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EDITORIAL.

THE CANADIAN CONFERENCE OF CHARITIES AND CORRECTION.

The ninth annual meeting of this association was held in the Education Department, Toronto, on November 25th and 26th, 1908. There was a good attendance. Dr. R. W. Bruce made an excellent presiding officer, and he was ably assisted by efficient associates.

The papers were of a very thoughtful character, and the discussions upon these gave evidence of much thought and preparation. The comparing of experiences in this way is sure to yield good results.

It became very evident during the reading of the papers, and the discussions that there are many changes required in our gaol and asylum systems. It is to be hoped that some of the suggestions made at the convention may find their way into the statutes and become matters of actual practice.

One feature of the gathering to which we wish to invite special attention is the effort made to curtail marriages among the feeble-minded and criminal classes.

In another portion, we give a full report of the meeting.

THE ONTARIO MEDICAL COUNCIL.

It is with some satisfaction that we notice that the medical council has taken some action against druggists who do prescribing for people. No druggist should do this. So long as proprietary medicines are allowed to be sold, there can be no good reason advanced against a druggist selling these; but then the onus of prescribing, or rather selecting the so-called remedy is on the buyer.

Druggists should not prescribe for their customers. They ought not to take the symptoms and dispense for the disease, whether rightly or wrongly diagnosed. Further, druggists should not repeat prescriptions without the consent of the physicians who ordered these in the first instance.

With regard to taking action against certain doctors, we think the council acted wisely in going slowly. It is easier to make a mistake than to get out of it. In one case the officers of the council did not know the whereabouts of the doctor, and could not serve him with papers. In such a condition of affairs the council could not act. There is not the least doubt but that things will become clarified by waiting a little while. By adopting this course the council will be able to move with certainty.

In the other case, as we understand it, there was an action tried against the doctor. He was acquitted at the time of trial. This being the case it behooves the council to be specially careful. We have no sympathy with infamous and unprofessional conduct; but we would not wish to see the council take rash and hasty action, which could not be sustained. This has been done in the past with very bad results. As Dr. E. M. Cook could not be served it was deemed wise to allow any action in the case of Dr. D. W. Shier to stand over.

A careful study of the proceedings of the council will show that some wise changes were made in the curriculum. These were a higher standard of matriculation, and that some latitude be shown in the case of students who do well on most subjects and only fail by a narrow margin on others. The fifth year is to be as practical as possible, and not to be burdened by a course of lectures. We think this is exceedingly sane and also humane. But of the fifth year must be spent in a hospital or with a qualified practitioner. The course of instruction on children's diseases was lengthened. A course of two months' duration was added on electricity. The council condemned the asking of catchy questions.

CONTAGIOUS DISEASES IN ONTARIO.

The report of the Provincial Board of Health goes to show that certain contagious diseases were rather more prevalent than usual. It is estimated that in Ontario there were about 1,000 cases of typhoid fever during the month of October, 1907. This is certainly very high. The deaths reported for that month were 123. The cause is attributed to pollution of water supplies. This is a very high toll to pay for culpable carelessness.

During the month of October there were 50 cases of smallpox in the counties of Elgin, Bruce, Frontenac, Grey, Simcoe, Waterloo, York, and Peterborough. All this sickness and expense is the result of wilful disobedience to the laws of preventive medicine. There were no deaths, but there was enough sickness, loss of time and expense to pay ten thousand times over for the inconvenience of having been properly vaccinated.

There were 318 cases of diphtheria with 44 deaths, or 1 in every 7 cases. This is altogether too high a death rate. It may be that many cases of the disease were not reported, and so the mortality appeared higher than it really was. With the proper and timely use of antitoxine, the disease should not score such a record as the foregoing.

EXAMINATIONS AND THEIR FAULTS.

It has long been felt that examinations, while necessary, are not always a true test, and have many faults. Some of these faults could be remedied by care.

One of the faults in examinations is to be found in the papers themselves. It is a very common experience to look over examination papers and find on them some very injudicious questions. This could be overcome by submitting the papers to a board of examiners before they are handed out to the candidates. These would correct the peculiarities of some examiners who might wish to place on the papers unsuitable questions. We have seen many a question that could not be regarded in any other sense than as a sort of puzzle, or medical curiosity.

With regard to the oral examination we contend that there should be two examiners always present and who should take part in the work of examining the candidate. Each examiner should ask an equal number of questions. These check any tendency on the part of an examiner to run his "fad" if he has one. We have known a good anatomist rejected because all the question given him were on intricate structures of the brain. This is only an instance of what may take place on other subjects.

Some examiners try to find out what the students do not know rather than what they do know. The questions should be made to cover a wide range of the subject examined. If it be surgery, then the candidate should get questions on many sections of surgery. It is no test to examine a candidate on some one portion of the work only, any more was it a proper test on anatomy to confine all the questions to obscure sections of the brain.

AVIAN TUBERCULOSIS.

Much work is being done upon the all-important subject of tuberculosis, and we must be ready to welcome any advance in our knowledge upon this disease.

A short time ago an important contribution has been given to the world by Drs. Max Koch and Robinowitsch. The main feature of this work is on the avian type of tuberculosis. It may be very interesting to review some of the conclusions arrived at by the authors.

In the first place they show that in 459 cases examined the organs mainly involved are the lungs and the peritoneum. The changes are somewhat similar to the caseation found in the Mammalian group of animals. Birds are infected mainly by feeding them with tubercular matter. They are not very liable to be infected by inhalation. There is strong evidence advanced in support of congenital infection. Infection may be carried in Zoological Gardens by rats and mice, when in the home caged birds may contact the disease from man. The bacilli in some instances were distinctly of the human type.

In many instances the found bacilli showing every shade of variation in form the avian to the bovine. The virulence of the bacilli varied considerably to guinea pigs and rabbits. Rats and mice were infected with bacilli obtained from birds.

A very important point is brought out in this work, namely, that cattle and goats may be infected. Spontaneous infection of mice, rats, horses, pigs, cattle, and monkeys by avian bacilli have been observed. Man has yielded bacilli which have been shown to be identical with the avian type.

This exhaustive study of tuberculosis goes very far towards proving that the human, bovine, and avian types of tubercle bacilli may change by easy gradations into each other.

MILK AND TUBERCULOSIS.

It is now becoming settled scientifically as well as clinically that tuberculosis in man, cattle, and birds is one and the same disease. It is quite true that the bacilli may undergo some modifications by their sojourn in any one of these hosts, but they are essentially the same still and will infect any of the other forms of animal life. This makes the subject of the milk supply a question of the utmost importance.

Acting under the authority of the Health Act of Britain, the Lister Institute examined 92 samples of milk taken at random from various vendors. Of this number no less than 22 or 23.9 per cent. were found to contain tubercle bacilli. As a result of this a veterinary surgeon visited some of the farms from which the milk came and found ten cows with tubercular udders.

It does not require a Solon to see what should be done. It is well known that many cows are suffering from tuberculosis and yet retain the

appearance of health. Dairies must be inspected and diseased cows removed from the list of those giving milk for sale. Nothing less will save the children.

CEREBRO-SPINAL MENINGITIS.

In the treatment of diphtheria there are now no voices raised against the value of the antitoxine treatment. It is with equal certainty that a great step onwards can be recorded in the treatment of that terrible malady, cerebro-spinal meningitis.

It is true that this disease is not so common as diphtheria, and the life saving power of Flexner's serum may not come into use so often as the serum for diphtheria; but it should be borne in mind that there are strong reasons for thinking that cerebro-spinal meningitis is steadily on the increase.

A number of lists of cases treated by Flexner's serum are now on record.

Few diseases have appealed more to the sympathies of the medical man than cerebro-spinal meningitis, a disease that was differentiated as a specific unity about a hundred years ago.

A few years ago Professor Flexner gave us the serum that is known by his name. Since then many cases have been treated with it.

Flexner's own record of cases now numbers somewhere about 322 with a recovery rate of over 75 per cent., and a greatly reduced number of recoveries with some impairment to the health of the patients. It became very apparent in the treatment of these cases that the earlier the serum is used the better the results, both as to mortality and sequelæ.

Dr. Dunn reports a series of cases with a death rate of 19 per cent. as against the former mortality of 80 per cent. He recommends that 20 to 30 cc. of cerebro-spinal fluid be withdrawn and the same quantity of the serum replace this. No bad symptoms followed the injections. He states that the serum is not antitoxic but antibactericidal. He is very strong in his praises of the serum.

Dr. K. Koplick, of New York, reports 13 cases with two deaths. He draws off cerebro-spinal fluid whenever there is evidence of pressure and replaces the fluid by the serum.

Dr. Frank T. Fulton, of Providence, gives his experience with 22 cases. His death rate was 20 per cent. He injects about 30 ccm. The injections are given each time cerebro-spinal fluid is withdrawn.

Drs. Ladd and Sladen are staunch advocates of the serum treatment. It does no harm if the meningitis be not of the meningococcic type. When used early in the disease it is almost a specific. Some cases call for a large amount of the serum and repeated injections.

Dr. Robb, in *B.M.J.*, reports 30 cases treated with Flexner's serum and with 22 recoveries. Some were moribund when treatment was commenced.

Drs. Findley and White, of Montreal, report 5 cases treated in this way with only 1 death. No bad sequels in those who recovered.

Dr. Ernest Watt, in *Lancet* (London) reports 86 cases. His death rate was 32 per cent. Many of his cases were of a very severe type and this ran the mortality up.

Drs. Currie and Magreggor, of Glasgow, report 330 cases treated in hospitals in that city. Of these 105 were treated with the serum and 225 without it. Their experience was not quite so good as that of some others, but still justified its use.

Schone has treated 30 cases with a death rate of 28 per cent. as against 53 per cent. in other cases.

Dr. C. B. Ker, in a recent issue of the *Edinburgh Medical Journal*, reports his experience to the effect that with the serum there was a death rate of 42 per cent., whereas without it the death rate was 80 per cent. If from the cases treated those in a moribund condition he deducted, the death rate would have been about 20 per cent.

When the serum is injected into spinal canal the cerebro-spinal fluid becomes clear, and the meningococci soon disappear.

HEREDITY.

This subject is one that has called forth endless discussion. Our forefathers were firm believers in the doctrine of heredity. At the present day many of the beliefs of a former day have been pretty well upset. The biologist has been advancing his views on the permanency of the germplasm, while the bacteriologist has been pointing that it is impossible for the spermatozoon to carry the germ of syphilis, tuberculosis, or leprosy.

Of recent date several articles have appeared upon this vexed question. They have certainly done something to clarify the atmosphere surrounding the subject.

One of these addresses was the Harverian oration, delivered by Dr. J. A. Ormond, of London. After discussing the views that a microbial disease cannot be inherited in the proper sense of the term, he says "Suppose we assent to that, yet susceptibility to such diseases, in either a plus or minus direction—that is proctivity to them or power of resistance to them—may be inherited. And may not such susceptibility be first acquired and then transmitted?" This last sentence puts the case in a word. The tendency, not the disease, is the all important consideration.

The views of Professor Adami, of Montreal, are well known. For years he has taught what is known as the law of adaptation. By this is meant the acquiring of a sort of soil that does not favor some diseases. Both he and others have pointed out that certain diseases act with terrible severity in a new soil. Measles among children of some island where the disease was formerly unknown is a most fatal malady. So with tuberculosis when it is introduced among people who have not been subject to it in the past. It would seem that in the course of long centuries a sort of racial immunity is acquired. Is this a phase of heredity? Surely it must be regarded as minus heredity, or a lessening tendency to the disease, syphilis and smallpox are much severer diseases among savages than among the civilized. As Dr. Adami puts it, if the Ancient Greeks came upon the earth now, tuberculosis would in all probability make short work with them.

Turning to a paper by Dr. Latham, of St. George's Hospital and the Hospital for Diseases of the Chest, on the heredity of tuberculosis we meet with this sentence as the last one of his very able paper: "There is some evidence to suggest that the diminishing incidence and mortality of the disease may be in part due to a partial immunity inherited in the course of generations from tuberculous ancestors in whom the disease has been cured. The theory that there is an inherited predisposition to tuberculosis is based on insufficient evidence."

Another paper of those on this subject is that by Dr. E. F. Bashford, Director of the Cancer Research Laboratory, on the heredity of cancer. He shows that among males 1 death in every 11 after the age of 25 is due to this disease, and among females 1 in every 8. If one has no more than the tendency found in the community at large, the foregoing figures would show the likelihood of death by cancer. In the experimental study of cancer it has been shown that mice can be rendered refractory or liable at will. German mice may be modified by prolonged sojourn in Norway, and English mice by prolonged sojourn in Germany. There is here constitutional conditions that are favorable or unfavorable to the growth of cancer; and that these constitutional tendencies can be modified at will. Such constitutional conditions or changes may be acquired by man.

Dr. Bashford concludes by stating that "With nothing but negative evidence of the part played by inherited constitutional conditions before us, and with positive evidence of the important part acquired constitutional conditions can play in furthering the growth, perhaps the development, of cancer, we shall more profitably spend our time if we frankly seek to ascertain how they are acquired, than if we continue to preach the doctrine that they are inherited and that it is hopeless to contend against them."

When the family histories of those showing cancer in them, and histories with no trace of the disease are compared, there does not appear to be any difference between them, nor that of the general public.

Sir W. R. Gowers gives us much firmer data for the heredity of *nervous diseases than either of the foregoing*.

In the first place he speaks of the early abiotrophies, such as hereditary ataxy, various myopathies, hereditary optic atrophy.

A second class of diseases are those where the heredity shows itself after growth is completed. Here we have the heredo-ataxy of Marie, Huntingdon's chorea is another disease coming late in life with marked heredity, Thomsen's disease is another.

A third class is the functional nervous disease. Here we group epilepsy. Sir W. Gowers thinks that at least 50 per cent. show heredity. It is exceedingly difficult to assign the share heredity plays in such diseases as migraine, hysteria, neurasthenia, etc.

Dr. G. H. Savage said, during the discussion, that he believed acquired peculiarities could be transmitted, and that the tendency to transmit predisposition could be modified by surroundings.

Dr. F. W. Mott said that 80 per cent. of adolescent insanity could be shown to have an hereditary history. General paralysis he regarded as caused by syphilis.

THE APPRENTICESHIP SYSTEM.

The old system of a student studying with a doctor had many good features in it. In later years it became somewhat modified so that, while a student of medicine spent some of his student days with a regular practitioner, he was not bound to him as in the old system of apprenticeship.

We are very much of the opinion that the plan of a medical student spending a portion of his college career with a doctor should be again made a portion of the academic course. One of the final summers could be spent with some one in general practice.

The advantages would be that the student would come into real and vital contact with patients and their ailments. He would also learn how to deal with people, and would in this way learn the deportment of a professional gentleman.

We are glad to notice that the Ontario Medical Council has made it count as part of a student's practical work to spend a portion of his fifth year with a doctor as well as in a hospital.

THE RELIGIOUS CURE CRAZE.

It looks as if there was much danger of going to great extremes and committing much folly in the movement that is on foot in certain quarters along the lines of curing disease by religious influences. We have all seen the terrible evils of Dowieism and Christian Science. It may be that the "Emmanuel Treatment" so much bruted abroad in Boston and New York just now may end in disaster. Just recently the Bishop of London was asked to appoint a committee to look into the question of religious influences in the treatment of disease and to report thereon.

The medical profession are not ignorant of the immense value of suggestion. Good advice, admonition, and encouragement are all in the lines of suggestion. In the training of children in good habits, or the contamination of them by evil example are also largely matters of suggestion. We would utter a word of caution in all this.

We think the claims put forth by all these sects should be subjected to the same tests as those imposed upon scientific medicine. The cures so far all appear to be of what are known as functional disorders. Hysteria opens many a door for the inlet of humbug and fallacy.

SOME ASPECTS OF ALCOHOLISM.

The subject of alcohol in health and disease has been the field on which many a battle royal has been fought. In the November issue of *Monthly Cyclopædia and Medical Bulletin*, there appears an article from the pen of Dr. Austin O'Malley, Ophthalmologist to St. Agnes' Hospital, Philadelphia, on this topic.

In the first place he states that alcoholism readily passes into insanity, and is a cause of degeneracy in children. If a man voluntarily takes alcohol to the point of intoxication he is responsible for the acts he may perform while under the influence of the alcohol. Parents are thus accountable for the nervous wrecks their drinking habits may give rise to in their descendants.

Chronic alcoholism causes many morbid changes in the tissues of the body. Among these may be named arteriosclerosis, nerve cell degeneration, wasting of the heart muscle, fatty changes in the liver and kidneys. The vaso-motor centres are disturbed and widespread derangements in nutrition must follow. The blood loses much of its power to carry to the tissues oxygen and to remove carbon dioxide.

Among the causes that lead to the excessive use of alcoholic stimulants may be mentioned a neuropathic nature, worry, disease that

weaken the constitution, and the use of proprietary medicines which contain much alcohol. Climatic influences must not be forgotten.

Alcoholism may be either the result of, or the cause of, insanity. The excessive use of alcohol may cause profound delusional insanity, mania a potu, delirium tremens, or a paranoid condition. The alcoholic may become a paretic or an epileptic. There may be states of trance, catalepsy, or amnesia.

Dipsomania is a form of impulsive insanity, and is closely allied to psychic epilepsy. After a short period of insomnia and anorexia, the victim is seized with an uncontrollable desire for alcohol. The attack is followed by depression. Between these attacks the person may be quite temperate, or even have a marked aversion to alcohol. Once the habit has been formed the freedom of will is almost wholly lost.

Alcoholics should not be allowed to marry. In the first generation we find moral depravity and drink excesses; in the second, chronic drunkenness and mania; in the third, melancholia, hypochondriasis, impulsive and homicidal ideas; in the fourth, idiocy, imbecility and extinction. Bourneville found that of 1,000 idiot children, 630 had alcoholic parents. Beech found that of 450 idiots, 31 per cent. had drunken parents, and Dahl found the percentage as high as 50.

SYPHILIS.

In another part we give a short paper by Dr. Heggie on the subject of syphilis. We wish to make a few brief remarks.

1. Syphilis is a curable disease. This should inspire every member of the profession to be painstaking and persistent. While the iodides control many of the results of syphilis, they are not curative. The only drug we have as yet on which reliance can be placed is mercury and its various preparations. Some use is now being made of some of the compounds of arsenic, but it remains to be seen whether these, namely, soamin, atoxyl, and arylarsonate, will prove destructive to the spirochete. It is true that Professor Neisser has been able to infect the monkey, then treat with these preparations of arsenic, and succeed in re-infecting the monkey again. It is on record that some persons have had a second attack of syphilis, thus showing the complete disappearance of the first infection.

2. The second point is that the disease is caused by the spirochæta pallida, or treponema. It is universally found in lesions of syphilis, which retain infecting power. Experimenters have shown that juices from syphilitic sores only infect when the spirochete is present. The

blood or fluids of a syphilitic will not infect when these contain no spirochetes.

3. The third point is that the disease is not a hereditary one. It may be contracted in utero and the child born with the disease; but this is not heredity. The spermatozoon cannot contain a spirochete. Neither can the germ plasma of an ovum. The child may get the spirochete through the placental circulation, or be infected at the time of birth. It is also said the seminal fluid may contain the organisms, and that these may find their way into the pregnant uterus and infect the foetus by insinuating themselves between it and the placenta.

4. The remote effects of syphilis, such as locomotor ataxia, dementia paralytica, and these diseases in the young, are caused by some toxine produced by the organism of the disease, and which gives rise to the changes found in ataxia and general paralysis. We take the position that these diseases do not occur in persons who have not had syphilis.

5. In the treatment the patient should be told to avoid alcoholic stimulants, tobacco, meat soups, and raw fruits. The mercurial treatment should be carried out with diligence during the early stage, as this goes a long way to prevent the late lesions and sequels. Gummata occur where there have been secondary inflammations. If the early treatment is efficient so as to prevent these inflammations the chance of gummata is almost nil.

6. The disease may be cured, and the person die from the sequels of the disease. An example will show this. A young man contracted the disease in 1882. He was treated carefully for over two years, when he married. His wife never acquired the disease and gave birth to four children, all still living and in perfect health, and without ever having exhibited a single syphilitic symptom. The father died some time ago of general paralysis. The organisms were killed but the toxins they had produced killed the patient.

ONTARIO AND CANADIAN MEDICAL ASSOCIATIONS.

The Medical Profession should remember these two associations and keep themselves free as far as possible to attend them. Even if a member does not read a paper his presence is valuable. There are always important subjects for discussion.

ORIGINAL CONTRIBUTIONS.

THE THERAPEUSIS IN CONJUNCTIVAL INFLAMMATIONS.*

By F. C. TREBILCOCK, M.D., Toronto.

MANY years ago the ideas existent in the minds of medical men at large regarding the therapy in conjunctival disease were notable for their indistinctness above all else. The treatment was purely empirical and so allowed no range for individuality or ingenuity on the part of the physician, hence he sought safety in polypharmacy and prescribed the old gun-shot eye-drops or used his caustic stick in a manner that has made his name famous upon his native heath until this day. There were in his mind few indications for the exhibition of any one drug and so zinc, lead, silver, alum, boric acid, opium and belladonna were by many jumbled together and used assiduously by believing patients. The light of modern medicine has dispelled much of that darkness, yet many of us have even now only the crudest ideas regarding the importance of rational treatment in all cases of conjunctival inflammation and need an awakening along these lines.

Not ignorance but thoughtlessness is at the foundation of such conduct; perhaps an excusable thoughtlessness, for ordinarily the physician's mind is so fully concerned with matters of life and death, it is small wonder the minimizes the importance of possible corneal opacity or future irregular astigmatism, while he may spend sleepless hours worrying over two inches of shortening in a fractured leg. Yet I venture to say that a man with one femur two inches shorter than the other after fracture, is not handicapped in the life struggle to the same extent as his competitor with a visual acuity of only 6-24 due to irregular astigmatism following a deep corneal ulcer, which his physician has hurriedly dismissed as a "bad cold in the eye."

That lack of thought regarding these painful and important maladies still exists; and that errors in therapy with subsequent disaster consequent upon that carelessness are still too common must be acknowledged by all. Some such have lately come under my notice and have in part prompted this paper; three or four I shall mention, knowing they will recall others of which you are cognisant either in your own practices or those of your friends.

An acquaintance of mine in Melbourne told me not long ago of the shocking way two corneæ melted away after the instillation at his command of silver nitrate drops, ten grains in the ounce: he was firm in the belief that his drastic application had far more to do with it than had

*At a Saturday afternoon clinic in the Orthopedic Hospital, Toronto.

the purulent catarrh for which the drug was used. This latter idea of his agrees exactly with the teaching of Arnold Lawson, of London, and Ireland Fergus, of Glasgow, who do not hesitate to say that many of the disastrous sequelæ of ophthalmia neonatorum are to be charged to the account of the drastic treatment ordinarily advised.

Again I found a mother forcing into the angry conjunctival sacs of her child, ointment of the yellow of mercury because it is stereotyped treatment for phlyctenulæ; but judging from the appearance of the eyes and the sobbing of the child the measure was far too severe, good for neither patient nor physician.

Another day an elderly woman with corneal ulcer complicating conjunctivitis, who had been using eserin with more perseverance than good sense for several days, was about to begin a corresponding course of atropine; here results were probable which would have surprised and disappointed all concerned. Of the dangers of atropine and its analogues in advancing years I shall speak anon.

Lastly, in a little brochure which came into my hand a few days ago entitled "The Therapy of Ycast" appears this sentence in discussing the conduct of a case of purulent conjunctivitis in a babe. The treatment began with washing and installation of protargol, then follows this sentence, "I also ordered hot applications to be made to the lids and used atropine and eserin alternately. After four days of this treatment I found the condition growing worse." Obviously the alternate use of atropine and eserin inside of four days could do no harm to a patient of twelve days old, but such orders to a hospital nurse who ever worked in the eye wards, would clearly shew the thoughtlessness of the physician. You know that the pupil-dilating power of atropine is stronger than the pupil-contracting power of eserin, hence where the drugs are used alternately within two or three days the eserin is without effect, as anyone of you will remember who has tried to restore the small pupil after efficient atropine dilatation. Many an eye has been lost from glaucoma after the use of atropine became eserin in heroic doses produced no result whatsoever. A sentence in Professor Fuch's new work reads, "A pupil contracted with eserin or pilocarpine can be dilated with atropine but a pupil dilated with atropine cannot be contracted with eserin." The kindest criticism we can make of that four days' treatment is that it was wasteful of strength on the part of the patient, temper on the part of the nurse, an eserin on the part of the physician, it is worth remembering lest we one day fall into a like error.

Upon whose shoulders can we place the responsibility for the coinage of such a phrase as "a cold in the eye"? The passing of the years has long ago blotted out his name, but, pity it is! we have still the words with us to hide a laxity of thought and diagnosis and suggest care-

lessness in treatment. As many distinct pathological entities hide under its cloak as do sins under that of charity. True it is we began to use it to make things as intelligible as possible to more or less anxious and perhaps stupid patients, but some have allowed it to displace a scientific classification which gives some clue to rational therapy.

The measures commonly used by the profession to combat conjunctival inflammation are few, but some are effectual when intelligently used, others are as harmful as they are silly.

We know now that practically every conjunctivitis is bacterial in origin. We cannot yet recognise every causal microbe by sight but are familiar with many of them *e.g.* the bacillus of influenza; the Koch-weeks bacillus of contagious pink-eye; the Morax-Axenfelt bacillus causing the annoying, recurring angular conjunctivitis; the diphtheria bacillus and the gonococcus of Neisser with their havoc-making lesions. To get clear ideas of the peculiar clinical appearances of each form of inflammation, to check our diagnosis by examining smears from the conjunctival sacs, to know the best means for neutralising the toxin irritation and destroying, if possible, the causal agent, to anticipate the possible complications and sequelae, is to lay the only true foundation for scientific sensible, effectual treatment.

Such a course would be to give a resumé of text-book work on conjunctival disease and such is not my purpose. I shall rather recall to your mind the ordinary therapeutic measures used in such cases and very briefly discuss each.

First, shall we bandage inflamed eyes? or shall we replace the bandage, for when these cases are first seen by us they are invariably tied up. If we accept the dictum of bacteriology as to the origin of these lesions, to tie up the eye is to fly in the face of the laws of modern surgery and to convert what for the sake of argument may be considered as a discharging sinus into a closed up abscess. Our whole object is to cleanse the conjunctival sac of all invading organisms and to keep it clean: to put pad and bandage over the closed lids is one effectual way to make a hotbed for their propagation. Therefore we should never put pad or bandage over a conjunctival inflammation. Shades or goggles which do not interfere with drainage are correct, and smoked glasses to ward off bright light, when photophobia is marked, are permissible and generally necessary. Occasionally it will be good policy to bandage or close from infection in some way the sound eye; it is especially so in gonorrhœal cases, when the physician must remember he himself has two eyes worth protecting. For the patient there is Buller's shield or a pad of gauze and collodion: for the doctor a pair of large clear coquilles or an extra measure of care.

After removing the bandage for good and making the surrounding skin clean with soap and water, we must now proceed to the toilet of the conjunctival sac, the diagnosis having been first made. It may be taken for granted that any antiseptic solution which would even inhibit the growth of pathogenic bacteria in this sac would seriously injure its delicate structure and so make matters worse. We had better be satisfied with a wash which will cleanse without doing any harm and this we have in normal saline solution. The good results which come to those physicians who use powerful antiseptics in the conjunctival sac are more than equalled in the practices of those who taboo such drastic remedies, and surely these latter must be our safer guides. We must be sure the wash gets into both sulci so as to clean out all the crannies and this is often a difficult part of the treatment and occasionally impossible as in marked spasm of the orbicularis or when the lids are thickened or actively oedematous as in the first few days of purulent inflammation. Having now flushed out the eye with normal saline solution warmed, and protected the other eye from infection if deemed necessary, what shall we do next? We may use drops, two to four carefully placed in the lower sulcus, or upon the eye-ball, the lids being held apart with thumb and finger; the eye is then closed and gentle massage used.

Of drugs applied in drops we shall speak first of zinc: solution of the sulphate two grains to the ounce, or of the chloride one grain to the ounce. These should be carefully dispensed for zinc is very irritating and a grain too much might lose your patient for you or make explanations necessary. Now zinc is sure-death to the bacillus of Morax and therefore *the* treatment for angular conjunctivitis. This type of inflammation, though as a rule, submitting in a few days, shews a marked tendency to recur and where failure is reported it is invariably due to careless application or too early cessation of treatment. The drops should be continued at least two weeks after every sign of irritation is gone.

Lead in the form of the acetate enters into most domestic eye-drops. As an astringent it has its use, but there is one danger ahead which is sufficient to put it under bann. Where there be any abrasion of epithelium there is laid down a deposit of insoluble salts of lead. Now any conjunctivitis, however slight, may be complicated with corneal ulcer; this is especially true in the phlyctenular type and also in the variety often seen in old age. An opacity of carbonate of lead glaring white in the black pupil, is not a sequel to treatment to be much desired, especially as such can only be removed by scraping, which cannot be very satisfactory.

Silver nitrate has the reputation of many years behind it: whether it be a reputation for good or evil seems to depend upon who speaks of it. Whatever may be said of the good resulting from its use, the evil it has done lives after it. These evils are several, perhaps the least is the stain-

ing of the white parts of the globe. It comes as a shock to the physician to have a patient come back after perhaps three months with a pair of eyes, the whites of which have turned to a dirty brownish grey and his phial of nitrate drops empty. Moreover, it is less consoling to know, after the diagnosis of silver staining is made, that it is absolutely permanent.

The greatest danger lies in the destructive power of this salt. Silver nitrate, even in very weak solutions, will cause disorganization of superficial epithelium both conjunctival and corneal. In fact the generally accepted explanation of the good results following nitrate applications is that with the sloughing which follows go myriads of pathogenic bacteria and so the final balancing is good. This sloughing may be of small moment to the palpebral or even to the bulbar conjunctiva, but what shall we say of the cornea?

There are many of our best teachers to-day who do not hesitate to say they have seen corneæ melt away more from the destructive action of the drops, than from the disease for which they are used. Careful thinking will keep silver nitrate out of the patient's hands and even the physician will rarely use it in drops.

Of the newer albuminoid salts of silver two have been largely used in conjunctival cases—protargol and argyrol. These, though less caustic than the nitrate and therefore devoid of the greater danger, are for that very reason less effectual, moreover, they are not free from the danger of permanent straining though it does appear to come less often. Argyrol is the favorite and is largely used for its astringent and supposed bactericidal action in ophthalmia neonatorum, and in tear-sac and duct cases. It is commonly used in from 15 to 25 per cent. solutions, having only one other disadvantage—its dark color. Where drops are given to the patient it is the best way of exhibiting silver.

Cocain, eucaïn, novocain and other analogues of the same ilk. I should think that local anæsthetics of this type are rarely used in the therapy of conjunctivitis, yet there is a temptation to add a fraction to astringent drops to lessen the stinging and burning consequent upon their instillation and make our patients comfortable and grateful. It will be much safer to lay down the same rule for cocain or any of its analogues that we have done for silver nitrate—don't let the patient have cocain in his own possession. You will all be aware of the distintegrating action cocain has upon the epithelium of the cornea, so that where the vitality of the tissues is low it may have a positively harmful effect; this applies especially to old people, where already there is often slight corneal abrasion. No matter how one may emphasise to the patient that he must use the drops sparingly, the result is invariably the same, he uses his anæsthetic ad libitum until the local pain is controlled. Only one other point

may be mentioned here, the risk of strong cocain drops passing down the nasal duct and so into the stomach. It is a hint worth taking that where it is necessary to cocainise an eye it is good policy to have the lachrymal sac compressed with the finger tip so that any risk of this drainage may be averted. It is a mistake to use strong solutions of cocain, 2 per cent. being all that is necessary. For small operations on the inner surfaces of the lids it is better to rub in the salt with a small spatula over the area desired anæsthetic.

Atropine comes next and might be readily dismissed by saying it has no place in the treatment of conjunctival disease, which is quite true. However, it is so generally and often so harmfully used that it demands a word or two. I think we may say that the only condition in which atropine is indicated in external eye disease is in acute ulceration of the cornea. Where one is tempted to prescribe cocain for the local pain and be disappointed by the need for such frequent application and the bad effects which may follow, for this one lesion, corneal ulcer, especially traumatic in origin *e.g.* after a foreign body has been removed with difficulty, it is atropine we should use and our patient will be comfortable for hours. With the above one exception atropine has no place in the treatment of disease limited to the conjunctiva or the anterior layers of the cornea. I need hardly mention a disastrous mistake which might be made should this rule be forgotten, but before now good men in busy practice have mistaken the circum-corneal passive congestion which is seen in acute glaucoma for a simple conjunctivitis and have instilled drops or ointment containing atropine. Out of the frying pan into the fire, the eye has been lost from increased intra-ocular pressure before the pupil could be contracted again. Very often it is an error in basal therapeutics which makes a wrong diagnosis fatal, strict adherence to sound general principles would have saved nearly all lost reputations. Two sequelæ to the use of atropine should not be forgotten: first, the dilatation of the pupil and the paralysis of accommodation which accompanies it. The large pupil makes a man most uncomfortable in bright lights and the cycloplegia prevents the long-sighted man from seeing anything clearly and the normally sighted one from reading. These possibilities should be mentioned to the patient or there may be annoyance for everyone concerned. More annoying still is the acute eczema which occasionally follows the use of atropine and causes such discomfort. It responds to calamine lotion readily when the atropine is discontinued.

Adrenalin, which will stand as the type of all the super-renal derivatives, will not often be put into the patient's hands by the physician. Its action is rapid and effectual in blanching the conjunctiva, but obviously we could not think of keeping the vascular area so contracted for any length of time, or we should assuredly get our cornea sloughing. Hence

the use of these drugs is really confined to office practice in preparing a field for a bloodless operation. Especially in searching for a foreign body which has set up a good deal of local reaction is it of great service.

Finally let us consider the commonly used boracic acid. True it enters into the majority of eye washes and drops and with such treatment the conditions for which it is prescribed generally repair. Exactly how it brings about this result we do not know. Its bactericidal power is so slight as to be insignificant, and it is probable the attendant lavage is the source of good. The saturated solution, 20 grs. in the ounce, is not too strong, and used as hot as possible makes a more comfortable application than warm water and hence it will remain the most generally dispensed of our eye-washes. It may be used as a basis for other medicaments in drops or lotion when it should be first warmed. It has no specific action to discuss.

The ointments exhibited in conjunctival cases are few, the simple emollients of the vaselin type are used constantly to prevent the lids from becoming glued together and so retaining the pent-up germ-laden discharge. This is apparently a small matter, yet upon its successful application may depend the vision of the eye. Our patients should not only be given the ointments but shewn how to use them.

There is the ointment of the yellow oxide of mercury, 5 to 10 grs. to the ounce, which holds its place as good treatment for phlyctenular cases when not associated with too much irritation. When such eyes are acutely inflamed with reddened bulbar conjunctiva, and much discharge *i.e.* in cases of mixed infection it is much better to treat along sedative lines until there be a reasonable amount of comfort obtained and then to use the ointment to hasten the healing of the coincident ulceration and so reduce the risk of opacity or irregular astigmatism following. Again we are at a loss to know exactly how the favorable results of this treatment are brought about but the accepted explanation is one of mild stimulation only. After the ointment is placed inside the lids, gentle massage is used for a moment to spread it over the whole bulbar surface.

The compound ointment of yellow-oxide and atropine is especially indicated where there be also ulceration of the cornea in children. It is unnecessary to repeat what has already been said regarding the indications for the use of atropine, the sequelæ to be expected and the dangers attending its use in elderly people. It is worth while mentioning that atropine irritation is more likely to follow the use of an ointment than of drops because of the difficulty of keeping the external surfaces of the lids from being smeared, which grease would not be removed on washing.

The ointment of the citrol of copper is occasionally used in cases where we desire the effect of copper and our patients cannot come to the office regularly to have topical applications made. The common indication for its use is granular ophthalmia or trachoma and as we have so little of it in Ontario—thanks to our immigration laws—I only mention it in passing.

Topical applications: In the hands of the family physician these are reduced to two, the solution of silver nitrate and the copper sulphate stick.

All that can be accomplished with the silver caustic stick—so-called lunar caustic—can be better done with the nitrate in solution: it may be used in varying strengths, but in few cases should it be applied stronger than 10 grains to the ounce. The cardinal rule to remember in painting lids with silver is never to do so unless there be a moderately profuse discharge. The rationale of the treatment, as already mentioned, is that its escharotic action causes the destruction and subsequent sloughing of the superficial layers of cells and with them go multitudes of the invading germs. Remembering this you will realise the necessity of carefully protecting the cornea and in cases where there may be a doubt regarding the advisability of exhibiting silver in so caustic a form, it will be wise to neutralise any excess with salt solution. The application should be made after the lids have been everted, using a small pledget of cotton wound around the end of a glass rod.

Many cases of semi-chronic conjunctivitis which have resisted the use of washes and drops respond quickly to a thorough painting of the inner surfaces of the lids as above. The operation is usually very painful for perhaps half-an-hour, and in private practice should be prefaced with the use of cocain drops and followed by the application of cold compresses.

The use of the copper stick in this province is confined almost entirely to the treatment of trachoma.

In conclusion, let me say a few words regarding the use of heat and cold in conjunctival cases.

Cold applications are naturally indicated where there is intense inflammation associated with marked heat and swelling of the lids. Perhaps one might say that cold is proper treatment in every case except those in which there is intense chemosis or any other condition causing mechanical interference with the lymph supply to the cornea, and when our disease is seen in anaemic subjects. In fact the conditions influencing the nutrition of the cornea are the real indices for treatment in nearly all conjunctival inflammation and the man who never forgets this will have few errors to his credit.

How shall we make our application of cold when demanded? In very severe inflammation it may be good practice to apply it constantly but a good working rule which will apply to most cases is to apply it for intermittent periods of twenty minutes' length. The method of application may be wearisome unless we have a Leiter's coil at hand or can improvise one out of a few yards of small rubber tubing. Ordinarily I expect we shall have to fall back upon ice in some form, there is a very light bag of crushed ice, or better though more exacting upon the nurse, the circles of lint which are taken from a block of ice or from contact with the outside of a vessel containing water at freezing point. The feather weight of these and the sense of constant care are very grateful to the patient but very wearisome to the attendant; of course the matter is much simplified when the patient can take care of himself.

The use of heat will, as has been emphasized, be called for in all cases where there appears to be any danger of sloughing of the cornea, as shewn by dullness of reflected images, any mucus having been cleansed away. Heat may be applied dry or moist: dry heat will not be so often used because fewer patients enjoy it and if there be much discharge it dries the secretion quickly and the lids stick together. Certain patients, however, prefer it and then the coil may be used or an electrically heated pad which may be improvised by a nest of cotton wool over the eye and a lighted incandescent lamp upon it. The small Japanese warmer, a little tin box in which is placed burning charcoal, is sometimes fastened over the eye and with it the patient may walk about, but not many of us will possess one of those. Again, the circles of lint may be taken from a vessel containing boiling water and frequently changed as when applying cold.

However, in the majority of cases it is moist heat we shall likely use. You are all familiar with the absence of results dependent upon the fact that our patients do not carry out our orders. Occasionally this is due to want of explicitness upon our own parts, and I fear I have been guilty of ordering various measures carried out for sick-folk, the technique of which I was not familiar with myself. Therefore I suggest an old but effectual way to apply heat to an inflamed eye: Get a large wooden spoon and wind around its bowl a pad of cotton wool, cover this with gauze. This pad is now dipped in a vessel of hot water, say at 100° F., given a squeeze and applied to the eye with so little trouble to anyone concerned that on our return to see the patient again we shall likely find everyone in good spirits. Our experience with douching will be repeated and we shall find our patient will submit to hotter and hotter applications until a dairy thermometer may be used to keep the water at the maximum temperature bearable which will of course differ in different patients. With these few suggestions I shall dismiss the subject of the use of cold and heat.

In this very loose-jointed way I have reviewed the measures which we shall use in handling our cases of conjunctival inflammation.

There are many points I have not touched upon such as conjunctivitis due to refractive errors, or to other local abnormalities *e. g.*, turning inward of one or more lashes. One of the worst cases I have seen in private practice followed the presence in the upper canaliculus of a barley-beard, another was due to the presence of an eye-lash in the same canal. The mention of these recalls the whole list of so-called lachrymal conjunctivites due to sac inflammation and duct obstruction. Then there are tubercular, syphilitic and malignant manifestations and finally cases which are directly traceable to general dyscrasias and systemic toxæmias. Obviously in all cases special causes should be searched for and rooted out if possible.

I feel that I have only scratched the surface of this field. I did not expect to say anything new, but these discussions accomplish their chief end when they stir up the breezes which house clean the crannies of our memory, and if we can do that to-day I shall be satisfied.

OPERATIVE TECHNIQUE IN ABDOMINAL AND PELVIC SURGERY.*

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THERE is no doubt that the great advancement made in abdominal surgery during the last twenty years is largely due to the labors of the gynæcologist. Perhaps there is no branch of surgery that has made more progress in technique than abdominal. To master this technique requires much practical experience. No young surgeon is justified in gaining this experience at the risk of the health and life of the patient. He should secure this part of his education by assisting a senior surgeon in very many such operations, after which he will be safer and more competent to assume the responsibilities himself. If this course were carried out there would be fewer cases in which the abdomen would be opened, and without removing the pathology, closed again and pronounced "inoperable." In intestinal surgery, for example, it would be well for the aspirant to practise the various operations upon the fresh bullock's intestine, which is about the same size as that of man, and which also resembles it closely in touch and resistance. By a little faithful work in this way a person may soon become quite expert in manipulation which will stand him in good stead some day on the living human body.

* Read at the meeting at the Orthopedic Hospital, 16th December, 1908.

Before undertaking any operation we should exhaust every means to make our diagnosis exact. It is only after this has been done, and doubt still remains, that the exploratory operation is justifiable. The exploration should always be done by a competent surgeon, one who is capable of dealing with the most complicated and difficult condition that may be met with. It is also well to remember that the textbook and the dissecting-room conception of the location of the organs may be quite misleading, when studied in the living subject on the operating table.

It is important that the intestines should be well emptied before abdominal operations, but it is equally unwise to derange their functional powers by repeated catharses. I have long since ceased the use, as a routine, of colomel and mag. sulph. either before or after operation in such cases. Some more gentle purgative—such as pil-aloes, belladonnæ and nucis vom, will meet all the requirements and with much less exhaustion to the patient.

Morphia and atropine may be given hypodermically half an hour before operation, I believe with much benefit. It relieves the nervousness, less anesthetic is required, it controls the excessive bronchial and faucial secretions and, I believe, there is less post-operative anesthetic vomiting present.

Even after our diagnosis has been made with all the accuracy possible it is well to make a very careful inspection of the abdomen. I fear our many modern mechanical aids to diagnosis have made us less close observers and poorer pulse feelers than our forefathers in the profession were. Just take one example to illustrate. We are about to operate for a supposed obstruction of the intestine. Now, if a careful watch reveals a visible intestinal peristalsis this is the final confirmatory symptom of obstruction, after which there should be no delay in operating. But if on inspection or on placing the hand lightly upon the patient's abdomen, visible or distended coils of intestine are found *without* peristalsis, the distension has either been so great or so long continued that paresis has taken place. Here the prognosis is most grave. To put it in one sentence:—*Visible peristalsis is an important indication of obstruction, while visible coils without peristalsis indicates paresis of the intestine.*

Although opening the peritoneal cavity by an abdominal incision is usually a very simple part of an operation, still it is not altogether without danger especially where a tumor growing from the pelvis rises high into the abdomen. I have seen the bladder thus accidentally opened on two occasions. I once injured it, but fortunately recognized the viscus and further injury was avoided. The accident is perhaps most likely to happen in opening for abdominal hysterectomy where the uterine tenor has drawn the bladder high into the abdomen in the course of its

development. Here the incision should obviously be made with the idea of allowing plenty of room for the delivery of the tumor as it has impressed the surgeon during his previous examination. The incision should be carried from a point below the umbilicus to a point well down to the symphysis. It is at the upper part of this incision that the entrance should be made into the peritoneal cavity and from this point work downwards under the guidance of the fingers and eye, carefully avoiding the bladder as you approach the symphysis.

In opening the abdomen to operate for large ovarian cyst I have seen prominent surgeons strip the parietal peritoneum from the abdominal wall for at least a foot square in extent, thinking they were dealing with adhesions between the tumor and the abdominal wall. The fact was they had not yet opened the peritoneal cavity. This mistake might be saved by remembering one anatomical point and that is that at the umbilicus all the layers of the abdominal wall are buttoned firmly together. Hence if the finger be really in the peritoneal cavity it will pass beneath the umbilicus with comparative ease, while if the peritoneum is being stripped from the abdominal wall it is impossible to pass this point. It is well to remember that prevesical fat is granular and in the median line is characterized by transverse vessels, which are not often found to the same extent in preperitoneal fat. The routine of passing a catheter immediately before operation is not to be advised as a bladder containing a few ounces of urine is really more easily observed and avoided than one completely empty. In fact at times in obscure pelvic conditions it may be necessary to have a catheter or sound passed into the bladder in order to map out its boundaries. All bleeding points should be carefully tied with fine catgut during your progress through the abdominal wall.

Having entered the peritoneal cavity the technique will depend entirely upon the conditions found. Some of these conditions we will undertake to discuss.

In any case where the pathology is of small size it is well to introduce the hand and forearm and to make a systematic examination of the contents of the abdomen. In this examination a topographical circle may be described, having the umbilicus as its center. The circumference of this circle will reach all the organs of the abdomen that most frequently require surgical treatment. Let us begin with the uterus and sweep the hand outwards towards the right, here the tube and ovary and the pelvic portion of the ureter may be passed under examination, there the appendix, the cecum, the ascending colon, the right kidney, the liver with its gall-bladder. Now across the top of the abdomen we investigate the transverse colon, the stomach, and the pancreas. Then, passing on to the left the spleen and left kidney are palpated, now

downwards, noting the condition of the ureter, descending colon, sigmoid flexure, and the left ovary and tube. Very few surgical conditions are found within this circle compared with its circumference. All this can be done in much less time than it takes to write it. On one occasion a lady came to me from a distance with distinct pelvic disease, and also complaining of a supposed right kidney displacement. By an abdominal operation, her pelvic symptoms were satisfactorily relieved. Later on she was sent to me again to have the kidney anchored in place. Its range of movement was very great—perhaps 10 or 12 inches. On very careful and repeated examination something was found which resembled a normal right kidney in normal position. An x-ray by the late Dr. McMaster gave negative results. However, an abdominal incision was made over the liver region and three large gallstones removed from a much dilated and thin-walled gall-bladder. She had had no jaundice and no hepatic colic, this with the extreme mobility put me off my guard. Had I made this systematic abdominal examination at the time of the first operation I would have been saved the mortification of this second experience. Another case has just left the hospital a week or two ago, where I discovered a gall-bladder well filled with gallstones during examination made while operating for ovarian cyst. How often have we all found a positively diseased appendix at the time of doing some pelvic surgery. Of course there are contra-indications to this circle of investigation. For example, when the operation in the pelvis has been attended with the evacuation of pus, which, if generally distributed in the peritoneal cavity, might give rise to peritonitis, this exploration should be omitted. The critical condition of the patient at the termination of the operation would be another contra-indication. Good surgical common sense must be our guide here as everywhere else, and some one has well said that "common sense is the most uncommon kind of sense."

In order that we may the better understand some of the points in technique advocated further on in this paper as well as the cause of some of the pathological conditions which we are to consider, we will turn aside for a moment and look into the peritoneal investment of the abdominal and pelvic viscera. To make it easy to understand let us imagine the abdominal and pelvic cavities emptied of all their organs and lined by a well-fitting, but not firmly adherent peritoneum. Now, if it were possible let us start behind this peritoneum near the spine and put the organs all into their proper places, carrying a snugly-fitting fold of peritoneum before and reflecting around each one of them. These organs are now all outside of the peritoneal sac or cavity and still they are all in the abdominal cavity and partially, and some of them, almost entirely surrounded by peritoneum. This peritoneal sac is entirely

closed—there is no opening or communication between it and the outside world with one very important exception and that is at the fimbriated extremity of the fallopian tube. We see there is a way of getting into this lymph sac without breaking the continuity of tissue, that is through the natural openings in the vagina uterus and tube. We will see further on that germs have long 'ago discovered this highway to the peritoneal cavity. We will also observe later on that some of the intestines are almost completely surrounded by peritoneum, while others have one-third of their circumference without it, and this must always be considered in the technique of intestinal surgery.

There are certain acute conditions in which we should never operate, while they are acute. Again, there is one familiar acute condition where immediate operation is advisable. Why not operate in acute salpingitis? Why operate in acute appendicitis? These are questions I have occasionally put to final students in the Council Examinations. They are generally unable to give a reason. The way I have reasoned it out for myself is that in salpingitis we are dealing with an organ that normally opens directly into the peritoneal cavity, and before the disease has had time to close the fimbriated end of the tube the pelvic peritoneum has become to some degree infected. Surgical interference at this time is likely to spread the infection by breaking down the protection that nature has commenced to build around the poisoned point. Also experience has taught us that these cases, while acute, frequently succumb, if radical surgical measures are employed. And we also know that the tendency of such cases is to either subside, or to go on to pus formation which becomes well walled off and may later on be opened through the vagina and if cure does not follow an abdominal operation may be done still later when the pus, if any remain, has become less virulent. On the other hand, in acute appendicitis if we operate early while the poison is still confined to the appendix we are operating on a closed tube, and by removing it we have gotten rid of the focus of infection and the entire trouble. And again, experience has taught us here that appendicitis is one of the most treacherous of diseases. The appendix is likely to perforate or become gangrenous and destroy our patient's life with remarkable rapidity. In any given case, with our present knowledge, we are quite unable to predict with any degree of certainty the course the disease will take.

Again, different kinds of infection are likely to give vastly different results in the pelvis. The infection due to the gonococcus affects chiefly the tubes, and may seal both ends when it becomes thickened and then perhaps forms a pyosalpinx. But the infection which comes post-partum or after abortion travels through the uterine tissue and through the lymphatics to the cellular tissue surrounding the uterus and

to the ovaries, and the appearance presented at operation is quite different. In the one case the tube will perhaps be closed and filled with pus, whereas in the other the ovaries may be enlarged and contain follicular cysts, and if any adhesions are present they are apart from the tube, rather cementing the ovary to the posterior surface of the uterus. The two conditions are quite distinct. The gonorrhœal infection is by far the more frequent. At times we get a mixed infection of gonorrhœa and syphilis. Many of these cases can be cured by the mixed treatment of mercury and iodides. Again, abscesses of cellulitis origin most frequently burst into the vagina; whilst those of tubal origin (especially if surrounded by peritoneum) are more likely to break into the bowel or bladder.

In returning to the more strictly technical side of our subject we may say that in many abdominal operations the most difficult, and to those of limited experience, the most serious condition that presents itself is the separation of adhesions. These may be so friable and easily dealt with that they may be wiped away with a gauze sponge, or they may be so firm and organized as to be only divided by knife or scissors. Any organ in the peritoneal cavity may be adherent to any other organ with which it chances to come in contact. Intestines and omentum may be firmly adherent to pus tubes and to the uterus. Intestine adherent to intestine and to the abdominal wall. The bladder may be adherent to the uterus and thus the utero-vesical space obliterated. I have seen cases where for some considerable time it was impossible to locate the uterus or its appendages. The bladder may even overlies the uterus and be adherent to intestines thus burying the uterus out of sight.

In separating an extensive mass of adhesions we should always take the body of the uterus as our landmark and starting point, working down well behind the uterus and close to it as the best lines of cleavage are usually to be found there. In separating intestine from uterus if very adherent better leave a little uterine tissue adherent to intestine than intestinal tissue to uterus. Where intestine is adherent to pus tube separation requires great care as this condition frequently means an attempt at the evacuation of a pus cavity into the intestine and the tube may be already perforated and when we separate that adhesion we generally get a gush of pus. It is well in such cases to have the surrounding parts well packed with sponges previously, and thus protect as much of the peritoneal cavity as possible from the field of operation. A plan I have adopted in some of these cases where I have gotten well down behind the uterus and expect yet to encounter pus later on, is to have an opening made from Douglass' pouch into the vagina. Through this opening one end of a moist gauze bandage is passed from above into the vagina and there an assistant grasps it with

forceps. If pus is liberated later on the gauze is packed on and around it and the pus is wiped down through the vagina by the assistant pulling the gauze out of the vagina. This may be continued if necessary from time to time during the progress of the work and then at the conclusion of the operation some gauze left as a drain if thought advisable.

When the bowel has been separated from the uterus and tubes, then the tubes should be separated from the back of the uterus and broad ligaments and this is best done, as it were, by unrolling them from below upwards.

In case of double pus tubes some surgeons advise removing with them the ovaries and uterus. This seems rather too radical. It is well to remember that the history of operative procedure in these cases has passed through three quite well-defined periods, as pointed out by Dr. Fredericks. Tait and his followers, for several years, removed both tube and ovary through the suprapubic incision, leaving the uterus. In making a pedicle common to both tube and ovary there was of necessity a portion of the uterine end of the tube left behind. Many of these patients were cured, others were not. Some of the uncured ones returned and had the uterus removed and a cure resulted. The natural inference was that the uterus was the offending organ, while in reality it was the remaining portion of diseased tube that continued the trouble. Hence arose the teaching that the uterus should be removed with the diseased appendages.

Then the French school resorted to vaginal operation for pus tubes, removing every vestige of uterus, tube, and ovary, whether it was necessary or not. This extreme procedure went on till the fashion of vaginal section began to wane and right-minded operators began to return to the abdominal route and removed the tubes alone, resecting them out of the horns of the uterus and sewing over the resulting uterine wound with catgut. That is the conservative operation in vogue to-day.

There are cases where the tubes are so adherent to the uterus that to remove the former would only leave a badly damaged and bleeding uterus, with hemorrhage difficult to control. In a case of this kind it is often easier and safer to remove the uterus (amputating at the internal os) with the tubes than to attempt to stop the hemorrhage by either ligature or suture. In case we encounter fibroids of the uterus it is well to perform hysteromyomectomy as myomectomy should not be done in the presence of pus. A septic uterus should also be removed. At times large portions of the omentum require removal. In tying it off we should never embrace more than a finger-breadth of this vascular tissue in one ligature.

While we believe that diseased tubes should be entirely removed, resected out of the horn of the uterus, still we are of the opinion that any healthy part of an ovary should be saved to the patient, especially during the menstrual life. It is distressing indeed to have a patient return with pain in the region of a portion of ovary remaining, but much more distressing to have them complaining of those awful symptoms the result of a precipitated menopause. Giles says:—"In case of diseased ovaries there is also less reason for saving them, because I believe that the removal of diseased ovaries has far less effect on the system than the removal of healthy ones."

Injury to the intestine during our manipulations may make a most serious complication. Slight abrasions to the serous coat should be sewed over with very fine silk or catgut, using round or non-cutting needle. We may even require to do an extensive resection and if so there are some general principles in intestinal surgery with which we should be practically familiar. We know that some parts of the intestine are not completely surrounded by peritoneum. Bidwell tells us that—"The extent of this uncovered area varies in different parts. It is smallest in the ileum, where only about one-tenth of the circumference is uncovered. In the duodenum, ascending and descending colons, the portion which is not covered with peritoneum is nearly one-half of the circumference, and in the transverse colon and sigmoid the uncovered area is about one-fifth of the whole. We see from this that an end-to-end anastomosis is comparatively safe where the intestine is nearly all surrounded by peritoneum, and it is quite a risky venture where only half of its circumference is covered by this important coat. Another settled rule is that a movable portion of bowel should not be united to a fixed portion.

Where we have a badly injured spot in the bowel, or where a perforation has been repaired, where the tissues are somewhat friable and we fear a fecal fistula may form it is best to provide a way of escape for feces by placing a soft rubber tube down to the spot and packing it gently all around with a strip of gauze, having both tube and gauze extend well through the abdominal wound. The tube may be withdrawn at the end of 24 or 48 hours and the gauze withdrawn a little each day, having all removed in from 5 to 7 days. In this way adhesions may be trained so they will close off the general peritoneal cavity down to the opening in the intestine, leaving a peritoneal tube where the rubber tube and gauze were. If a fecal fistula has formed this leaves a safe way of escape. Such fistula almost invariably heal spontaneously.

A considerable portion of the bowels will frequently extrude through the abdominal incision and rest on the abdominal wall. These should be kept warm by soft towels wrung out of hot normal saline solu-

tion. Authorities tell us that these towels should be frequently changed. A plan which I have been adopting for some time is not to change the original hot towel at all, but to occasionally pour over it some hot normal saline. The peritoneum is not injured by this method nearly so much as by the frequent changing of towels, and the less trauma to the intestine the less danger of post-operative adhesions.

If an operation has been rather exacting on the patient's strength from shock and hemorrhage it is wise to replace, as far as possible, the loss of fluid to the circulatory system by the administration of normal saline solution. This may be poured directly into the abdominal cavity, at a temperature of about 110° F., at the conclusion of the operation. Of course if pus has been encountered during the operation this method had better not be employed. Instead, the salt solution may be introduced directly into a vein, or it may be given by enema into the rectum, or, which is quite common, by hypodermoclysis into the cellular tissue beneath the breasts.

I am quite conscious that I have only been able to touch upon a few of the interesting and practical points of this great subject, to exhaust which would require a volume of no mean dimensions. A paper on operative technique in abdominal and pelvic surgery could never be complete without discussing many other points such as flushing the abdominal cavity, drainage, methods of closing the incision and the after care of the patient. We might dwell long enough to say that flushing and drainage are not employed nearly so much now as formerly. The flushing is chiefly employed in tuberculous conditions within the peritoneal cavity. The old rule "when in doubt drain" is practically changed to, "when in doubt do not drain." Drainage is rarely needed and, if used at all, should, when possible, preferably be instituted through the vagina.

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SYPHILIS.*

By W. C. HEGGIE, M.D.

HISTORY. Whether it originated in Naples, Spain, China or in our own America, is not of vital importance to us. We know it had a beginning in some far distant time and has spread over the civilized and uncivilized quarter of the globe. You doubtless know the rather cynical remark "civilization" and "syphilization" are synonymous terms.

* Read before the Staff of the Toronto Western Hospital.

Cause.—At this date the cause of syphilis is generally accepted to be the spirochete: *pallida*.

Pathology.—We are all aware that its ravages are found in all parts of the system. It mimics almost every form of skin lesion from erythema to tumors. Bones and joints are affected by this poison. The lymphatic system is quickly attacked. The circulatory system is likewise injured, producing endarteritis with resulting arterio-sclerosis and aneurism; also myo-, endo-, or pericarditis. The mucous membrane of nose, mouth, pharynx, lungs and arms all may show its lesions. Liver and kidneys are not immune to the poison. The eyes frequently pay tribute to its virulence. The meninges, the brain and spinal cord may be attacked:—In fact tabes dorsalis is fairly well proven to be the result of syphilitic infection. The peripheral nerves almost invariably resist against the poison.

Contagious, not Inherited.—I have said the cause of syphilis is the spirochete *pallida*, and I wish to add that it is always contracted, never inherited; that congenital syphilis is just as purely a contracted syphilis as any other form of syphilis. In a paper on syphilis presented to the Ontario Medical Association in 1897 and which was printed in the *Dominion Medical Journal* early in 1898, I gave my idea of heredity as "transmission from parent to offspring through the unimpregnated ovum or spermatozoon." No one questions that heredity from the male is only by way of the spermatozoon. Surely then inheritance from the female is the continuance of something already existing in the ovum before impregnation. Anything introduced into an impregnated ovum or fœtus in utero or during birth is contagion. In 1898 the *Louisville Medical Journal* asked for a paper along the same lines. In that article entitled "Congenital syphilis acquired not hereditary," after quoting the definition of heredity I have given you, I said, "True, heredity would be the continuation of something already existing in the ovum before impregnation or introduced into that ovum by the impregnating spermatozoon." I said then, which I more firmly believe now, that no disease is inherited. *No infectious disease even* If a child contracts scarlet fever, for example, from mother or father shortly after birth, no one thinks of calling that inherited scarlet fever, yet it contracted in utero most physicians do not make the distinction. I had hunted at that time all the medical and surgical authorities I could find to get their ideas on heredity and the idea they all seemed to have was that heredity was simply transmission from parent to offspring. It seemed to me indefinite and not truly scientific. Surely a child becoming inoculated from a mother's chancre during delivery or a young woman from kissing her mother cannot be said to have inherited syphilis, yet in each case it was "transmitted from parent to offspring." Hence the definition

of heredity I have given you and which has been of help to me. Some one may have worked out the idea before, but to me it was original and I am glad to see others are falling in line. In different journals during the past two years, physicians have been taking the ground that certain diseases were not inherited and some that no disease was inherited. In 1902 Prof. Adami took the ground that no infectious disease was inherited. Since promising this paper, Dr. A. Laphorn Smith, of Montreal, in a paper in the *New York Med. Journ.*, September 19, 1908, gave reasons against the heredity of cancer. And Dr. Gould in *American Medicine* for October, 1908, says in his editorials, "Incorrect use of the word heredity is still so common that it is time to end it once and for all. If a child is poisoned a few days after birth no one thinks of the resulting condition as heredity, yet if the damage is done shortly before birth it is a very common error to describe it as an inheritance." Why some cases are mild and some malignant is not due to the virulence of the germ, but to the fertility of the soil. In fact some people seem to have a certain amount of immunity transmitted to them (not inherited).

Diagnosis.—With a disease showing so many manifestations of its presence in the system one might fancy the diagnosis not too difficult, but in the first stage especially the reverse is true. To combat the disease most successfully one requires to make the diagnosis at once and it is one of the hardest problems confronting the practitioner. So much so that for years it has been urged by the most competent syphilologists to wait for secondary symptoms before beginning specific treatment. This has been my course in most cases though like others doubtless I have felt that valuable time was being lost in some cases. In spite of text books and the experience of seeing some few chancres, I do not know positively how to tell a hard chancre by inspection. I have seen soft chancres with a hard chancre on the same patient at the same time. Have seen a patient with slightly enlarged indurated inguinal glands on both sides with only a soft chancre. And in many cases the patient cannot tell you whether the sore appeared in three days or thirty days after intercourse. It is, or has been so far, a very hard proposition to demonstrate the spirocheta in the chancre for most bacteriologists, therefore we welcome the serum or any other test which will enable us to say within a few hours whether a patient has lues or not. Investigators have been experimenting with different controls to secure a positive diagnostic serum test. Wasserman's serum has not proven specific. Varney, of Detroit, has lately given to the profession a serum that with lecithin and bile salts, which he believes to be positive in 40 to 80 per cent. of cases. The literature on the subject of late is profuse, but as yet most investigators agree they have not found the specific test.

Treatment.—For years I have depended on the bichloride of mercury, in dosage suited to the patient. Begin with 1-16 for 3 times daily and increase rapidly until you reach the point where it begins to show salivation, whether it be a quarter grain daily or a quarter grain four times daily. Keep the dose just below the salivation point. I have seen more patients tolerate one grain daily than the reverse. It will very rarely fail you, but you will often be surprised at the quantity some patients can tolerate. Inunction is beneficial, particularly in children. Lately I have used a preparation called Merculin with gratifying results with women who are fussy about liquids. It is said to be an albumin compound of mercury. I do not like using a proprietary article, but it certainly does the work and being in capsule is handy and easy to take. The hypodermic method of using the soluble or insoluble salts of mercury was not a success in the few cases in which I tried it so I allowed the method to lapse. In Germany they are using the albumins cholotanate of mercury in $\frac{3}{4}$ gr. doses three to nine times daily, and are claiming better results than with other lines of treatment. For the parasyphilitics the iodides of potash, soda, etc., are the indicated remedies. Here you may sometimes fail to get results because the patient has not had mercurial treatment. If you will put your patient on mercurials for a time and then go back to the iodides you will be both surprised and gratified. But no matter what form of mercury you may adopt for your treatment do not forget that you are treating a patient, not a disease, and that you must not overlook other conditions which may need treatment. Just a word about hygiene and the necessity of making your patient lead a sensible life, sans wine, sans woman, yes, and sans tobacco. Fresh air is as imperative here as in tuberculosis. Hot baths, at least twice weekly before retiring, help materially.

In conclusion, gentlemen, I must apologise for skimming over the subject in this rapid way, but the fifteen minutes at my disposal to deliver this sketch would not permit going into the subject more deeply. However, if the material has made you think or given you one helpful idea the purpose of the lecture will have been accomplished.

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ANTEPARTUM HÆMORRHAGE.*

By G. H. THOMAS, M.D., Toronto.

MR. Chairman and Gentlemen,—I have chosen this subject not because I have anything new to impart, but because it is one which is of great importance to the general practitioner, and because

* Read at the Clinical Meeting of the Toronto Western Hospital.

every one is likely to meet with it at some time in his practice. We will speak of it under two heads, namely, accidental hæmorrhage and unavoidable hæmorrhage.

Accidental hæmorrhage is due to the premature separation of a normally-situated placenta.

The frequency of this accident is set by one author as high as 1 in 500. On the other hand, Whitridge Williams has seen only 3 cases. For my own part, I have seen one.

The cause is imperfectly understood. There is frequently a traumatism in the history. The Germans seem to consider that inflammatory changes in the decidua play an important part.

It mostly occurs before the onset of labor. There is a form due to traction on a short cord, but we will not deal with that variety.

Pathology.—There is a separation of the placenta from the uterine wall by the effused blood, and as the uterus cannot retract it bulges and distends. If it remains entirely behind the placenta it will be a concealed hæmorrhage. It may, however, pass down behind the placenta and membranes and escape externally. It may gain access to the amniotic cavity, or it may fail to escape externally because of the head fitting closely to the lower uterine segment and acting as a plug. Eventually the blood escapes externally in about two-thirds of the cases.

Clinical History.—The symptoms occur in the later months of pregnancy or at full term. The patient usually complains of severe pain and suffers from profound shock. The pulse becomes rapid and weak and the patient shows the characteristic pallor of an internal hæmorrhage. On palpation there may be nothing definite elicited, but if the hæmorrhage is entirely between the placenta and the uterine wall, the characteristic irregularity may be noticed, or the uterus may be found larger than normal.

Diagnosis.—The diagnosis is suggested where acute anæmia and shock appear suddenly in the later months of pregnancy. Other conditions to be borne in mind are rupture of advanced ectopic gestation or spontaneous rupture of the uterus. The large size of the uterus and its hardness are in favor of antepartum hæmorrhage. The escape of blood externally in the absence of placenta prævia confirms the diagnosis.

Prognosis.—Practically all the children die. The maternal mortality varies from 32 per cent. to 50 per cent.

Treatment.—If the hæmorrhage is very slight it may be disregarded, although if it is so slight as to justify this course, it is likely to pass unnoticed.

If the case requires any treatment, it is necessary to empty the uterus. If the cervix is partly dilated, delivery may be hastened by

completing the dilation under an anæsthetic and delivering with forceps or by version. If the cervix is not dilated, we may rupture the membranes, hoping that the uterus will contract and thus check the hæmorrhage. It has been advised by some to pack the vagina hoping thereby to stimulate contraction of the uterus and the dilating of the cervix, but, if this is done, the attendant must remain with his patient and watch carefully to see that no serious hæmorrhage takes place above the plug. And as soon as feasible, the delivery is to be completed.

It is important to remember that the tonicity of the uterus may be impaired predisposing the patient to postpartum hæmorrhage, and hence preparation for this complication should be made.

Placenta prævia.—There are three varieties, viz. : Centralis, lateralis and marginalis.

The frequency is variously put at 1 in 1,000 to 1 in 250. It is said to occur more frequently in hospital practice than in private practice.

Ætiology.—The two factors are thought to be endometritis and multiparity. The condition is not common in primiparæ.

Symptoms.—The important symptom is hæmorrhage occurring after the seventh month. It is true the early cases of abortion may be due to the condition, but they usually follow the ordinary course of an abortion and consequently, receive no consideration under this head.

The first bleeding may stop of its own accord. The second may be very severe or there may be a slight, almost continuous hæmorrhage.

Cause of the Hæmorrhage. If the case is one of placenta prævia centralis, dilatation of the os must cause hæmorrhage, and the stretched fibres of the lower uterine segment cannot retract and compress the open vessels. In the third stage, the process of separation may be interfered with by want of contraction of the muscle in the lower uterine segment.

A case of placenta prævia commonly has uterine hæmorrhage in the second half of pregnancy. Examination will reveal the cervix patulous, and the under surface of the placenta may be felt. Failing this, a boggy mass may be found in the lower segment of the uterus.

If the cervix is red, patulous and placenta prævia is suspected, it is justifiable to give an anæsthetic and dilate the cervix sufficiently to admit the finger and enable the diagnosis to be confirmed.

Prognosis.—The mortality has been much lower of late years. The maternal mortality is now estimated at from 1 per cent. to 5 per cent. The foetal mortality at 35 per cent. to 60 per cent. The high foetal mortality is partly due to premature birth.

Treatment.—The only safe method of treatment is to empty the uterus, which should be done without delay except in cases where the

hæmorrhage has already been so severe that the collapse is such that the patient must be allowed time to rally before any manipulations are undertaken. If the cervix is not dilated proceed to dilate it by whatever means may seem best adapted to the case in hand. Goodell's or Hegar's dilators may be used and the cervix dilated to admit two fingers. The dilatation may be continued manually or with a Champetrier-de-Ribes bag after rupture of the membrane. When the cervix is sufficiently dilated, do a bipolar version and bring down the half breech, and then leave the case to nature. The half breech will act as a plug and control the hæmorrhage, and no traction should be made on the leg unless it is found that some hæmorrhage persists, in which case only sufficient traction to control the hæmorrhage is permissible. It is well recognized that accouchment force entails a high maternal mortality.

If the cervix is not readily dilated, pack the cervix and vagina and wait. On removal of the pack in six to twelve hours, the cervix will probably be dilated or dilatable.

Cæsarean section has been recommended where the child is viable and living, and where there has been little hæmorrhage and the mother is in good condition. It is especially indicated in the case of a primiparæ with rigid cervix. Under the above circumstances the operation is not only justifiable, but it is the best way out of the difficulty, and it seems to me has not received the attention which it deserves.

In conclusion I wish to say that I have not attempted to cover all the ground which my subject suggests, but to bring forward some important practical points in the hope that they may call forth a free discussion of those present.

CURRENT MEDICAL LITERATURE

MEDICINE.

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

PREMONITORY SIGNS OF ARTERIOSCLEROSIS.

The initial manifestations of this disease vary according to the region in which its impact chances to fall, kidney, brain, heart, liver, etc. The tendency thereto is notably influenced by heredity, although acquired by certain habits of life. We may have early migraine, epistaxis, baldness, etc. Constitutional symptoms comprise diminished mentality, energy for work and power of concentration. Tendency to fatigue is shown by drawn features and psychical depression. Small amounts of alcohol and tobacco render the patient morbidly irritable. Irritability of temper is common. Headaches are frequent. Sensory disturbances in one form or another are fairly common such as neuralgia, tingling, slight paresis of the limbs with or without pain. Genuine insomnia is rare though sleep is disturbed. Capiello has called attention to a peculiar sensation in the palm of the hand—a tingling along the palmar arch—when the radial artery is compressed enough to arrest pulsation. A simple way of determining general arterio-sclerosis is the estimation of the stability of the pulse. Under normal conditions the pulse is eight or ten per minute higher in the erect than in the recumbent position, and when observation shows that such is not the case it may be inferred that the blood pressure is markedly above normal, while the ratio be reverse it may be taken as proved that not only is the arterial pressure unduly high, but that the arterio-sclerosis has reached the stage of giving rise to definite organic disease, an assumption which is confirmed should it be found that the heart apex is displaced to the left.

Exaggerated arterial tension with a small hard thready, but regular pulse, is a recognized sign of arterio-sclerosis, but in minor degrees it also constitutes an early premonitory sign; indeed some weighty authorities believe that actual changes in the arterial walls are preceded by prolonged exposure to the ill-effects of persistent high pressure what Huchard calls the pre-sclerous period, such hyper-tension being due to the spasmodic contraction of the arterioles probably dependent on toxic irritation of the vaso-motor system.

High arterial tension, it is true, is commonly associated with chronic renal lesions, but the presence of the latter by no means excludes

the possibility of the mischief being due to arterio-sclerosis; indeed the renal lesion may be, and often is, due to local arterio-sclerosis. When in addition to an abnormally high blood pressure, some of the other signs just mentioned are observed, there is a strong presumption in favor of the existence of arterio-sclerosis. (*Cyclopaedia of Medicine—*from the "Lancet.")

SURGERY.

Under the charge of H. A. BEATTY, M.B., M.R.C.S., Eng., Surgeon Toronto Western Hospital; Consulting Surgeon Toronto Orthopedic Hospital; and Chief Surgeon Ontario Division, Canadian Pacific Railway.

PROMINENT SYMPTOMS IN THE DIAGNOSIS OF GASTRIC AND DOUDENAL ULCERS.

G. Graham, Rochester, Minn., *Journal of the American Medical Association*, August 22, 1908, calls attention to four points that seem to stand out prominently in the larger number of cases of gastric and duodenal ulcer. These are: First, the periodicity of the attacks. The onset is often sudden; an attack of acid dyspepsia appearing without warning or apparent cause and lasting for days or months, followed by an intermission or marked remission, lasting for days, weeks or months, and giving place again to another attack like the first. These changes are so characteristic as to often, by themselves alone, warrant a probable diagnosis. Second, the long period of time during which this cycle has continued before surgical relief is called for. Usually the history shows that the condition has run from five to twenty years, frequently longer. In a series of 258 duodenal cases, the average duration was just short of 12½ years. Third, the characteristics of pain, its great diagnostic significance and its place in differential diagnosis. Its distinguishing feature is not its location or the kind of pain, but its time. It varies from mild distress to very intense pain, but its appearance some time after meals (oftener it is more exact to say before meals) and its relief by eating, are characteristic. It is epigastric, radiating seldom to other areas, and in the later stages, when complications (adhesions, obstruction, perforation) have occurred, the relief by eating and other measures fails and surgery is called for. The lower down the ulcer is located, the longer, as a rule, is the relief of pain after eating, and this is one of the best indications of the location of the ulcer. Fourth, Graham remarks on the usual ready control of the symptoms by the measures used to control pain during the attack, as food, alkalies, irrigation and vomiting, as being characteristic of the condition except in its later stages with complications. Purely functional hyperacidity may

cause symptoms difficult to differentiate from those of early ulcer, but Graham holds that when we meet with the combination here described, we may justly look for ulcer in the stomach or duodenum in a large proportion of cases.—*Am. Jour. Surg.*, October, 1908.

A CASE OF CARCINOMA OF THE JEJUNUM; WITH REMARKS ON MALIGNANT DISEASE OF THE SMALL INTESTINE.

C. R. Keyser, London, (*Lancet*, August 1, 1908), reports a case of primary cancer of the jejunum with extensive infiltration of the abdominal cavity, in which death was due to perforation of the growth. The author's statistics show that primary cancer of the jejunum is extremely rare, only 12 cases having been reported. Cancer of the ileum, on the other hand, is not infrequent, while cancer of the duodenum occurs as frequently as cancer of the ileum and jejunum together. The symptoms of cancer of the small intestine are practically those of cancer of the upper part of the colon, viz. : pain, often colicky in nature, a tendency to constipation, with occasional diarrhea, anemia, and, in the final stages, cachexia. When palpable, the tumor is, in the majority of cases, felt in the iliac fossa, most commonly in the left. Of the 12 cases, 4 died of perforation. In several of the reported cases, the neoplasm was an accidental find at autopsy.—*American Jour. of Surgery*, October, 1908.

GYNÆCOLOGY AND ABDOMINAL SURGERY.

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

TRANSPLANTATION OF OVARIES.

F. H. Martin, Chicago, (*Surgery Gynecology and Obstetrics*, July, 1908), reports the further history of two cases of heterotransplantation of the ovaries. In neither did the menstrual function return, although distinct relief of menopause symptoms resulted. A third case has been lost sight of. In five cases of homotransplantation, menstruation continued in four, and no menopause symptoms developed. In the first two cases a considerable period had elapsed between the removal of the ovaries and a second operation for transplantation, thus allowing uterine atrophy to progress, possibly beyond a point where restitutio ad integrum was to be expected. The technic in heterotransplantation consisted in re-establishing a tubal lumen and implanting thin disks of normal ovary into the broad ligament close to the site of the new tubal outlet. In homotrans-

plantation, thin disks of remaining normal ovarian tissue are similarly implanted. The operation causes no unusual reaction, and is worth trying. References and abstracts of the literature covering the entire subject conclude this interesting article. *Am. Jour. of Surgery*, August, 1908.

CARCINOMA OF THE UTERUS AND FIBROIDS.

Dr. John I. Williams, of Boston (in *Boston Medical and Surgical Journal*), concludes his article upon the above subject as follows:—

1. That there is a distinct relationship between carcinoma of the corpus uteri and fibromyomata.
2. That this relationship probably lies in certain common etiological conditions.
3. That the predisposition of fibroids to become complicated with cancer does not constitute an indication for their routine removal as soon as discovered, providing the patient can be kept under close observation.
4. That any marked increase in the loss of blood from a fibroid, or the appearance of any vaginal discharge in the intervals between the hemorrhages should be regarded as suggestive of the development of carcinoma.
5. That in a fibroid where either of these symptoms is present an immediate curettage should be performed in order that the condition of the endometrium may be examined, even if a radical operation has been decided upon.
6. That every uterus removed for fibroids should be immediately opened by an assistant and the endometrium inspected to guard against possible oversight of a malignant process.
7. That in all cases of fibroids complicated by adenocarcinoma of the corpus a complete removal of the uterus including the cervix is the operation of choice.

OBSTETRICS AND DISEASES OF CHILDREN.

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

INFARCTION OF RENAL CORTEX IN PREGNANCY.

Oskar Klotz, (*Amer. Jour. Obs.*, October, 1908), records a case observed in the Montreal Maternity, giving the clinical history, urine chart and autopsy in detail, and records three similar cases obtained from literature.

The patient was a primipera $7\frac{1}{2}$ months pregnant. She was admitted to the hospital with albuminuria. There was tremendous edema of the vulva which in spite of treatment seemed to increase. She was delivered by Cæsarean section.

The operation was performed rapidly and without any difficulty being encountered. For several days she passed from 95 to 355 c.c. of urine per day. On the 6th day after the operation but 105 c.c. of urine could be obtained. On this day the patient had two convulsions followed by stupor. She was bled copiously from the arm which seemed to relieve her.

Six days later the patient complained of severe pain over the heart. At no time the temperature exceeded 99.6. The patient died fourteen days after delivery.

The autopsy was performed eight hours after death. There was general anasarca present. In the right pleura there was 300 c.c. of clear yellow fluid and 600 c.c. of the same fluid in the abdominal cavity. The bladder contained a very little thick urine, its walls were injected and covered with a thin muco-purulent layer, smears of which showed various organisms. The uterus was in good condition. Both kidneys were large. The capsules peeled off readily. The whole surface of the kidneys were of a golden yellow color with dark red injected vessels along the borders of the poorly demarcated lobules. The medulla and the contiguous part of the cortex were normal in appearance. The outer margin of the cortex was a bright yellow color, having here and there small punctuate hæmorrhages scattered through it. Between the two zones there was a hæmorrhagic zone. The main renal arteries were healthy.

Microscopically, the outer zone of the cortex showed lobules and glomeruli only as outlines of their former selves, the nuclei being absent from all the cells. Blood vessels contain in their lumina thrombi made up of fine granular material containing no inflammatory leucocytes or bacteria. The arteries of the medulla and cortex did not present any changes in their walls, and nothing in the nature of an endarteritis was found. There was no signs of necroses in the liver.

The three cases recorded in literature are referred to briefly. There was suppression of urine with anasarca in all of them, lasting over several days. In all three the kidney findings were very similar to those above recorded.

These cases were all similar in essential points. The suppression lasted for five to thirteen days. One of them showed no uremic conditions.

The simultaneous involvement of both kidneys and the complete thrombosis of all the arteries of the same diameter and in exactly the

same location appears to the author to be very significant, and he does not agree with reporters of previous cases that endarteritis was a causative factor. He expresses the opinion that the thrombosis is the result of certain metabolic changes of secretion occurring in pregnancy. The nature of these metabolic changes are unknown but the effect is a dissolution of the red blood cells and a plugging from their agglutinated debris occurs in the smaller arteries. The whole process is similar to agglutinated red cell thrombosis in the liver.

OPHTHALMOLOGY AND OTOTOLOGY.

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

EFFECTS OF FAULTY EYE, EAR, NOSE AND THROAT CONDITIONS UPON THE MENTAL DEVELOPMENT OF SCHOOL CHILDREN.

Herbert F. True, M.D., Los Angeles, in his article in the *Southern California Practitioner*, among other things, states :

Compulsory attendance at school is fast becoming the law of the various States. We are thereby often requiring a child to attend school when he possesses some physical defect of sight, hearing or bodily ailment, of which he is not aware but which makes school life distasteful and a burden; and which might easily be detected and cured by a skillful physician. The State should demand attendance at school on the part of those for whom the schools exist, but it should also see to it that no child should be in school blindly suffering from a defect that could be cured.

A child physically defective so that he cannot succeed well with his studies and gets behind his class grows to dislike school. It would be better to prevent dislike for school and truancy than to have truant officers and reformatories. It is better to lead the child in the right way by skillfully correcting all physical or mental defects when possible and surrounding him with the proper environment, than to build walls of prohibition and costly State penitentiaries. Do not wait until a criminal is made to reform him. Train him so he cannot become one. Truly much is being done for the education of children, but much more can be done by the discovery and correction of defects.

To properly consider the various eye, ear, nose and throat conditions, their effects upon the child, and how we believe these effects are produced, would be to cover the entire field of the specialist, and would take hours to even introduce the subject. So I must content myself

with merely enumerating some of the evils attendant upon faulty conditions of the eye, ear, nose and throat, that we have found among the school children of this city; and to leave to my hearers with their knowledge of the human body, their scientific judgment and their keen medical insight as to what effect, this or that faulty condition, would have upon the child and his mental and physical growth. Take for instance, the symptom headache; the mere mention of this as I enumerate it as one of the evil effects of a faulty condition, immediately brings to the mind of the physician, or in fact any intelligent person, its many causes and its detrimental effects upon the sufferer. It distracts his attention and makes him lose interest in all subjects, except the headache itself and means for its relief. The power of application and concentration is lost. Consciously or unconsciously, he seeks relief from the cause of his distress; avoiding that which he believes to be the cause, even going to extremes, as we shall later show.

First, let me enumerate those enemies of the student (be he school child or adult) that we see entering through the gateway of faulty conditions of the eyes: Headache, watering, blurring, poor distant vision, vertigo, nausea, restlessness, pain in the eyes themselves, inflammation of the lids and of the parenchyma of the eye, squinting; and reflexly, palpitation of the heart, chorea, stammering, mental confusion, backaches and dyspepsia. Any one of which will take the attention away from school work. Numerous as they are, the causes of most of these distressing conditions are comparatively few, myopia, hypermetropia, astigmatism and heterophoria about covers the list.

Many a boy or girl who gets on indifferently in school, gaining a reputation for dullness or indolence, is prevented from going forward by his imperfect vision, a condition of which his parents, instructors and he himself may be ignorant. Yet while he is ignorant of the fact of his imperfect vision, he is conscious of its evil results. How is the child to know that the blurring page, the watery eyes and the aching head which follow any protracted use of his eyes are not the common lot of mankind? This has been his experience. Why should it not be that of his fellows also?

Second, through the gateway of faulty ear conditions, enter earache, annoying discharges and deafness. Defective hearing is a great barrier between the teacher's efforts and the child's receptiveness, and is the cause of much apparent inattention and stupidity on the part of the pupil. Again, very often no one knows of the defect; the pupil thinks he hears as well as others. Of course, this does not apply to marked cases, but only to the undetected ones. We frequently find as high as thirty per cent. of this class existing in certain schoolrooms. The child's lack of ready response is laid up against him, as stupidity

and sometimes even as perverseness; when it is due simply to his not hearing distinctly what is told him. The parent or teacher thinks his hearing not at fault, because at times he probably hears much better than at others, which is true of most cases of bad hearing. Also, one ear may be defective while the other is not; and when the good ear is turned to the speaker, perfect hearing is experienced and prompt response is had; whilst when the defective ear is turned, his lack of ready response is attributed to inattention, disobedience, or even stupidity.

Third, through the gateway of faulty nose and throat conditions, again we see very frequently entering, headache, as a common symptom of many forms of intra-nasal disturbances especially when resulting from pressure on the soft parts by projections from the septum or swelling of the turbinals or inflammation of the sinuses. Limited or difficult breathing frequently occurs in faulty conditions of the nose and throat, as does a tendency toward the development of catarrhal conditions of the lower respiratory tract.

We have been told so often regarding the dangers to the mucous membrane of the entire respiratory tract, to the ears, to the formation of the face, to the general health of the patient and especially to the nervous system; of the presence of adenoids and enlarged tonsils, that I will not reiterate. I would only wish to call your attention to the lack of mental application and loss of memory found in this class of patients. This much is bad enough, but in addition, the child very often is not given the opportunity for mental exercise and development, by his associates, because he is thought to be very stupid, when in reality he may not be so. Especially is this true in those cases of typical, dull, listless adenoid face so easily recognized by the physician but not so by the laity.

Thus, I have only enumerated the effects of faulty conditions of eye, ear, nose and throat; all of which tend to hold the child back in his studies, distract his attention from his work and render him less able to cope with the tasks set before him, than his fellows. Once he realizes this, his spirit for the attainments of perfection and the approval of his elders wanes, and his interest goes elsewhere, usually to worse things or trivial matters. Sometimes, however, it seeks the proper vent indicated by the call of nature and he flees from the place of his torment, namely, the schoolroom; because, there, he knows his distress is greatest and his unhappiness the most marked. The child becomes a truant, naturally and properly so. He should be a truant, nature should rebel, until help is given him and the faults from which he suffers, eliminated. And in the few cases where this cannot be accomplished, an easier or special course laid out for him, such as is now

being given in the ungraded rooms, which are in so many of the city schools. In addition, in most of those cases, I believe that it would be wise to give them out-of-door work during part of their school hours under the guidance and direction of a teacher. By following this plan, I firmly believe great good can be accomplished, especially in this particularly wonderful climate, and over in the less clement climate of other localities upon such days as the weather permits.

In the examination of 5,321 school children in this city, 2,241, or 61 per cent., were found defective in eyesight; 1,170, or 22 per cent., defective in hearing; 1,835 or 31 per cent., had adenoids; 1,390 or 25 per cent. had enlarged tonsils.

Besides the above, many diseased conditions of these important organs were discovered.

In the examination of fifty bright pupils and fifty dull pupils selected by six teachers on account of their marked brightness or dullness, eight bright ones were found defective in some condition of the eye, ear, nose or throat; and forty-three of the dull ones had some easily detected and marked defect of these organs. This proportion speaks for itself. The dull ones are the defective ones, and the defective ones are the dull ones. As these little ones were lined up, the practiced eye of the physician could see at a glance, that this one or that one had some physical defect, and in most cases the diagnosis could be reached without a detailed examination. Upon the tests being applied additional defects were discovered.

I have considered this subject mostly from the effect these conditions have upon the mental development of the school child, leaving to your consideration the effects these conditions have upon the physical conditions of the child; for we all know full well how slowly these children develop physically, when encumbered with the load-stones of the defects that I have enumerated; and again we know how dependent mental advancement is upon a satisfactory physical condition.

It is the object of the medical examiners of the city schools to point out to the parents the fact that this child or that has some defect, so that they may bring the child to the attention of their physician. And by his efforts and the co-operation of the teacher in sustaining and encouraging the child until he regains his normal status among his fellows, we shall accomplish the most good for these little ones who are behind the others and whose sensitive natures feel it more than we know.

So let us all work together to discover and remedy the defects and then the physical and mental development will attain its maximum, in so far as the inherent natural ability of the child will permit.

ELECTRO-THERAPEUTICS AND RADIOLOGY.

Under the charge of JOHN STENHOUSE, M.A., B.Sc., Edin., M.B., Tor.

LIGHT.

In the *Southern California Practitioner*, (October), P. H. Sunde gives a short but clear resumé of the physics and therapeutics of light. The effects of light as a whole and of the different parts of the spectrum are considered. While no part of the spectrum has one and only one properly the red and infra-red are mainly heat rays; the yellow and orange, luminous; the violet and ultra-violet actinic or chemical. Thus, the development of bacillus prodigiosus was inhibited by exposure to the red rays for six minutes while the same was accomplished in fifteen seconds by the whole spectrum.

One clear distinction, full of important meaning to the race, is that while normal tissues are incited to increased activity by light, bacteria are rapidly destroyed by it. Dr. Soiland suffering from diphtheria, exposed his throat to direct sunlight and lessened the infective period by half, and this has been corroborated by other observers. The tubercle bacillus is killed in from 5 to 10 minutes by direct sunlight; in 8 hours by a 900 candle-power arc lamp; in 11 hours by the incandescent light.

Unfortunately the penetrative power of the actinic rays is small, though it is claimed that this may be increased by injecting hypodermically or painting the surface with 5 per cent. solution of eosin. This has been found successful in lupus, tubercular ulcers and superficial epitheliomata. It is claimed, however, by Klingmiller and Hallerstadler that the Finsen light does not kill bacteria in the deeper tissues. Pieces of lupus were exposed to the light for ten minutes and placed in the peritoneal cavity of guinea pigs with resulting tuberculosis.

While the usefulness of light as a therapeutic agent has been discounted by its too enthusiastic supporters it has shown clinical results of genuine value. To claim for it, as has been done, the ability to cure tabes or specific disease is only to bring it into undeserved disrepute. Finsen's work is well known and needs no comment. The Uvial lamp (Scott) made of a barium phosphate chrome glass which does not prevent the passage of the chemical rays gives excellent results, 13 cases of chronic ulcer, weeping eczema, acne, etc., being cured. Kromayer, of Berlin, by using an arc light with metal electrodes without the pressure lens claims 28 successes out of 35 cases of alopecia areata. Light treatment is undoubtedly valuable in pain of rheumatic origin and neuritis.

The "colour line" is an important one when we consider immunity to tubercle on the one hand and the dangers of tropical light to the

white races on the other. The dark skin of the negro absorbs the actinic rays and hence he lacks one important protection against tubercle. Conrad, of Oklahoma, points out that those subjects of the post-mortem room which showed perfectly healed tubercular infections were blondes, the healing process being expedited by the uninterrupted passage of the actinic rays. The negro lacking the protective influence of the sunlight which is stopped by the thick pigment layer of his skin falls a ready victim to tubercle.

The question of the protection of the white races who have to live in tropical regions is considered by Ernest Kinloch Johnstone M.D., Edin., of the U. S. Army, who writes in the *Pacific Medical Journal*, (October), on "Rational Dressing in Tropical Regions." He points out that the chief mischief is done by the short actinic ray, against which the flimsy white garments of European and American clothing are no protection. Here the negro scores. His thick pigment layer stops the actinic ray while the white he wears stops the heat. The imitation of native dress is not therefore any solution of the difficulty. Dress which will stop both the heat and chemical rays is the desideratum and this is found in the fabrics devised by Dr. Sambon, of the London School of Tropical Medicine, with the assistance of a spectroscopic expert of university college. The material is so woven that it is red on the inside, white or khaki coloured on the outside. The former absorbs the chemical rays; the latter deflects the heat waves.

X-RAYS IN EXOPHTHALMIC GOITRE.

G. E. Pfahler, in the *New York Medical Journal* of October 14, 1908, gives a summary of 51 cases of this disease treated by means of the x-ray, with success in 42. In 9 there was little or no improvement. In only three successive cases is it specifically stated that the x-ray was the only means employed. In most cases almost complete recovery was obtained in from three to six months. One case was treated three times a week for a month with abolition of the symptoms and increase in weight and well being which had lasted up to the time of writing.

The treatment given by Freund varies in frequency, depending on the reaction,—once a week or even every other day. A medium soft tube is used for ten minutes. Of course, only the goitre is rayed and a mild dermatitis may be produced, but not more. Increase in weight is the first sign of success and this is followed by improvement of all the symptoms. When properly given the treatment seems to be without danger and ought to be tried for at least twelve sittings.

THE X-RAY IN DERMATOLOGY.

Albert C. Geysler reports 5,000 applications of "The Cornell Tube" during a period of two and a half years at Cornell University and at the New York Polyclinic. He claims to have placed the tube in close contact with the skin; from 5 to 20 minutes without producing a dermatitis. When the skin is broken, as in epitheliomatous ulcers, the tube is kept in steady apposition with the lesion, while if it is still intact as in acne, eczema and hypertrichosis close contact is maintained but the tube is kept moving so that a large area is treated during an exposure of 5 to 10 minutes. During the period named 41 cases of epithelioma were treated, 33 being discharged as cured; 2 returned with a recurrence and were cured; 6 were still under treatment at the time of writing.

The writer claims that while there is no accurate means of estimating the effect of the x-ray, so much depending upon the reaction of the patient, it is more active than radium and furnishes better clinical results.

This method is only useful in old chronic cases where the skin is eczematous and thickened. Just what the action is that brings about a cure he does not attempt to say, but that the eczema disappears and the skin returns to its normal condition, or nearly so, is beyond question. It is too soon to say positively how permanent the results are going to be, but from the appearance of the skin the writer thinks there will be no return if the bowel above is put in a healthy condition.

His technique is as follows: With a soft tube he gives an exposure of ten minutes' duration twice a week, until he learns how the skin is going to stand it. If there is no irritation he gives three treatments a week until a brown discoloration appears. All treatment is then stopped until this goes away, when treatment is resumed until it reappears. This is usually enough, but if possible he thinks it is well to give an occasional treatment after this as a matter of precaution. *Therapeutic Gazette.*

PERSONAL AND NEWS ITEMS.

ONTARIO.

Dr. R. M. Coulter, Deputy Postmaster-General, has been having a trip to Australia.

It is understood that a home will be built for the nurses of the Hamilton Hospital at a cost of \$20,000.

Dr. McGregor, of Waterdown, met with a severe accident, by being thrown from his rig and having his thigh fractured.

Dr. Millyard, of Goderich, has gone to Europe on a prolonged post-graduate course of study.

Dr. J. I. Cassidy, for some time at Moorefield and Brantford, has located in Drayton.

The Marine Hospital of St. Catharines has a fund of \$8,600 on hand towards a new building.

Dr. A. T. Wilson, of the Toronto Asylum, has been appointed Superintendent of the Asylum in Cobourg.

Dr. Edward Stubbs, of Stratford, is taking a trip round the world and will end up in Vienna where he intends doing post-graduate work.

Dr. W. A. Young, Toronto, is improving rapidly. His many friends will be glad to learn of his recovery from his lengthy and severe illness.

Dr. Ferguson, of Hensall, has sold out to Dr. Aikenhead, and has moved to Toronto to take up the practice of his late brother, Dr. A. K. Ferguson.

Dr. Clarence Hill, who for some time was assisting Dr. Gunn, of Clinton, has been appointed for two years a house surgeon in the New York Hospital.

Dr. Hector N. McNeil, of Latchford, has been appointed coroner for Nipissing district, and Dr. John Ball, a coroner in the County of Bruce.

The Hammond Fund for the Endowment of the Toronto Sanitarium for Consumptives had reached the handsome sum of \$41,740 when last reported. A handsome memorial to an excellent man.

Dr. C. F. Moore, of Toronto, has been spending a short time with Dr. Mayo, of Rochester, Minn. He was paying special attention to abdominal surgery.

The City Medical Health Officer says the Isolation Hospital will have to be enlarged by one-third or one-half in order to accommodate the patients when East Toronto and other suburbs come into the city.

Lt.-Col. J. A. Grant, formerly of Ottawa, has been permanently appointed medical officer of district No. 11, in place of the late Dr. Wm. Nattress.

Dr. Ernest Jones has been appointed pathologist to the Toronto Asylum in succession to Dr. J. E. Fitzgerald, who has accepted a position in Boston.

Dr. W. F. Adams, who spent four years in China, was in Toronto for some time on a visit. He has returned to China and will take charge of the hospital at Yo-Chow in the Province of Hunan.

At the residence of Mr. and Mrs. John Podmore, Toronto, their eldest daughter, Florence Emma, was married to George MacIntyre

Campbell, M.D., of Southern Ohio. The marriage took place the latter part of December.

A very pretty wedding was solemnized on 25th November, 1908, at the home of Mr. and Mrs. John A. Ramsden, 422 Markham Street, Toronto, when their daughter, Anna, was united in marriage to Dr. H. S. Burns, of Jarvis, Ont., only son of Dr. W. J. Burns, of Caledonia, Ontario.

Dr. C. D. Parfitt, who was for six years physician-in-charge of the Muskoka Free Hospital for Consumptives at Gravenhurst, Ontario, and has been for the last seven months resident consultant to that institution and the Muskoka Cottage Sanatorium, has resigned his position. Dr. Parfitt will remain in Gravenhurst and continue practice in pulmonary and laryngeal tuberculosis.

Dr. Wishart, who has been lately appointed Chief of the Ear, Nose and Throat Department of the Toronto General Hospital, has on that account resigned his position as Chief of that Department in the Hospital for Sick Children, which has devolved upon his junior in the service, Dr. Geoffery Boyd. Dr. Wishart has been elected a member of the Royal Society of Medicine, England.

The first medical students of Toronto were taught in a shack, part of which was used to stable a cow, was the statement made by Dr. Reeve before the York Pioneer and Historical Society. Dr. Rolph, who was the first teacher, according to Dr. Reeve, was the best lecturer in surgery, anatomy and medicine Toronto had ever known. Tribute was also paid to the sterling qualities of Drs. Widmer, W. T. Aikins and Howitt.

There were 139 cases of diphtheria reported to the Toronto Medical Health Officer in November of last year, as against 138 in the corresponding month in 1907, and 162 in October, 1908. The scarlet fever cases in November, 1908, totalled 168, as against 214 in November, 1907, and 111 in October, 1908. The typhoid fever cases in November, 1908, numbered only 8, whereas there were 22 in November, 1907, and 28 in October, 1908.

G. W. Hill, Indian herbalist, convicted and fined in Grey county at the instance of Detective Rose, acting for the Ontario College of Physicians, was awarded \$100 damages in the County Court for false arrest. Plaintiff's counsel, J. B. Mackenzie, pleaded that the British North America Act gave no power to fine and imprison under the head of education, and that Rose being a non-resident could not lay any information against Hill.

The annual meeting of the General Marine Hospital, St. Catharines, was held November 27th, when the reports showed the institution to be in excellent condition. During the past year 516 patients were cared for, the expenditure being \$10,000, with receipts of \$2,536.82 in ad-

vance of that amount. The hospital has a fund of \$8,620 for the erection of a new hospital, which will be started as soon as the fund is increased to a reasonable amount.

Dr. George E. Porter, of Toronto, has been appointed associate secretary of the Canadian Association for the Prevention of Consumption. He at once commenced the delivery of a series of lectures, and the organization of local branches of the society in Ontario. He spoke at Galt, St. Catharines, Stratford, Berlin and other places, and will endeavor to arrange his visits for the same dates as those of the provincial tuberculosis exhibit.

In connection with his advocacy of compulsory vaccination of school children, Dr. Sheard, Toronto Medical Health Officer, states that in 1908, the year the Board of Education abolished compulsory vaccination, there were fifty-three cases of smallpox, whereas last year there were ninety-three cases, and so far this year sixty-six cases. Dr. Sheard says the ill effects of the non-vaccination of children are more apt to be seen in later life than in youth, as more adults catch smallpox than children.

The late James A. Blair, London, left an estate valued at \$100,000. According to the will, an agreement entered into by the city and himself with reference to the establishment of a tuberculosis hospital will be carried out. Some time ago Mr. Blair offered the city \$20,000 to establish a tuberculosis hospital, the city to pay the interest until his death, and then the money would revert to the corporation. Mr. Blair provided for this, and the money is still at the disposal of the city for the purposes intended. Practically the entire estate, amounting to \$100,000, is left to charity.

Queen's University is applying to the Ontario Government for an increased grant in aid of the medical school. Recently Mr. W. F. Nickle, the Provincial representative for Kingston, accompanied by the Mayor, Dr. Ross, and Mr. J. Cameron Connell, Dean of the Medical Faculty, waited on Sir James Whitney and other members of the Cabinet for the purpose of asking for an increased grant in aid of the medical school. The growing needs of the school were pointed out, and the Premier promised that the matter should receive the best consideration of the Government.

QUEBEC.

The examiners appointed by the Medical Council act along with those appointed by the Universities. Those who pass the examinations are entitled to both their University degree and the license to practise. Graduates of McGill and Laval can register in Great Britain.

Mr. Robert Reford has given \$50,000 in the form of securities to aid McGill in her present financial difficulties. McGill has made the statement that unless she obtains \$2,000,000 as an endowment she will be unable to hold her professors and do good work. Mr. Reford's gift is the first one to come in in response to the appeal.

A short time ago Col. Jeffrey 'Burland informed the Montreal League for the Prevention of Tuberculosis that he would give \$50,000 for the purpose of building and equipping a dispensary for the treatment of tuberculosis. Already a building and land has been secured in Belmont Park. It is expected that at least \$50,000 will be secured from other sources to the endow the institution.

Earl Grey, speaking in Montreal a short time ago on the subject of tuberculosis said: "I believe that it is the bounden duty of every individual to use all the power he can command to fight the incubus that weighs so heavily upon society. Modern science has proved that the disease which once appeared as an inevitable companion of society, can be driven out by a little concerted effort." He hoped the various Canadian clubs would take the matter up and unite in a grand effort to secure effective measures for the arrest of the disease.

Montreal's tuberculosis exhibition closed on 29th November last. During the twelve days it was opened over 55,000 people visited and inspected the exhibition or attended the lectures. Of these 25,000 were school children. The latter were given special instructions regarding fresh air, food and means of preventing the disease. Valuable aid was given by the Street Railway Company in transporting all school children to and from the exhibition free. For several days Earl Grey was in attendance, and by his presence and help aroused a great deal of interest in the question.

The late Samuel Carsley left bequests amounting to \$11,000 to sixteen Montreal charities. One thousand dollars each to the following institutions: Montreal General Hospital, Notre Dame Hospital, Royal Victoria Hospital, Western Hospital, Protestant Hospital for Insane, Salvation Army of Montreal. Five hundred dollars each to the following societies and institutions: St. George's Society, Irish Protestant Benevolent Society, St. Andrew's Society, St. Jean Baptiste Society, St. Patrick's Society, St. David's Society, Baron de Hirsch Institute, Hebrew Benevolent Society, MacKay Institute for Protestant Deaf Mutes and Blind, and Protestant Infants' Home.

MARITIME PROVINCES.

Dr. J. L. Cock has gone from Halifax and taken up his residence in Truro, where he will follow his professional work.

Dr. Florence McDonald, of Halifax, and for sometime in the China mission field, was married a short time ago to Mr. W. H. Piers.

Dr. J. L. Churchill, of Goldboro, has purchased the practice of Dr. March, M.P.P., of Bridgewater.

Dr. J. J. Doyle has been elected president of the Halifax and Nova Scotia branch of the British Medical Association.

Dr. C. S. Morton, of Greville, N.S., has gone to Vienna for an extended period of postgraduate work on surgery.

Dr. Jemima MacKenzie has been home in Halifax on furlough from her missionary work in India. She intends doing some postgraduate work in New York before returning to India.

Drs. E. B. Roach, E. D. Farrell, F. V. Woodbury, M. A. Macaulay and H. K. MacDonald, have been appointed assistants on the staff of the Victoria General Hospital, Halifax.

Among recent marriages may be mentioned those of Dr. P. A. MacDonald, of Halifax; Dr. E. E. Sinclair, of Folly Village, and Dr. J. R. Corston, of Halifax.

Dr. M. A. Lindsay, of Halifax, who has already done very excellent work in pathology, has gone to Edinburgh to still further pursue his studies along this line.

Dr. Louis H. Nurse and wife, of Digby, were treated to a very pleasant surprise when many friends called upon them on the 10th anniversary of their wedding and made them the recipients of a number of very fine presents.

WESTERN PROVINCES.

Dr. Paintin, of Masonville, Que., has located in Regina, where he will engage in practice.

Dr. A. C. Robertson, Winnipeg, has returned from his year's postgraduate study in Europe, and will devote himself to orthopaedic surgery.

In Edmonton for the month of October, 1908, there were 32 deaths, 29 marriages, and 40 births.

The University of Alberta has commenced work with an efficient staff and a class of 40 students.

Dr. Brett, of Banff, has commenced the erection of a new hospital, to be 90 feet by 40 feet and three stories. It is to be modern in every way.

The Government of Saskatchewan will supply free vaccine to the medical profession, and will pay for the vaccination of the poor who cannot pay for themselves.

The vital statistics of Winnipeg for October, 1908, were: Typhoid fever, 114 cases and 7 deaths, scarlet fever 14 cases, diphtheria 15 cases

and 1 death, measles 2, tuberculosis 4, mumps 1, scabies 2, erysipelas 2, whooping cough 1, chickenpox 7, smallpox 1.

The following were elected officers of the Winnipeg Medical and Chirurgical Society:—W. J. McLean, M.D., M.R.C.S., President; J. O. Todd, M.D., Vice-President; C. H. Vrooman, M.D., Secretary-Treasurer. Executive:—Dr. Harvey Smith, Dr. Hunter, Dr. Galloway, Dr. Halpenny.

Dr. Harvey Smith, of Winnipeg, paid a visit to Toronto, Montreal and other points, in the interests of The Canadian Medical Association. The association will meet in Winnipeg on August 23rd, 24th and 25th. Dr. H. H. Chown is chairman of the committee on arrangements, and Dr. Smith the secretary.

The following were elected officers of the Winnipeg Clinical Society for the ensuing year:—W. R. Nicholls, M.D., F.R.C.S. (Eng.), President; Charles Hunter, M.D., M.R.C.P. (Lond.), Vice-President; J. G. Munroe, M.D., Secretary; J. E. Lehmann, M.D., M.R.C.S. (Eng.), Treasurer; Executive: R. W. Kenny, M.D., J. H. Bond, M.D. (Edin.), R. Rorke, M.D., M.R.C.S. (Eng.)

The annual report of the Superintendent of Indian affairs shows that during the fiscal year ending last March, Indians in Canada numbered 110,205, a decrease of 40. The preceding report showed that the Indians in the year 1906-7 increased by 169. The falling off in the Indian population last year is attributed to the increased activity of tuberculosis. Reports show that Indians generally are becoming more self-reliant. This is indicated in the fact that the expenditure for destitution which amounted to \$372,000 ten years ago, has decreased to \$143,000.

Manitoba has formed a Provincial Medical Association. The inaugural meeting was largely attended, and there was a feeling of much enthusiasm among those present. The officers are Dr. J. R. Jones, Winnipeg, President; Dr. J. A. McDonald, Brandon, Vice-President; Dr. J. R. McRae, Neepawa, 2nd Vice-President; Dr. J. Halpenny, Winnipeg, Secretary; Dr. R. W. Kenny, Winnipeg, Treasurer; Executive Committee, Dr. Hicks, Griswold; Dr. Ross, Selkirk; Dr. Keele, Portage la Prairie; Dr. Specchley, Crystal City; Dr. Harrington, Dauplin; Auditors, Drs. Blanchard and Moddy, of Winnipeg.

BRITISH COLUMBIA.

In Vancouver for November, 1908, the births were 127, marriages 39, and the deaths 75.

The Committee of Management of the Vancouver General Hospital have received from the citizens of that place during the past four years \$400,000.

Any immigrant in the province who has not resided in it for more than two years, and who is cared for by a hospital without pay from such patient, shall be paid for by the Dominion at the rate of \$1 per day.

The Tranquille Sanatorium is expected to be completed by May, 1909. It will have a frontage of 300 feet by a depth of 65 feet. The building is one of two wings and two stories. The cost will be about \$100,000. It is expected the products of the ranch will meet the expenses of maintenance.

The following have passed the examinations for registration in the Province: J. Arbuckle, F. J. Buller, H. L. Burris, C. A. Eggert, H. B. Gourlay, F. W. Brydone-Jack, A. H. M. Kennedy, W. H. Lang, B. B. Marr, I. N. Mathers, A. Proudfoot, C. W. Prowd, G. E. Richards, G. E. Seldon, A. H. Wallace, W. C. Whittaker, C. S. Williams.

Through the efforts of Dr. Fagan, Provincial Health Officer, regulations have been adopted for the control of the plague, and the proper disinfection of vessels coming from plague-stricken parts. Hon. Dr. Young, Hon. Sydney Fisher, and Hon. Frank Oliver have agreed upon these regulations.

FROM ABROAD.

Paris has had for some time a well equipped Government school for the training of nurses. It is meeting with much favor. In the past there were hospital trained nurses in France.

The requests of the University of Utah have passed a regulation to the effect that no teacher, student, nor employee suffering with tuberculosis will be admitted to the buildings of the University.

The medical assistants who worked under Dr. T. S. Clouston in the Royal Edinburgh Asylum from 1873 to 1908, presented him with a silver Vikingship of the design of the tenth century. It weighs 100 ounces.

The library of the Ecole de Medicine in Paris is said to have 300,000 volumes. Some very important improvements are to be made in the building.

In India good results are obtained from the treatment of snake bites by permanganate of potassium. In all there were 198 cases so treated in one district, with only 23 deaths.

The next meeting of the British Medical Association will be held in Belfast from 23 to 31 July, 1909, under the presidency of Sir William Whitla.

A lady specialist in London, England, has been fined £500 for failure to remove smallpox marks from a patient's face, and for disfigurements that followed her "harmless methods."

Dr. Thomas Orme Dudfield, who held the position of Sanitary Officer for Kensington, London, for 37 years, and Medical Health Officer for the County of London, died at the age of 77 years, a few weeks ago.

Dr. Frederic Brush, of Boston, has been Medical Superintendent of the New York Postgraduate Medical School and Hospital. He intends devoting some time to the study of postgraduate work before entering upon the duties of his new position.

According to the recent report on the health of India, it would appear that there is a decrease in the mortality from plague, but an increase in the sickness and death rates from malarial fevers, typhoid fever, and dysentery.

In Minneapolis the city paid for the medical inspection of the public schools. This was discontinued and the Board of Education could not pay for its continuance. There is an agitation on foot to have medical inspection of the schools taken up again by the city.

Medical inspection of schools is conducted under national control in France, Belgium, England, Sweden, Switzerland, Bulgaria, Japan, and Argentina. In Germany and the United States it is compulsory on many cities.

In London arrangements are made with young doctors to inspect the schools. They receive £120, or \$600, and give three half days a week throughout the year to the work of inspection. They also receive their travelling expenses.

Dr. George H. Savage, in an address a short time ago on "Mental Cripples," remarked that feeble-minded persons are not properly cared for. He recommended homes and colonies rather than asylums. These feeble-minded cripples cannot unaided make their own way in the world.

Sir James Crichton-Browne made an excellent speech at the dinner of the public vaccinators. He pointed out the changes vaccination had wrought in the civilized world. He emphasized the fact that no amount of sanitation could prevent smallpox. Vaccination alone could do that.

In a recent issue of the *British Medical Journal* a number of obesity cures are given in detail. They contain various combinations of the following ingredients, namely, dried thyroid gland, phenolphthalein, sodium chloride, fucus vesiculosus, oil of peppermint, sodium bicarbonate, tartaric acid, farmarine, talc, gum, bladderwrack, sugar, liquorice.

Among the birthday honors may be mentioned the following: Sir Anderson Cretchett is now a baronet, Dr. Donald MacAlister is made a knight of the rank of K.C.B., Mr. Jonathan Hutchinson is knighted as K.C.B., Dr. Thomas Oliver, of Newcastle, and Dr. Stewart Woodhouse have both been made knights.

In a recent report Dr. F. W. Andrews, the eminent bacteriologist of London, states that under some conditions both streptococci and colonbacilli are found in the gas from sewers. This statement will cause a new view to be taken of the spread of such infections as scarlet fever, typhoid fever, septicæmia, etc., by means of sewer gas.

There is considerable agitation on foot in Edinburgh for a radical change in the method of clinical teaching. It has been suggested that all the full surgeons to the Royal Infirmary should become clinical teachers of surgery to the University. So far an agreement has not been effected.

The death of Dr. William Alfred Elliston, of Ipswich, took place on 27th November, 1908. He was born in 1840, and was regarded as a very widely read man. He was one of the physicians to the Ipswich Hospital, and was President of the British Medical Association in 1900, when it met in his city.

There is a proposal in England to fit out a vessel capable of accommodating about 50 consumptive patients, and keep the vessel out on the ocean all the time in the vicinity of the Canary Islands. The vessel would only go into port in bad weather and when supplies were demanded. This may prove a novel method of sanatorium treatment.

A medical inspection of 7,412 school children in Birmingham showed that 1,140 had defective eyesight, 19 per cent. had verminous heads, 71 per cent. suffered from defective teeth, 28 per cent. showed enlarged tonsils, 10 per cent. had some degree of lateral curvature of the spine. Lang's disease was present in 107 and heart disease in 124 children.

The medical research work that has been done in the Philippines go to show that ipecacuanha is not regarded very highly in amoebic dysentery. Operations on the liver for abscess are frequent. It has been shown that dengue is spread by the bite of the culex fatigan. It is also supposed that the cholera vibrio is latent from one epidemic to another, and that under certain conditions it becomes active.

A report has been issued by the Bureau of Chemistry of the United States on meat extracts. It shows that some of these preparations are made from good meat; but that others of an inferior quality are made from the liquid in which the meat is boiled in the process of making canned beef, together with odds and ends of meat and bone. Several of the samples fell below the standards in several respects, notably in the amount of coagulable protein. Such reports are of value as these extracts are extensively advertised as nourishments for invalids.

The average time required by students to obtain their qualifications in Britain is as follows: University of Cambridge 76 months, University of Leeds 73.7, University of London 71.8, English Conjoint Board 69.3, University of Liverpool 67.1, Royal University of Ireland 66.5, Irish Conjoint Board 66, Scottish Conjoint Board 65.7, University of Durham 65.6, University of Glasgow 65.3, Victoria University of Manchester 64, University of Dublin 63.8, University of Edinburgh 63.1, University of St. Andrews 63, University of Aberdeen 62.5, University of Birmingham 60. Thus it is that the course is practically five years and over.

At a recent Lambeth Conference a resolution was passed asking the Bishop of London to nominate a council to consider the subject of spiritual healing. It remains to be seen whether this movement will tend to lift the whole question of spiritual and mental influence in disease onto a higher and saner plane than has been too common of late years; or have the opposite effect of wrapping the whole affairs in deeper mysticism, and thereby open the door for further quackery and humbug. It is to be hoped that no attempt will be made to discredit the aids of medicine and surgery in disease, while claiming for the psychical and spiritual their true spheres of operation.

Papaun medicine-men are regarded with great respect by the natives. Those I have met certainly seemed energetic and hard-working. They sit close to the patient, massaging the seat of pain with much vigor, and while they are thus rubbing, make a noise with their lips rather like that which a groom makes when rubbing down a horse. The process is a tiring one, and the medicine-man stops at intervals to drink hot water in which taro has been boiled. His object is to extract some mysterious foreign substance from the sick man's body, and if he succeeds in this he receives a fee, otherwise he gets nothing. "No cure, no pay," is apparently the Papuan sufferer's motto.

It is no new story that the population of France remains stationary, but it is a new and disquieting feature that the deaths exceed the births. The population of this brilliant and gallant nation is absolutely diminishing. Last year 773,000 French children were born; 793,000 persons died. A simple sum in subtraction shows that the decrease in population last year was 20,000. Evidently a very serious state of affairs. On the morrow of the war France seemed to be re-peopling herself as if nature were anxious to fill up the depleted ranks of her army. Then the births represented 960,000 a year. In twenty years the natality tables have fallen 200,000, and now the deaths outnumber the newly born.

At a recent banquet, Sir John Tweedy, who was for some time president of the Royal College of Surgeons of England, expressed the opinion that the three licensing corporations in England, the three in Scotland, and the three in Ireland, should unite and form a body with power to grant medical degrees to students. He thought that it was not well that the granting of medical degrees should drift, as at present, into non-medical bodies as many of the universities are. At one time in Britain the granting of rights to practise was entirely in the hands of these medical corporations. Lately it has been passing into the possession of the Universities. Sir John Tweedy thought it should be again brought back into the medical corporations.

The custom of making eunuchs still goes on in China where there are about 3,000 of this class. They retain the appearance and voice of

the boy, but are rather irritable in temper. There are persons called "Knifers," who do the operation. They fasten a sort of clamp on each groin to compress the part, and then with one sweep with a curved knife remove the penis and the scrotum with its contents close to the pubis. The urethra is plugged with a piece of wood, and the wound dressed with brown paper wet in cold water. The person is kept walking during the first day, and is allowed no water for three days. The plug is then removed and the eunuch permitted to void urine. The removed parts are preserved with spirits in bottle and are called "precious," or "valuables."

Sir Henry Pitman, M.D., B.A., Emeritus Registrar of the Royal College of Physicians of London, died on 6th November, 1908, at the advanced age of 100 years and 4 months. He met with a fall which caused his death. He retired from the active duties of registrar in 1889. He graduated from Trinity College, Cambridge, as B.A., in 1831, and as M.B. in 1840, and M.D. in 1841. He succeeded Dr. H. Bruce Jones, in 1896, as Assistant Physician to St. George's Hospital, and Dr. James Arthur Wilson, as full physician in 1857. He became a fellow of the College of Physicians in 1845, and in 1858 registrar. He was an ardent worker in the interests of the college, and all things pertaining to medical education. The college brought out its famous nomenclature of diseases under his guidance in 1869. He took a keen interest in the matter of better dwellings for the working classes.

On the 16th October, 1908, the introduction of ether in 1846 was duly celebrated. Prof. W. H. Welch of Johns Hopkins gave an able address on the history of anæsthesia. He said that Dr. Long, of Jefferson, Georgia, had used ether in 1842 and for a few years afterwards in minor surgery. The glory, however, of really making the use of ether in surgery an accomplished fact is due to Wm. T. G. Morton, of Boston, who on 16th October, 1846, in the Massachusetts General Hospital anæsthetised a patient for Dr. J. Collis Warren, who performed successfully an operation. Dr. Weir Mitchell said many years ago:—

"No hour so sweet, as when hope, doubt and fears,
'Mid deepening stillness, watched one eager brain,
With Godlike will, decree the Death of Pain."

OBITUARY.

CHARLES BENT, M.D.

Dr. Bent died suddenly in his office. He had practised for many years. His daughter found him reclining in his chair and seeing that

his appearance was very strange called a physician, but on his arrival Dr. Bent was found to be dead. He was born in Amherst, N.S., in 1826. He was educated at Sackville, N.B., and at the University of Pennsylvania, where he graduated in medicine in 1847. He practised in Pugwash for a few years, but settled in Truro in 1853. He had such offices as Mayor of Truro, Health Officer, Coroner, and Commissioner of schools. He is survived by a widow, and one son and one daughter.

J. R. DRYDEN, M.D.

Dr. J. R. Dryden, a well known specialist on diseases of the eye, ear, nose and throat, died on the 2nd December, 1908, at his home in Guelph, after an illness of some weeks. Dr. Dryden was 53 years of age, and a graduate of Toronto Medical College of the class of 1880. He practised for some years at Rockwood, and after taking a special course in New York located in Guelph.

L. C. ALLISON, M.D.

The death took place on November 26th, 1908, of Dr. Lucius C. Allison, who in his active days was one of the foremost physicians in New Brunswick, but for some time past had been living quietly because of an affection of the heart. Dr. Allison was born in 1845, and was educated in Edinburgh, London and Paris. His wife and one son survive. He was a member of a prominent New Brunswick family.

D. M. FRASER, M.D.

Dr. Donald M. Fraser, of the firm of Fraser and Deacon, Stratford, died 8th December, 1908, after an illness of two or three months at the age of sixty-two years. He was a graduate of McGill University. He practised first in Morpeth, Kent County, and located in Stratford about 1871. A widow, three daughters and one son survive.

H. R. MacKAY, M.D., C.M.

Dr. MacKay died at Rapid City on 1st November, 1908. He was born in Inverness, Scotland, in 1864, and took his M.D., C.M., from Edinburgh University. Two years ago he bought the practice of Drs. Dixon and Allan of Rapid City. He leaves a widow and four children.

JOHN SUTHERLAND, M.D.

The death occurred in Montreal, on October 5th, 1908, of Dr. John Sutherland, of Bedeque, P.E.I. Returning from a trip to Chicago, he stopped at Montreal for some days. On the night of October 4th, he retired in apparent good health to be found lifeless next morning. His remains were conveyed to the Island and interred at Bedeque, where he practised his profession with much success for over thirty years.

Deceased was born at Stanley Bridge 62 years ago. He graduated from the University of Pennsylvania Medical College with the class of 1876.

He was an ex-President of the Prince Edward Medical Association, and an ex-Vice-President of the Maritime Medical Association. He leaves a widow, but no children.

 D. GILLESPIE, M.D.

Dr. Donald Gillespie, one of the best known physicians in central Ontario, died at his residence, "Spruce Lawn," Cannington, on 22nd December, 1908, of heart failure. He had been attending to his practice up till noon of the preceding day, but not feeling well, went to bed. The late Dr. Gillespie was born in 1838. He graduated in medicine from Toronto University in 1860, and after a short time in Manilla, came to Cannington, where he has since resided. He enjoyed a large practice. He is survived by five daughters.

 BOOK REVIEWS.

 MEDICAL INSPECTION OF SCHOOLS.

By Luther Halsey Gulick, M.D., Director of Physical Training, New York Public Schools, and Leonard P. Ayres, General Superintendent of Schools of Porto Rico, 1906-1908. New York Charities Publication Committee, 1908. Russell Sage Foundation. Price, \$1.00, postpaid. Address, Arthur P. Kellogg, 105 East 22nd Street, New York.

The book deals with The Nature and Aims of Medical Inspection, The Argument for Medical Inspection, Historical, Inspection for Detection of Contagious Diseases, The work of the Teacher in Detecting Contagious Diseases, The School Nurse, Physical Examinations for the Detection of Non-Contagious defects, Vision and Hearing Tests by Teachers, Administration, Controlling Authorities, Legal aspects of Medical Inspection, Retardation and Physical Defects, and Appendices.

In the introduction we are told that "This volume is one of the by-products of the 'Backward Children Investigation.'" It is a very valuable by-product. It would be a boon to humanity if in the investigation of many things in this world, such notes were made as would give us many such by-products. Darwin's "Origin of Species" might be said to be a sort of by-product of his extensive notes taken during the voyage of the *Beagle*.

In this book by Dr. Gulick and Mr. Ayre we are informed that:—

1. The school is the only government department that directly assumes control of children's lives;
2. At least nine out of every ten of all children are subject to this control, and,
3. Such control is maintained (roughly speaking) during the critical years of from seven to fourteen.

The authors tell us that the book aims at being practical, reliable, frank, and not too dogmatic, but merely revealing all the facts. The main thesis of the book is "A sound mind in a sound body." The vast importance looking after the health of our school children is fully dwelt upon as a national asset. It is contended, quite truly, that the public schools are a public trust. When the parent sends his child to a school he has a right to expect that the child will be safe from harm and will be handed back in a good condition. The excellent thought is being accomplished in some countries along this line is fully discussed.

Very full instructions are laid down for the guidance of the teachers in detecting the presence of disease among the children. These instructions are both simple and full, and by their aid few teachers would fail to detect the presence of disease. The best health officer is one who is present all the time and ever watchful for the welfare of the child. That ever-present health officer is the teacher.

On the subject of the school nurse the authors have a good deal to say. Among other things we find the following:—

"To sum the case of the school—she is the teacher of the parents, the pupils, the teachers, and the families in applied practical hygiene. Her work prevents loss of time on the part of the pupils and vastly reduces the number of exclusions for contagious diseases. She cures minor ailments in the school and furnishes efficient aid in emergencies. She gives practical demonstrations in the home of required treatments, often discovering there the source of the trouble, which if undiscovered, would render useless the work of the medical inspector in the school. The school nurse is the most efficient possible link between the school and the home. Her work is immensely important in its direct results

and very far reaching in its indirect influences. Among foreign populations she is a very potent force."

It would be impossible to follow this book through all its chapters. Sound advice is laid down on school sanitation, play, school, furniture, and many other matters of vital interest. We think that every teacher should procure a copy of this book, and carefully study its contents. Apart from finding much that will be useful for their school work, they will find a good deal that will be of a most helpful nature for themselves.

THE IMPERIAL CANCER RESEARCH.

The Third Scientific Report on the Investigations of The Imperial Cancer Research Fund, under the direction of the Royal College of Physicians of London, and the Royal College of Surgeons, of England. By Dr. E. F. Bashford, General Superintendent of Research and Director of the Laboratory. Published by the Authority of the Executive Committee, London. Printed and Published by Taylor and Francis, Red Lion Court, Fleet Street, E. C., 1908. Price, 15s.

Three years have elapsed since the Second Report was published. During these three years there have been many advances made in our knowledge of cancer. The various papers in this Report tell of the studies and researches that have been devoted to the subject of cancer. While the present volume cannot be said to have settled the subject of etiology it has done much to settle some other important points, among which may be mentioned that there is very little evidence to show any heredity in cancer, that the disease is local to commence with and early surgery is the proper treatment, that the disease is common to man and vertebrate animals, and that irritation is the main cause for its appearance.

The work of the Imperial Cancer Research seems to have arrived at three sweeping deductions: 1. That these growths are not caused in any way by congenital "germs"; 2, that they bear no analogy to any known form of infective disease; and, 3, that there is no tendency to a hereditary nature in them. Strong evidence is submitted to show that cancer in all cases arises as the result of irritation.

If the Report would seem to disappoint those who expected a clear exposition of all that has been doubtful, it will more than satisfy those who take a more patient and wider view of this important subject. Much that has clung about this question is removed by this Report. This is a long step towards the truth. We are now getting rid of error. This accomplished, we shall surely reach the truth. The Report is got up in superb form, and merits the highest praise for all concerned.

MISCELLANEOUS.

THE MEDICAL EXCHANGE.

The Canadian Medical Exchange for the purpose and sale of medical practices, during the past fifteen years has conducted the vast majority of transfers of medical practices from one physician to another, and offers a short-cut either to buyer or vendor, to secure the goal desired. Especially is this true in regard to vendors, as Dr. Hamill always has from twenty to thirty physicians who are registered with him as buyers, and who have asked him to pilot them on to suitable locations for practice. Vendors can get quick results by taking advantage of the experience and opportunities of this office. A list of his offers will always be found among our advertising columns, the complexion of which necessarily changes each month.

PROF. ROYCE ON FOOTBALL.

The declaration that "the prevalent result of football is not favorable to the best moral education of the great body of our youth," is made by Professor Josiah Royce, of the department of philosophy at Harvard, in a long article in the football number of *The Harvard Illustrated Magazine*. In his article Professor Royce says further:

"It does not train loyalty to see another man's bones broken. Among the spectators it makes a loyal life and practical love of loyalty impossible as far as the conduct and spirit and results of these public displays are concerned."

Professor Royce considers the worst feature of the game to be that evils, which nobody intended often become prominent.

"Reforms of these evils are only temporary," he says, "and after a time moral clouds gather again. I care not what special form these passing evils take during bad seasons. What I note is that the modern game is played under social conditions which render such incidental and recurrent mishaps inevitable."

ONTARIO MEDICAL COUNCIL, SPECIAL MEETING, NOVEMBER
17TH AND 18TH.

EXAMINATION STANDARDS.

There was a full attendance of members of the Medical Council of Ontario at the special meeting called to consider the revision of exam-

ination tests and other important matters pertaining to the medical profession in the Province. The President of the Council, Dr. Glasgow, opened the session and briefly reviewed the work before them in the course of the two days' discussion. He remarked that during the last seventeen years there had been a great many changes and it was time for a revision of the curriculum for examinations. It was now generally acknowledged that the matriculation examination was not sufficiently high. The profession in Ontario should set a particularly high standard, but for some years past the matriculation examination had been a reproach. Another very important matter was that of interprovincial reciprocity. Dominion registration had been brought forward in the House of Commons, but had failed to pass, and, failing that, they should at least agitate not only for interprovincial registration in Canada, but possibly also for joint action with Great Britain.

Dr. Ryan, Superintendent of Rockwood Asylum, Kingston, outlined the most important changes advocated in the examinations by the Education Committee of the Council. He stated that many years had passed since the present examinations had been instituted and the meaning of many clauses had been lost. The standard of education had been raised year by year, and the Medical Council must lead in the medical education of Ontario and the Dominion. A very important provision in the recommendations of the committee was that of raising the standard of matriculation twenty-five per cent. In chemistry, the committee were recommending that the course as given by the various universities should be adopted and that two years in chemistry and the passing of two examinations should be demanded. Bacteriology had been included in the curriculum, as nearly every physician was now able to do microscopical work. On the other hand the subject of the diseases of children had been removed from the final to the intermediate examination. Dr. Ryan did not favor reciprocity with Great Britain or European centres where conditions were fixed, and the professions crowded. But he did believe that reciprocity with the great west would be of vast advantage to all graduates. It was quite impossible in the smaller centres of population to have such hospital or clinical advantages as were to be found in the eastern colleges. He hoped that they would do all they could by direct representations to bring about interprovincial reciprocity with the west. It was also provided in the report that a student failing to pass in one-third of the subjects should not be allowed to try again till the next year. Alluding to the raising of the matriculation standard Dr. Ryan remarked that if the higher percentage now asked for by the Council had been exacted in the recent examinations twenty-five per cent. of the students would not have graduated.

The Council proceeded to discuss the report clause by clause. In the course of an animated debate Dr. Britton of Toronto said he be-

lieved they might easily go too far. Many men of lowly birth who were a credit to the medical profession would still be holding the plough if they had been required to pass the senior matriculation examination. And thus, eminent men as they were now acknowledged to be, they would have been lost to what he might call their closed circle.

Dr. Henry of Orangeville said they had heard threats of that nature for the last twenty years. He thought it must come from other than Government quarters, as the Legislature was interested only in raising the standard.

In one of the clauses of the report of the Education Committee it was provided that the student should put in some portion of the fifth year as a house surgeon in a hospital or with a general practitioner. Dr. King moved that the latter half of the clause should be deleted. Dr. Spankle was quite of the opposite opinion. The student was obliged already, he said, to listen to 2,250 lectures, and it was now proposed that he should come back and be obliged to take 195 more. One year with a medical practitioner would far better fit him for his life's work than any lectures they could give him above the 2,250 he had already received.

Dr. Ryan said they were turning out mechanics who could do microscopical and other theoretical work, somewhat to the neglect of clinical work. There was no use in submitting a student to the torture of six months more of didactic lectures.

The amendment of Dr. King was lost and the clause carried as first drafted.

A heated discussion arose as to whether professors of the University of Toronto should be allowed to serve as examiners. It was contended by several physicians that they should not be given that privilege. The clause was finally amended to read as follows: "No teacher shall be eligible for appointment as examiner in the subject which he teaches, but this restriction shall not apply to anatomy and physiology."

Dr. Britton called attention to a matter which he thought should be remedied, with respect to fifth year students being allowed to enter the various hospitals for interne work. It was explained by several of the members that under existing conditions the majority of the hospitals would not accept students, preferring licensed practitioners for this work. Dr. Britton pointed out that students were accepted in some hospitals in Canada. The meeting was not prepared to act at the present conference, but a committee composed of Doctors Ryan, Britton, Moorehouse and Hardy was appointed to confer with the governors of the various hospitals in the matter, and report at the next convention.

The report of the Committee on Complaints, presented by Dr. Ryan, recommended that a number of the students who in the spring and fall failed in one examination by very narrow margins, and who in other sub-

jects secured high marks, be granted their standing without further examination.

The discussion on the limitations that should be put upon examinations, introduced by Dr. Edmund E. King, resulted in an amendment of the clause. Dr. King thought that in the framing of certain questions in the examination papers all reference to proper names with respect to diseases and operations should be eliminated as far as possible. His contention was upheld by the Council.

CASES OF DRs. COOK AND SHIER.

"Your committee ordered to inquire into the conduct of E. M. Cook, Esq., M.D., and D. Webster Shier, Esq., M.D., beg respectfully to submit the following report to your Council: 'Your committee met and consulted with Mr. J. W. Curry, K.C., counsel for the Discipline Committee, and instructed to prepare the necessary notices and cause them to be served upon Doctors Cook and Shier. We beg to report that upon the necessary notices being prepared and an attempt having been made to serve some, it was found that Dr. E. M. Cook was not capable of being served, and instructions were asked for with reference to continuing the prosecution against Dr. D. Webster Shier alone at the present time. Your committee considered the question and concluded it was advisable to not proceed against Dr. Shier alone, but to delay proceedings with the hope that Dr. Cook could be served. Your committee respectfully forward the above report and ask that the matter be referred back to them for further action.' "

The above was the report submitted by the Discipline Committee of the Medical Council of Ontario.

Dr. Robertson at once moved the adoption of the report and Dr. Johnson seconded this before the motion could be put by the President, Dr. Glasgow, Dr. MacColl, of Belleville, asked if the Council were not to be allowed to debate the report. Where, he would like to know, had Dr. Cook gone? Had anything been proved against him? Dr. Robertson, the Chairman of the Discipline Committee, said Dr. Cook could not be served, as it was impossible for the officers of the Crown to serve him. It was also asked if all criminal proceedings had been dropped against Dr. Shier.

Dr. MacColl—With regard to Dr. Cook, he skipped his bail and we know well he won't come back. Do you mean to say that this committee cannot go on with the investigation with regard to criminal proceedings and bring in a report as to whether his name should be erased from the register? If the officers of the Crown cannot serve him it was not their fault. If Dr. Shier's conduct does not come under the criminal code, is it not sufficiently unprofessional for us to take notice of it?

Dr. Bray (the Registrar for the College) said they could not take action against anyone unless they were served first. Dr. Robertson explained that the Council did not wish to go to the expense of holding an investigation over Dr. Shier, because they learned there was another case of the same nature to be tried at the following assizes, so they thought it best to put it off until that was disposed of. Dr. Gibson of Sault Ste. Marie did not see why they should not reach Dr. Cook by registered letter or otherwise. Was it possible that the Discipline Committee would yet take some action against Dr. Cook and make a report at the July meeting?

Dr. King rose to a question of order. Had the Council any legal right to debate questions other than those set forth as the business of the special meeting? Had they any legal right meeting? The Registrar said that in an informal talk he had with their solicitor he had been informed that in discussing any matters but those specified they were out of order. Dr. King thereupon moved that the Council should go into a Committee of the Whole on the report of the Education Committee. The motion was seconded and carried. The report of the Discipline Committee was thus proposed and seconded for adoption, but not approved by the Council as a whole.

A letter from Dr. Parsons of Coe Hill asked for his reinstatement. Dr. Glasgow explained that the writer had been struck off the list for unprofessional conduct. It was referred to the Registration Committee.

TORONTO WESTERN HOSPITAL.

At the annual meeting of the Toronto Western Hospital it was reported that the average stay of patients was less than 20 days, the death rate less than $4\frac{1}{2}$ per 100 of patients treated, while the cost per day was barely over one dollar. The liabilities of the hospital were reduced by a substantial amount through donations.

The following officers were elected: E. B. Osler, M.P.; Hon. Thos. Crawford, M.L.A.; Prof. A. C. McKay, chancellor of McMaster University; David Fasken, B.A., barrister; H. Langlois, H. C. Tomlin and Randolph Macdonald. The medical governors are: Drs. J. Price Brown, J. B. Gullen, Jas. McCullough, H. A. Beatty, A. A. Macdonald and John Ferguson.

The officers elected for the year are: E. B. Osler, hon. president; Hon. Thos. Crawford, president; D. Fasken and Mr. Langlois, vice-presidents; Dr. Jas. McCullough, medical superintendent; Dr. Price Brown, chairman management committee; Dr. J. B. Gullen, treasurer;

Dr. John Ferguson, secretary, and Dr. A. A. Macdonald, dean of the medical staff.

A generous friend of the hospital has donated \$25,000, and the governors feel confident that they can secure other donations to make this up to \$50,000. Immediate steps will be taken to erect a large pavilion.

If the hospital by-law in January is carried, the Western Hospital will receive \$50,000 from the city. This sum would enable the governors to erect another large pavilion.

MEDICAL APPOINTMENTS TO MUSKOKA SANATORIA.

At a meeting of the Board of Trustees of the National Sanitarium Association, held at the head office, 347 King St. West, on 19th November, two important appointments were made in connection with the Muskoka Cottage Sanatorium and the Muskoka Free Hospital for Consumptives.

Hon. W. A. Charlton occupied the chair, and among others present were W. J. Gage, J. J. Crabbe, T. H. Bull, Ambrose Kent, Thos. Long, Dr. W. P. Caven and Dr. N. A. Powell. The resignation of Dr. C. D. Parfitt as resident consultant, was accepted. Dr. Alfred H. Caulfeild, of the Toronto General Hospital, was appointed resident pathologist, and Dr. W. S. Lemon was added to the resident staff of the Muskoka Institutions. Dr. W. B. Kendall continues in his position as Medical Superintendent of the two institutions. These appointments very greatly strengthen the medical position of the Sanatoria, the two new appointees holding prominent positions in the profession.

Dr. Alfred H. Caulfeild graduated in medicine in 1904. After graduating he became Assistant Bacteriologist in the Provincial Board of Health, and Demonstrator of Bacteriology in the University of Toronto. Later he accepted the position of Interne in Pathology at the Toronto General Hospital, and was subsequently made the first resident pathologist of that institution. Spending a year abroad he entered the laboratory as an assistant to Sir A. E. Wright, London, Eng. This was followed by a period in the laboratories of Dresden and Berlin.

Dr. Caulfeild, not only from his excellent work done in the laboratories of the Toronto General Hospital, but through papers published, has given him a reputation not only in Canada, but beyond, and is recognized to-day as one of the foremost pathologists in Canada or the United States.

Dr. W. S. Lemon took first scholarship on entering his medical course in Toronto, and finally carried off the gold medal, Brown scholarship, and Clark scholarship. After graduating he took up a course in

research work in the University, and was also for a time resident physician in the Toronto General Hospital, and has spent some time in general practice in Toronto.

THE NINTH ANNUAL CANADIAN CONFERENCE ON CHARITIES AND PRISONS.

HOUSES OF REFUGE.

Dr. R. C. Charteris, Chatham, introduced the subject in a very able paper, and said in part: The majority of the Houses of Refuge in Ontario were excellent, well managed institutions, but there were a few that were a positive disgrace to the province. Some proper place was needed for the erection of such institutions, which should be equipped with every modern sanitary appliance. Large and lofty rooms should be provided, so that the inmates might enjoy plenty of fresh air and sunlight.

The use of basements should be avoided, as they tended to breed disease, owing to dampness and the accumulation of dirt.

The question of help was one of the difficult ones confronting the superintendent of a house. The inmates were, as a rule, not able to do all the work, and outsiders sometimes hesitated to accept positions.

In connection with the care of tuberculosis patients, three or four counties should group together and form a district, combining their resources and building one isolated establishment on one of the poor farms for the open-air treatment of patients. He thought the Government could be called upon to provide the equipment. The discussion of the paper was led by Mr. George Johns, Warden of Kent, and Mr. J. F. Lavery, Superintendent of the Whitby House of Refuge, who deplored any tendency on the part of superintendents to force aged inmates to rise early in the morning to assist in farm work.

Col. McNaughton, of Cobourg, recounted some of the difficulties encountered in the management of inmates.

Dr. Hodgetts, of the Provincial Board of Health, said a sewage farm should never be used to raise anything for human consumption, and the practice told by one superintendent that it was customary to grow cabbages, pumpkins, etc., on ground covered with the output of a septic tank in connection with one of these institutions could not be too strongly condemned. Grow grass for your animals on it, if you like, but nothing for human food.

Referring to tuberculosis, he said that Ontario was twenty years behind the times in dealing with the disease. Many of the states put us to shame on this matter. He admitted, of course, that most of these

were very wealthy ones. He recommended that when poor patients in the last stages of the disease were taken charge of by the municipality they should be kept in an annex to a House of Industry where they could be near their friends.

HOSPITAL FINANCING.

At the afternoon session the niggardly manner in which the Government and municipalities throughout the province support the public hospitals was the chief feature of the discussion that followed an able paper on "Hospital Finance," read by Mr. W. M. Dack, Walkerton.

Mr. Dack said that five years ago the County of Bruce started their hospital with a legacy of \$8,000. Up to the present time the Trust Board had invested \$25,000, and they had only a \$3,000 mortgage debt, and no floating liabilities.

The hospital has 27 beds for patients, and is so finely equipped and furnished that it has become the pride of the County of Bruce, whose people cheerfully contributed to its maintenance.

Other counties were not so fortunate, and the struggle to make both ends meet, and at the same time to maintain the general hospitals in a state of efficiency, was a serious problem continually before the boards of management of these institutions.

If the County Councils were compelled to make an adequate grant to the hospitals, every one would contribute his fair share, whereas, at the present time, many of the most wealthy scarcely gave a cent. To illustrate how this would work out, it was shown that the equalized assessment of Wellington was \$27,632,817, and its County Council made a grant of \$1,200 to the General, and \$1,200 to St. Joseph's—in all \$2,400. A ratepayer assessed for \$2,000 would be called upon to contribute about $17\frac{1}{3}$ cents, or $21\frac{1}{4}$ cents on a \$2,500 assessment. The equalized assessment of Waterloo was \$23,260,719, and its County Council made a grant of \$1,250 to the hospital in Berlin, and an equal amount to the hospital in Galt—in all \$2,500. A ratepayer would contribute $21\frac{1}{2}$ cents on a \$2,000 assessment, or $26\frac{3}{4}$ cents on \$2,500. The equalized assessment of Victoria was only \$13,171,522, yet its County Council made a grant of \$1,200 to the hospital in Lindsay, which had an income of \$750 from an endowment fund. A ratepayer would contribute $18\frac{1}{4}$ cents on an assessment of \$2,000, or $22\frac{3}{4}$ cents on \$2,500. The equalized assessment of Bruce was \$25,969,122. If Bruce County made a grant of \$1,500 for maintenance, the levy would be so small as to be scarcely noticeable.

H. H. Strathy, K.C., said hospital work is strictly benevolent and non-sectarian, and should be supported by the public for that reason.

During the past seven years the cost of maintenance had greatly increased—in 1900 the average cost per patient, per day, was 33½ cents, now it was \$1.16.

There were many channels open for private benevolence, and as the hospitals were doing a work for the benefit of the whole community private benevolence should not be called upon to pay the cost. He paid a high tribute to Mr. J. Ross Robertson, whom he said was the only man in the Dominion who carried a hospital on his back.

Mr. G. T. Chown, Kingston, said the maintenance of hospitals was a greater strain than the founding of them and he strongly advocated compelling all counties and municipalities to contribute to the cost.

Mr. J. Ross Robertson said: The position of Canadian hospitals, as regards support from the Government and municipalities, has never been a satisfactory one. The Hospital for Sick Children had each year to raise \$45,000 from the public.

The City of Toronto gives \$15,000 a year and the Government grant averages \$10,000, a total of \$25,000, but the remainder of the \$70,000 comes from voluntary subscriptions.

"I think," he said in conclusion, "It was Napoleon who said that an army moves on its stomach. We all know that an hospital moves on its cash box."

Napoleon meant that you must feed the army, and we know that we must feed the treasury of our hospitals if these institutions are to work miracles of mercy or be useful in the service of humanity.

H. H. Strathy, K.C., Barrie, introduced the following resolution, which was unanimously carried:—

"That whereas the work of caring for the sick in the public hospitals is very largely benevolent and non-sectarian; therefore, the burden of carrying on such work should be shared by the general public instead of by a few individual members of it.

In the opinion of this conference it is desirable that legislation be passed by the Legislature of this province, requiring County Councils of counties in which hospitals are situated to contribute some fixed yearly proportion of the cost of carrying on such hospital work based on the number of hospital days, or otherwise, and that the president and Resolution Committee at once bring the matter before the Provincial Government, with a view of having such legislation enacted."

DISCHARGED PRISONERS.

Lieut.-Col. J. S. Pugmire, social secretary Salvation Army, read a paper on "The Discharged Prisoner" and the way to reclaim him.

He said that men leaving prison were as helpless as babies, for in most cases they were shunned by all. People forgot that the discharged

prisoner was still a man and needed sympathy at that particular moment, more than at any other in his existence. One result of the work of the army in the city was that during the past year out of over 700 men discharged from the Central Prison over 50 per cent. had been found employment, the majority of whom were doing well and becoming good citizens.

Mrs. O'Sullivan, Superintendent of the Mercer, said that women were more helpless than men on discharge from prison, but could be easily reclaimed if there were officers appointed in connection with the Mercer who could look after them when they were released. She suggested an extension of the parole system, by which the prisoner could be brought back if she did not lead a respectable life. Capt. Fraser and Warden Gilmour and Mr. Finlay Spencer supported these suggestions.

The following were elected officers for the ensuing year:—Hon. President, Hon. W. J. Hanna, Provincial Secretary, Sarnia; President, J. R. McNeilly, Lindsay; Vice-Presidents—J. P. Downey, Guelph; Col. J. E. Farewell, Whitby; J. J. Kelso, Toronto; Dr. Helen MacMurchy, Toronto; Sheriff Middleton, Hamilton; Dr. Rosebrugh, Toronto; C. H. Corbett, Kingston; John Ross Robertson, Toronto; Secretary, F. M. Nicholson, Toronto; Treasurer, F. J. Walsh, Toronto; Executive Committee—Sheriff Cameron, London; Sister Clementine, St. Vincent de Paul Hospital, Brockville; Sister Gabrielle, House of Providence, Kingston; Mrs. Griffin, House of Refuge, Fergus; S. M. Thompson, Brantford; Dr. C. R. Charteris, Chatham; Mayor H. J. Snellgrove, Cobourg; W. L. Scott, Ottawa; J. Rae, Hamilton; John Keane, Ottawa; Jas. Mitchell, Goderich.

Toronto was chosen as the next place of meeting, the date being left to the executive.

CHILDREN'S AID WORK.

Destitute and neglected children, juvenile delinquents and causes of poverty, were the subjects under consideration at the evening session of the Conference of Charities and Correction.

Mr. James Mitchell, Goderich, spoke of the work done by the Children's Aid Societies throughout Ontario in rescuing children from cruel and inhuman parents, and a life of crime. He suggested that this work, which is mainly carried on by private voluntary effort, should be done by the municipalities, which should appoint officers who would devote their whole time to the work. He gave illustrations of the work in Huron County, and said the County Council there had been educated up to paying for the keeping of those children who had become a charge on the society in that county.

Mr. W. L. Scott, of Ottawa, gave a lucid explanation of the need of the Act for dealing with juvenile delinquency. He said it was wiser

and less expensive to save children than to punish criminals. The object of the Act was to devise means to save children from a life of crime. Hitherto Canada had been twenty years behind the rest of the world in dealing with youthful offenders. Under the old system they were sent to jail, where they became contaminated by contact with the adult prisoners.

The child received its impressions of life from its environment, and children unfortunate enough to come within the clutches of the law were either ruined or made respectable members of the community by the way they were treated at that period of their lives.

Under the new act every child was treated individually, and taught that its place in life was amongst the ranks of the honest. A wave of reform was sweeping over the world in regard to the treatment of children, and Canada led the way. The act was not yet in general use throughout the Dominion, as it could only be put in force by an order-in-council. Before this would be done for any locality it was requisite that a Juvenile Court Committee be formed, probation officers appointed, and a magistrate appointed to preside over the Juvenile Court. It was essential that each of these should be sympathetic.

The detention homes in the province were doing good work, and the more they were run like a family home their usefulness would increase.

Mr. G. M. Macdonald, K.C., Kingston, said civilization was only just emerging from barbarism in its treatment of children. If the brotherhood of humanity meant anything, he said, it was the bounden duty of all to help save one's brother, and especially the children.

THE CAUSES OF POVERTY.

Rev. Father Minehan spoke on the "Causes of Poverty: How to Prevent and Relieve it." The primary causes were intemperance and improvident marriages. He said the world demanded fitness in every contract, and that the parties thereto should fulfil its obligations. The only exception was the nuptial contract, the most sacred of all: yet when it was abused it was only looked upon as an indiscretion. If the marriage contract was enforced to the limit, poverty would vanish. The home life should be improved, and the children taught to look upon it as the ideal place on earth.

Rev. Dr. Chambers, Dr. Gilmour, Col. Pugmire, Mr. Parker and Ald. Bengough were appointed a committee to formulate a scheme for the care of discharged prisoners.

PRISON REFORM.

Dr. J. W. Leonard, Superintendent of the Ohio State Reformatory, was the guest of honor at a luncheon at the Parliament Building, at

which Mr. J. P. Downey, M.P.P., presided. Hon. W. J. Hanna, the Provincial Secretary, introducing Mr. Leonard, spoke of the value of the information obtained by the Committee of the Legislature through its visit to the institution at Mansfield, Ohio. The work Dr. Leonard had done must go toward bringing public opinion to agree with the reforms the Legislature had in mind.

Mr. Leonard said that the system of prison reform rested on several fundamental ideas, such as the belief in the "eternal improbableness" of men. The indeterminate sentence was a requisite of the reformatory system. It was objected that this deprived the judiciary of a time-honored function. On the other hand, judges were relieved of the duty of measuring out sentence to young offenders. It was said that there was a danger of abuse of the power of control. This was obviated by the improvement in the law, which now caused the superintendent of institutions to take the initiative in matters of parole. It was utterly impossible to administer a reformatory from a partisan standpoint, or along the lines of the spoils system. Not only must the officers in the institution be well qualified and well trained, but they must be secure in their tenure of office.

It had been said that the present system made for hypocrisy on the part of the inmates in order to shorten their sentences. Experience had shown that in practice it did not make for successful hypocrisy. The indeterminate sentence removed the lack of uniformity in sentences of men convicted of the same offences. Of all places where it was necessary to have things made plain and just it was in a prison.

For one thing, it makes a prisoner the dominating figure in his own redemption. Since he had been in Toronto he had seen a young man, 28 years of age, who had been brought to prison for the eighteenth time. There was a wrong conception of the end of a reformatory on the part of some of those sent there. They thought it a sort of Keeley cure, to make them better in spite of themselves. Undue pressure for early parole was another difficulty. No inmate of the Mansfield institution ever got out in less than a year. Dr. Leonard described some of the methods adopted with success in Mansfield. Boys, or rather young men, were decorated for good behavior. Others signed a bond, and were employed outside the walls. Of 1,018 of these bonds, only five had been dishonored. The walls to a great extent are unnecessary. He went on to explain the methods of paroling prisoners, and ultimately releasing them from the control of the Institution.

If you people start an institution you will have the benefit of our experimentation, and I hope you will do it. But let no man hesitate to depart from tradition.

Those present included: Hon. J. S. Duff, Chas. Calder, M.P.P.; J. Robinson, Hon. Thos. Crawford, Jas. L. Hughes, Hon. A. J. Mathe-

son, Geo. Pattinson, M.P.P.; T. H. Preston, ex-M.P.P.; F. G. Macdiarmid, M.P.P.; Property Commissioner R. C. Harris, Warden Gilmour, of the Central Prison; A. Studholme, M.P.P.; E. R. Rogers, Warden Platt, of Kingston Penitentiary; S. A. Armstrong, Colin Postlethwaite, Dr. Bruce Smith, J. J. Kelso, J. S. Willison, J. A. Macdonald, Governor Chambers, of Toronto Jail; W. K. McNaught, M.P.P.; John Shaw, M.P.P.

MAYOR OLIVER'S WELCOME.

Many philanthropic persons and officials of jails and charitable institutions were present at the second day's session of the Canadian Conference of Charities and Correction, which opened in the Normal School theatre in the afternoon. Mayor Oliver officially welcomed this body to the city and he referred to the great good that could be effected by the association in bettering the methods of administering public institutions. The chair was occupied by Sheriff Donald M. Cameron, of London.

It was determined to present a memorial to the Dominion Government on the need for appointing psychiatric hospitals for the treatment of persons who were not chronically insane. A committee will deliberate on the treatment of feeble-minded women.

PRESIDENT'S ADDRESS.

The feature of the morning session was the annual address of the president, Dr. Bruce Smith, who treated mainly of prison systems and their cost. During the past year over \$3,500,000 was spent in Ontario in caring for its defectives, delinquents and dependants. Canada was deplorably behind other countries in its methods of dealing with prisoners and its measures to reform first offenders. For many years the province had clung to a system of penal administration that had proved futile in the older countries, many of which had reformed their methods. The torture idea of punishment had persisted too long. The offence, and not the offender, has been held too much in view. All feeling and thought of revenge and vindictive punishment had to be put away. Society must deal with the prisoner for his betterment, and it was only just, there should be thrown about him conditions and opportunities for right and decent living. He should be treated, not as a hopeless outcast, but as an individual with a human history. The probation and indeterminate sentence systems were then described. In Ontario at least 500 feeble-minded girls were without proper protection.

HOSPITAL METHODS.

Dr. C. K. Clarke, Toronto, delivered an address on "Modern Hospital Methods for the Insane." Much good could be effected by treat-

ing acute cases of insanity in psychiatric hospitals instead of in asylums.

Mrs. Evans, convener of the Committee on Feeble-Minded, for the National Council of Women, sent in a paper that emphasized the need of isolating these women.

Col. J. E. Farewell, K.C., Whitby, said that there was no more promising field for benevolence and philanthropy than the caring for and restraint of the feeble-minded.

JAIL SYSTEM IS PERNICIOUS.

Mr. C. H. Corbett, governor of Kingston Jail, read a paper on "Our Jail System." This was unworthy of the present age, and it was not a credit to the Province of Ontario. While every other branch of the public service that related to charities and correction, asylums for the insane, hospitals for the sick and all public institutions in receipt of Government aid, had been improved and modernized, the jails were little better than they were 50 years ago. The buildings were erected, with few exceptions, with but one object in view, the safe keeping of prisoners, but they did not even answer that purpose in some municipalities. The structural defects in the jails clearly indicated that those who planned them and those who sanctioned the plans had little or no conception of the need of classification further than the division of the sexes. Hygienic or sanitary laws were not even dreamed of by the builders of these antiquated cells. Even common humanity seemed to be lost sight of in their construction. Prisoners in many jails were confined in night cells seven feet long and by three and a half feet wide, without modern conveniences for 12 out of each 24 hours in which they are in custody.

Sheriff Middleton, of Hamilton, thought clergymen and magistrates should visit the jails frequently. He deprecated the cry of so-called free labor against competition with jail labor. The prisoner had the right to earn his own living. The object of the jail should be to make men of the prisoners, who should therefore be put to work. The cat should be used more frequently, not in a spirit of revenge, but of correction. Some men could be reformed by the cat, that could be reached in no other way. He would use the cat on drunkards and assaulters.

Mr. R. C. Harris, Property Commissioner, Toronto, did not believe in the dual system of governing jails. In regard to the reformation of the prisoner the present jail system was a failure. The first step now taken for the reform of the prisoner was to put him in degrading clothes, to give him a modicum of labor, and leave him alone to his thoughts and evil communications of his fellow-prisoners. Jail governors should be men who take a special interest in the work. The present methods of appointing subordinate officers was censured. The

first requisition for these now was the possession of a strong physique and their affiliation with the ruling political party, while little or no stress was laid on the need of their possessing intelligence. The governor, as an enthusiast in the work, should have a free hand in the choosing of his subordinates, while he should assume the responsibility for miscarriages of administration. Referring to drunkenness and crime, he said that 46 per cent. of the prisoners in jail were convicted drunkards. The inebriate confined for his first offence should be given work in the fields, with plenty of light and good air, few locks and bars, good food and kindly treatment. In conclusion he said that it was hoped a jail farm could be secured near Toronto.

Major H. J. Snelgrove, Cobourg, deplored the practice of committing the insane to the jails, and paid a tribute to some of the recent legislation in this direction.

HOSPITALS FOR INEBRIATES.

Dr. Ferguson read a paper that was composed by Dr. E. Ryan, Superintendent of the Rockwood Hospital, Kingston, on the "Care of the Inebriate." He said the patient should be placed in a separate institution, away from his evil surroundings. The State should maintain an hospital for the care of the inebriate. Hot air baths and electrical appliances, trained nursing, and expert medical treatment should be provided. The result would fully justify the expenditure.

Prof. G. M. Wrong pointed out that a complete change of method should be effected in the treatment of inebriates. The worst thing for the inebriate under the present system was a short sentence. A long term was better, but that would effect but little till a better treatment along hospital lines was adopted.

Mr. R. H. Coleman told of his investigations into the care of inebriates in England.

Dr. Oldright said that a fine for drunkenness generally served only to take the needed money from the wife and family of the person convicted.

THE CARE OF THE CONSUMPTIVE.

Mr. J. P. Downey, M.P.P., introduced the discussion on the "Care of Consumptives." He paid a tribute to Dr. E. L. Trudeau, who was one of the foremost leaders in the fight against the "white plague." Since the revelations of Dr. Koch, consumption was found to be as curable as other diseases. In the incipient stages, it was not infectious. Surely the measures against the scourge in vogue in England, France and Germany would be adopted in this country. Among the required changes were the establishment of free dispensaries and compulsory noti-

fication of cases. Over 3,000 persons died from consumption in the province each year.

Dr. W. J. Dobbie, of the King Edward Sanitarium, Weston, said there were 40,000 consumptives, of whom 8,000 died every year. In Ontario there were 36,000 deaths from the disease in 10 years. If a fraction of the money spent in combatting other maladies was devoted to the fighting of it, its ravages would be quickly reduced.

Dr. Charles Sheard, the Medical Health Officer of Toronto, said that Ontario was twenty years behind the times in the treatment of tuberculosis. Philanthropy alone should not have to combat the disease. The visiting nurse system had worked out well in the cities.

TOLD OF PRISON REFORM.

Hon. J. M. Gibson, Lieutenant-Governor of Ontario, in opening the evening session, remarked that in philanthropic work there had been progress, but the room for further progress was ample. Not so much could be gained from any convention as could be gained from the comparing of notes on new methods. The care of the helpless, the most advantageous treatment of the insane, and particularly the proper handling of the criminal classes were questions requiring consideration.

Mr. J. A. Leonard, Superintendent of the Ohio State Reformatory, Mansfield, Ohio, took as his subject, "Prison Reform." In Ohio, he said, 5,000 young boys and men from 10 to 25 years of age were under duress, either out on bail, or in the jails and reformatories. Eugene Smith, New York, who has made a deep study of criminology, had said that only one of every ten young persons that committed offences were actually incarcerated, and at this rate it was a serious matter for Ohio to have 50,000 broken vessels. The wonder to him was the number of young lads who got through safely. The acquired traits of man were not transmitted. Every child had to travel the course of the race. He had not seen one in 10,000 of these little lads criminals. They might be savages, for the criminal had the knowledge of his evil doings and had time to think about them. The standards made for them to observe were set up by the sages and philosophers that they had sent to the Legislatures and Parliaments. If a body fell below that standard he was solemnly declared a felon. Neither saints nor criminals were born. It was a case of development. The fundamental institution was the home, after that the school which in his country came more nearly fulfilling its mission than any other institution that they had. Fifty per cent. of their bad boys came from homes broken by divorce or separation. The manless home was another evil, for it was a mistake to have the education and rearing of a boy entirely managed by a woman. The bad little boys were the hope of the nation, but they were hard on the

mothers. In the United States they had it so unwisely managed that a boy sometimes never came under the influence of a man till he went to college. The street, he believed, exerted seven-tenths of the influence to which the average boy was subjected. In their reformatory they found it necessary to organize a school of ethics, owing to the lack of such training in the schools and colleges of the United States. They trained intellects, but not character. Mr. Leonard recited some instances in which the boys under his domination had been converted into good citizens. The suspended sentence that allowed the boy to work out his reform on probation had proved highly beneficial. It was a shame for any country to have a prosecuting officer derive any emoluments from fees.

Mr. James L. Hughes had visited Mansfield Reformatory, where he found splendid recognition of the good in the lives of boys and men. He was glad they were to have a similar institution in this country for boys over 16 years of age, and he hoped they would soon have one for lads under 16 years.

HON. MR. HANNA SPEAKS.

Hon. W. J. Hanna, the Provincial Secretary, said that two years ago a special committee was appointed by the Legislature to investigate the various reformatories. Four members of this committee thought that the institutions of 60 years ago were good enough for the present. Five or six places were visited, but the four members strongly persisted in their opinions. In Cleveland they heard of the Mansfield institution and of Dr. Leonard, who was described as a man without a peer in his respect on the continent. On their visit to the reformatory they were treated to a meal, every part of which, except the Java coffee, was prepared on the Mansfield property. Everything was wide open. The boys worked on the farm without a semblance of restraint. Mr. Leonard was doing work that would put to shame every pulpit in Ohio. After inspecting a similar reformatory in New York State, the committee had concluded that it was possible to improve these conditions in Ontario. So the province had already made a brief step towards taking up the work and it would be carried on.

On motion of Mr. J. P. Downey, M.P.P., who visited the Mansfield institution with the committee, and Dr. Gilmour, a vote of thanks was tendered Mr. Leonard.

ONTARIO MEDICAL COUNCIL'S PROPOSED ACTION.

Mr. Charles Rose, the official prosecutor for the medical council, has sent out the following letter to Crown Attorneys throughout the

Province. It would appear that the council intend to take action where evidence is forthcoming.

"Dear Sir,—The Council of the College of Physicians and Surgeons are anxious that any infractions of the law which would render any of their registered members liable to criminal prosecution, or which would in any way reflect upon their professional character, should come to their knowledge, so they have instructed the undersigned to communicate with you, in order that you may be placed in a position to advise them of any matters which may come to their knowledge, and which should, in your opinion, be attended to by the Discipline Committee of the Council.

"The Council of the college feel assured that infractions of the law and unprofessional conduct are the exception and not the rule; but they are anxious that the members of the college, and of the medical profession, should live up to the highest ideals of the profession, and with that end in view they are taking this course."

ALVARENGA PRIZE OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.

The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Señor Alvarenga, and amounting to about one hundred and eighty dollars, will be made on July 14, 1909, provided that an essay deemed by the Committee of Award to be worthy of the prize shall have been offered.

Essays intended for competition may be upon any subject in medicine, but cannot have been published. They must be typewritten, and must be received by the secretary of the college on or before May 1, 1909.

Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope having on its outside the motto of the paper and within the name and address of the author.

It is a condition of competition that the successful essay or a copy of it shall remain in possession of the College; other essays will be returned upon application within three months after the award.

The Alvarenga Prize for 1908 has been awarded to Dr. William T. Shoemaker, of Philadelphia, for his essay entitled: "Retinitis pigmentosa, with an analyses of seventeen cases occurring in deaf mutes, including laboratory examinations of the blood and urine in eleven cases."

THOMAS R. NEILSON, M.D.,
Secretary.