are dropped about four inches distant from

each other. Then, with a vaccinating lancet, the point of which has the form of a small chisel, a superficial small scarification is made between the two drops (for the control of the traumatic redness folowing the small scarification). Finally the same scarification is made inside of the two drops; a few fibres of cotton are put on the drops so that they will not flow. After five minutes the cotton is taken off. No dressing is applied.

The papule is examined after 24 and 48 hours. It is considered positive when the tuberculin scarifications are clearly different from the controled places, but the inflammatory reactive area must measure at least 1/6 of an inch."

This paper is concerned with a study of this reaction on 1,407 children in the Escherich Clinic in Vienna, and contains a considerable quantity of statistics. The statistics seem to show that in the first year of life all reacting cases show definite clinical symptoms, whereas in the later years of childhood not all the infected cases as defined by positive reactions to the tuberculin tests, present clinical symptoms. In other words, latent tuberculosis becomes more frequent in succeeding years. In the 10th year of life 70 per cent. of the children reacted to the test for latent tuberculosis.

It was found in cases presenting clinical evidence of tuberculosis a positive reaction was obtained in all cases after 24 hours, whereas in latent tuberculosis, especially in older children about one-half the patients reacted only after some days and some reacted only after a second test. This "secondary reaction" he thinks is indicative of a slight and old tuberculosis infection which is in the process of healing.

He explains the high percentage of infected children as shown by his table as being due to the fact that tuberculosis is notoriously prevalent in Vienna among the poorer classes.

The author suggests that similar studies should be made in every city in order to ascertain the frequency of tuberculosis in general.

The paper concludes with his sugestions as to a definite method for international use:—

All children should be submitted to the cutaneous test. The following day they are to be inspected. Those showing a positive reaction are noted as belonging to the group of early reactions. A week later those who show no reaction are to be again tested and inspected a day later. If they then react they are grouped in the class of secondary reactions.

This method of testing requires about one hour for one hundred children and one half hour is consumed in the inspecting process. The test is absolutely harmless, so there can be no objection as to carrying out such an investigation.

He considers it desirable to ascertain at what age children generally acquire tuberculosis infection. In this way he hopes that we may be placed in a position to institute proper hygienic measures for the prevention of tuberculous infection in childhood, especially at the period of greatest danger.

OPHTHALMOLOGY AND OTOLOGY.

Under the charge of G. STERLING RYERSON, M.D., L.R.C.S., Edin., Professor of Ophthalmology and Otology Medical Faculty, University of Toronto.

APPENDICITIS COMPLICATING THE PUERPERIUM.

A. M. Judd, M.D., in *Medical Times*, March, 1909, is convinced that there is a causal relation between the birth of the child and the inflammation of the appendix.

He includes in his paper only those cases of appendicitis occurring from the period of child-birth up to ten days post partum. He has studied twenty-two cases found in literature, and one case that occurred in his own practice.

He dwells on the anatomical relationship between the internal genitals of the female and the vermiform appendix, and the displacement of these organs during parturition and the puerperium.

Reference is made to the aberrant course of the ovarian vessel beneath the cæcum in some cases, and to the continuity of the peritoneum and sub-peritoneal cellular tissues with their anastomosing vescular and lymphatic channels. Such relations undoubtedly inviting the extension of an inflammatory condition from one region to the other.

The author argues that the etiological circumstances would be most active within a few days after parturition, and that their potency would rapidly subside as the tissues and organs assume their normal relationship. This is verified by the cases studied, two-thirds developed during the first four days post partum.

Parturition acts probably mechanically by displacement, probably by direct pressure or by traction on adhesions; thus bringing about interference with the circulation or partial necrosis or otherwise damaging the tissues.

Reference is then made to the fact that micro organisms of various kinds may be walled off in the tissues and rendered harmless temporarily, yet retain their vitality. Thus previous attacks of appendicitis may predispose to recrudescence of the condition after parturition.

"Whenever there is a history of any previous symptoms of appendicitis and other causative factors of fever following child-birth such as infectious material remaining in the uterus, or where the genital tract does not furnish any evidence of infection having taken place from with-

out, and other intra-abdominal conditions have been carefully excluded; an exploratory operation, where you have right-sided symptoms of the presence of some inflammatory condition in the lower abdomen is the proper procedure and may save lives that would otherwise be lost."

The author states that the signs and symptoms of appendicitis at this time are as on other occasions. The pain may be interpreted as being due to after-pains. Careful examination as to the locality of the tenderness must always be made. Freund's suggestion of having the patient turned upon the left side while examining the region of the appendix is highly approved of as a valuable method of localizing the inflamed area.

The paper concludes with a report of a case of appendicitis coming on 36 hours after delivery in a primipara. It was attended with chills, pains in the lower abdomen, diarrhœa, nausea, and vomiting. Operation with removal of the appendix which were found to be gangrenous at the tip, and on one side was followed by recovery.

LARYNGOLOGY AND RHINOLOGY.

Under the charge of PERRY G. GOLDSMITH, M.D., C.M., Assistant Laryngologist and Rhinologist, Toronto General Hospital.

A NEW METHOD FOR THE TREATMENT OF ACUTE FOLLICULAR TONSILLITIS.

Hahn (Turin) defines ("Bollettino delle Malattie dell'Orecchio, etc.," No. 11), the disease as an infective process, not specific, which often remains localized into the tonsils, but can easily overstep the barrier of this organ, and with the extension of infective and toxic products of other organs, produce localized disease in these organs, or general infection also.

He proves this assertion by numerous clinical facts collected from the publication of several authors.

In the presence of an infection that may cause, under favorable anatomical conditions, many and serious complications, it is reasonable to have recourse to a remedy more active than those usually indicated in treaties.

After mentioning what other laryngologists have proposed, the author proposes to wash the tonsillar crypts with a special syringe containing luke-warm oxygenated water (12 vol.) with a solution of boric acid (3 per cent.). This liquid is carefully injected into every crypta, and especially several times into the recessus of the palate and in the cavity situated behind the fold of His.

After having done this preparatory washing we must inject many times with the same method into the tonsillar crypts and the surrounding

cavities, a luke warm solution of novocaine of 2 or 3 per cent. in hydrochloride of adrenalin at 1 per cent. and then practise on the tonsil an insufflation of an anæsthetic powder.

The patient obtains an immediate improvement. Sometimes if the treatment is begun at the commencement of the illness the tonsillitis aborts. By freeing the crypts from their contents we are in the best condition to abridge the illness and to avoid the serious complications which may follow a follicular tonsillitis.—*The Journal of Laryngology,* February, 1909.

THE TREATMENT OF COLDS AND CHRONIC NASAL AND PHARYNGEAL CATARRH.

Salzwedel (Review in the *Corresp. Blatt fur Schweizer Aerzte,* November 15, 1908, quoted from "Therap. d. Gegenw.," February, 1908; "Centralbl. f.d. Ges. Therap.," Heft 9), has seen good results ensue by the use of a 0.5 per cent. solution of silver nitrate. He has cured many cases of catarrh which had been of frequent recurrence for some years, and especially such forms as follow attacks of influenza. With the subsidence of the pharyngeal catarrh he also saw other manifestations disappear, which at first sight did not seem to have any causal relation to this condition. Thus, for instance, he noticed recovery from anæmia in children and young girls after such a course of treatment, and even bronchitis and attacks of coughing, the nature of which was attested by cultural experiments, ceased after the application of this solution to the nose.

The treatment is carried out by "pencilling" the interior of both anterior nares as far back as the anterior of the inferior turbinal (not further), and the whole posterior wall of the pharynx accessible, whilst the patient holds the mouth, opens, and says, "ah." The anterior wall of the vestibule is also "pencilled" in the same way. The patient is instructed to incline his head backwards whilst the lotion is squeezed into the nares from a swab, so that the drops run towards the post-nasal space. At first the "pencilling" is limited and only performed lightly; later on energetic swabbing of the recesses of the pharynx is undertaken. In acute cases it is done once daily, rarely twice a day, afterwards treatment every three or four days suffices. Since at the commencement of treatment an increased secretion may take place, it is recommended then only to make this application in the evening about two or three hours before bedtime.—*The Journal of Laryngology,* February, 1909.

PERSONAL AND NEWS ITEMS.

ONTARIO.

Dr. W. F. Loricks, of Campbellford, is appointed associate coroner for the United Counties of Northumberland and Durham.

Dr. S. T. White, of Shelburne, has been made an associate coroner for the County of Dufferin.

Dr. Kenneth Campbell, of Bruce Mines, has been appointed as assistant coroner for the District of Algoma.

Dr. P. J. McDonald, of Little Current, and Dr. J. A. Kane, of Cobalt, are made coroners.

Dr. W. J. Kerfoot, of Biship's Mills, has taken the practice of Dr. G. S. Young, of Prescott, who intends removing to Toronto.

The plans for the New General Hospital of Toronto have been carefully inspected by Dr. Howard, of Boston, and Dr. Holmes, of Cincinnati.

Dr. Max Klotz, of Ottawa, has gone to England and the continent for eight or nine months' special study.

Dr. Arthur C. Munns, of Moorefield, Ontario, has been appointed a coroner.

Dr. C. S. Mahood, formerly of St. Catharines Marine Hospital, has gone to Victor, Colorado.

Dr. W. A. Young, of Toronto, will visit England, France, and Italy, during the summer.

Dr. R. H. Bonnycastle, of Campbellford, has been appointed physician to the G.T.R., in place of Dr. Carlaw, deceased.

Dr. G. H. Wyse, who has been practising in Stratford for a year, will return to Southport, England.

Drs. Ryerson, W. H. B. Aikins, R. A. Reeve, A. H. Garratt, and A. McPhedran will attend the International Medical Congress at Budapest.

The people in Galt are quite determined to improve the hospital there. It has already cost $60,000, and it is proposed to spend $20,000 more on the institution.

Dr. Bruce Riordan has returned after his visit to Texas, Dr. John Caven from his trip to Florida, and Dr. G. R. McDonagh from his visit to South America.

Dr. Thomas McRae, of Baltimore, paid a visit to Toronto a short time ago, and proposed the toast to Professor R. Ramsay Wright at the banquet given in honor of his 35 years of service to the University of Toronto.

Dr. Sheard, Medical Health Officer, for Toronto, is very active in his efforts to secure pure milk, not only for Toronto, but for the Pro-

vince of Ontario. He is doing what he can, as chairman of the Provincial Board of Health, to induce the local boards of health to act in this matter.

Dr. Allan Kinghorn has been recently visiting his mother in Toronto. Dr. Kingborn has been attached to the Liverpool school for the study of tropical diseases, and has spent considerable time in Africa studying the sleeping disease and other tropical affections. He travelled some 9,000 miles through Rhodesia and Nyassaland.

Dr. J. B. Leathes, F.R.S.C., of London, England, has been appointed by the Board of Governors of the University of Toronto to chair of Chemical Pathology in the Faculty of Medicine. The position is a new one, and the appointment takes effect on 1st July. Dr. Leathes is a distinguished authority on the subject.

The monthly meeting of the Victorian Order of Nurses was held recently with the president, Mrs. Samuel Nordheimer, in the chair. During April 736 visits were made by the nurses. By the special request of physicians in the respective localities, nurses will be stationed at Wychwood and Riverdale, where their services are in a great demand.

The third annual meeting of the Canadian Hospital Association was held in Toronto, April 17th, under the presidency of Dr. W. J. Dobbie, of Weston. Dr. H. E. Webster, of Montreal, was elected President, and Dr. J. N. E. Brown, of Toronto, Secretary. The meeting was a very successful one.

There were 80 cases of diphtheria reported to the Toronto Medical Health Department for April, as against 136 in March last, and, 85 in April, 1908. The scarlet fever cases reported in April numbered 115, as compared with 122 in March, 1909, and 109 in April, 1908. The typhoid fever cases numbered 19 in April, 22 the previous month, and 22 in April, 1908.

Many Russian Jews who have arrived in the city within a year are diseased, and they comprise the majority of the patients in the pavilion at the General Hospital. City Relief Officer Taylor received applications from 162 persons in April for admission to the hospital, as against 112 in April, 1908. The applications for food and shelter numbered 245 in April, as against 322 in April, 1908.

It is stated that Professor William Nicol of Queen's School of Mining will present a gift of $40,000 to the directors of the school for the erection of a building on condition that he be given a certain annuity. Professor Nicol is a native of Kingston and a Queen's graduate. He studied in Germany, and has been the head of the department of mineralogy in Queen's for some time.

At a hospital conference in Toronto definite plans were proposed for relieving the local hospital situation. There has been trouble regarding maintenance between the city and the county. It is now proposed to

double the capacity of the Isolation Hospital, and the county will pay *pro rata,* according to the number of patients in the isolation and general institutions.

The Toronto General Hospital ex-house surgeons held, a short time ago, a very successful reunion. Dr. Taylor, of Goderich, presided. Dr. C. F. McGillivray, of Whitby, was elected president; Dr. C. E. Trow, Toronto, Vice-President; Dr. J. N. E. Brown, Toronto, Secretary; Dr. W. B. Hendry, Toronto, Treasurer; and Dr. A. Ardagh, Barrie, Harry Hutchison, Toronto, and Colin Campbell, Toronto, Councillors.

The annual meeting of the Middlesex Teachers' Association was held at Strathroy recently. Dr. Charles Sheard, Toronto, addressed the teachers. He strongly opposed home work for the student, and showed that it is injurious to the child's brain and health, generally. The doctor addressed the teachers again on hygiene, pointing out the necessity of vaccination, and spoke on the different diseases that are prevalent among the students.

The Ontario Government has appointed a milk commission consisting of Mr. A. R. Pyne, Mr. J. R. Dargavel, M.P.P., Mr. Findlay MacDiarmid, M.P.P., and Mr. W. F. Nickle, M.P.P. The appointment of the commission is largely due to the efforts of Mr. W. K. McNaught, M.P.P., for North Toronto. The commission will hold a series of meetings in various parts of the Province, and will go thoroughly into the whole question of a pure milk supply.

QUEBEC.

Dr. John Stirling, of Montreal, has returned from his trip to Europe.

Dr. Frank Patch has resigned his position as Superintendent of the Montreal General Hospital.

Lord Strathcona has sent a check for $10,000 to Archbishop Buchesi in aid of the Hospital for Incurables at Notre Dame du Grace, Montreal.

Two interesting features of the convocation at McGill were the graduation of Peter Hing, the first Chinaman in Canada to receive the degree of B. C. L., and the first Ph. D. degree conferred by McGill. The winner of the latter degree was Mr. Peter Boyle of McGill Faculty.

An agreeable surprise was given at the first annual dinner of the reunion of the McGill graduates in science when Dr. Milton Horsey announced a donation of $10,000 to the metallurgical department of the faculty of applied science. Dr. Horsey's gift was greeted with loud applause by the graduates.

At McGill convocation on the 30th April it was announced that $60,000 had been guaranteed by the committee who purpose establishing a memorial chair in memory of the late Dr. Harrington of the Science Faculty. It was announced that $20,000 had already been raised and a committee of four have agreed to be responsible for the remaining $40,000. In addition to this, there were a number of smaller gifts announced by Dean Adams. These are annual gifts for the most part and vary from $250 to $500 each.

MARITIME PROVINCES.

The Baptist Foreign Mission Board of Maritime Provinces, at a meeting decided to accept an offer made by Dr. W. R. Morse of Providence, R. I., to go to India as a medical missionary.

It is with pleasure one notes the activity of the movement in Nova Scotia for the prevention of tuberculosis. Good will come from the campaign of education.

From the *Maritime Medical News* we learn that Dr. Hare, formerly of Halifax, is doing excellent work in the hospital at Harrington on the Labrador Coast. He joined the work Dr. Grenfell is doing for the Labrador people.

WESTERN PROVINCES.

The new Municipal Hospital at Saskatoon was recently opened. It is an up-to-date building and cost $60,000.

The hospital at Nokomis in Saskatchewan was opened on 1st May, 1909. The accommodation is good.

The Manitoba Sanatorium for tuberculosis is at Ninette, and Dr. Stewart is in charge of the institution.

A Society for Sanitary and Moral Prophlaxis has been formed in Calgary.

Dr. Shepley, who has been in practice at North Battleford, has settled in Raddisson.

Dr. Snyder is taking the place of Dr. Lawson, who was in practice in Lille, Alta., along with Dr. Malcolmson.

Dr. Blow, of Calgary, has been appointed eye and ear specialist to the western division of the C.P.R.

The City of Moose Jaw is asked to erect an isolation hospital. The General Hospital in that place had a good year and reduced its debts by $2,500. A Nurses' Home has been purchased.

Dr. H. G. Mackid, of Calgary, has been appointed medical superintendent of the western division of the C.P.R. extending from Broadview, Sask., to Field, B.C., and all branch lines in that area.

The Western Provinces are moving for Interprovincial Reciprocity. As there is no prospect of that the *Roddick Act* will come into operation for some time, the Western Provinces are trying to agree upon a basis of reciprocity among themselves.

The Alberta Medical Association will meet this year in Calgary on August 18th, 19th, and 20th. This date will enable many who may be going to attend the Canadian Medical Association Meeting in Winnipeg to take in the meeting in Calgary as well.

Dr. W. J. Bechtel, of Lille, Alta., has succeeded in his appeal against the medical council of that Province. Last August his name was removed from the register. After hearing the arguments in the case, Chief Justice Sifton ordered that his name be restored. The council has to pay the costs of the action.

The *Western Medical Journal* in its issue of April is strongly favoring the formation of a western Medical Association to aid in elevating the standard of the medical profession in every way, and in looking after its interests. It is claimed that a strong medical association in the West would aid in making the profession of the Western Provinces second to none in the world.

FROM ABROAD.

There are 21 general hospitals in Egypt with 2,133 beds. The in-patients in 1908 numbered 33,241. There were 181,580 out-patients.

Dr. Gerald Francis Yeo, for many years Professor of Physiology in King's College, London, died at the age of 64 a short time ago.

The total number of births in Scotland last year was 131,337, and the deaths were 77,849, showing a natural increase of 52,875.

At the Liverpool Medical Society Drs. Marsh and O. T. Williams gave a report of cases of menigococcic meningitis treated by Flexner's serum. The results on the whole, very good.

The population in France is decreasing each year, while that of Germany is increasing by 1,000,000. In France the birth-rate is less than the death-rate, whereas in Germany the o osite is the case.

A careful study of the school children of Glasgow shows that their physical development and health is in direct ratio to the social status as to comfort of the families from which they come.

Dr. William Osler was the guest of honor at the medical and chirurgical meeting a short time ago. New hall was dedicated, known as the Osler Hall. It contains ample room for 60,000 books.

A new hospital is to be erected in Melbourne, Australia, to cost about $600,000. The architect visited the best hospitals in the world, Canada, Britain and the continent.

Dr. Simeon Snell, immediate past President of the British Medical Association died at his home in Sheffield, on 17th April. He held many high appointments.

The system of Medical Education in Edinburgh is under a good deal of criticism at the present time. Old and traditional methods have outlived their usefulness. The systematic lecture has become a stumbling-block in the advancement of medical education.

Mr. Jonathan Hutchinson, in *B. M. J.* contends that the continuous treatment of syphilis for a period of two years is the best plan. He holds that if the treatment be properly regulated there is no need for giving the constitution periods of rest. He favors the 1 grain gray powder pill.

The committee of medical and lay members which has in charge the securing of a suitable memorial to the late Dr. W. T. Ball, has issued an appeal for $500,000 as a fund for original research in connection with Columbia University.

There is a proposition on foot for Harvard University to establish a medical school in China. A board of eleven trustees has been appointed in the presidency of ex-President Roosevelt, and the approval of the officials of China has been secured.

A good deal of evidence is being accumulated to show that the short bacillus, with rounded ends, discovered in 1906 by Bordet and Gengou is the true cause of whooping-cough. Their results have been confirmed by Klimenko.

The Merchants' Association of New York has issued a pamphlet dealing with the house-fly. A good case is made out against this common nuisance and excellent rules laid down for the prevention of the breeding of the fly and the spread of disease by it.

Dr. Claudius Galen Wheelhouse died on Good Friday, at the age of 82. For many years he was surgeon to Leeds Hospital, and took much interest in medical affairs in Britain. He was President of the annual meeting of the British Medical Association which met in Leeds in 1889.

The Eugenic Society in Britain has been making its voice heard. Every one is in sympathy with all efforts to raise the physical standard of the nation. It may be well to move in this matter slowly and gain plenty of information before asking for any laws.

Two college buildings at a cost of $100,000 each are to be erected near the site of the Illinois Hospital for photo-therapy. Every facility will be given for the study of the effects of different forms of light on disease.

Australia has inaugurated a crusade against the mosquito. The filaria parasite may be conveyed to the blood by the bite of the mosquito as well as by drinking polluted water. Malaria also prevails in many parts of the island.

The birth-rate of Australia has been steadily decreasing. The Church of England in Victoria has taken the matter up, and is co-operating with the medical profession. It is urged that the government should prohibit the manufacture of all abortifacial drugs and appliances and stop their sale. All houses where women go for confinement should be under inspection.

Dr. Hugh H. Weir, writing in the *B. M. J.* of recent date, on the origin of Beri-Beri, remarks that those who wash the rice thoroughly before cooking it escape, while those who cook it with its dust, suffer from the disease. After the husk is removed an epiplyte develops on the grain which generates a nerve toxin.

Dr. Wm. Murrell reports a case of disseminated sclerosis greatly benefitted by the injections of tiodine, or thiosinamin-ethyl-iodide tiodine can be obtained in phials containing 0.20 centigrammes in 1 c.c. It is best given hypodermically. In one case of disseminated sclerosis 168 injections were given in 5 months. The improvement was very marked.

Dr. Charles A. Duncan, of New York, has invented a projector by which he can throw the picture of an operation into an adjoining room, where the details of the operation are explained to the students by an assistant. Above the heads of the operators there is a disc furnished round its margin with electric lights. In the central opening there is placed an oblique mirror. By another mirror and lense the picture is thrown into the room on a screen.

The International Conference for the suppression of the opium habit, which met in Shanghai, China, sometime ago, has done good work. There were fourteen countries represented, China and Japan taking part. There was an evident sincerity in the minds of the delegates that strong measures should be taken to restrain the evils of the opium habit, and, specially, opium smoking as it exists in China. China was one of the most anxious of all the countries to have the evils of the trade curtailed.

One of the big conventions of the year will be the 36th annual conference of charities, which opens in Buffalo on June 9th, and continues in session for a week. It is expected that 1,500 persons will attend from all parts of the United States, and owing to the meeting being so close to the Canadian border the officials hope for a large representation from Canada. All who can make it convenient to attend will be made welcome to the meetings. Among the speakers will be the leading philanthropic workers of the continent, and every phase of social and philanthropic work will be discussed.

OBITUARY.

JAMES McMAHON, M.D.

Dr. James McMahon, for 19 years M.P.P. for North Wentworth and during the last 15 years chief of the law stamp office at Osgoode Hall, died suddenly at his home, 294 Simcoe Street, recently. Up to a few days prior to his death Dr. McMahon attended as usual at his office at Osgoode Hall, though for some time his health had not been very good. He was in his 79th year, having been born on July 1st, 1830, at Dundas, Ontario.

Dr. McMahon was a son of the late Mr. Hugh McMahon, one of the first licensed surveyors for the Province of Upper Canada, who came to Canada in 1819 from County Cavan, Ireland. He studied medicine at the Medical School of Dr. Rolph, in connection with King's College, Toronto; licentiate of the Medical School of Upper Canada in 1850.

Taking an active interest in politics, Dr. McMahon was returned by the Liberal party as member of the Provincial Legislature for North Wentworth in 1875, re-elected in 1879, 1883, 1886 and 1890. He was appointed to succeed the late Mr. Stephen Baldwin, who died in 1893, as distributor of stamps at Osgoode Hall, assuming the position in 1894.

Dr. McMahon was twice married; his first wife was Miss Julia Ball, daughter of Mr. William Ball, of Niagara, who died in 1883. His second wife, who survives him, was Miss Martha McKee, of Brantford. Mr. Justice McMahon, of the Ontario High Court, is a brother.

The funeral took place at Niagara-on-the-Lake and was private.

A. C. L. FOX, M.D.

Dr. Fox, of Montreal, died in the Royal Victoria Hospital, at the age of 45. He graduated from McGill in 1898 and practised in Montreal since.

J. B. BENSON, M.D.

Dr. Benson died at his home in Chatham, N.B., 7th April, 1909, from an attack of pneumonia. He was at one time Mayor of Chatham, and chairman of the Board of Health. He had a large practice and was very highly esteemed by all who knew him.

J. K. NIVEN, M.D.

Dr. Niven was a graduate of McGill of the class 1901. He had practised in London, Ontario, where he died at his home there.

BOOK REVIEWS.

OPHTHALMIC THERAPEUTICS.

Edited and chiefly written by Casey A. Wood, M.D., C.M., D.C.L., late Professor of Ophthalmology and Head of the Department, Northwestern University Medical School; Ex-President of the American Academy of Medicine, of the American Academy of Ophthalmology and of the Chicago Ophthalmological Society; Ex-Chairman of the Ophthalmic Section of the American Medical Association; Mitglied der Ophthalmologischen Gesellschaft, etc. Cloth, $7.00; half Morocco, $8.50, net. Cleveland Press, Ogden Ave., and Lincoln St., Chicago, Ill., U.S.A.

This is undoubtedly a great work on diseases of the eye. It contains nearly one thousand pages large octavo. There is a very complete index, containing about 8,500 references. The printing, paper and binding are of the best. The book is sold by subscription direct from the publishers or the authorized canvassers. We have examined this excellent work at considerable length, and feel free to recommend it as a thoroughly trustworthy and reliable one. Two features occupy a leading place in the book, namely, the clinical and the therapeutic. We have not met with any medical work in which more care has been given to the recognition of the various diseases as is to be found in this volume. Then, again, the directions with regard to treatment are of the most explicit nature. Running all through the book are to be found many formulæ which will prove very helpful to those wishing to deal intelligently with eye diseases. The whole work is well brought up to date. The contributors to this volume and the publishers are to be congratulated upon the results of their labors.

THE POPES AND SCIENCE.

The story of the Papal Relations to Science from the Middle Ages down to the Nineteenth Century. By James J. Walsh, M.D., Ph. D., LL.D. 400 pp. Price, $2.00, net; postage, 15 cents extra. Fordham University Press, N.Y., City office, 110 West 74th street.

The main object of this work is to set forth the position that the popes have not stood in the way of scientific and medical progress, as has been often assumed. The work is well written, and gathers together

a great deal of information on the matter of the growth of scientific knowledge. He points out that the popes have often been real friends to medical progress, and the growth of our knowledge of disease. The author refers to the medical schools of Rome, Ferrara, Perugia, and Bologna as having been under papal patronage. Upon the whole this is a very interesting work on the history of medicine in some aspects, and of science in a more general aspect. We have read this book with pleasure and can commend the tempered and fair way in which the author presents his arguments to his readers. There is much real information to be gleaned from its pages. The book is got up in a very attractive form.

THE READING PATHOLOGICAL SOCIETY.

A History of the Reading Pathological Society. By Jamieson B. Hurry, M. A., M.D., President of the Society. With illustrations. London: John Bale, Sons and Danielsson, Great Titchfield Street, W., 1909. Price, 7s. 6d.

We can say of this book that it is got up with very great taste. The binding, the paper, the typography, and the illustrations are of the very best. The reading matter is of a somewhat local character, but nevertheless interesting, and shows what a society may do. The society was established in 1841.

IMMUNISATION.

Studies on Immunisation and their application to the diagnosis and treatment of Bacterial Infections. By Sir A. E. Wright, M.D., F.R.S., Director of the Department for Therapeutic Immunisation, St. Mary's Hospital, London W.; late Professor of Pathology, Army Medical School, Netley, London: Archibald Constable & Co., 1909. Price, 16s. Toronto: The Copp Clark Co., Limited. Price, $4.80.

The main position of this very interesting book is to be found in the motto "The Physician of the future will be an Immunisator." Those who had the pleasure of hearing Sir A. E. Wright on the occasion of his visit to Toronto, will recall with what zeal he upheld the doctrine of the important part played by the opsonic theory in the domain of infectious diseases. Since then Professor Wright has done a vast amount of additional original research. A considerable portion of the book is made up of papers which have already been published; but are revised and brought to the present views held upon the subject of immunity. The various chapters discuss such topics as Agglutinins, Bactericidius, Opsonins, Therapeutic Immunisation. On the importance of the vaccine theory and the place played by opsonins, the author has much confidence. Note the

author's words: "I go even further; I submit that the principle of *Phylactic* inoculation—that is to say, the principle of building up the resisting power of the system against any microbe which may have entered the body—will ultimately hold its own, even against the principle of the warding off infection from the susceptible patient." The author is a profound believer in the value of the "curative medicine may give us even more effectual aid against bacterial diseases than has either hygiene and aseptic surgery." We would like to see this book have a very large sale.

WRITING THE SHORT STORY.

By J. Berg Esenwein, A.M., Lit. D. Editor of *Lippincott's Monthly Magazine*. Author of "How to Attract and Hold an Audience." Cloth, 12mo. 448 pages. Price, $1.25. Published by Hinds, Noble & Eldredge, New York.

"The story-writer is the lineal descendant of the story-teller." This book discusses the stort story in its origin, its nature, its structure, and the preparation for authorship. In the short story the following points must be borne in mind, namely, the theme, the material, the facts, the plot, the development, the opening, the setting, the body, the characters, the dialogue, the title, the style, etc. It is a genuine treat to read this volume and note how the short story is developed, and its connection with the epic poem. To those who wish to cultivate the taste for writing short stories this book will be found invaluable.

FORENSIC MEDICINE AND TOXICOLOGY.

Aids to Forensic Medicine and Toxicology. By William Murrell, M.D., F.R.C.P., Physician to and Lecturer on Clinical Medicine in the Westminster Hospital; Joint Lecturer on Medicine in the Westminster Hospital Medical School; late Examiner in the Universities of Edinburgh, Glasgow and Aberdeen, and to the Royal College of Physicians of London. Seventh edition. Sixteenth thousand. London: Bailliere, Tindall & Co., 8 Henrietta Street, Covent Garden, 1909. Price 2s. 6d.

In this compact little volume the essentials of Forensic Medicine and Toxicology are very tersely and clearly stated. The first half of the book deals with Forensic Medicine, and the second half with Toxicology. This is an excellent book for a student to review his work from. The rules laid down for the detection of poisons, and the treatment of poisoning cases are thoroughly trustworthy. As everything is elated so briefly the contents of the book could be readily memorized.

FLUIDS OF THE BODY.

The Mercer's Company Lectures on The Fluids of the Body. By Ernest L. Starling, M.D., F.R.C.P., F.R.S. Jodrell Professor of Physiology in University College, London. London: Archibald Constable & Co., 1909. Price. 6s. net. Toronto: Copp, Clark & Co., Limited. Price $1.80.

The author disclaims the idea of giving a full account of the subject under consideration, rather attempting to advance his own views. As Professor Starling is a physiologist of high standing his teachings will prove most interesting. The topics passed under review are Protoplasm, Cells, Fluids, Lymph, Dropsy, etc. We have examined this book very carefully and have not found a weak page in it. It is really a ground work on physiology and medicine. It merits commendation.

TUBERCULIN.

Tuberculin in Diagnosis and Treatment. A Text-book of the Specific Diagnosis and Therapy of Tuberculosis for Practitioners and Students, by Dr. Bandelier, Senior Physician to Dr. Weicker's Sanatoria for Pulmonary Diseases at Görbersdorf, and Dr. Roepke, Medical Director of the Sanatoria in Melsemgen, translated from the Second German Edition by Egbert C. Morland, M.B., B.Sc., Lond., M.D., Berne. London: John Bale, Sons, and Danielsson, Oxford House, 83-91 Great Titchfield Street, Oxford Street W., 1909. Price, 7s. 6d.

We have in this book or 182 pages, with the accompanying charts, a very clear statement of our knowledge up to date on the important subject of tuberculin in diagnosis and treatment. Under the head of Diagnosis the subject is discussed in the divisions of general and special. The former includes the cutaneous, the percutaneous, the conjunctival and the subcutaneous reactions. In the special section we have such topics as the use of tuberculin in the diagnosis of tuberculosis in the lungs, the larynx, ophthalmic diseases, in skin diseases, tuberculosis of glands, bones and joints, in the serous membranes, and in children's diseases. The second part of the book takes up the treatment of tubercular disease by the use of tuberculin. The different varieties of tuberculin are considered, and their advantages and disadvantages pointed out. The book is full of useful information on a very live subject, and we congratulate the authors and publishers on the many merits of the book. Whether the tuberculin treatment will ever become perfected so as to be regarded as a specific remains for the future to determine. Great progress is being made, however, apart from the tuberculin treatment. According to the authors the death rate from consumption was in Prussia in 1886, 31.14 per 10,000, whereas in 1906 it had fallen to 17.26. This shows what better conditions can do.

HOWARD A. KELLY'S WORK ON THE APPENDIX.

Appendicitis and other diseases of the Vermiform Appendix, by Howard A. Kelly, M.D., with 215 illustrations, some in colours and 3 lithographic plates. J. B. Lippincott Company, Philadelphia and London. The Canadian Agency, 608 Lindsay Building, Montreal.

Four years ago Professor Howard A. Kelly, in conjunction with Dr. E. Hurdon, issued a large work on the diseases of the vermiform appendix. The volume before us is, therefore, a second and somewhat abreviated edition of the former work. The present volume is smaller than the first edition, but at the same time it is more completely up-to-date in every way. The author contends that the present volume is better adapted to the needs of the general practitioner. The work is certainly a very superb one. The paper, binding, illustrations and press work are of the very highest order of excellency. One might be tempted to say on looking over this volume that "the art of book making had reached its finality." The contents of the volume again reveal the author. His painstaking methods are made clear on every page. Nothing is omitted. There is that balancing of attention to the various portions of the subject. Diagnosis, Pathology, Etiology, Treatment, all find here their full quota of consideration. The whole trend of the book is intensely practical; and, coming from the pen of such a well-known surgeon, intensely useful. We can, therefore, recommend the book to all.

CONSTIPATION AND INTESTINAL OBSTRUCTION.

Constipation and Intestinal Obstruction. By Samuel G. Gant, M.D., LL.D., Professor of Diseases of the Rectum and Anus in the New York Post-Graduate Medical School and Hospital. Octavo of 559 pages, with 250 original illustrations. Philadelphia and London: W. B. Saunders Company, 1909. Cloth, $6.00 net; Half Morocco, $7.50 net. W. B. Saunders Company, Philadelphia and London. Canadian Agents, J. A. Carveth & Co., Limited.

Diseases of the digestive organs have of recent years received much more attention than was the custom some years ago. This is a hopeful sign. The digestive canal affords a very rich field for study for both the physician and the surgeon. This new work for practitioners and surgeons is both a thorough treatise on the medical treatment of these conditions and a complete intestinal surgery, including the rectum and anus. The chapters on the medical treatment are supplemented by a large chapter devoted to formulas. There is a special chapter on Intestinal Auto-intoxication. The operative procedures are presented concisely, yet explicitly, the remarkably clear illustrations being especially helpful. Hydrotherapy, massage, and gymnastic treat-

ment are also presented. This work will meet with a very wide circulation if merit counts for anything. The publishers have produced a very attractive work from the standpoint of the book-making art.

MEDICAL CHEMISTRY AND TOXICOLOGY.

A Text-book of Medical Chemistry and Toxicology. By James W. Holland, M.D., Professor of Medical Chemistry and Toxicology, Jefferson Medical College, Philadelphia. Second Revised Edition Octavo of 655 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, $3.00 net. W. B. Saunders Company, Philadelphia and London. Canadian Agents: J. A. Carveth & Co., Limited.

There is everything in this book that the student of medical chemistry and toxicology could desire. It is both complete and accurate. The chemistry of the elements is well given. There is an excellent account of the laws of chemistry. Special attention is devoted to the methods of testing for the poisons. Organic and physiologic chemistry receives the fullest consideration. The author concludes the book with chapters on the Energy of Foods. We can speak in very high terms of praise regarding this book. It is an ideal one for both student and practitioner.

EPOCH-MAKING CONTRIBUTORS TO MEDICINE AND SURGERY.

Epoch-Making Contributions to Medicine, Surgery, and the Allied Sciences; being reprints of those communications which first conveyed Epoch-Making observations to the scientific world, together with biographical sketches of the observers. Collected by C.M.B. Camac, M.D., of New York City. Octavo of 435 pages, with portraits. W. B. Saunders Company, 1909. Artistically bound, $4.00 net. W. B. Saunders Company, Philadelphia and London. Canadian Agents: J. A. Carveth & Co., Limited, 406 Yonge Street, Toronto, Ont.

Just think of it! The original papers of Lord Lister on Antisepsis, of William Harvey on the Circulation of the Blood; of Leopold Auenbrugger on Percussion; of R. T. H. Lawrence on Auscultation and the Stethoscope; of Edward Jenner on Vaccination; of W. T. G. Morton on Anæsthesia, and of Oliver W. Holmes on Puerperal Fever, are here gathered together in one neat and inexpensive volume. The illustrations of these immortals in the healing art are alone worth the price of the book. When one thinks of the pain that has been assuaged and the lives that have been saved by the discoveries and investigations of these great men, truly may we say that the disciples of Hippocrates are among the noblest of all the benefactors of the human race.

A PRACTICAL MANUAL OF PHOTOTHERAPY.

The Modern Medicine Publishing Co., announce for early publication a work on Photo-therapy entitled Light Therapeutics, a Practical Manual: Physics, Physiologic Effects, Technique, Therapeutics, Clinical Applications, by Dr. J. H. Kellogg, Superintendent of the Battle Creek Sanitarium.

The thorough treatment that Dr. Kellogg gives to the subject is indicated by the five sections into which the book is divided. They are as follows: Section I—The Physics of Light; Section II—The Physiologic Effects of Light; Section III—The Therapeutics of Light; Section IV—Technique of Light Applications; Section V—Clinical Phototherapy.

INTERNATIONAL CLINICS.

A Quantity of Illustrated Clinical Lectures and Especially prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Paediatrics, Obstetrics, Gynaecology, Orthopaedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, etc. Edited by W. T. Longcope, M.D., Philadelphia. With many eminent collaborators. Vol. I., 19th Series, 1909. Price, $2.25. The J. B. Lippincott Company, Philadelphia.

The immediate contents of this volume are articles on Treatment, Medicine, Surgery, Gynæcology and Obstetrics, Genito-Urinary Diseases, Proctology, Rhumology, Dermatology, Pathology, and a summary of the Progress of Medicine, Treatment and Surgery during the year 1908. The illustrations and plates are very fine. The articles are of a high order of merit, and keep this volume up to the standard of the others in the series. The summary of progress during 1908 is most interesting, and makes one feel that after all it was a fruitful year.

SAUNDERS' POCKET MEDICAL FORMULARY.

Saunders' Pocket Medical Formulary. By William M. Powell, M.D., Author of "Essentials of Diseases of Children." Containing 1,831 formulas from the best known authorities. With an appendix containing Posologic Tables, Formulas and Doses for Hypodermic Medication, Poisons and their Antidotes, Diameters of the Female Pelvis and Fœtal Head, Obstetric Table, Diet-lists, Materials and Drugs used in Antiseptic Surgery, Treatment of Asphyxia from Drowing, Surgical Remembrancer, Tables of Incompatibles, Eruptive Fevers etc., etc. Ninth Edition, adapted to the 1905 Pharmacopeia. Philadelphia and London: W. B. Saunders Company, 1909. In flexible morocco, with side index, wallet and flap, $1,75 net. W. B. Saunders Company, Philadelphia and London. Canadian Agents: J. A. Carveth & Co., Limited, 406 Yonge Street, Toronto, Ont.

This is a very convenient little book and contains a vast amount of very useful information. The subjects are arranged alphabetically,

according to diseases. Even physicians of long experience, large practice, and extensive reading will find it a matter of much satisfaction to look into this little book and find what others have found of value. The formulæ are taken from specialists and practitioners of world-wide celebrity. There is probably no more trying time in a young practitioner's experience than when he is called upon to write a prescription in the series. The summary of progress during 1908 is most interesting, and makes one feel that after all it was a fruitful year.

REPORT FROM THE PATHOLOGICAL DEPARTMENT, CENTRAL INDIANA HOSPITAL FOR INSANE, 1903-1906.

Indianapolis: W. B. Burford, contractor for State Printing and Binding, 1908.

Much of this report is no doubt the work of Dr. Charles F. Neu, whom many will remember as an active student of Pathology in connection with the work of the Medical College in London, Ontario, a few years ago. The report is a stimulating one, and should be studied by other institutions as an example of what can be done. The findings are grouped according to the types of insanity.

REPORT ON SOCIAL BETTERMENT.

By George M. Kober, M.D., LL.D., Professor of Hygiene, School of Medicine, Georgetown University, Chairman of Committee. Published by the President's Homes Commission, Washington, D.C., 1908.

This is a very valuable report. The first chapter deals with foods, the second with infectious diseases, the third with infantile mortality, other chapters take up the tobacco habit, the drug habit, the alcohol habit, the prevention of venereal diseases, etc. The dissemination of this information will do good.

REPORT ON MODEL HOUSES.

By General George M. Sternburg, M.D., LL.D., Chairman of the Committee. Published by the President's Homes Commission, Washington, D.C., 1908.

This report deals with houses and gives many plans of cheap but sanitary homes. It goes very fully into the miserable shacks that are allowed in many cities, and points out their danger. It is to be hoped this report will be widely studied.

INDUSTRIAL AND PERSONAL HYGIENE.

By George M. Kober, M.D., LL.D., Chairman of the Committee on Social Betterment; and Professor of Hygiene in the School of Medicine, Georgetown University. Published by the President's Homes Commission, Washington, D.C., 1908.

This report deals fully with the various trades and gives excellent rules for the prevention of sickness and accidents. This volume will be of much benefit to both employer and employed.

REPORT ON INSANITARY HOUSES.

By William H. Baldwin, Chairman of the Committee on Improvement of existing Houses, and Elimination of Insanitary and Alley Houses. Published by the President's Homes Commission, Washington, D.C., 1908.

This small report contains much information on the kind of houses many live in in the alleys of Washington and other cities. The illustrations make it abundantly clear that steps cannot be taken too soon to abolish these alley houses.

THIRTY-FIRST ANNUAL REPORT OF THE DEPARTMENT OF PUBLIC HEALTH, AUGUSTA, GEORGIA, 1909.

This neat report on the state of health of Augusta, Georgia, is quite attractive. The matter is well arranged and instructive. The various papers are good. The report is published by the Board of Health.

BULLETIN OF THE AYER CLINICAL LABORATORY OF THE PENNSYLVANIA HOSPITAL, NO. 5, ISSUED DECEMBER, 1908, PHILADELPHIA, PA.

This number contains articles on Periarteritis Nodosa by W. T. Longcope, Enlargement of the Hypophysis Cerebri by E. B. Krumhaar, The Human Spleen as a Hæmoplastic Organ by J. L. Donhauser, Solitary Tubercule of the Aorta by E. B. Krumbhaar, Gallop Rhythm of the Heart by G. C. Robinson, Carcinoma of the Appendix by R. G. LeConte, Proteolytic Ferments by Longcope and Donhauser, The Influence of Blood Serum on Aulolysis by W. T. Longcope. The articles are well up-to-date and are a valuable addition to the present state of our knowledge on the topics considered by the contributors.

MEDICAL REPORTS OF THE CENTRAL LONDON THROAT AND EAR HOSPITAL.

Vol. I. London: Adlard and Son, Bartholomew Close, 1908.

This neat pamphlet of 138 pages contains several excellent papers on nose, throat and ear diseases, and their complications. These papers will prove good reading to those who are interested in the work of this specialty. The papers are by Drs. J. Dundas Grant, Percy Jenkins, Chichele Nourse, P. H. Abercrombie, W. Stuart-Law, Andrew Wylie, J. Atkinson, Dan McKenzie, B. Kingsford, and Wyatt Wingrave. The pamphlet is well illustrated. The papers are very interesting and contain much valuable information.

NOTES ON SOURED MILK.

This pamphlet by Professor Elie Metchnikoff contains a clear statement of the author's views on this subject. They are the outcome of his remarks on curdled milk made at the congress on old age. This brought to him many inquiries, which he thought he should answer more fully. The pamphlet is published by Messrs. Bale, Sons and Danielsson, 83-91 Titchfield Street, London W.

MISCELLANEOUS.

BRITISH MEDICAL ASSOCIATION.

UTERINE CANCER COMMITTEE.

A.

An Appeal to Medical Practitioners to Promote the Earlier Recognition of Uterine Cancer.

The attention of all Medical Practitioners is directed to the necessity of emphasizing the curability by operation of uterine cancer in its early stages.

The adoption of a more extensive operation by the abdominal route has made it possible to deal successfully with cases hitherto regarded as inoperable, and to remove more of the pelvic cellular tissue as well as a portion of the vaginal walls; it is in these situations that recurrence is prone to develop.

Many patients now present themselves for examination and treatment when the disease is considerably advanced, and it is hoped that by a widespread and accurate knowledge of the early signs and symptoms the number of such patients will gradually diminish.

Special attention is directed to the following :—

1. Cancer of the uterus is at first a local disease.

2. Cancer of the uterus is often a curable disease.

3. Operation is the only satisfactory method of treatment.

4. The earlier the disease is recognized the more hopeful are the prospects of treatment.

5. The risk of operation in early cases is slight, and the chance of permanent cure is good.

6. The recognition of early cancer is not usually difficult, and the disease should not be overlooked by the medical attendant.

7. A medical practitioner who fails to make a physical examination of a patient exhibiting any of the symptoms of uterine cancer incurs grave responsibility.

8. Treatment of symptoms without a physical examination is unjustifiable.

9. Early cancerous ulcers should not be treated with caustic; their appearance becomes masked, and valuable time is lost.

10. It is an error to wait and observe in order to arrive at a diagnosis.

11. In doubtful cases a diagnosis must and can be made in a few days.

12. To examine, to diagnose, and then to treat, should be the rule in all cases.

SYMPTOMATOLOGY.

Uterine cancer is at first a painless disease which does not affect the general nutrition.

The early symptoms of cancer are :—Irregular bleeding of any description, even if there be only traces; bleeding post coitum; and watery, blood-tinged discharge. There may be no loss of strength or wasting, nor any condition to alarm the patient. Pain, wasting, profuse bleeding, and foul discharge, indicate advanced disease.

As the majority of cases occur between the fortieth and fiftieth year, the symptoms are too often regarded by the patient as due to "change of life." The medical attendant should not accept this assumption until he is satisfied that cancer does not exist.

Bleeding, however slight, occurring after the menopause, should give rise to suspicion that cancer is present.

Examination.

If a patient with any of the above symptoms comes for advice, a careful visual and bi-manual examination must be made before any treatment is recommended.

Should a patient refuse to be examined—and this is exceptional when the situation is explained—the medical attendant should decline any further responsibility, and no treatment should be advised. The examination should be made, even if bleeding is present, as valuable time may be lost by postponement until the hæmorrhage has ceased.

It is most important to observe rigid aseptic precautions in all manipulations.

In the examination, the condition of the vaginal portion of the cervix and of the cervical canal should be carefully noted.

In the early stages new growth may be found on the surface of the vaginal portion of the cervix, in the lining of the cervical canal, or in the substance of the cervix. Any prominence on the surface of the vaginal portion or any ulceration, *i.e.*, a definite loss of substance, should at once arouse suspicion. A nodule or nodules, hard, inelastic, or irregular in outline, felt in the substance of the cervix, suggest the presence of cancer. If the whole cervix be affected, the relative hardness as compared with the soft elastic body is pronounced.

The detection of high-lying cervical cancers, and cancers of the body of the uterus, is only posible after curettage or digital exploration.

The signs common to the early stages of cancer of the cervix uteri are :—

(1) The definite occurrence of new growth on the surface of the vaginal portion of the cervix, in the lining of the cervical canal, or in the substance of the cervix;

(2) Friability;

(3) Bleeding on manipulation.

(1) The definite occurrence of new growth on the *portio vaginalis* or in the cervical canal cannot fail to arouse suspicion. When, however, thickening of one lip or a portion of one lip of the cervix exists, the nature of the growth is difficult to determine if the mucous covering be still intact. It is then necessary to remove a portion of the affected tissue and examine it under the microscope.

(2) Friability is a sign of the greatest importance, and may be tested by the finger nail, curette, uterine sound, or an ordinary long probe. Degrees of friability exist in early cases, depending upon the amount of interstitial tissue contained in the growth.

(3) The occurrence of free bleeding after the slightest manipulation is, when combined with friability, a valuable diagnostic aid.

Forms of Uterine Cancer.

Vaginal portion of the cervix.

(1) *Infiltrating type.*—In this type, one lip, or a portion thereof, or even the entire vaginal portion of the cervix, is infiltrated with cancerous growth. Ulceration occurs early from the surface inwards, or necrosis may begin in the centre, and opening on the surface, lead to the formation of a deep ulcer, with undermined edges.

The growth is somewhat hard in consistence, but is still friable if tested with the probe, curette, or finger nail.

(2) *Papillomatous or polypoid type.*—This includes the so-called cauliflower excrescence, and is characterised by the growth from the margin of the os externum of a rounded or flattened tumour, varying in size, which may or may not have a definite stalk. It has a papillary surface, bleeds readily, and is very friable. More rarely it resembles a bunch of soft papillomata. Portions of the growth, pale red or greyish yellow in colour, are easily detached on examination.

(3) *Superficial flattened type.*—This is characterised by a flattened growth on the vaginal portion which tends to spread over its surface. It is prone to early ulceration and is frequently seen clinically as an ulcer. The lip or portion affected is thickened. The ulcer has a sharply defined, raised edge, indented at places, yellowish grey, finely granular surface, a moderate amount of loss of substance, and an infiltrated base. It bleeds readily on touch and the amount of hæmorrhage is entirely out of proportion to the amount of injury inflicted. The finger nail can detach small pieces from its surface.

Cervical Canal.

(1) *Superficial type.*—The inner surface of the cervical canal is lined by an irregular papillary growth which at first attacks the substance of the cervix superficially. As the growth increases portions of it may protrude through the external orifice of the cervical canal. When ulceration occurs the superficial portion of the growth is shed, with consequent hollowing out of the cervical canal, whilst the remainder of the periphery of the cervix is more or less thickened by infiltration. Where the external os uteri is narrow the process may be hidden, or patency of the os uteri may be produced by destruction of its margin, whilst in uteri where the os is already wide a crater-like cavity is formed.

(2) *Infiltrating type.*—The cancerous infiltration proceeds from the mucous membrane deep into the tissues of the cervix, and thus the whole cervix becomes thickened and enlarged, or the enlargement and infiltration may be limited to one or more portions of the cervical walls. Necrosis may commence on the mucous surface, or in the centre of the infiltrated area and may lead to extensive destruction of the cervical tissues.

Probably the majority of cancer cases which are overlooked are examples of disease affecting the lining of the cerival canal or the tissues of the wall of the cervix.

Cancer beginning in the cervical canal is not difficult to detect where the os uteri is dilated as in many multiplaræ. The finger passed into the cervical canal feels irregular elevations or nodules from which portions may be removed. Free hæmorrhage follows this manipulation. Difficulty arises where the os uteri is not dilated and the disease is hidden. A sound carefully passed into the cervical canal may give the impression of impinging on an irregular nodular surface, or friable tissue may be removed by the curette. Free hæmorrhage following such manipulations is a suspicious sign. Thickening and hardening of the cervix may be detected by a rectal examination, which is most helpful in detecting cancerous nodules in the cervical walls, and should always be made in such cases.

Body of the Uterus.

If the vaginal portion of the cervix, the cervical canal and the cervical walls have been proved to be free from disease attention must be directed to the body of the uterus. The uterus may not be enlarged, although a cancerous growth exists in its interior. Usually, however, there is some increase in size, which in advanced cases may be considerable.

Microscopical Investigation.

In doubtful cases, if there be a suspicious hard nodule, or erosion, or ulcer on the external os uteri, a piece including a boundary of healthy tissue should be exercised.

The vulva and vagina having been thoroughly cleansed, the posterior vaginal wall should be retracted by means of a speculum, and the cervix pulled slightly downwards with a volsellum. A wedge-shaped piece, the size of a pea or bean, including *a margin of healthy tissue* should be excised with a sharp knife.

The bleeding which follows this little operation should be stilled by the insertion of one or two sutures, or by firm tamponade with a strip of gauze. An anæsthetic is not essential. The patient should be kept in bed for 24 hours.

The tissue removed should be transferred to a small stoppered bottle filled with absolute alcohol or methylated spirit, and forwarded without delay to an expert in uterine pathology.

Where the cancer originates in the body of the uterus or in the cervical canal, it is frequently possible by using the curette, to obtain a sufficient amount of tissue for examination without the aid of anæsthetics. If this cannot be done, it may be necessary under an anæsthetic to curette

the whole interior of the uterus and cervix, special attention being paid to the region of the tubal orifices.* All fragments should be collected, including those which may have been washed out. The douche, if employed, should consist of sterilised water or a weak solution of corrosive sublimate (1 in 10,000), as carbolic acid and lysol interfere with the staining of the cells.

The fragments should be transferred to a stoppered bottle filled with absolute alcohol or methylated spirit.

If the expert's report is favorable the patient will be reassured, if unfavorable immediate operation is imperative.

The Operation.

The question of operation is best decided by the operator, who may require to examine under anæsthesia.

To Recapitulate.

(1) Attend to all symptoms suspicious of cancer, and instruct the patient on their importance;

(2) Examine immediately all cases of bleeding or abnormal discharge;

(3) Make a definite diagnosis and do not wait for the disease to develop;

(4) Urge immediate operation if the diagnosis is established.

The practitioner who diagnoses cancer in an early stage, when operation offers a probability of cure, renders a service to his patient as great as that rendered by the operator.

B.

An Appeal to Midwives and Nurses in order to Promote the Early Recognition of Cancer in the Womb.

Cancer of the womb is a very common and fatal disease in women, but *it can be cured by operation when it is recognised early.* A woman sometimes tells a nurse or midwife her ailments before she speaks to a doctor, and the nurse or midwife has then an opportunity of aiding our crusade against this terrible disease.

Cancer may occur at any age, and in a woman who looks quite well and who may have no pain, no wasting, no foul discharge and no refuse bleeding.

* Special care should be taken in using the curette as the cancerous uterus is easily perforated.

To wait for pain, wasting, foul discharge, or profuse bleeding is to throw away the chance of successful treatment.

The early signs of cancer of the womb are—

1. *Bleeding,* which occurs after the change of life.

2. *Bleeding* after sexual intercourse, or after a vagina douche.

3. *Bleeding,* slight or abundant, even in young women, if occurring between the usual monthly periods, and especially when accompanied by a bad-smelling or watery blood-tinged discharge.

4. *Thin watery discharge* occurring at any age.

The nurse or midwife who is told by a patient that she has any of these symptoms should insist upon her seeing a medical practitioner in order that an examination may be made without delay. By doing so she will often help to save a valuable life, and will bring credit to herself and to her calling.

QUEEN'S MEDICAL COLLEGE.

The list of graduates, medalists and prizemen as announced at Queen's Medical College is as follows:—Degree of M.D. and C.M.—E. J. Bracken, Ellisville; J. E. Brunet, Clarence Creek; L. L. Buck, Railton; E. P. Bryne, Kingston; D. R. Cameron, M.A., Lancaster; D. A. Carmichael, M.A., Unionville; H. E. Chatham, Stettler, Alta; W. A. Claxton, Kingston; J. W. Corrigall, Rosin; P. O. Coulombe, Cheneville, Que.; W. H. Craig, Kingston; L. M. Dawson, Ottawa; C. S. Dunham, Kingston; Alex. Ferguson, Williamstown; J. E. Galbraith, Chatsworth; J. C. Gillie, Chapleau; T. J. Goodfellow, B.A., Parham; Irvin Hardy, Davis W. Va.; A. R. Houpt, Melbourne, Australia; C. A. Hughes, Grenada, B.W.I.; J. B. Hutton, Kingston; C. H. Knight, Georgetown, B.W.I.; H. M. Lermont, B.A., Trinidad, B.W.I.; A. Letherland, Glenvale; T. N. Marcelius, Williamsburg; J. J. McCann, Perth; M. C. MacKinnon, Whim Road Cross, P.E.I.; J. J. McPherson, Nigg, P.E.I.; C. J. McPherson, Metcalfe; O. W. Murphy, Portland; J. S. Quinn, Tweed; A. L. Raymond, Williamstown; B. C. Reynolds, Cornwall; D. Robb, B.A.; Battersea; A. K. Salmon, Lucea, Jamaica; J. C. Shillaber, Regina, Sask.; J. H. Stead, M.A., Lyn; W. G. Wallace, B.A., Metcalfe; B. L. Wickware, Toledo; H. C. Workman, B. A., Kingston.

PRIZE LIST.

Faculty prize in anatomy—W. E. Wilkins, Ont.

Faculty prize, $25, for highest marks on second year examinations in anatomy, physiology, histology and chemistry—R. A. Simpson, Chapman, N.B.

The New York Alumni Association Scholarship, $50, for highest marks in honor physiology and histology—F. Boyd, M.A.

Faculty prize for highest percentage of marks on second year examinations in materia medica, therapeutics and pharmacy—R. A. Simpson, Chapman, N.B.

The Dean Fowler Scholarship for highest percentage of marks on work of third year—S. M. Polson, M.A., Kingston.

Faculty prize for best written and practical examination in third year pathology—S. M. Polson, M.A., Kingston.

The Chancellor's Scholarship, value, $70, for highest percentage on four years' course, tenable only by those who take the examinations of the Ontario Medical Council—M. C. MacKinnon. Next in order, J. J. McCann and D. A. Carmichael.

Prize of $25, given by Dr. W. C. Barber, for best examination in mental diseases—M. C. MacKinnon.

Medal in medicine—J. J. McCann, Perth.

Medal in surgery—D. A. Carmichael, B.A., Unionville.

House surgeons in Kingston General Hospital—The following are recommended in order of merit:—J. B. Hutton, C. S. Dunham, M. C. MacKinnon.

CANADIAN MEDICAL ASSOCIATION.

Milk Commission, Academy of Medicine, Toronto, stated meeting, June 4th, 1909.

The Chairman, Dr. C. J. C. O. Hastings, Toronto, called the meeting to order at 4.30 p.m.

The following members were present: Dr. Hastings, Dr. George Elliott (Secretary), Dr. J. A. Amyot, Dr. A. McPhedran, Dr. J. H. Elliott, Dr. W. B. Thistle, Dr. J. N. E. Brown and Dr. Helen MacMurchy.

Mr. John Ross Robertson was present by invitation.

The subject under discussion was that of pasteurization.

Dr. Hastings presented a memorandum on the subject presenting evidence and authorities in favor of pasteurization (official) for all milk not officially certified.

Mr. John Ross Robertson then addressed the Commission referring to his investigation of pasteurization in New York hospitals, the mortality at the Children's Hospital, Toronto, the necessity for pure and clean milk in that institution. It was his determination to at once proceed to to the installation of a pasteurization plant in the Children's Hospital.

Dr. John A. Amyot advocated official pasteurization, as well as other members of the Commission.

The following resolution was then presented and adopted unanimously:—

It must be apparent that it will require time and education to comply with even reasonable safeguards, and it is equally evident that the number of dairy farms now in a position to live up to sanitary requirements, will supply but a small proportion of the population of the city. Until this can be accomplished the Commission strongly recommends that all milk not officially certified be pasteurized.

A vote of thanks was tendered Mr. John Ross Robertson for his address as well as for his offer to send two or three members of the Commission to New York, at his expense, to investigate the subject of pasteurization.

LONDON MEDICAL SCHOOL.

The results of the London Medical School examinations were announced as follows:—E. F. Jeffries, of that city, is gold medallist, and Clarence Brown, also of London, is silver medallist.

The graduating class, who number 26, is as follows:—E. F. Jeffries, London; C. E. Brown, London; J. R. N. Childs, London; S. M. Fisher, London; Paul Poisson, Belle River; J. Le R. Anderson, Ailsa Craig; W. L. Lutan, Mapleton; J. E. Kidd, Mitchell; H. C. L. Lindsay, Strathroy; W. E. Bavis, Broughdale; R. C. Carroll, Middlemiss; Nelson George, London; R. G. Barrett, Freeborn; W. Gallespie, Seaforth; A. E. McLarty, St. Thomas; T. R. Phipps, London; J. A. Butterwick, London; R. G. Gordon, London; A. T. Stockwell, London; A. G. Robertson, Ivy; J. M. Taylor; Odell; W. M. Lancaster, Wyburn, Sask.; R. G. Mathews, Toronto; W. S. Rhycard, London; H. E. McCaul, Holiday; C. H. Alley, Petrolea; J. H. R. Stanfield, London.

SIGNS OF LONG LIFE.

"Bacon took a deep interest in longevity and its earmarks," said a physician, "and Bacon's signs of long life and of short life are as true to-day as they ever were.

"You won't live long, Bacon pointed out, if you have soft, fine hair, a fine skin, quick growth, large head, early corpulence, short neck, small mouth, brittle and separated teeth and fat ears.

"Your life, barring accidents, will be very lengthy if you have slow growth, coarse hair, a rough skin, deep wrinkles in the forehead, firm flesh, large mouth, wide nostrils, strong teeth set close together, and a hard gristly ear.—*Minneapolis Journal.*

CHANGE IN THE CHARACTER OF CANCER.

A very interesting article in the reports of the Imperial cancer research laboratories, by Haaland, embodies the microscopic appearances of all the mouse tumors for nineteen generations derived from a mouse carcinoma by inoculation. Knowing the remarkable changes that may be produced in the histological appearances of a rodent ulcer for example, by x-rays, we were not altogether unprepared for the nevertheless remarkable demonstration of the complete change from carcinoma through a mixed-cell type to pure sarcoma that may be observed in a few generations. It had for long been held, for instance, by Hebb that in the course of time individual tumors undergo transition of type but it required the evidence of transmission through generations of short-lived animals for proof.

DEFINITION FOR PRACTICE OF MEDICINE.

A new law defining medical practice is advocated in the annual report of the Massachusetts State Board of Registration in Medicine, in which it is stated that just what constitutes the practice of medicine or holding onesself out as a practitioner of medicine is clearly set forth in the medical practice laws of nearly all other States. Such definitions are recognized as being most important; for possible misinterpretations of the intended meaning of the law are thereby avoided, the administration of the law is simplified and is more certain as to results, and motations of it are less likely to occur. The following new section amending chapter 76 of the revised laws is earnestly recommended: "Persons shall be considered, irrespective of methods of practice, as practising medicine within the meaning of chapter 76 of the revised laws who shall assume or offer to assume the responsibility of determining the nature of disease, deformities or injuries of the human body, having in view the treatment of the same for the purpose of cure or alleviation."

"SPIRITUAL HEALING."

At a meeting of the Church and Medical Union, held at the Church House, London, a paper was read by Dr. L. W. Bathurst, in which he discussed the effect which the movement is likely to have on the relationship between the Church and the medical faculty. He took the line that the profession is very far from being convinced that there is need for any such movement, and, in the second place, held strongly to the

view that it cannot be expected to take any share in it without full inquiry. So long as the clergy confine their attention to administering comfort and consolation, and encouraging cheerfulness, prayer, faith, hope, fortitude, and resignation, in accordance with circumstances, so long, says Dr. Bathurst, will the medical profession welcome their co-operation. But as regards those who are credited with special gifts in the matter of healing, he declared that if medical men were to submit their patients to them, they would be running altogether counter to the General Medical Council in its efforts to put down unqualified practice. Dr. Bathurst sums up what he conceives to be the opinions of the medical profession on this subject under the following headings:—

(1) If the Church wishes the co-operation of the medical profession, she must propound her views and intentions, and say exactly in what manner her proposals are to be carried out.

(2) The medical profession does not recognise the special gifts of healing claimed by unqualified and irresponsible persons—claims which, if admitted or sanctioned, could only serve to open wider the door to quackery.

(3) The medical profession cannot, from a practical point of view, be regarded, as has been suggested, as the handmaiden of the Church.—*Medical Press and Circular.*

IMPRESSIONS OF PARIS.

The second article of Dr. Osler appears in *The Journal A. M. A.*, March 6, and the students form the subject. Of course, there are, as elsewhere, good, bad and indifferent among them, but the general impression he obtained is that they are an industrious, hard-working set of men. The Paris medical student has one advantage over all others—he is admitted to the hospitals from the beginning, and, while attendance is not compulsory for the first year, the practice is universal. The hospital is everything. The medical school is a secondary consideration. Osler does not entirely agree with this view, though he gives the arguments in its favor. He thinks that it is not so well for the student intellectually, and that an ordinary sequence in which their acquired knowledge of the laboratories is brought to bear on the problems of disease is, on the whole more satisfactory. The students are assigned in groups of twenty and are expected to make the visit with the chief and do part of the work of clinical clerks and surgical dressers. They appear to be looked after pretty sharply. The plan of bedside teaching varies with different men. The new cases are first discussed and elaborate notes are read, with diagnosis, and

criticized by the teacher. The difficulty of ward teaching is in the crowding, which makes it profitable only to the inner ring. Twenty should be the limit, but Osler on one occasion counted fifty-five. There are no house surgeons or house physicians, all the work being done by externes and internes. Both are appointed by examination; the externes number about 1,000, the internes 250. The interne is a special French product unlike anything else in the medical world, He is still a student, yet has all the responsibility of a physician. He lives in the hospitals for four years and finishes his term with an admirable piece of work which appears as his thesis for the M.D. He can not take his degree while an interne. A first-class interne, Osler says, is about the best hospital product he knows, and as a body they are looked on as the special glory of French medicine. They receive from $20 to $200 a year. A variable number of vacancies occur yearly, from 50 to 80, and the examination is held by a jury of ten members of the hospital staff. There are a certain number of prizes every year, and the Paris theses contain some of the most valuable literature of the profession. Osler gives an interesting account of the hospital clinic in which the teaching is chiefly in the wards; the amphitheatre is secondary and very unlike what we regard as a clinic. After the ward visit the professor returns to the amphitheatre and gives a set lecture on a case or cases which have been under observation in the wards. The patients may or may not be brought in, and usually are not. Corvisart, with whom began set clinical instruction, adopted the plan, and it has ever since been the Paris method. The opportunity is afforded to the assistants to help in the teaching, and two of them lecture for half an hour each on some special laboratory method or special case every Wednesday morning. A number of illustrative accounts of the clinics of the different professors are given, and the characteristics of some of the leading ones described. On the whole, Osler gets the impression that the Paris medical student gets very close to the patient, and, if diligent and successful in becoming successively interne and externe, has very exceptional opportunities. Many reforms are under discussion and the chances are good for planning a model curriculum. The number of young enthusiastic teachers is very large and the arrangements for clinical instruction are excellent.

BRITAIN'S DRINK BILL.

The drink bill of the United Kingdom for 1908, as estimated by Dr. Dawson Burns, shows the greatest reduction in any one year that has yet been recorded. The difference between 1907 and 1908 was nearly

six millions (£5,955,718), while, taking the increase of population into account, the diminution was not less than seven and a half millions (£7,529,913). Spirits, beer and wine all shared in the reduction. The average expenditure per head, which was £3 15s. 9d. in 1907, fell to £3 12s. 3¾d. in 1908, which signifies an average outlay of £18 1s. 6¾d. by every family of five persons. These averages do not indicate the amounts individually expended. The entire body of total abstainers and a large portion of the juvenile population contribute nothing to the drink bill, and among those who do contribute the differences of amount are exceedingly great.

As might be expected, the three kingdoms vary considerably in their average expenditure, that of England being £3 15s. 5¼d., of Scotland £2 18s. 9¾d., and of Ireland £3 1s. 6d.

The liquors consumed differ much in their alcoholic strength, and applying the alcoholic test to the several kingdoms, England shows an average consumption of alcohol 1.9 per head, Scotland of 1.3, and Ireland of 1.5.

The difference of the expenditure in 1907 and 1908 points to a widely prevailing cause, affecting the spending power of the community generally. Social reformers of all classes will regard with satisfaction any reduction of the drink bill, which for 1908 still stood at £161,060,482.

WHAT THE GOVERNMENT IS DOING *RE* TUBERCULOSIS.

Hon. Mr. Hanna said that the bill presented by the member for South Wellington for the suppression of tuberculosis had been submitted to the Provincial Board of Health, and had been regarded as an ideal bill from their particular standpoint, but for reasons heard in this House it was not quite suited to present requirements. Mr. Hanna showed that the Government had not been negligent in regard to this matter, as during the past four years the sum of $80,000 had been expended in this direction, while for the six years preceding this date only $18,000 was spent. Of the $80,000 expended, $35,000 was spent in construction, and 45,000 in maintenance. Mr. Hanna also referred to the fine travelling exhibit, illustrating the various stages of the disease, maintained by the Government, and the good work it had done in an educational sense. Literature on the subject had also been prepared and sent out. In respect to compulsory notification, Mr. Hanna said that in Great Britain it did not generally obtain, except in the case of patients under charge of the parish.

MEDICAL PREPARATIONS, ETC.

THE POISON LABEL IN RUSSIA.

Since the Russian Government enacted a law requiring the poison label to be attached to all containers of Vodka (a strong alcoholic beverage), numerous cases of accidental poisoning have been reported from various parts of the Empire. There is a large population of illiterates in Russia, and with them the poison label appearing on Vodka bottles has come to stand for Vodka. As a result many bottles of really poisonous mixtures are being drunk by these people under the impression that any bottle bearing the poison label contains Vodka. This emphasizes the danger of making the poison label too common, for while we have few illiterate adults, we have many children, and to them the poison label now means a sign of real danger. The attempt to impose the poison label upon drugs, medicines and household remedies, which have been freely and harmlessly taken for years, cannot be too severely condemned. When the poison label appears too often, and on nearly everything, children as well as adults will become careless of poison labels, because the word Poison and the skull and crossbones will lose their terror, and bottles and boxes of really poisonous drugs will be carelessly left with bottles of harmless remedies, because all are labelled alike. The dangers to the public, and to children particularly, of this confusion cannot be overestimated.—*The New England Druggist.*

ECTHOL.

In Ecthol we have a preparation of vegetable origin, which possesses strong antipurulent properties, properties which may be described as specific. Ecthol is nontoxic, so that it may safely be employed by the unskilled, who are thus armed against septic complications. It contains the active principles of two remarkable plants, viz.: Echinacea angustifolia and thuja occidentalis, two American shrubs that have long rejoiced in an extensive reputation as a dressing for wounds. The action of Ecthol is not limited to wounds and suppurating lesions of integument. Its antipurulent action is equally manifest when given internally in the acute specific fevers, in erysipelas, and generally in all cachetic states with a tendency to pus formation. It constitutes an excellent dressing for fresh wounds, which are thus protected against septic invasion, but its inhibitory and destructive action on pyogenetic organisms renders it invaluable as a local application to boils and car-

buncles, insect stings and bites, ulcers, and for the irritation of abcess cavities.—*American Medicine.*

THE CHILD THAT FAILS TO THRIVE

is one of the many troublesome and vexations clinical puzzles that the family practitioner is called upon to solve.

Malnutrition, slow growth and development, sluggish metabolism, unusual susceptibility to digestive and respiratory disorders, mental dulness, physical lassitude and lack of snap and ambition, constitute a clinical picture that every physician of experience will readily recognize.

To arrive at any definite determination in regard to the treatment of such a patient, a careful and thorough physical examination is essential, in order that any of the causes which act reflexly through the nervous system may be discovered and properly dealt with—Post-nasal adenoids, a redundant prepuce, ascarides, eye strain, as well as other local irritations, may be more or less responsible for the child's backwardness, both mental and physical; constitutional diatheses, such as syphilis, tuberculosis and lithemic states, should also be looked for and intelligently treated. After the discovery and removal of the cause, tonic and reconstituent treatment is almost invariably indicated and among the reconstructives especially adapted to the delicate digestive organs of the undernurtured child, Pepto-Mangan (Gude) is easily first. Its iron and manganese contents exists in organo-plastic combination with peptones, and the preparation as a whole, is so pleasant and readily tolerable as well as immediately and wholly assimilable, that children of all ages take it readily and benefit materially from its corpuscle-building and hemoglobin-contributing power. Unlike most iron-containing remedies, it does not injure the teeth nor cause constipation.

CATHETERIZATION.

Cystitis has been found so often to follow not only a foul catheter, but careless catheterism, that it is important to employ the most careful asepsis in the preparation of the patient, instruments and the operator's hands. And if the patient should assay to catheterize himself, the above precautions should be enjoined upon him. After catheterization it will be well to instill a few drops of a 1/1,000 solution of silver nitrate to the trigonum and throughout the urethra, and to administer by mouth Sanmetto in teaspoonful doses, in half wine-glass of warm water every two hours.

UTERO-VAGINAL CATARRH.

By LOUIS P. RETMAN, M.D., Philadelphia, Pa.

During the past two years I have experimented with Glyco-Thymoline in the treatment of some of the catarrhal conditions which affect the female genitalia. The splendid results which I obtained on the naso-pharyngeal mucous surfaces led me to try it on other mucous surfaces where the conditions were substantially the same. Actual clinical experience has proven to my satisfaction that in Glyco-Thymoline the practitioner has at his disposal a remedial agent which in my opinion is unquestionably superior to the topical applications which I formerly employed. Without fear of contradiction I can say it is by far the best deodorant ever put in a purulent vagina. Under its influence the character of the discharge is rapidly altered and that comfort, relief and freedom from malodor which is of so much importance to the female patient, is secured. Glyco-Thymoline, by reason of its peculiar composition, produces the rapid depletion so desirable, cleanses the surfaces and maintains an aseptic condition of the parts. As an irrigation for the uterus and vagina, solutions of 10 per cent. to 25 per cent. are most desirable. When the uterus is highly congested an intrauterine irrigation of pure Glyco-Thymoline will produce wonderfully good results. When I use tampons pure Glyco-Thymoline produces the best results.

Case 1.—Miss R., profuse leucorrhea (idiopathic). She was very miserable and "run down," very nervous, severe pain in back; cervix congested; discharge was acrid and excoriating. Treatment: Ordered hot douches (110°) twice daily, medicated with Glyco-Thymoline, two ounces to quart, and put the patient on constitutional remedies. This treatment was persisted in for two months when she was discharged cured.

Case 2.—Ulceration of Cervix. This patient had been treated with Boro-Glyceride, Iodine, Ichthyol, etc., but without much benefit. Resolved to try Glyco-Thymoline, which I accordingly did. Tamponed with lamb's wool saturated with pure Glyco-Thymoline which was allowed to remain for twenty-four hours. On removal a hot douche of 10 per cent. solution of Glyco-Thymoline was given and tampon again introduced. This treatment was given for three weeks when the patient was discharged cured.

SCIATICA.

"One of the most common causes of sciatica is rheumatism; so often, indeed, is this the causative influence that some writers include it among the varieties of rheumatism" says Dr. U. C. Underwood, of

Louisville, Ky. "The treatment of the affection," he states, "includes remedies to counteract the constitutional factor at work in the production of the disease and measures looking to the relief of the pain. As anodynes, opium is to be studiously avoided in all cases. Antikamnia is a reliable anodyne, which does not produce cardiac depression and will give relief without injurious after-effects. In sciatica it is best given in tablet form, with salol. One antikamnia and salol tablet every two to four hours will act both as a curative and anodyne.

Mr. S. P., age 39, applied for treatment for a most distressing case of sciatica. This gentleman was so racked with severe pain that he could not attend to business, and had to give up all work and was now confined to bed. He drank largely of buttermilk and took antikamnia and salol tablets. These tablets kept him free from pain, and after ten days' regular employment of the treatment he was able to go about his business.

Jennie G., age 19, had severe sciatica, which extended all along the course of the sciatic nerve. She suffered a great deal and could not attend school and had been almost an invalid. She was put on antikamnia and salol tablets—one every two hours for the first three days and one every four hours thereafter. She began also to take a cod liver oil emulsion about the tenth day. She recovered entirely within a period of four weeks. Now, after a lapse of four months, she has had no recurrence of the disease.

SUMMER-TIME IS SPRAIN-TIME.

Some wit has said that "Summer-time is sprain-time." Golf, tennis, baseball and the other outdoor sports inaugurate a season of sprains and wrenches, and ankles, knees, wrists, elbows, shoulders, and backs pay the penalty of a missed drive, an overhand smash or a slide to base. The resultant conditions, the stretching or tearing of ligaments, contusion of the synovial membrane and damage to vessels and nerves, are best remedied by the use of antiphlogistine, which markedly aids in the reconstruction of the injured part.

By removing the products of inflammation, through the absorption of the liquid exudate from the swollen tissues, and by permitting free circulation of blood through the seat of the injury, antiphlogistine acts as Nature's first assistant. The affected cells are stimulated and toned up through endosmosis, and the process of repair is greatly hastened.

Antiphlogistine should always be applied directly to the affected area as hot as can be comfortably borne, and covered with absorbent cotton and a bandage.