

The Canada Lancet

VOL. XLIII. TORONTO, NOVEMBER, 1909

No. 3

EDITORIAL.

DOMINION REGISTRATION.

THE CANADA LANCET has always stood firmly for Dominion Registration. There is no need for the present condition of provincialism any longer. The various provinces have nothing to lose and everything to gain by coming to an understanding on this very important subject. It is not only folly, but compound folly, that there should be so many qualifying bodies in Canada. It was felt some years ago when Dr. Roddick carried his bill through the Parliament of Canada that a solution had been reached.

But the little politician had to have his say and a proviso was put into the act that all the provinces must give consent to the act before it would become operative. This spoiled the bill, as Quebec has stood out. The fear of losing some privilege, or being lost in the larger scheme intimidated those affected with medical short sightedness and we are where we were.

But the conditions are changing and the medical myope will not be able to retard progress. The bill will, we hope, be modified in such a manner that the consent of all the provinces will not be necessary. The unwilling one or two provinces might then see that it was in their interests to fall in line and correct their errors of refraction, and get some true medical leaven into their nature so that they could rise to the occasion and get away from the narrow condition of provincialism. A leader is needed in this matter, or rather those who would be willing to aid Dr. Roddick in his further efforts.

What we have urged for years is coming about. We have pressed upon the attention of the medical men throughout Manitoba, Saskatchewan, Alberta, and British Columbia to secure a common standard of their own. We are glad to note that active steps are on foot looking towards this end. It is time that the Ontario Council was acting in this matter.

If the professional attitude in the Province of Quebec is hopeless, that is no reason why the other and rapidly growing provinces should do nothing. We do not hesitate for one moment in asserting that the

true course for the Ontario Medical Council to pursue in this matter is to do all that lies in its power to secure an arrangement of reciprocity with the western provinces. The Council will be held responsible by the profession if it does not.

OSTEOPATHY AGAIN.

The right of osteopaths to practise was before Col. Denison recently. Messrs. C. S. Gadsden and D. S. Kissick of the Canadian Detective Bureau gave evidence against Robert B. Henderson who practises osteopathy in Toronto.

Mr. J. W. Curry, K.C., who conducted the prosecution, cited a case where the decision had been given to the effect that "practising medicine did not necessarily mean the administration of drugs for the alleviation of disease, but the employment of any means to the end of healing." Mr. Curry contended that osteopathy was a means used to heal disease. He contended that the practice of osteopathy ought to be limited to duly qualified physicians or carried out only under their directions.

Messrs. Gadsden and Kissick proved that they had consulted R. B. Henderson and had paid for the treatment which they had received.

Osteopathy is not a new thing. In some form it has been before the people for a long time in the form of the practice of the bone-setters, the Swedish movement cure, or massage, etc. As practised now-a-days the words "osteopathy" has no true meaning. The practitioners of this ilk resort to rubbing, pulling, kneading, etc., for disease in all our organs, as well as when it is limited to our bones. Osteopathy is a pulling, hauling, rubbing, kneading process, applied to the human body by persons who almost always know nothing of disease, and when such treatment should be applied.

As examples of this we might mention the case of a lady who had very violent treatment at the hands of an osteopathist for pains which she suffered from. Her trouble was due to a floating kidney. In another instance a young boy who had tuberculosis of the elbow joint had it treated by forcible manipulations and with very bad results. A neurasthenic with meandering pains was told he had a bone misplaced in his neck. This was rubbed and pulled diligently.

But coming down to the kernel of the whole affair, doing anything for a patient is treating that patient. We regard our advice in diet just as rightly part of our therapeutics as we would the ordering of a certain drug. Many times physicians and surgeons treat their cases without ordering medicines of any kind. If this be not practising medicine and surgery then such practitioners would not be entitled to their fees. It is

all nonsense for lawyers and courts to haggle over what is practising medicine, and when one can escape the meaning of the medical act on the plea that he does not order medicine. A man does not need to prescribe drugs to reduce a dislocation, and yet he is practising in a very skilful manner and should be paid.

The medical profession has been altogether too easy going in these matters. It should oppose these classes of practitioners and vendors of patent medicines with vigor. If we cannot secure proper amendments to the act then break the act altogether and let the people take the consequences.

INSANITY, RESPONSIBILITY, AND PUNISHMENT OF CRIME.

This is the title of an article in the August issue of the *American Journal of Medical Sciences*, by James J. Walsh. He refers to the murders, many in number, for which no one is arrested. These murders remain as mysteries. There are many murders in states and countries where there is no capital punishment. Many murderers escape through the false evidence submitted to court, the clever work of experts, and the tactics of lawyers. Some murderers escape execution through the influence of political friends.

We have pointed out that murderers fall under several classes. 1, The wilful murderer who commits the deed for revenge or plunder; 2, The person who slays another in a passion or fit of temper, as in some ordinary altercation; 3, The person who takes the life of another in self defence; 4, and the one who commits homicide as an insane act under the influence of some delusion. Viewed from this standpoint the value of capital punishment becomes more apparent.

It is now very common for the defence of insanity to be set up. This raises the question as to what is to be our standard of sanity or insanity. On this point Dr. Walsh lays much stress on the complete absence of agreement among experts. The medical expert is too often a paid partisan. It is thus a very open field to introduce into any trial, and has often led to a complete miscarriage of justice. It is not the knowledge of a person on the subject of mental diseases that places him in demand, but how far will he go in proving that a certain person accused of a murder is, or is not, insane.

Dr. Walsh is of the opinion that all except idiots should be punished. The person of sub-normal mental capacities can reason some and should be made responsible for their acts. This is the only safe rule to follow, as otherwise there is bound to be a great crop of crime by these persons. These sub-rational individuals are cunning and will do crimes under the

belief that they will escape on account of their mental state. Dr. Walsh contends that horses and dogs can be taught by punishment so that they will not repeat certain offences. But we must never forget that the horse and the dog are not impelled by delusions as may be the case with man. Here we think Dr. Walsh's arguments fail to meet all the conditions. We agree with him fully, however, that the murderer who is mentally defective should not be allowed to escape. Such examples of punishment have a good effect on those of his class.

There is a tendency to depart from the value of capital punishment and the propriety of maintaining it as the highest deterrent of the law. It is for this reason that murder trials are so often fought out on the insanity cry. If the punishment were to be something else than the death sentence, there would be less place for this sort of a plea. Dr. Walsh is inclined to think that justice would oftener be done if the death penalty was discarded. Some punishment always is better than a severe punishment occasionally and a miscarriage of justice frequently.

CANADIAN MEDICAL ASSOCIATION JOURNAL.

For several years there has been a good deal of discussion over the advisability of establishing an official journal as the organ of the Canadian Medical Association. Several examples may be quoted in favor of this view.

1. There is the *British Medical Journal*, the organ of the British Medical Association.
2. The *Journal of the American Medical Association*.
3. The *Australasian Medical Gazette*, published by the Australian branches of the British Medical Association.
4. And perhaps the *Transvaal Medical Journal*, published by the Transvaal Medical Society.

These journals are sent to the members as a part of the return they receive for the fee they pay. The other rewards are the right to attend the meetings and the status of being a member.

The conditions, however, differ in all these places. In Australia there is only the *Australasian Medical Gazette*. There is virtually no local opposition. This is also true in the case of the *Transvaal Medical Journal*. When we turn to the United States the case is quite different. The medical population is large. Even when the journal was launched many years ago, the population and the number of doctors were in excess of those in this country. In Britain, again, there were many doctors to draw from when the *British Medical Journal* was first published.

In Canada there are about 4,500 medical practitioners who use the English language. It is from these that the support to the journal must come. We have often pointed out that the shape of this country is unfavorable to large annual meetings. Much of the country must always be far away from the place of meeting.

The adoption of the rule to make annual fee obligatory may not work well in practice. Many may only wish to pay for the meetings they can attend. Any attempt to go beyond this may have just the opposite effect to what the executive would wish.

If the Canadian Medical Association undertakes to publish an official journal it ought to be one worthy of the association. This will mean the outlay of much money. A good sized journal published regularly comes high. There should be no attempt to go into any such undertaking until there is enough cash on hand.

We gather from our contemporary, *The Canadian Practitioner*, "that the official publication will be quite different from the present medical journals, and will not enter into competition with them." The real question at stake is whether it is wise for the association to enter into the publication of any journal that would prove a heavy drain upon its funds.

So far as THE CANADA LANCET is concerned the Canadian Medical Association may look for every assistance we can give it. We have given up the space at our disposal at all times most cheerfully to advance in any way we could the best interests of the Association. We take the position, and one held by many, that the interests of the Canadian Medical Association will be best served by maintaining a friendly attitude towards it by all the Canadian journals. We do not think there is either the need of nor the room for another regular medical journal in this country. For some years to come we think the Canadian Medical Association can do better with its money.

It has been said that present journals are not of as high a standard as one would wish. It is easy to make such a criticism. The present journals publish the best articles that Canadians are capable of writing, and they give the medical views of the country. We do not see how any new journal could do more.

MEDICAL EDUCATION IN BRITAIN.

There are certain bodies and universities in Britain that teach medical subjects and grant diplomas or degrees. These bodies are recognized by the General Medical Council which registers these diplomas or degrees and thus gives legal status to their holders. Some of these colleges have come to an understanding with the medical council only to grant their diplomas as the result of an examination by a joint board.

The medical council has the power to regulate the course of study adopted by the teaching colleges, and it does exercise this power by laying down the outline of study which a student must follow. In this way a certain amount of uniformity is secured among the many colleges and universities.

There are ten universities in England, four in Scotland, and three in Ireland which grant medical degrees. In addition to these there are the licensing bodies, such as the College of Surgeons and Physicians of London, those of Edinburgh, the physicians and surgeons of Glasgow, and that for Ireland. The tendency in Britain is more and more in the direction of securing a university degree.

The fees amount to from \$500 to \$750 to secure a degree or diploma. In addition to this there are the cost of living, books, instruments, etc. The average time taken to qualify is virtually seven years. Only 14 per cent. qualify in the minimum time of five years. If \$500 be followed for ordinary expenses for each of the seven years and the fees then added on, the cost of a qualification in Britain would come to about \$4,000 or \$5,000.

In England and Wales, in 1882, there were a population of 26,334,943 and 15,383 qualified medical practitioners. This gives 1,710 persons on the average to each practitioner. In 1908, the population was 35,348,780 and the practitioners 25,092, or an average of 1,407 persons per doctor. There is also on the average less sickness per 1,000 owing to preventive measures. It thus becomes quite apparent that there is a steady tendency to an increase in the number of practitioners for the amount of work to be done. There is an increase in the number of six penny doctors, and many now receive 2s. 6d. for visit and medicine who formerly received 5s. Those in Scotland and Ireland suffer in the same way. The general tendency is towards a decline in the average income of the doctor. In France this has become so serious that several societies have sent out advice against entering the medical profession. This is also in contemplation by the British Medical Association.

In Canada and the United States the same tendencies are present and making for the ends, namely, lengthening of the college course, increase in its cost, increase in the number of doctors, and lowering of the general income of those in practice.

OPPOSING LADY ABERDEEN'S WORK FOR CONSUMPTIVES.

One of the most remarkable episodes in the history of the efforts that are being put forth by well informed and well intentioned persons occurred in Dublin a short time ago. It came up in South Dublin Board of Guardians by whom the following resolution was carried, twenty-three voting for it and eleven against :

"That we respectfully ask her Excellency the Countess of Aberdeen to discontinue her consumption crusade, as to continue such a course would have a very serious effect on the country, as well as on the tourist traffic, on which a great number of the poor people in the country districts have to depend for a living.

"Her Excellency will at once see what an effect it may have on strangers when they are told that the country needs such action on the part of the Viceroy's wife."

Mr. John Ragmond moved the foregoing resolution and urged that so much agitation about tuberculosis would prevent tourists visiting Ireland, and would cause many to lose their employment. Mr. Anderson seconded the resolution in a similar strain. Mr. Mullett spoke in the same way and said that such crusades were detrimental to the Irish people. Mr. John Scully, J.P., the chairman, spoke against the motion. He said the Board should rather send its commendations to Lady Aberdeen and give her every assistance in her splendid work.

The foregoing incident is a painful example of how much people may stand in their own light. There are those who always oppose any good reform or effort in the right direction. Lady Aberdeen is right and we feel sure that the passing of such a resolution will only stimulate her to greater efforts in her noble work for the people among whom she is at present stationed. It will only tend to convince her that the cause of the consumptive requires a strong champion. Lady Aberdeen no doubt realizes, however, that she has the great weight of sober thought and well informed judgment on her side.

From the educative and philanthropic work that Lady Aberdeen is doing nothing but the best of results can come. We send her our encouragement on her efforts.

CANADIAN NATIONAL HYMN.

MERCY E. POWELL McCULLOCH.

O Canada! in praise of thee we sing,
 From echoing hills our anthems proudly ring,
 With fertile plains, and mountains grand,
 With lakes and rivers clear,
 Eternal beauty thou dost stand
 Throughout the changing year.
 Lord God of Hosts! we now implore,
 Bless our dear land this day and evermore,
 Bless our dear land this day and evermore.

Dear Canada! for thee our fathers wrought,
 Thy good and ours unselfishly they sought.
 With steadfast hand and fearless mind
 They felled the forest domes,
 Content at last to leave behind
 A heritage of homes.

Lord God of Hosts! we now implore,
 Bless our dear land this day and evermore,
 Bless our dear land this day and evermore.

Blest Canada! the homeland that we love,
 Thy freedom came a gift from God above,
 Thy righteous laws, thy justice fair,
 Give matchless liberty;
 We thank our God that we may share
 Thy glorious destiny.

Lord God of Hosts! we now implore,
 Bless our dear land this day and evermore,
 Bless our dear land this day and evermore.

167 College St., Toronto.

The foregoing national hymn was composed by Mercy E. McCulloch, who is the wife of Dr. McCulloch and the daughter of Dr. N. A. Powell. There is no need for any eulogy on the words—they speak for themselves. The composition won the prize for the best poem that could be sung to the tune of "O Canada," composed by Calixta Lavallee, a French Canadian. The judges were Professor Pelham Edgar, Dr. Broome and Mr. Hector Charlesworth. Long life and happiness to the gifted authoress!

THE ROUGH SIDE OF COLLEGE LIFE.

Attending college is no guarantee of gentlemanly conduct. It is painfully true that a student may be learned in many subjects and lack the finer touches that do so much to make life pleasant. On the other hand a young man, "remote, alone," may be in every way the embodiment of all that is refined. These traits of character are likely to go through life, and may do much to make or mar the man.

If being an undergraduate means anything that *anything* is not merely the acquiring of a certain amount of knowledge on history, the mathematics, the sciences, or "the proper study of mankind is man." The

university student should never fail to realize that while he is a student he is a citizen of a very special kingdom,—his college and the world of letters.

Within the past few weeks all who read the despatches flashed over the country must be impressed with some of the instances of brutal conduct on the part of those who take part in the games of college life, and the unseemly conduct of students when gathered together in numbers. It may be said that groups may do what the individual student would be ashamed to conceive of in his mind.

The following item refers to a Toronto student who was seriously injured in a game of football:—

“Roy Miller, aged 18, son of Provincial Detective John Miller, was seriously injured on Saturday afternoon while taking part in a football game on St. Alban’s grounds. He was thrown to the ground and lay unconscious for sixteen hours from concussion of the brain.”

We have often said that there is no need for any game that involves such risks. The bull fight is forbidden in civilized countries, because it is brutal and degrading. Football, as played, can be equally so. But the following item from many of a similar kind is to the point here:—

“A head-on collision between two players seeking to recover a fumbled football at a game on Staten Island to-day resulted in probably fatal injuries to Ernest Stamm, 27 years old, of Brooklyn. His skull was fractured. Frederick Sterle, with whom Stamm collided, was not seriously hurt. He was arrested pending the outcome of Stamm’s injuries.”

One of the players is arrested. This would not be so if there was not good reason to think that his playing was brutal.

The following item which comes by associated press should arouse a determination on the part of students to have an end of vulgar and degrading customs. No year has any right to compel a lower year to wear any badge of inferiority or appear as occupying a humiliating position. Here is the reader:—

“Because William R. Cowieson, of Pittsburg, a student in the freshman class, Washington and Jefferson College, refused to obey college rules by wearing the regulation class cap, he was subjected ‘the Third Degree’ to-day by the undergraduates, Cowieson, following a preliminary encounter with other students, in which he escaped after cowing his hazers at the point of a revolver, was later seized by nearly 200 students and taken to the campus and placed beneath the college pump, where he was doused with water until half drowned. Later Cowieson went before Justice of the Peace Henry Gantz, and swore out warrants for the arrest of five students, on the charge of assault and battery. Four of these students were given a hearing this evening, three paying fines, and one

being discharged. A warrant for the arrest of the fifth student has not yet been served.

"A rule in the Washington and Jefferson College which has been in force for several years requires all freshmen to wear small black caps, topped with a green button. Every freshman but Cowieson donned this headgear."

But coming back to Toronto, we see some rather revolting relicts of bossism and barbarism. On the campus of Victoria University some 110 young men struggled with much energy with each other over the following:—

"Ye verdant class '13, to be hobbled October 15." The foregoing notice painted on the handball board in tantalizingly prominent letters of white paint by the second year men of Victoria University yesterday morning resulted in a resurrection of the hustle. The men of the first year altered the belligerent invitation till it read, "Ye verdant asses, '12 to be bobbed October 15."

It appears that there were some 70 first-year men as against about 40 in the second. Most of us have heard of the words of Napoleon that Providence usually fights on the side of the large army. This may be true also of the "hustle"—one of the most degrading of customs in college life.

But a few days ago the students of the Veterinary College were engaged in a most unseemly affair. Here it is as it appeared in the daily press:—

"The case of Gordon Tupling was disposed of first. He was fined \$5 and costs or 30 days in jail on a charge of disorderly conduct. The \$5 was to go to mend the tear in the trousers of William Johnston, a 'peaceable citizen,' who was passing in front of the Veterinary College at the time of the hustle. He said he was shoved into the crowd and taken into the college, where he was laid on a table and spanked with straps, Tupling was one of those who had taken him in.

"In regard to the other four, Herbert Holmes, Roy Kee, Chester L. Nelson and Robert J. Warren, who were charged with disorderly conduct, and had been identified as some of the wielders of the straps, the Magistrate said they ought to be charged with assault. He wanted it understood that a freshman had just the same rights as any citizen, and should be protected. He fined each of the four \$1 and costs.

"Magistrate Denison said that if any of those who were mistreated in the veterinary students' hustle of last week wished to lay a charge of assault he would be quite willing to make an investigation. If any more such cases came before him he would be tempted to send them to jail without the option of a fine."

The following example of rough play is to the point:—

“Annapolis, Md., Oct. 20.—Hope for the recovery of Midshipman, Earl D. Wilson, quarter-back of the Navy football team, who was injured in the Villa Nova game last Saturday, was practically abandoned this afternoon. Wilson injured his back in stopping a long run of the opposition half-back. An x-ray examination showed that the fifth vertebra was fractured.”

There are few things in this world better than clean, manly sport; but for a number of students to play the part of ruffians over one of their college companions is beneath contempt. Imagine the feelings of right minded citizens when any one is held up on the highway by robbers or worse and maltreated. This is just the sort of case that came before Col. Denison a few days ago. The hustle, hazing and brutality in sport should cease.

THE QUEEN ALEXANDRA SANATORIUM, DAVOS.

The Queen Alexandra Sanatorium (under Her Majesty's patronage), which is to be opened early next autumn, is destined to rank high in the list of the *National Sanatoria* of cosmopolitan Davos. But though national, it will be unique in welcoming patients from all parts of the world and not only from the Empire, but from the States, as it was founded for the benefit of all English-speaking nationalities, the only qualification needed being evidence of medical suitability, and of inability to meet the heavier cost of treatment at hotels or private institutions. The following notice which appeared in the *British Medical* and other journals, has been forwarded to us by the joint Honorary Secretary, Dr. William Ewart, as of special interest to some of those who may be visiting Europe from over the seas:

“The prospective opening of the Queen Alexandra Sanatorium at Davos for the reception of patients early in this autumn was announced from the chair at the sixth annual meeting of the Council, held at 11 Chandos Street, Cavendish Square, W., on July 16th, by the President, the Lord Balfour of Burleigh, K.T., P.C., who has labored so long and successfully in the difficult task of raising funds. A splendid donation of £25,000 lately received from a munificent sympathizer, who desires that his name shall not be published, not only supplies the amount required to complete the work and to open the sanatorium free from debt, but provides means for its scientific equipment and for future extensions. It should be mentioned that Lord Strathcona, with his well-known zeal in the promotion of all charitable and useful works, not long ago gave a donation of £2,000 for the purposes of the sanatorium. For the present the sanatorium will accommodate 54 patients, all in single rooms.

ORIGINAL CONTRIBUTIONS.

—

 THE TECHNIQUE OF ROUND LIGAMENTS SHORTENING
 THROUGH THE INTERNAL RING COMBINED WITH
 COELIOTOMY.

By CHANNING W. BARRETT, M.D. Gynecologist to Chicago Polyclinic School and Hospital, Associate Professor of Gynecology, Medical Department, University of Illinois, Gynecologist to Henrotte Memorial Hospital, Obstetrician to Cook County Hospital.

IF an excuse is necessary for again writing upon a subject presented some years ago (*Surgery, Gynecology and Obstetrics*, Nov., 1905), it lies in the interest shown in, and the frequent inquiries for the technique of the operation which I then described and the fact also that a wider experience enables me to point out important points in the technique not at first emphasized. True, since then several exhaustive articles under well known names have proven to the satisfaction of the authors that no operation is required to hold the uterus in place but this has not lessened the suffering of the patient with mal position of the uterus nor obviated the necessity for her relief at the hands of the practical gynecologist.

The anatomical arrangements of the ligaments of the uterus speak very strongly in favor of the fundus being forward and the cervix backward. No abdominal organ may change its position or location markedly without causing a considerable percentage of morbidity. The principles which govern the support of the abdominal organs and the construction of the walls to prevent hernias speak very strongly against the uterus having so wide a range of movement as to get in line with the vagina for this favors vaginal hernias. (See *Obstetrics and Diseases of Women*, April, 1909.) Clinical observations furnish unbounded evidence that retrodisplacements and prolapse are undesirable. These should be dealt with according to well defined principles.

The time has not and never can arrive when operative treatment should be applied to all cases for the principles which govern are abiding and cannot reasonably be abandoned at the present time, although when "preventive medicine" comes into its own there will be much less need of surgery along this and other lines.

During the last decade great ingenuity has been exercised to obtain a different—sometimes better—sometimes worse—operation to hold the uterus forward. When they have failed they have departed from, and when they have succeeded they have adhered to certain well known principles. In 1881 Alexander proposed dealing with these cases in accord with what he considered essential principles, 1st, using natural ligaments, and 2nd, keeping out of the abdomen. A few years later Olshausen, Kelly and others found it so essential to open the abdomen that they thought it

desirable to ignore the points of advantage urged by Alexander, and after correcting conditions in the abdomen created new pathology by making a false ligament.

Ever since that time gynecology has been trying to devise a procedure which will offer the advantages of one without the faults of the other. It is not entirely a question of treating retrodisplacement; it is a question of dealing with retrodisplacement, and their complications. We have displacements combined with complicating conditions in one of four ways.

1. The displacement and the complications may have a common etiological factor.
2. The displacement may be an etiological factor in the complications.
3. The complications may be an etiological factor in the displacement.
4. The displacement and complications may have entirely independent etiological factors.

The complicating conditions are so variable as in one case to appear as an incident in the displacement and in another to outweigh in importance the displacement itself. Our treatment, however, must look toward the correction of each. An operation for wide application must present the following advantages:

1. It should be safe, no immediate or remote mortality.
2. It should be simple in technique.
3. It should allow inspection of intra pelvic conditions.
4. It should allow correction of intra pelvic conditions through the best opening.
5. It should use normal ligaments, creating no false ones.
6. It should use the best part of natural ligaments.
7. It should use natural ligaments in such a way, that they remain normally placed in the abdomen, allowing of no opportunity for entanglements of the bowel or omentum.
8. It should be permanent with or without future pregnancy.
9. It should not interfere with pregnancy, delivery or involution.

An operation which presents these advantages is bound to live: one that does not must recede.

In November, 1903, I began doing an operation which I denominated "Intramural Transplantation of the Round Ligaments," which had the following technique which I quote from my former paper:

1. The abdomen is opened in the median line, through an incision one and one-half to two inches in length.
2. Intra-abdominal complications are dealt with.

3. The round ligaments are picked up with the author's rubber-jaw forceps, and a control ligature is thrown around each ligament about two and one-fourth to two and one-half inches from the angle of the uterus. If they are exceedingly well developed, a longitudinal slit is made over the ligament, and the peritoneum not included.

4. The edge of the aponeurosis over the rectus muscle is now grasped close to the lower angle of the wound, and the author's curved-ligature forceps are carried between the aponeurosis and the rectus muscle outward to the natural exit of the round ligament, the internal ring where the forceps is guided into the abdomen by sight or by means of one or two fingers through the abdominal incision. It is not difficult to have the forceps follow the round ligaments subperitoneally to the control ligature.

5. The forceps now grasp the control ligature, and it is withdrawn, and along with it is a loop of round ligament.

6. Each loop of round ligament while being held by the control ligature is sewed to the under side of the aponeurosis with cat-gut, about one inch from the median line, and should the loops prove long enough, as they frequently do, they are sutured together in the median line over the recti muscles.

Tracing the round ligament we now have it running from the uterus to its normal exit, the internal ring, then under the aponeurosis to the lower angle of the abdominal incision, close to the symphysis pubis, to the under side of which aponeurosis it is attached one inch from the incision. The ligament now retraces its steps to the internal ring, from whence it follows its normal course to the labium majus. This leaves no opening for strangulation of the bowel. The ligament leaves the abdomen at its normal place and utilizes the normal structures as a pulley for the round ligament. The uterus is now held by the very best part of the round ligament, a ligament which has capacity for evolution during pregnancy and involution thereafter.

The distinctive feature of the operation is that it was the first operation to carry the ligaments out of the abdomen at the internal ring after securing them in the abdomen where they are easily found.

The technique of dealing with the ligament after it is carried through the internal ring has been modified by Martin, Dudley, Benjamin and others, each making the operation somewhat more difficult. Mayo and others modify the technique of getting the ligament by picking the ligaments up with the forceps though the internal ring not putting the preliminary control ligature upon the round ligament, and this I had previously tested but find that it has the following disadvantages :

1. A larger abdominal incision.

2. More manipulation of the forceps through the internal ring.
3. Less certainty of manipulation.
4. Occasional crushing asunder of the ligament.
5. Frequent slipping of the ligament from the bite of the forceps as a result of care not to crush the ligament.

After a long experience with the control ligature, and some experience without I would urge the desirability of this step.

A number of men who have adopted and described this technique speak of grasping the ligament one and one-half inches from the uterus. When it is remembered that this portion of the ligament is to run to the internal ring and then through the abdominal wall to the median incision, it will be seen that this gives a small amount of ligament to make that excursion. I am in the habit of putting the control ligature upon the ligament at the junction of the middle and outer third of the intra abdominal portion of the ligament.

This draws the outer two-thirds of the ligament into the abdominal wall and leaves the inner third—the best part of the ligament running from the internal ring to the uterus.

Even with this longer portion of the ligament than is used by some I do not bring as many over the recti muscles to meet in the median line as I did when I made my original report, as an uncomfortable pulling was occasionally observed.

This operation which has been pronounced by Smythe and others, a most perfect procedure, yet has its necessity for certain cautions.

1. The ligaments must be rendered free from adhesion to sigmoid, appendix, cæcum, small bowel omentum or bladder.
2. In drawing the ligament from the ring it must be observed that no abdominal structure is included between the ligature and the broad or round ligament.
3. Too much tension must not be exerted upon the ligaments for fear of inguinal distress or drawing the uterus too near the anterior abdominal wall.

No hernias have been observed after hundreds of operations extending over six years of time. Many of our cases have gone through childbirth with entirely favorable results. One was operated upon for incarceration of the four months' pregnant uterus, this procedure following the release of the uterus with pregnancy continuing to term. One patient returned for a second operation, the uterus having been drawn backward by firm adhesions to the right broad ligament, greatly elongating the right round ligament. One other case has been observed in which firm adhesions returning after the operation is giving the round ligaments a severe

test. I have ceased to have fears that this operation will fail as the Alexander frequently does.

It has occasionally been found desirable to shorten the sacro-uterine ligaments and very frequently necessary to build a new pelvic floor.

The above procedure has been denominated by some, the "Internal Alexander Operation," but Alexander emphasized so emphatically the point of keeping out of the abdomen that intra abdominal round ligament shortening cannot rightfully be charged or credited to Alexander.

Time has demonstrated that it has the following advantages:—1. Safety. 2. Simplicity, or only a moderate degree of technicality. 3. Allows inspection and correction of abdominal conditions. 4. Uses natural ligaments. 5. Uses the best part of these ligaments. 6. Places the ligaments normally, their exit being through the internal ring. 7. Theory suggests that this should, and numbers of our cases furnish evidence that it does stand the double test of pregnancy, that is, the operation does not interfere with pregnancy, delivery and involution and these processes do not interfere with the permanency of the operation.

CANCER OF THE UTERUS.*

By J. MILTON COTTON, M.D., M.R.C.S., Eng., L.R.C.P., Edin.

NO subject is more interesting both to practitioner and pathologist. The frequency with which it occurs, its terrible results and its fatal end, alike demand both careful attention and study. And yet, perhaps no subject is more difficult and confusing both clinically and pathologically, so varied are the types of malignant disease met with at the bedside. And still more so are their pathological appearance under the microscope, yet both clinical and microscopical evidences of malignant disease are all important. The one alone may be sufficient, but together they form the solution of a problem of exceeding difficulty. The microscopical appearances of uterine neoplasms, and the differentiation into carcinoma, adeno-carcinoma and epithelioma are very puzzling. So varied are their appearances even in the same section that it requires a considerable knowledge of uterine histology before an opinion can be arrived at. Even then varied views may be taken, as it is possible that the malignant diseases, which we call epithelioma, carcinoma and adeno-carcinoma may be all present in the same individual, and that in attempting any classification of malignant disease of the uterus, we do so with regard to the most striking forms met with and only with anything like precision in comparatively early stages of the disease. The terms used simply

*Read at Academy of Medicine, Toronto.

indicate certain pathological tendencies and imply the ultimate facts determining their origin and their relationships are still quite unknown to the pathologist.

The varieties of malignant disease which affect the uterus are carcinoma, adeno-carcinoma, epithelioma and sarcoma.

Little or nothing is known of the cause of malignant diseases generally, still less so of its causes when it starts in the uterus itself.

As the matter stands at present, we can only say that "While foetal inclusion and hereditary taint may act as predisposing causes of the origin of tumors generally, irritation and injury may be considered as exciting causes." It appears from clinical evidence that long continued irritation is necessary for the production of epitheliomatous tumors, but that the occurrence of sarcomata is influenced rather by direct and sudden injury.

Nothing is more important than the early recognition of cancer. How often do we see cases in which the diagnosis is easy but all possibility of operation is hopeless. It is well to remember that uterine haemorrhage at any time should be regarded as pathological, particularly that occurring at, or after, the menopause. Such cases should always be examined. It is but too often that we find that the patient is afraid of the verdict, till it is too late; or the symptoms are discounted both by the patient and her medical adviser.

Spread of Cancer.—The evidences of cancer are haemorrhage, more or less offensive discharge and pain. The haemorrhage comes from the cancerous surface; it is irregular and never a menorrhagia; menstruation plays no part whatever in cancer; it is rarely profuse, unless some vessel be opened by ulceration. Haemorrhage after the climacteric is extremely suggestive of cancer.

Discharge may or may not be offensive, it may be slight or profuse, and comes from the surface of the growth; and generally, if profuse, it means that a large cancerous surface exists, either as an ulcer or as a mass in the vagina.

Pain generally coincides with the invasion of the parametrium, and in such cases cancerous parametritis may cause fixity of the uterus. Pain may be due to pressure on nerve trunks, and, if so, may extend down the legs. Ulceration in the vicinity of the internal os gives rise to the dull aching in the sacral region. Sometimes, in cases of cancer, the mass may block the internal os and pyometra may result, the pain being hypogastric and spasmodic. Later still, there may be interference with bladder and bowel. If the peritoneum be involved, perimetritis may cause pain. Pain may be absent all along. If there be pain, it is generally worse at night, and is not relieved by lying down as is frequently the case with pain due to inflammatory conditions. Pains are more felt on the

left side, and pain is a less infrequent early symptom than has hitherto been imagined.

Rise of Temperature is met with in cancer either from septic infection, or inflammation of the peritoneum or cellular tissue.

Vomiting may occur early; if late in the disease it points to obstruction; but irritation of the bowel in cancer cases is sometimes seen apart from complete or partial obstruction, and may cause troublesome diarrhoea, the bowel being surrounded by a dense cellulitis.

Bladder Troubles almost constantly occur, and mean that infiltration of the loose tissue between the bladder and the uterus has occurred, producing irritation and cystitis. Later, ulceration may occur with the formation of distressing fistulæ, or large masses of growth may protrude into the bladder.

If the urethra be involved, retention of urine may result.

Cancerous infiltration of the parametric tissues may involve the ureters they are embedded, not displaced; if constricted, dilation above the constriction results, and hydronephrosis, pyonephrosis, pyelitis and other evils ensue, producing obstructive suppression and uræmia. Haultain points to the importance of the condition of the urinary organs in cancer cases, in regard to prognosis.

Later still, there may be recto-vaginal, recto-uterine, or uretero-vaginal as well as vesical fistulæ, and the vagina becomes a mere cloaca, with terrible suffering, the patient becoming anæmic, uræmic, sapræmic and wasted.

If large cancerous masses occupy the pelvis even blood vessels such as the iliac veins are pressed upon, producing œdema. There may be fullness of the veins over the front of the abdomen, ascites, thrombosis and phlebitis. The uterine veins may inflame, and pyæmia may result in this way.

Causes of Death in Cancer.—Haemorrhage itself rarely kills; patients generally die from one or other of the complications of cancer, such as peritonitis, local or general, dysenteric ulceration or inflammation of the bowel, cystitis, pyelitis and uræmia, pulmonary embolism, pyæmia, bedsores, pneumonia and pleurisy from secondary growths, sudden failure of the heart, or gangrene of the lung from putrid embolism. The duration of life in uterine cancer is rarely more than 18 months.

HISTORY OF CASES.

The following cases will demonstrate the clinical symptoms described.

CASE I.

Mrs. K.—, aged 61. Saw her December 3rd, 1901. Mother of eleven children, ceased menstruating at 51. Enjoyed fair health until

one year ago, when she commenced an irregular flow, quite freely at times. One flow quite free six months before I saw her. Increasing pain in the region of the back and stomach, losing in weight. Vaginal examination shows a hard indurated cervix, breaking down in the centre and edges everted, ulceration extending to the vaginal wall; bleeds very easily. Growth looked to me of much longer duration than symptoms given by patient. Advised, hysterectomy which was refused by the patient and family when I explained to them of a possible recurrence. The alternative was accepted by the family of free curettage and cauterization of the whole ulcerated surface. This was done in December and the patient was fairly comfortable for about six weeks when the disease seemed to progress quite rapidly in the adnexa. There were no haemorrhages to speak of for six months, but pressure symptoms on the ureters developed with uræmic poisoning and the patient died the following October from uræmic poisoning, having had 30 or 40 uræmic convulsions.

CASE 2.

Mrs. S.—, aged 48. Mother of two children. Called at my office in December, 1899, on account of profuse haemorrhages. Her menses had ceased three years previously. The haemorrhages were the only symptoms that she had. Examination showed a large cauliflower mass involving the cervix and the adnexa. The uterus was fairly movable. The haemorrhages were worse when she was on her feet. She submitted to a curettage with cautery in January, 1900, was fairly free from haemorrhages until April, when they became very profuse. Used the cautery and curette freely again, after which the haemorrhages were slight. This patient did not rally and took to her bed and became weaker and weaker daily after the curettage in April. Her appetite was fairly good, but in spite of this she gradually failed from day to day and died from anaemia, the following October.

CASE 3.

Mrs. F.—, aged 60. Mother of four children. Saw her in December, 1903. Stopped menstruating at the age of 55. Had lochial discharge about a year after this, then stopped and did not see anything for three years. Two years previous again became irregularly unwell and continued so up to the time of examination; profuse at times, coming away with a gush. Has lost 27 lbs. in weight. Has been quite free from pain. Examination shows a uterus $5\frac{1}{2}$ inch in length, freely moveable. Cervix normal in appearance, no deposit in the adnexa. Curettage brought away a large amount of broken down debris shreds, whitish in appearance, foul smelling and bled quite freely. The right upper angle

of the fundus very rough. Diagnosis, carcinoma of the fundus or body of uterus. Advised abdominal hysterectomy which was performed on the 30th of December, leaving the cervix, and found at the upper right angle of the fundus a well marked carcinoma about the size of a cent. It had almost eaten through the body of the uterus. The patient improved daily until the 10th day, when she died suddenly from pulmonary embolism.

CASE 4.

Mrs. F.—, aged 39. Was sent to Grace Hospital under my care on the 29th August, 1907. Mother of three children. History of irregular haemorrhages for the past two years. Much pain in the lower part of abdomen also tenderness, emaciation and cachexia. Examination showed a large cauliflower mass in the vagina involving the whole cervix and extending well down on the vagina. The central portion had sloughed away leaving the mere walls of the cervix. The uterine sound passed for about three inches and the adnexa was solid on both sides of the uterus. The patient was unable to walk and in a desperate condition owing to the excessive haemorrhages she had been having. On the 30th August I curetted freely, leaving only a shell, afterwards cauterized the whole interior surface, also as much over the vaginal surface as possible. Tied the left uterine artery, but could not get at the right one. Opened the abdomen and tied all ovarian vessels and all other vessels leading to the masses in the adnexa. The haemorrhages ceased at once and the patient improved. Left the hospital on the 21st September and returned to her home where she remained until the 27th of November, when a recurrence of the haemorrhages, but slight as compared with formerly. The curette and cautery was used freely again and she again left the hospital on the 9th of December. Returned to her home and in two weeks was able to attend household duties with freedom from pain and haemorrhages. Took her nourishment well and improved in weight and general appearance until October, 1908, when the haemorrhages again started but not so freely. The growth had increased but slowly. She died in January, 1909, from exhaustion. Suffered slight pain for a month before her death. The haemorrhages were never excessive after the vessels had been tied.

CASE 5.

Mrs. F.—, aged 48. Had been a patient of mine for a number of years and treated her for specific disease which she contracted from her first husband. Had five children by her first husband, all strong and healthy. She married the second time and she came under my notice on October 10th, 1904, with a very free discharge which proved to be gonorrhoea. Treated her until November, when she declared herself quite

cured. I saw her on the 27th January, 1905, and found that she had not given me her correct history in her former visit. She had had irregular haemorrhages, sometimes quite profuse; she was failing in weight and could not attend to her household duties. Examination showed a large mass surrounding the whole cervix and extending into the vagina. A mass in the right iliac region with some tenderness. The left was fairly clear. The uterus was pushed over towards the left side. She complained of pain in the lower part of the abdomen. I advised her that a hysterectomy would not be advisable owing to the extension of the disease to the vagina but that we could give her much relief by curettage and cauterization and ligating the ovarian and uterine vessels, which was done on the 3rd of February. She improved very much. The mass in the right iliac region became much smaller and she was quite free from haemorrhages until the following August, when a slight one appeared which only kept her in bed a couple of days. On the 20th of November, she had a large discharge of pus which evidently was a pyometra. This discharge had given her much comfort and she felt fairly well, able to attend to her household duties, improved in weight until the following March, when she became weaker and well marked cachexia, unable to take nourishment very well and suffered from heart failure and dyspnoea. She went to bed on the 1st of April on account of general weakness and died on the 24th April from heart failure. She had no further discharge nor haemorrhages but seemed to gradually die from weakness. She was absolutely free from pain. Examination of uterus at this time showed that the progress of the disease had been interrupted, the masses in the right iliac region had almost entirely disappeared.

CASE 6.

By permission of Dr. Riordan, I am giving the history of this case. Mrs. S—, aged 48. Mother of two children. Saw her in consultation with Dr. Riordan on 21st December, 1903. Had been suffering from irregular and profuse haemorrhages for some time previously. Examination did not reveal very much and we advised curettage which was done. This did not relieve the haemorrhages, to any great extent. The patient gradually got weaker, until the following April, when a second examination was made. The uterus was found to have become much enlarged, the os uteri hard, nodular and much enlarged, with cauliflower growths extending on vagina. The adnexa completely filled with solid mass. The haemorrhages seemed to pour out so much that packing had to be resorted to. We advised a laparotomy which was performed on the 9th of May, 1904. We found the pelvic fascia pushed up from the pelvis and the large mass which seemed to fill the whole pelvis on both sides of the uterus. With some difficulty we found the ovarian vessels which

were both tied, and in fact all the vessels we could tie were tied. Dr. Riordan reports this patient as having daily improved after this operation. She is now strong and able to attend to her household duties. The haemorrhages never returned. The masses in the abdomen have become smaller but the uterus is still solid. This patient is still well and hearty.

CASE 7.

Mrs. F.—, aged 52. Mother of one child. Was admitted in the hospital February, 1908. Saw her with Dr. Riordan. Diagnosis of cancer of the body of the uterus was made. No involvement of the adnexa, uterus freely movable. Irregular haemorrhages and a lot of debris coming away at intervals. Patient emaciating and general feeling of malaise. Did a vaginal hysterectomy. This patient made an uninterrupted recovery, and up to the present time is in perfect health. There is no appearance of return of the disease.

In cases 4, 5 and 6, where the blood vessels leading to the uterus and to the growth were tied off, there was a marked improvement in patient, both as regards the progress of the disease as well as general health and comfort.

Freedom from pain I think can be accounted for by the lessened congestion and growth of the neoplasm.

The conclusions one comes to as to treatment from the above cases are:

1. In carcinoma of the body of uterus where the growth has not extended to peritoneum and adnexa, that is when the uterus is freely movable, hysterectomy by either vaginal or abdominal route.
2. In carcinoma of cervix without extension to vaginal wall and before there is much sloughing, hysterectomy.
3. In carcinoma or epithelioma of cervix with extension to vaginal wall, with uterus fixed, adnexa filled with deposit and breaking down of the growth, free curettage, cauterization and tying off of all blood-vessels.

This will prolong the patient's life, gives her freedom from pain, haemorrhages and pressure upon the adjacent organs.

A NOTE ON A CASE OF CEREBRAL HEMORRHAGE.

By JOHN W. S. McCULLOUGH, M.D., Alliston, Ont.

W J. S., a blacksmith, 48 years of age, consulted me on February 13, 1909. He was suffering from a severe cold and disordered stomach. His temperature was 100 P. 108, and its tension was marked. Examination of the urine revealed 1 Sp. Gr. of 1010 and there was con-

siderable albumen. He was put upon a light diet and advised to give up his laborious work. He soon recovered from the acute symptoms and the writer saw no more of him until September 4 last when the temp. was 100, pulse 100 and very tense. He complained of vomiting, and his face was pale. He was a short, stout man. There was some pallor. The heart was hypertrophied and there was a mitral systolic murmur. His personal history was good. Had had no previous illness except a severe sciatica some years ago complicated with a thrombosis of the veins of the right leg from which he recovered. He said the sight of his right eye was not as good as usual. Examinations with the ophthalmoscope revealed albuminuric retinitis of both eyes, more marked in the right. He was again advised to give up work which he did. He was put on a diet largely farinaceous, and given internally moderate doses of pilocarpine with magnes. sulph. in small doses daily. I saw him, perhaps, weekly since early in September and there was considerable improvement in the condition of his stomach and heart, although a moderate albuminuria with low Sp. Gr. still obtained.

On October 9th about 3.30 p.m. he consulted me at my office when I gave him a general examination including his eyes, which were in about the same condition. The urine had a Sp. Gr. of 1010 with a small quantity of albumen. Twenty-four hours quantity, about 50 ounces. When I had finished my examination he said "My hand, indicating the right, feels numb." He walked from my consulting-room to the waiting-room where he sat down and chatted for a few minutes with some ladies of his acquaintance. In about 10 or 15 minutes he called me. Then I noticed his speech was somewhat incoherent but he was able to tell me the whereabouts of his mother who had accompanied him to town. I assisted him in walking a few steps to a couch, and when his mother arrived 15 minutes later he could not move the right arm or leg, and speech was almost gone. In the course of an hour he was almost completely unconscious. Later he was taken home and placed in bed. Chyne-Stokes respiration soon developed and he died at 5.40 a.m. on the 10th, about 14 hours after the onset of first symptoms of the cerebral hemorrhage.

The case is chiefly interesting because of the opportunity of observing the actual onset of the hemorrhage which seems to have been unusually severe.

An experienced doctor wishes a position as assistant or *locum tenens*. Apply CANADA LANCET.

CANCER OF THE PROSTATE.*

By JAMES BELL, M.D., Professor of Surgery and Clinical Surgery, McGill University,
Surgeon to the Royal Victoria Hospital, Montreal, etc., etc.

I DESIRE to thank you, the President and the Committee of Arrangements of the Canadian Medical Association, for the great honour they have done me in extending me an invitation to deliver the address in Surgery before this meeting. When I received your very kind invitation, Mr. President, I accepted it with a deep sense of the responsibility which such acceptance entailed upon me,—a feeling which has not diminished as the time has approached for the fulfilment of my undertaking.

However, I shall not weary you with apologies or excuses, but will endeavor to direct your attention to a subject which has been brought very prominently before my attention and the attention of many other surgeons during the last few years—I refer to cancer of the prostate.

To one who has been engaged in surgical work for a quarter of a century or more, a retrospective glance at the achievements which have followed Lister's epoch-making discoveries is calculated to inspire the greatest optimism in the consideration of surgical questions, no matter how difficult they may seem to be. When one passes in review the difficult problems which have already been satisfactorily solved: the triumph over the infective micro-organisms by which all the cavities and organs of the body have been brought under the control of the surgeon, the growth of exact knowledge and scientific methods, the development of diagnostic skill and operative technique; one cannot but look hopefully and confidently for the solution of any surgical problem which presents itself; and there are many and serious problems in surgery still unsolved. In this respect the attitude of surgeons has changed materially since the middle of the last century, when it was customary with prominent surgeons (like Alexander), to deplore the fact that there were no new fields to conquer, that the science and art of surgery had become a finished entity; but the sphere and scope of surgery have been so immensely enlarged in recent years that instead of this attitude, we, of the present day, feel that the surgical millennium is still far off.

The cancer problem is one of the greatest questions of our time. Much careful and painstaking work has been done and many earnest workers are engaged at the present time in endeavoring to discover the cause of cancer (or rather we should say, malignant disease, and include sarcoma), but although much good has been accomplished and much knowledge has been acquired which enables us to understand the disease better, the great secret of its origin remains hidden; and the net outcome of our knowledge has been the development of operative methods,

* Address in surgery delivered at the forty-second annual meeting of the Canadian Medical Association.

the recognition of our limitations, and especially of the necessity for early diagnosis. Whether it be cancer of the tongue, the stomach, the breast, or any other organ, the universal rule has become recognized that early and wide and complete removal of the disease, while it is still local, is curative; that extension takes place early and insidiously by infiltration and lymphatic involvement, which must always be anticipated. Metastases through the blood-current are more of pathological interest than of practical importance to the surgeon. The really important fact which we must recognize is that we have not advanced in the treatment of cancer beyond the stage at which removal by operation is the sole remedy; and while we recognize the difficulties which must be encountered, and which necessarily vary with the organ or region involved, in effecting complete and thorough extirpation, we must also recognize the futility, or worse than futility, of any operation which falls short of complete removal.

I am aware that to this statement there may be exceptions as in cases of late recurrence, five, ten or fifteen years after operation, a condition which is not so rare as to be phenomenal; and indeed, in discussing the treatment of cancer of the prostate, I shall be obliged to consider partial operations but only as palliative and not as curative treatment. We may doubtless dare to hope that with fuller knowledge of the origin and growth of cancer, it may become possible to treat it successfully without operation or even to prevent it altogether, but that happy condition has not yet been attained. The history of tuberculosis affords ground for the belief, however, that this may be no idle dream.

In the operative treatment of cancer, we must practically disregard mutilation and loss of function in order to save or prolong life, and obviously some organs can be more easily spared than others. It is in the light of all these facts that I venture to direct your attention to cancer of the prostate gland.

I have chosen this subject for several reasons, among which are the following :

First :—Because there is a general widespread and erroneous opinion in our profession, that cancer of the prostate is a very rare disease. This belief is based upon the statistics of cancer, derived from pathological records, in which the prostate is shown to be one of the organs least frequently the subject of cancer, and no doubt this error has survived because the prostate has not always been systematically examined at autopsies.

Second :—Because of the habit, which unfortunately prevails very generally, of making a diagnosis of hypertrophy of the prostate or “enlarged prostate” in the case of every man past middle life who seeks advice for disturbances of the urinary function. I believe I am safe in

saying that medical practitioners generally consider that there is no difficulty in diagnosing senile prostatic hypertrophy and rarely look beyond the obvious fact of disturbed urination, with palpable enlargement of the prostate felt through the rectum, in elderly men; and I am quite positive that this is a fatal mistake. It should become the systematic habit of every practitioner to attempt a diagnosis between ordinary senile hypertrophy and other special causes of disturbed bladder function such as cancer, tuberculosis, stone, chronic inflammation, etc.

Third:—The great importance of the subject; on account of its frequent occurrence, the hopelessness of all treatment except surgical treatment in its very early history, and the distress and misery which it causes when radical treatment has become impossible. During the last fifteen or twenty years, much attention has been given by surgeons to the operative treatment of senile hypertrophy of the prostate, and a pretty general unanimity of opinion has been reached on this subject, but not so with cancer of the prostate. Indeed, operations upon the prostate for hypertrophy have only incidentally shown the incorrectness of statistics based upon post-mortem record, and have proved that, instead of being a very rare disease, it is a very common one; but beyond this no very great advance has been made in its treatment.

Frequency:—Young believes that cancer of the prostate occurs as often as once in seven cases of prostatic enlargement, in men past fifty. (*Journal of the Medical Association*, Vol. 46, 1906.) Thompson Walker, in a study of 242 consecutive cases of prostatic enlargement, diagnosed cancer in 57, although he eliminated 17 in which there might have been a doubt of the diagnosis. (*Lancet*, Vol. 1, 1908.)

The records of the Royal Victoria Hospital in Montreal show that, since 1902, 142 cases of prostate enlargement have been treated, of which 32 were diagnosed as cancer (one in four and a half). Of these, 88 were submitted to complete prostatectomy and the material removed was carefully examined with the result that 21 were demonstrated to be cancerous, 23.8 per cent. or a little more than one in four. It will be seen therefore that of all the patients who present themselves for the treatment of symptoms reasonably attributable to prostatic hypertrophy one in four or five is suffering from cancer: and indeed more careful and extended investigation will probably show that the proportion is even greater than this. I have no doubt the fact will surprise many physicians.

It is interesting to note that from the opening of the Hospital, in 1894, to the 1st June, 1902, eighty-six cases of prostatic enlargement were treated, of which only one was diagnosed as cancer. This case was a large adeno-carcinoma of unmistakable character originating in the prostate. In the other eighty-five cases, six complete prostatectomies

were performed, but no systematic examination of the ablated tissue was made. In the remaining eighty cases, many palliative operations were performed, but these were not of such a character as to admit of pathological diagnosis. This comparison shows how easy it is to overlook conditions which are unsuspected and how fallible statistics are except when obtained by most careful and accurate methods. The foregoing figures have been introduced in support of the statements made as to the frequency of the occurrence of cancer of the prostate, but no attempt has been made in this communication to present a full report of the statistics of the subject.

Varieties of Cancer:—Of the 21 cases examined in the Royal Victoria Hospital, four were from prostates which were small and very hard and showed in their minute structure a type of growth which resembled very closely scirrhous carcinoma of the breast, and five were from prostates which were markedly enlarged and showed a type of growth which resembled an adenocarcinoma. The remaining twelve were of intermediate character but more closely resembled the scirrhous type.

In many of the cases where the prostate was removed entire it could easily be seen that the new growth commenced well towards the centre of one of the lobes, but where only a small portion of the gland was removed, or where it came away piecemeal, this could not be determined.

Two types of malignant growth are therefore seen in these prostatic carcinomas; the one shows a cellular growth with cubical to columnar cells, usually arranged in such a manner as to suggest a poorly-formed gland acinus, while the other consists of small groups of small cubical cells scattered throughout a very firm and adult fibrous tissue stroma. The former type of growth is usually found where the gland is markedly increased in size, while the latter is often present where the prostate shows little if any increase in volume, or may even be apparently shrunken. Many of the carcinomata of the prostate show types of growth intermediate between these two. All these growths arise from the epithelial cells which line the ducts or acini of the prostate gland.

None of these prostatic carcinomata have shown an ulceration of the epithelium covering the gland, and thus the appearance of the gland as seen by the cystoscope does not indicate the nature of the enlargement.

Symptoms:—The symptoms produced by cancer of the prostate are in the main the same as those produced by hypertrophy, but they vary sufficiently on careful analysis to enable one to at least suspect in many cases that the disease is not one of ordinary hypertrophy. A full discussion of the symptoms would be out of place at this time, but the following are some of the main distinctive differences between the symptoms of simple hypertrophy and those of cancer:—difficulty in micturition,

shown by delay in starting the stream and maintaining it until the bladder is evacuated, rather than retention:—often little or no residual urine, hence often no decomposition. Frequency:—perhaps not distinguishable from that of ordinary hypertrophy; pain greater than in hypertrophy and without apparent cause; sometimes felt at the point of the penis, the perineum, the sacral region, the urethra, and sometimes shooting down the thighs. Hæmaturia is observed only when the mucous membrane of the prostatic urethra or the bladder outlet has become involved. It is generally more or less constant and not excessive. It sometimes appears to be an early symptom on account of the insidious character of the growth in its early stages in which there are no symptoms whatever, but it is, in reality, always a late symptom. When the growth is large, residual urine is a more prominent sign and retention may occur from mechanical causes, but in the scirrhus type, at least, there is usually no projection of the prostate into the bladder. It may even cause serious difficulty in evacuation of the bowels, or actual obstruction without causing retention, as in a case recently under my observation.

In the small or shrunken prostate, which is by far the most common form, retention occurs less frequently. There can, of course, be no uniform grouping of symptoms to distinguish cancer from hypertrophy and some of the most characteristic symptoms are often absent; and may be present in one case and not in another. Physical examination gives more definite information. Dense, stony hardness felt from the rectum is perhaps the most important sign. This may involve the whole or only a part of the prostate. It is sometimes smooth and sometimes nodular. The lobes are often unequal in size, and in some cases where there are marked symptoms, the examiner will be surprised to find that there is very little palpable enlargement of the prostate.

Sometimes a small hard mass leads one to think that he has to deal with a stone or a tubercular nodule. Both of these conditions must be eliminated although they occur much less frequently than cancer.

In far advanced cases, the outline of the prostate is obscured by an infiltration of the capsule which gives the idea of an invasion of the bladder wall upwards. The bladder, however, is rarely invaded until very late, but the seminal vesicles and surrounding tissues are, and it is this extension which gives rise to the sign above noted.

The rectal mucous membrane may also be less freely movable in these late cases and enlarged cancerous glands may be found in the inguinal region. Cystoscopic examination shows that the prostate does not project into the bladder as in ordinary hypertrophy, and Young describes the appearance of the mucous membrane as hard, drawn, and contracted looking.

When operation is undertaken it is found difficult or impossible to enucleate the mass, to separate the gland substance from the capsule, and it can only be torn away in fragments. (Doubtless many of the so-called "fibrous prostates," which have been described, were cancerous.) In early cases this may be noted at only one point in the mass. In the history of a case, rapid development of symptoms in a comparatively young man is very suggestive. In a word a man of 50-60 suffering from frequent micturition, much pain, comparatively little residual urine and whose prostate is very hard but not greatly enlarged, is probably the subject of cancer, and it is a very important question to decide whether enucleation,—the ordinary prostatectomy,—should be undertaken or a much more serious and extensive operation be provided for.

The following case may be taken as a type and one which illustrates also the hæmaturia which is observed in the later stages of the disease.

A strong rugged man, aet. 64, was in perfect health until December, 1908, when he began to have some frequency of micturition by day and was obliged to get up once during the night. He had more or less burning at the neck of the bladder but no pain. Early in May, 1909, he began to pass bloody urine, which continued without change or interruption until his admission to hospital on the 23rd of June, 1909. The blood was intimately mixed with the urine but the amount was not large. He had a hard nodular prostate, and, on examination, five oz. of residual urine were withdrawn at one examination and at another no residual urine whatever was found. The cystoscope showed oozing of blood from all around the urethral opening, but no visible ulceration and no projection of the prostate into the bladder. Suprapubic operation on June 28th verified this observation and an attempt was made to enucleate the prostate. This I am now convinced was bad surgery, but it was difficult to know how to deal with the condition. It was exceedingly hard, and even with the aid of a perineal incision only a partial removal was effected. The patient made a good recovery, had no more bleeding, and was discharged July 27th with perfectly normal urinary function and no residual urine. It is, of course, unnecessary to add that this satisfactory condition cannot long continue, and one can only contemplate the future of such a case with a deeper feeling of sadness and despair than that which is evoked by incurable cancer in almost any other situation. In this case although the first symptom had been noticed less than six months before operation there can be no doubt but that the disease had been present for a long time before it gave rise to any signs.

The relation of cancer to senile hypertrophy of the prostate has not been sufficiently studied, but while there is no doubt but that cancer often attacks the already hypertrophied prostate, the comparatively early age

at which it frequently occurs would seem to indicate that quite as frequently it occurs before there is any real hypertrophy. Whether hypertrophy predisposes to cancer or whether the occurrence of cancer in the already hypertrophied gland is not simply due to the more frequent incidence of cancer at the age at which hypertrophy occurs, are still unsettled questions.

The fact also that cancer of the prostate is usually, so far as we know, of slow growth in its early stages and has generally existed for some time before it produces symptoms, must also be taken into account. At any rate, cancer seldom occurs in the capsule after the removal of the hypertrophied gland. Careful examination of the prostate in cases in which cancer had not been suspected, has quite frequently discovered it in some part of the removed gland. Cachexia and failure of nutrition are rarely found until the disease is so far advanced that diagnosis is unmistakable. A peculiar feature which has been noted by nearly all observers is the tendency to metastases to the osseous system.

But the fact must not be overlooked that at the present time pathologists are inclined to believe that metastasis to the bones is much more frequent in all forms of cancer than has heretofore been thought to be the case. My own experience is not in accord with that of other observers on this point, as in none of my cases was there any sign of bone involvement when the diagnosis was made; and in one case only am I aware of this form of metastasis recurring after operation, but it is true that no attempts have been made to follow up the later histories of my cases.

I will describe here, briefly, a case which came under my care nearly three years ago, as it not only illustrates the results of partial enucleation but is also the case in which bony metastases occurred two years after operation.

A man, 71 years of age, had suffered for two years with some frequency to which at the end of one year was added urgency and difficulty, and later on pain; and still later on, retention. The pain increased. There was no hæmaturia; his health became poor and he lost about 15 lbs. in weight. On admission to hospital, he had a distended bladder; the urine was of a low specific gravity, turbid; and contained albumen but very little pus. The prostate was removed by suprapubic incision and enucleation. The tissue removed weighed 17 grammes and was definitely cancerous. The patient made an uninterrupted recovery, had perfect urinary function and normal urine and became so well that the diagnosis was questioned. At the end of about two years, however, he showed evidences of metastases in the sacrum, gradually failed and died two and a half years after operation.

Prognosis :—When the disease has advanced to such a degree as to admit of clinical diagnosis, the outlook is bad. This, of course, is precisely what is to be said of cancer in almost any organ. In one such case, (above mentioned) the patient, aet. 71, where a fairly satisfactory enucleation was possible, lived two and a half years with perfect urinary function to the end and with good health for about two years. In some cases in which cancer has been found in the prostate after operation, but where it had not been suspected clinically, the patient has enjoyed good health for several years; but when the disease has progressed to a degree at which satisfactory enucleation is impossible, the prognosis is bad in every way, and while incomplete operation will often restore the urinary function for a time, it will also probably in most cases hasten the growth and spread of the disease and shorten life.

Treatment :—As may be inferred from what has already been said, an ordinary prostatectomy (enucleation) will often give satisfactory results for a long time in the early cases. Some surgeons recommend this method of treatment and report cases as cured by it, but it is impossible to make a sufficiently wide removal of a cancerous prostate by enucleation where the diagnosis can be made before operation. The subcapsular dissection recommended by Proust and Albarran would appear to be theoretically a little more promising, but in more advanced cases the history of operative treatment has been far from encouraging. Billroth is credited with having performed the first operation for the radical removal of a cancerous prostate in 1867. Many operators since that time have devised and carried out operations with this object in view, some by the suprapubic route and others by the perineal route. Large portions of the bladder have been removed by some operators, and even the whole bladder has been removed and the ureters transplanted, but the results have not been such as to encourage a continuance of any of these methods.

In 1905 (Johns Hopkins Bulletin), Young of Baltimore devised the operation which bears his name and which stands to-day as the only radical procedure which commends itself to surgeons.

Two lessons have been learned, however, namely, first: that it is impossible to follow up extensive involvement of cancerous glands where they exist, and second, that closure of the bladder wound is possible after very large portions have been removed by the perineal route. Young's operation, which consists in exposing the prostate in the perineum, cutting the membranous urethra across and removing the bladder neck, prostate, seminal vesicles and ampullæ of the vasa deferentia, and reuniting the stump of the urethra to the upper angle of the bladder incision which is closed up to this point, has been very success-

ful in his hands, but has not been extensively employed by other surgeons up to the present time. In fact, the radical removal of the cancerous prostate has not received the attention from surgeons which its importance entitles it to. It must, however, be admitted that the operation is difficult and not without danger, although Young had only one operative death in his first six cases and the after results were very satisfactory. In a direct communication Dr. Young writes me that one of his cases reports himself entirely well at the end of about four years. Even this operation can of course only be expected to be curative in the early cases. There are also more advanced cases in which even complete extirpation of the bladder and either bringing the ureters out upon the loin, as recommended by Watson, or transplanting them into the bowel with all its risks and disadvantages, would seem to be preferable to a period more or less prolonged of hopeless suffering and a miserable lingering death.

I have in mind at this moment several cases of strong, useful men in middle life doomed beyond all hope, and dying by inches in constant pain and distress from cancer of the prostate.

Surely any treatment or any operation which can hold out any hope would be gratefully accepted by patients in such an unfortunate position; and the endeavour to treat the more desperate cases by operation would only be in accord with the general practice of surgeons in the treatment of cancer of other organs as already pointed out. We do not hesitate to extirpate the tongue, the stomach, the breast, the limbs or any organ, even where we feel that there is great doubt as to the possibility of getting completely beyond the disease, especially its extensions into the lymphatic system; and subsequent history very often proves that we have not completely eradicated it.

Finally, in the most advanced cases where no operation is possible which holds out any hope of cure, palliative treatment is called for. It will be seen that in the early cases, especially in those operated upon before a clinical diagnosis has been possible, that the ordinary enucleation gives very satisfactory results for a time, but in the great majority of cases it can only be palliative.

It has not been my purpose in this communication to give a detailed history and description of cancer of the prostate or of its treatment in the past. I have not attempted to array facts or to marshal figures in favor of one line of treatment or another. I have had nothing new to offer as to its pathology, symptomatology or diagnosis. I have only attempted, and I hope not entirely without success, to direct your attention to a painful, distressing and fatal disease which, occurring so frequently as it does, does not seem to have received sufficient attention from the

general practitioner who first comes into contact with it, nor from the surgeon who is finally called upon to treat it.

I would strongly urge that the same thorough, conscientious investigation be given to patients with disturbances of the urinary function as is given to disturbances of function of other organs, in order that early diagnosis may be made; and that surgeons should give to this disease the benefit of their most serious consideration, their skill and surgical resource, to the end that satisfactory operative treatment may be developed and made available for those unfortunate sufferers while the disease is still local and circumscribable, and that more satisfactory palliative treatment may be evolved for the inoperable cases.

A FORTUNE FOR THE PASTEUR INSTITUTE.

In a few days the Pasteur Institute will receive the large sum of £1,200,000, which was bequeathed to it by the late M. Osiris. M. Osiris, who was a rich and philanthropic Jew, founded in 1903 a triennial prize of £4,000 to be bestowed on "the person who had rendered the greatest service to the human race during the three preceding years." The prize was awarded to Dr. Roux, the head of the Pasteur Institute, for the discovery of the "anti-diphtheria serum," which has been the means of saving the lives of many thousand children. The millionaire was much astonished to learn that Dr. Roux had made over the whole of the money to the institute of which he is the head, although he is a poor man with a salary of some £250 a year, and lives in a very small apartment, for which he pays £24 a year rent. M. Osiris was so much struck by the unselfish conduct of the man of science that he made the doctor's acquaintance, and they became firm friends. M. Osiris one day asked him why he had given the money to the institute.

"All that I am," replied Dr. Roux, "I owe to the Pasteur Institute, for all my experiments and discoveries have been made there. Besides, the institute is very poor, for we have no income except what we make by the sale of serums, and though that brings in enough to keep the establishment going, some fresh remedy may any day be discovered, in which case I fear the institute would have to close its doors for want of funds."

The millionaire said nothing at the time, but at his death, which occurred a year or two afterwards, it was found that he had left the bulk of his wealth to the Pasteur Institute, as a token of admiration for the scientific attainments and self-abnegation of Dr. Roux.—*The Medical Press.*

CURRENT MEDICAL LITERATURE

—
MEDICINE.

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

—
THE HIGH ENEMA.

Horace W. Soper, in the *Journal A. M. A.*, for August 7, considers the question of how far into the colon a soft rubber tube can be introduced. He believes that it is only in those rare cases of abnormal development of the sigmoid that it is possible to introduce a soft rubber tube higher than six or seven inches in the rectum without the tube bending or coiling on itself. With the aid of the sigmoidoscope only the middle of the sigmoid can be reached. The practice of allowing liquids to flow through the tube simultaneously with its introduction serves to smooth the kinks and adds to the illusion that the tube is going higher. The short tube, six inches in length, is therefore best for all sorts of enemata, e.g., (a) when water, etc., is introduced for the purpose of causing fecal evacuations, using the fountain syringe or funnel and long tube in the usual way. It is possible, as he has frequently demonstrated, thoroughly to cleanse the entire colon by using a larger caliber ($\frac{1}{2}$ inch) short tube. This is connected by rubber tubing to a large funnel elevated from 3 to 4 feet; the solution is poured in until the patient experiences a feeling of distention or desire to evacuate; then the funnel is lowered until the outflow has ceased, and this manœuver is repeated in exactly the same manner as in gastric lavage. The short tube is also best (b) when retention of liquid is desired, as in administering saline solution, oil, nutrient material, etc. The attempt to pass the tube higher into the bowels is not only unnecessary, but, because of the coiling that inevitably occurs, such a manipulation tends to produce irritability of the bowel, and this, of course, will very probably cause expulsion of the fluid.—*Cleveland Medical Journal*.

—
ON THE SELECTION OF CASES AND THE LIMITATIONS OF
SPECIFIC TREATMENT IN TUBERCULOSIS.

In the *Therapeutic Gazette*, August 15th, Von Ruck, of Ashville, reports the results of sanatorium treatment of tuberculosis as affected by the use of specific medication. Climatic, dietetic and hygienic mea-

tures are the unconditional requisite for success under any form of treatment, but while an arrest of the disease in early cases followed these methods when used alone, inquiries to determine the permanency of results give little reason for satisfaction, as it was found that not 10 per cent. remained free from relapse in the course of a few years.

A more intelligent and rigorous enforcement of these methods may give now somewhat better results, but yet they are not encouraging and we are forced to the conclusion that specific medication which will effect the bacillus itself is required. This has been brought about by the use of preparations of the tubercle bacilli, and the better results can be credited to this alone as the general management of patients at the Winyah Sanatorium, from which the statistics are taken, has not been altered.

For convenience of comparison we give here the results obtained with and without specific medication since 1888:

(a) In 782 cases treated from 1888 to 1908 without specific remedies there were:

Apparently cured	90, or 11.9%
Improved	238, or 30.5%
Stationary or progressive	454 or 57.6%

(b) In 73 cases which in addition to the usual methods were treated with tuberculin or some of its modifications, the product being derived from the culture fluid upon which tubercle bacilli had been grown to maturity, there were:

Apparently cured	166, or 36.8%
Improved	310, or 42.8%
Stationary or progressive	147, or 20.4%

(c) In 1,503 cases treated with the Watery Extract of Tubercle Bacilli, the culture fluid not entering into the preparation, there were:

Apparently cured	834, or 55.5%
Improved	508, or 33.8%
Stationary or progressive	161, or 10.7%

In our report for 1905 and 1906, mentioned above, were tabulated the results of over 100 other physicians, who had likewise employed the Watery Extract of Tubercle Bacilli in institutions and general practice. Their material comprised 2,183 cases, and the clinical results obtained differ but little from our own. There were:

Apparently cured	1098, or 50.3%
Improved	639, or 29.4%
Stationary or progressive	446, or 20.3%

In regard to the permanency of the results obtained under specific treatment with the Watery Extract of Tubercle Bacilli from 1897 to 1904 inclusively, our inquiry, for the details of which we must likewise refer the reader to our last report, show that of 602 patients traced, after having been dismissed from our care for periods of from two to ten years, there were reported on their discharge as :

Apparently cured 400, and of these had continued without relapse	320, or 80%
Improved 202, and of these had continued without relapse	94, or 46.5%

The object of treatment is to render the organism completely and lastingly resistant to the pathogenic action of the specific bacillus, and as this is a cell function, then the cells themselves must be normal in structure and function or as nearly so as possible. With normal nutrition and without specific treatment we find frequent arrestments of the disease, but these are generally only temporary and followed by extensions; these changing conditions are found to be associated with variations in the amount of immune bodies in the patient's serum, these are formed in response to the absorption of specific toxins derived from tubercle bacilli. In persons badly nourished the natural formation of immune bodies is slow, and there may be even a loss to produce any. Good nutrition checks the growth and multiplication of the bacilli, thus there is a decrease in the specific toxin which leads to the increase in the immune bodies and these in turn become less in amount. Under the stress of intercurrent disease or unfavorable conditions the immune bodies may disappear entirely, and in this case if there are still living bacilli there will be a serious outbreak. If a sufficient degree of immunity could be obtained spontaneously tuberculosis would become a self-limited disease; artificial addition to the immunity is the means at hand.

In cases in which the disease has as yet not caused much degeneration of tissue and in which the nutrition is still good, immunization is readily accomplished, but these cases are not as a rule diagnosed as tubercular, there may be merely slight loss of weight, malaise, etc.; the Calmette or v. Pirquet test will be positive. In cases in which the disease has made considerable progress, if the state of general nutrition is poor we cannot look for results, and even if conditions are favorable enough to permit of the production of a high immunity, it is plain that this is no protection against fatal hemoptysis from an aneurysmal sac in a lung cavity, or from local inflammation due to causes other than the tubercle bacillus, it cannot prevent perforation of a lung cavity or

autolytic changes in caseous material, much less can it enhance or restore nutrition when it is lost.

In the words of the writer the indications are :

"If he concludes that the nutrition can be improved, or, if this is still fair, that it can be maintained, and if the symptoms indicative of progressive softening and suppuration are absent, if there are no serious non-tuberculous complications, then the case may be considered as suitable, and a trial is then not only justified, but is imperatively indicated. Thus we would immunize a patient, if we felt that by the removal of the present recent tubercle and by preventing further extension of the tuberculous process the patient could reasonably hope to recover from the lesions now existing. On the other hand, we would delay specific treatment in cases which, owing to the present softening, pneumonic or other local inflammations, have higher degrees of fever than 100 or 100.5 F. until the excavation is completed and drainage established, or until the inflammatory complications have subsided."

The writer uses the "Watery Extract of Tubercle Bacilli," and has administered ten to fifteen million single doses since 1897, showing its safety; he believes it better in every way than the "tuberculin."

MYOPATHY AND SYRINGOMYELIA.

In the *British Medical Journal*, May 8th, Sir W. R. Gowers has a clinical lecture on these two diseases with description of cases. They have one marked feature in common, the muscular wasting, they are both diseases of development, but while syringomyelia is due to defective structural formation in the spinal cord, whereby cavities are left in the process of development or portions of embryonic neuroglial tissue fail to achieve their change into nerve elements, but remain as tracts of low resistance which break down into cavities. These enlarge by distension and thus cause symptoms. Myopathy or muscular dystrophy, on the other hand, is a defect of muscular growth, not dependent on the nervous system, but inherent in the muscles, by which the fibres fail, sometimes early in life, sometimes later. The interstitial tissue may increase but it is when the fibres are replaced by fat as in the pseudo-hypertrophic form that the muscles apparently increased in size; ordinarily there is a marked wasting of the muscles. It is a disease of males but may be transmitted through the females and it is markedly hereditary. The pseudo-hypertrophic form is the one that appears early in life and the victims usually die before adult age, in the other the disease may appear late and grad-

usually spread. The invasion of different muscles follows no rule; general resistance is usually weakened.

Syringomyelia is evidenced by the loss of cutaneous sensibility to pain, and often to temperature without loss of touch, and on this account it may frequently remain undiscovered for some time after its appearance. In the case shown the distribution of the analgesic areas did not follow any anatomical nerve distribution. The cavities which cause the symptoms are usually situated in front of the posterior horn of the cord, and probably damage the path for pain which crosses in the posterior commissure; sometimes a cavity is situated in the posterior cornu in such a position as to interrupt the nerves after they enter the cord and in this case touch as well as other sensations are altered. The loss of sensation and of power may be sudden on account of the rapid enlargement of some cavity and in these cases the muscles will give the reaction of degeneration.

If the early signs of this disease are recognized the patient should be warned that it is unwise to undertake strenuous exertion or to be exposed to influences which weaken vitality, as progress may be readily accentuated in this way.

CHLOROFORM IN LABOR.

You must withhold the chloroform until the correct time to administer it. The patient will beg for it, pray for it, cry for it, and even try to make those present use force to make you give it. But hold until the perineal stage—latter half of the second stage. This is the time woman suffers the most; large beads of perspiration stand out on her forehead, run down her cheeks, eyes bulging and quivering with pain, the whole form being on a rack of misery. Now take your chloroform inhaler, and place it firmly over your patient's nose and mouth. If you have not the inhaler, use a small handkerchief, saturated with chloroform, or a tumbler containing a piece of blotting paper.

As you feel a pain coming on, sprinkle about a drachm of chloroform on the inhaler, and instruct her to take deep inspirations before the pain reaches its height. The patient will take two or three deep inhalations, and at once the severity of the pain will be lessened. As the pain ceases, remove the inhaler, and then as the next pain comes on replace it, only allowing it to remain during the pain. By this method of administration it will be impossible to give enough chloroform to cause danger. She may cry out just as loud as if chloroform had not been used, but afterward will tell you that she suffered very little, and invariably will thank you for having used it.

Chloroform may be used in the first stages of labor, though when the pains are severe in this stage I prefer hydrate of chloral.

There is danger of having to use chloroform too long when given in the first stage, thereby decreasing uterine force, and predisposing the patient to hemorrhage. The same, perhaps to a less degree, applies to the first part of the second stage of labor. During the perineal stage, or at any stage, the chloroform may be pushed to complete anesthesia—surgical extent if necessary—but in natural labor only to its obstetrical extent. If there are any members of this society who have never used chloroform, try it, and you will be so well pleased that you will use it in every case of labor. You will thereby receive the everlasting gratitude of your patients, and be a blessing to the female sex.—*Gaillard's Southern Medicine*.

DIFFERENTIAL DIAGNOSIS OF PSORIASIS.

Dr. John V. Shoemaker, of Philadelphia, in *Gaillard's Southern Medicine* for February, among other things remarks:—

The diseases of the skin which psoriasis often resembles are eczema, squamosum, syphilis, and seborrhea sicca, but the differential points of these affections with psoriasis are many and decisive. The tabulation will readily assist in making a correct diagnosis.

1. PSORIASIS.

1. The primary lesions begin as a papule, covered with whitish scales.
2. Itching slight, rarely intense.
3. Affected areas sharply defined.
4. Areas occur both large and small, and are usually round.
5. Involves with preference the extensor surfaces.
6. The lesions often remain unchanged for months.
7. Eruptions always dry.
8. Areas are covered with many white scales.
9. The Course is chronic.

1. ECZEMA SQUAMOSUM.

1. The primary lesions begin as an erythematous patch, a vesicle pustule or moist spot.
2. Itching intense.
3. Affected areas gradually fade into healthy skin.
4. Areas are large and irregular.
5. Involves with preference the flexor surfaces.
6. The lesions rapidly change.
7. Eruption usually is moist.
8. Areas are covered with small yellowish scales or with crusts.
9. Course is either acute, sub-acute or chronic.

2. PSORIASIS.

1. History negative.
2. History of rheumatism, gout or gastro-intestinal catarrh.
3. Extensor surfaces of arms and legs nearly always involved.
4. Lesions regular in outline.
5. Scales are shining silvery-white and abundant
6. Itching slight.

3. PSORIASIS.

1. Eruptions in area of entire scalp.
2. Scales dry and silvery-white.
3. Scales consist of epithelial cells.
4. Base of eruption is inflammatory and infiltrated.
5. Eruption also over body and extremities.

2. SYPHILIS SQUAMOUS.

1. History of primary lesion.
2. History of sore throat, syphilitic fever and other concomitant signs.
3. Extensor surfaces of arms and legs rarely, if ever, involved.
4. Polymorphous arrangement of lesions.
5. Scales, dirty yellow and few.
6. Itching entirely absent.

3. SEBORRHEA SICCA.

1. Eruption usually involves the scalp, over the top of the head only.
2. Scales, yellowish, fatty and greasy to the touch.
3. Scales consist of dried sebum.
4. Base of eruption is anemic.
5. No eruption over the body.

OPHTHALMOLOGY AND OTOLOGY.

Under the charge of G. STERLING RYERSON, M.D., L.R.C.S., Edin., Professor of Ophthalmology and Otolaryngology, University of Toronto, and F. C. TREBELCOCK, M.D., Ophthalmologist, Toronto Western Hospital.

OCULAR MANIFESTATIONS OF HYSTERIA.

The syndrome, or symptom complex, which we denominate hysteria, presents such multiform phases, copying at times organic lesions so closely that it oft-times becomes a subject of careful study to determine whether we have to deal with an organic lesion, a pure neurosis, or an admixture of the two; and in endeavouring to settle the question, a careful examination of the eye for disturbed function often furnishes most satisfactory evidence. Inasmuch as the eye, with its adnexa, is the most complex organ of the body, it is good reasoning to expect that these various functions would be disturbed in the numerous manifestations of the condition, and as a matter of fact, this is true, and there appears to

be no function of the eye which may not at sometime be modified, or altogether abolished, in the course of an attack; and on the other hand, there are very few cases of hysteria in which some ocular manifestation is not present.

I. Anesthesia of the eyelids, the conjunctiva, the cornea and the retina, which latter may be either for light, form or color.

II. Hyperesthesia of the skin of the lids, of the conjunctiva, cornea, retina and ciliary muscle.

III. Disturbances of the motor apparatus, as spastic convergence, conjugate deviation, blepharospasm and ptosis.

IV. Disturbances of accommodation and pupil reaction, as cyclospasm, cycloplegia, myosis, mydriasis, alternating myosis and mydriasis, unilateral mydriasis, paradoxical pupil reaction and exaggerated hippus.

V. Unclassified visual disturbances, as central scotoma for light and color, peculiar effects of red on vision and fields, monocular diplopia and polyopia, micromegalopsia, monolateral amblyopia and amaurosis, disappearing in binocular vision and monocular achromatopsia, disappearing in binocular vision.

ANESTHESIA OF THE SKIN AND MUCOUS MEMBRANE.

In many of these cases, the examination of the skin of the eyelids, as to their sensibility, is of value, and the anesthesia of the lids may be monocular, or the lids of both eyes may be insensitive, and this insensibility may be confined to the area of the eyelids, or may extend more or less to the surrounding skin.

With, or independently of, the mucous membrane of the palpebra and of the bulb, the cornea is found more or less anesthetic. For some reason the conjunctiva of the left eye appears much oftener anesthetic than the right, and the ocular conjunctiva than the palpebral; though it may be universal in one or both. Perhaps I should not have said universal, for the area over the pupil does not appear free from sensation; though, Paranaud states as his belief that it is more the sight of the object over the pupillary area which causes the lid reflex, than actual sensation.

ANESTHESIA OF THE RETINA.

Anesthesia of the retina manifests itself by impaired vision. It is not the purpose of the writer to discuss just where, anatomically, this disturbance resides; whether in the retina, the cortical visual centers, or elsewhere; as a matter of fact, the retina is the organ believed to be disturbed, though many competent observers consider it to be central. This impairment of vision presents various characteristics. An amblyopia, or reduced vision, is common, and this may be monocular or bin-

ocular, may be simple reduction of acuity of vision, or the loss may be absolute. In cases of recent loss of vision, without evident ocular lesion, it is often interesting to note the rapid improvement which is obtained while trying various weak lenses. The initial vision may not be more than one-tenth normal, though inside of ten minutes by the use of a series of weak lenses—and it makes little difference what you use—the vision may become normal finally, by the use of a plain glass. This discovery has been responsible for much concern on the part of many an inexperienced refractionist.

CONTRACTION OF THE FIELD OF VISION.

With the reduction of the acuity of vision, or independent of it, is often a contracted field which is denominated concentric. This statement is correct if one refers to the center of normal vision, but if referring to the center of a normal field, it would not be concentric. Therefore in speaking of concentric contraction of the field of vision in hysteria, it is understood that the length of the radii toward the periphery from the point of fixation, are practically uniform. This contraction may be moderate at first, but often the field becomes smaller and smaller, until but a very small central field remains; and even this, as stated above, may be lost. This statement refers to light and form. A somewhat singular condition exists in these cases with greatly reduced fields, in the fact that, though in the taking of the fields in the usual manner, it is found to be so much reduced that an ordinary individual would have much difficulty in getting about, the hysterical patient seldom has much trouble from running against objects which appear out of the field of vision. Various explanations have been offered for this; among them is that of Wilbrand, who thinks that the outer portions of the retina are not so completely anesthetic that they cannot see larger objects, while the small test object usually used produces no retinal impression.

EFFECT ON COLOR VISION.

In reference to color vision we have some especial disturbances. A concentric limitation of color vision—a dischromatopsia—for all colors is often seen; indeed, this contraction of color fields *may* be so complete that no colors are observed—an achromatopsia, and this, like the vision for light and form, may be either monocular or binocular.

BINOCULAR VISION WITH ONE BLIND EYE.

Hysteria is a most peculiar condition, and one of its especially peculiar symptoms is the ability with one hysterical blind eye, to get

binocular vision with both eyes uncovered. This condition is easily discovered by placing a five or six degree prism, base up or down, before one eye, when the patient will see double, and this applies as well to monocular color blindness as to the loss of vision for light and form.

INVERSION OF THE COLOR FIELDS.

Another abnormality of the color vision is what is known as "inversion of the color fields." This expression is not essentially a correct one, for the reason that it takes into account only two colors, viz., blue and red. In taking the color fields, the colors commonly used are blue, yellow, red and green, and from without in, their normal relations are as above. This inversion is manifested by finding the field for red larger than that for blue, which normally has the larger field. Now this inversion may be produced by a contraction of the field for blue, while the field for red remained stationary, or by an expansion of the field for red; indeed, the red field may be found to exceed the field for white when the latter is contracted. There are other peculiarities in reference to the color red, which will be discussed later. In taking the color fields with the perimeter, it is not unusual to find them holding their normal relations in some parts of the field, while in others, the red will be found to extend to considerable distance outside the blue, but a true inversion of all of the color fields does not occur in any condition. In finding this color field inversion in a case, the investigator must not jump at once to the conclusion that he has a sure case of hysteria to deal with; as this is quite the proper arrangement of the color fields in retinitis pigmentosa, which also has a concentric limitation of the fields for form and light; and the same statement holds true in some cases of quinine toxemia; also in nitrobenzol poisoning and in xerophthalmos. This condition—hysterical amblyopia—may be illustrated, in some of its phases, by a single case from the writer's records. January 31, 1900, Miss K., aged 18, complained of dread of light, with no inflammatory condition apparent. Two days later, vision reduced to one-fifth normal, field for form to one-half and all sense of color appreciation lost. Various worsteds in Holmgrens set appeared gray, varying only in shade. Three days later vision reduced to one twenty-fifth, or counting fingers at eight feet. Field for form reduced to 15° to 20° , and has some trouble in getting about the house, and no colors seen. The next two years of this young lady's life were spent in getting better and getting relapses, not allowing herself to be treated at one time sufficiently to regain either vision or health, when she again came under treatment sufficiently to regain both, since which she has had no more ocular manifestations of the trouble, so far as I am aware. In certain cases of retinal anesthesia amounting to complete loss of vision in the region of the macula, as well as the general field, the

pupillary light reflex is left intact. Now complete loss of vision in both eyes is practically always due to destructive lesion of the optic nerves or tracts, and in lesion of this character, the pupil light reflex will not be preserved; therefore, a blind patient, with the preservation of this reflex, particularly if without apparent fundus lesion, is practically always a hysteric.

HYPERÆSTHESIA.

As stated above, this form of heteræsthesia is much less frequently observed than the anesthetic form. This condition is manifested by small areas about the eyelids, or conjunctiva, of more or less acute hypersensitiveness. These, in the absence of neuralgia of nerve trunks, are considered by Schwartz as characteristic of the condition. Hyperæsthesia of the conjunctiva and cornea are occasionally seen, and are usually accompanied by amblyopia, increased flow of tears, and often with blepharospasm. In certain cases, a considerable degree of dread of light is observed, which has been called variously, hysterical kopiopia, painful accommodation, and retinal hyperæsthesia. The simple dread of light, of itself, is far more frequently a symptom of ocular inflammation than of hysteria; yet in cases in which there is no inflammatory condition, and associated with other suspicious signs of hysteria, this, with a profuse lachrymation, deserves consideration. In cases of hyperæsthesia of the retina, it is not uncommon to find the fields for form, light and color enlarged; the fields for color may retain their normal relations, or the red may be found to exceed the blue, and at times, even the limits for white.

HYPERÆSTHESIA OF THE CILIARY MUSCLE.

Painful accommodation, or hyperæsthesia of the ciliary muscle, is another form of hypersensitiveness of the eye which is often associated with this condition; but inasmuch as it, also, is a symptom of inflammation, of itself it has little value as a sign of hysteria.

DISTURBANCES OF THE MOTOR APPARATUS.

Of the disturbances of the motor apparatus, spastic convergence is the most frequent. This condition, when observed, is one of the most positively diagnostic symptoms of hysteria; and consists of a fixed condition so far as the muscular relations of one eye to the other are concerned; *i.e.*, when an object is approached from the distance it is seen double until it reaches a certain point, say fifty centimeters, when it is seen single; if brought nearer it is again seen double, showing the inability of the subject to converge or diverge from a given point. Occasionally this symptom—spastic convergence—is an *early* sign of an attack of hysteria. Another motor anomaly is seen in spastic conjugate devia-

tion, when both eyes look either to the right or left. Inasmuch as this is a symptom seen in irritation of the cortex of the brain in the motor area, in uremic convulsions, as well as in cerebral hemorrhage, these conditions must not be overlooked in the diagnosis. Another hysterical motor disturbance is blepharospasm, which may be either clonic or tonic. The clonic form is manifested by a more or less constant trembling of both eyelids which does not disappear, even in sleep. The tonic variety is usually monocular in which the orbicularis is in a state of tonic contraction, throwing the skin of the lids and surrounding region into folds; in fact, the muscles of the face often participate to a marked degree in the spasm. In endeavoring to open the eye by lifting the lid with the finger, one meets with marked resistance, and if the patient attempts to open them by his own efforts, the only effect noticed will be a trembling of the lids, without any particular separation of them. This contraction may be, and often is, accompanied by pain, though it may be painless. Blepharospasm is usually associated with anesthesia of the skin and conjunctiva, by dischronatopsia, and at times with asthenopia. Finally there may be a ptosis, or as it is usually called, a pseudo-ptosis, when the patient is unable to raise the eyelid. It will be noticed in these cases, that the eyebrow is lower on the affected side than the opposite, and if the fingers attempt to raise the lid, more or less resistance will be felt.

DISTURBANCES OF ACCOMMODATION AND PUPIL REACTION.

Hysterical cyclospasm is a condition difficult to duplicate in any other disease, and consists in a tonic spasm of the ciliary muscle, which gives the patient distinct vision only at one point, or at least a very short range; *i.e.*, the patient will see his best at, say sixty cm., but if the test object be moved much nearer or farther, the object is much blurred: and in case the patient has not discovered his point of distinct vision, thinks he can see nothing clearly, as both his distant and reading points are out of focus. In a suspicious case of this character, the condition is easily discovered by taking a fairly large test object, and gradually receding from the eye till a point is reached where the vision is best, often fairly good. Now there are cases in which instead of cyclospasm, a cycloplegia is found, the patient having no power of accommodation at all, and oftentimes closely resembles the post diphtheretic form. Either the cyclospasm or the cycloplegia, may be one, or both sided, may be equal or of varying degrees. Associated with cycloplegia is seen a paralysis of convergence, in which case the patient gets double vision, as well as blurred vision, at near points. Spasmodic contraction of the pupil, or spastic myosis, has been recorded in a few instances, but according to de Schweinitz, is probably one of the rarer ocular manifestations of hysteria; on the other hand, hysterical mydriasis is one of

the more frequent symptoms. This may be monolateral or bilateral, and is particularly apt to occur with cycloplegia and paralysis of convergence, though instances of its independent occurrence are numerous. Again, there may be alternating mydriasis and myosis, and according to Lagovides and Blok, either of these may occur intermittently, with normal sized pupil in the interval, and in all these cases the pupil will be found to react to strong light stimulus. Paradoxical pupil reaction is a symptom of rather frequent occurrence. Binswanger believes that this "should be regarded chiefly as an expression of a pathological perversion by virtue of which physical processes are more easily transmitted to the movement of the pupil than under normal condition." By paradoxical pupil reaction is understood, that instead of obtaining a contraction of the pupil by light stimulus, the reverse takes place, *i.e.*, the pupil dilates in the light, and contracts in the dark. Another abnormal condition of the pupil seen in hysteria is what is known as exaggerated hippus. Now when the normal pupil is observed under uniform moderate illumination, it does not assume and remain at a uniform size, but is almost constantly varying, not greatly, but moderately dilating and contracting. This condition is known as hippus, and is a normal condition in young and middle life; but in the hysterical it is seen to make fairly wide excursions, so much so, as to be quite noticeable to the casual observer. This condition has also been observed in certain forms of insanity, but this fact would not be likely to confuse the diagnosis.

UNCLASSIFIED VISUAL DISTURBANCES.

In addition to the above, there are a certain number of unclassified symptoms which deserve notice, among which is a central scotoma. Now as this is an almost constant sign of toxic amblyopia, one should be on his guard, particularly when occurring in a female, in the absence of any history of toxic influence. A case of this variety from my own records, was a girl of eighteen. She had the central scotoma, the loss of central color vision, while the peripheral field for color and form was not greatly affected. The condition was binocular, and but for the lack of characteristic fundus changes, was a complete picture of toxic amblyopia. In this case, no cause for toxemia could be found; and the usual remedies for toxic amblyopia had little effect, but she did recover rapidly under the use of galvanism locally. There are some peculiarities in reference to the color *red*, in the hysteric, which do not pertain to other colors. In the so-called inversion of the color fields, instead of finding the limits of this color between the blue and the green, it is found outside of both. In the contraction of the color fields, it has the largest, as a rule, to the last, and it may be found outside the white, and often the last to disappear in the achromatopsia of this condition. It is frequently the first to

appear on the return of color vision, though I have in mind a single case in which the first color seen after a period of achromatopsia, was pale green. In a certain number of cases tested with the electric light of a photometer, in a portion of the field where the white light was not seen, a superimposed red glass brought out a luminous impression; in some of the cases it was red, but often it was not, but simply an impression of some object in the field. It would appear, therefore, that red might be considered the favorite color of the hysterical, though there are a few recorded cases in which red has produced painful impressions, in fact, a form of chromatophobia. In many cases of hysteria, the symptom, monocular polyopia, is one of the most interesting. Certain cases in this condition get double vision, and others three objects are seen with one eye. This is not a symptom of which the patient is likely to complain, for with binocular vision, these multiple images do not appear prominent. In searching for this symptom, as in all other examinations of the hysterical, one must avoid any question which is likely to be suggestive to the patient, and he should not ask whether he sees more than one test object, but rather to describe the appearance of the object seen. In these cases there will be a point in his line of vision where the object—and Paranaud recommends a small object like a match—will be found to be seen single, but approached or receded from this point, will appear double. Now if the object is brought nearer, and a plus lens used, the object is seen single at once; if receded from the point of single vision, a minus lens will have the same effect. Inasmuch as these cases are always seen with cramp of the ciliary muscle, and as a rule, with spastic convergence, it is believed by Paranaud that the polyopia is caused by irregular contraction of the ciliary muscle upon the various sectors of the lens, resulting in the projection upon the retina of two, and sometimes three, images. However, there is one case on record, reported by Roder, which Paranaud quotes, in which the double vision continued under the full effect of a cycloplegic, and was considered by the reporter as being caused by cortical disturbance. Another symptom brought out by Paranaud some years since, and which he called micro-megalopsia, is one in which the apparent size of the object, when brought near the eye, looks magnified, but when withdrawn from the eye, rapidly becomes smaller, till its apparent size is much less than it should be, when seen at a given distance, *i.e.*, the individual realizes that the object, a pencil, for example, appears larger or smaller than it should be at the distance at which it is observed. The lachrymal apparatus also comes in for its share of disturbance in certain cases of hysteria. This, however, does not include the paroxysms of weeping seen in the condition, but appears to be simply an abnormal lachrymal flow without any other apparent emotional disturbance.

SUMMARY.

It is not the intention of the writer to discuss all of the ophthalmic evidences of hysteria in this communication, but only those which should be borne in mind in a suspicious case, or in cases in which there is a question in the mind of the diagnostician as to which of two or more conditions he has to deal. The symptoms which I would especially urge to be kept in mind are, first, the anesthesias, manifested by loss of sensation in the eyelids, the conjunctiva, and the cornea, by concentric limitation of the field for light and color, by amblyopia, achromatopsia and the so-called inversion of the color fields. Next I would place the disturbances of accommodation and pupil reaction, including the approaching and fixation of the far and near points. This, together with spastic convergence and they are frequently seen in conjunction, may be considered pathognomonic of this condition; while cycloplegia, with or without mydriasis, in the absence of some known cause, is an important sign. While the other more or less numerous symptoms found in this condition are valuable, the above well looked for, and found, will decide the diagnosis in the vast majority of cases. I said well looked for, for the reason that many of the symptoms would never be mentioned or complained of by the patient, were they not sought for by the medical attendant. As stated early in this article, the marvelous way in which this condition is capable of copying other diseases, renders it highly important that the diagnostician should be ever on the alert, and when this condition is suspected, settle the matter as soon as possible, and avoid embarrassing complications, for his own sake, as well as the object of his solicitations.—W. H. Dudley, M.D., Los Angeles, California, in *Southern California Practitioner*.

 LARYNGOLOGY AND RHINOLOGY.

Under the charge of PERRY G. GOLDSMITH, M.D., C.M., Fellow of the Laryngological and Rhinological Society of Britain, Assistant Laryngologist and Rhinologist, Toronto General Hospital.

MALFORMATIONS OF THE NASAL SEPTUM.

J. P. Lewis (*Medical Record*, May, 29th), first discusses nasal obstruction from the physical standpoint. The importance of the turbinated bodies in warming, moistening, and filtering the air is mentioned. Interference with the Physiological Process affects the normal exchange of oxygen and carbon dioxide, diminishing the oxygen and increasing the carbon, thereby retarding the normal metabolic processes and lowering the resistance by decreasing the activity of the leucocytes. The result is anemia, debility, and so forth, while indigestion may also be due to the swallowing of pharyngeal secretions.

Since the production of the overtones gives the spoken and singing voice its musical character, and as the overtones are largely produced in the nasal cavities, it is obvious that imperfect nasal channels at once affect the quality of the voice.

The old factory function of the nose is to be regarded ^{the} next in importance! The olfactory nerve is distributed over the superior turbinate and corresponding portion of the septum; the air, therefore, must pass over this area to produce an action on the nerve endings, and here again it is evident that an obstruction to this current would render the patient anosmic.

He next discusses some of the various theories advanced to account for deformities of the septum. He first considers the irregular development of the facial bones, the result either of over development of the vomer whereby it requires more room than is present, or failure of the high arched palate to descend, delayed eruption of the incisor teeth which may render the high palate hard, is also a factor. Traumatism is as frequent a cause as we have hitherto been led to believe.

The symptoms most generally met with in connection with septum deviations are: (1) A sense of stuffiness in the nose, low down when the inferior turbinal bone is pressed upon, higher up over the bridge when the middle turbinate is affected. (2) Pain frequently complained of the frontal region, bridge of the nose, and inner angle of the orbit being the usual seats. (3) Irritation of the ethmoidal and frontal sinuses which is sometimes accompanied by dizziness. (4) Asthma is sometimes due to irritation caused by the deformity. (5) An increased nasal secretion is usually present, the secretion being thick and mucoid in character when the mucous membrane is inflamed low down, or sometimes thin and acrid and may become purulent when the sinuses are affected. (6) Post nasal catarrhal inflammation is present when the nasal obstruction prevents the drainage of the secretions and they flow back to the epipharynx. (7) When the obstruction is well forward or low down nasal respiration is usually obstructed. (8) Epistaxis due to the formation and separation of crusts which collect where the dust-laden air impinges on the prominent part of the deformity. (9) The presence of pus in the olfactory fissure, and simple dry rhinitis on the unobstructed side. (10) Acute and chronic inflammation of the sinuses, acute and chronic otitis media, chronic catarrh of pharynx and larynx, trachea, or bronchi, nasal neuroses, and polypoid degeneration of the nasal mucosa.

Various operative procedures are next considered, but the sub-mucous resection he suggests has largely superceded all others in that it may be applied to any deviation and its results are perfect. This consists essentially in the elevation of the perichondrium and periosteum on

both sides of the septum, as practised by Hajek and Killian, which may be supplemented by an anteroposterior incision according to Freer, if occasion arises. The obstructive portions of the cartilage and bone are then removed without injury to the mucous membrane and the flaps allowed to fall into apposition, being held by suitable packing for 24 to 48 hours, healing taking place by first intention.

Probably one of its greatest advantages is the comfort to the patient with the absence of nasal splints and short convalescence. The disadvantages are the length of time and difficulty in performing the operation with corresponding shock to the patient. (This operation is probably not the one of election in children and the reviewer is strongly of the opinion that the Roe operations are best adapted for this class of cases.)

Some of the various crushing operations will still doubtless be employed on account of the simple technique and lessened shock to the patient. Still, as the chief disadvantages of the sub-mucous operation may be in a considerable measure controlled by the operator, it seems probable that they will continue to be less prominent as improved technique is developed.

ADENOID HYPERTROPHY DURING THE FIRST YEAR OF LIFE AND ITS TREATMENT.

In a paper read in the section of the diseases of children of the American Medical Association, June, 1909, R. G. Freeman, New York, draws attention to the frequency of adenoids in early life. He draws attention to the fact that they interfere with the proper development of the child by reflex action and interference with breathing. The small size of the post nasal pharynx during the first year admits a small adenoid which at this period will cause obstruction. Snuffles are one of the commonest results during the first year of life, recurrent colds are also associated with it. He speaks of cough as being of very common occurrence. Otitis media is frequently present and due to the obstruction in the naso pharynx.

Acute adenoiditis frequently associated with head cold and rapidly disappearing, responds best to syrup of iodide of iron. For a chronic enlargement he advises surgical measures only, and this without an anæsthesia. In cases owing to family reasons an anæsthesia must be given, he prefers nitrous oxide given only to produce primary anæsthesia.

In the discussions which followed, Dr. John Lovett Morse, Boston, made the following remarks: "The members of the section probably

remember that I read a paper on this subject two years ago. I want to emphasize again the fact that the symptomatology of adenoids in infancy is not that of adenoids in childhood. The symptoms in infancy are snuffles, repeated 'colds,' irritating cough at night, difficulty in nursing and otitis media. I believe that adenoids should be removed whenever they cause symptoms, no matter how young the baby is. I have seen them cause symptoms in babies only a few weeks old. I do not operate myself because I believe that the operation demands the skill of a specialist. I disagree entirely with Dr. Coit and think that the operation should be performed by a man who is in the habit of doing these operations. I do not find that the specialists are unduly anxious to operate; in fact, my difficulty in Boston is to find men who are willing to operate on these babies for me. They object to operating on young patients, and it is very difficult to make them appreciate how much harm adenoids may do in infancy. It is not recognized how frequently otitis media in babies is due to adenoids. A baby may have repeated attacks although the adenoids are very small. In fact, it is possible to overlook them in these cases unless a very careful examination is made."

(Inability to nurse owing to nasal obstruction has also been found to be due to adenoids.)

P. G. G.

TORONTO ACADEMY OF MEDICINE.

ACADEMY OF MEDICINE, 12 OCTOBER, 1909.

MYOCARDITIS.

Dr. J. F. Fotheringham opened the discussion on "Myocarditis." He said there were three sets of cases. Those with abundant symptoms and signs wanting, signs abundant and few symptoms; and those where both were present. In some cases of toxic conditions there may be symptoms and few signs. In a man of mid life, say with hard arteries, there may be signs and few symptoms. Later, there may be an apoplexy. In the later cases there are usually both signs and symptoms.

The importance of heart lesions other than valvular disorders had been overlooked too much. Myocardial disease may be acute or chronic. The acute forms are usually of an infective origin. Diphtheria, typhoid fever, scarlet fever and acute rheumatism are among the diseases that cause acute myocarditis. Influenza is very liable to cause it. So many variola and gonorrhœa. The toxins cause parenchymatous changes on the heart muscle. There may also be small emboli. The coronary arteries may be

thrombosed, and the heart muscle fail. This may cause aneurism of the heart.

The chronic forms of myocarditis are from intrinsic or extrinsic causes. The intrinsic causes are from coronary sclerosis, heart strain, and valvular lesions. Strain causes dilatation and lessens the effectiveness of the heart's action. There may be some hypertrophy to overcome this to some extent.

The extrinsic causes of myocarditis are the mode of life, as the busy man who eats, drinks, and smokes too much, and adds weight to burden the work of the heart. Beer is very bad for such cases. The effects of chronic intestinal auto-intoxication, and chronic suppuration, as in cholelithiasis must not be forgotten. The chronic anæmias, as in cancer, may cause myocardial changes. The collapse in such cases may come on very suddenly.

One of the early symptoms is a change of rate, either quickening or slowing. The latter may be very serious, if there be intermittent beats. There may be pain. This may come on suddenly on making exertion, or going in for a swim. Dyspnoea is a feature of most cases of myocarditis. Along with this there is likely to be a good deal of œdema.

Dr. Anderson took up the topic of ruptured compensation. He asked what is meant by ruptured compensation, how caused, its symptoms, and how far can it be treated?

The heart is a good motor, as it can do only a small amount or a very large amount of work, in a given time. The heart has a great amount of reserve power in its muscle tissue. The heart muscle cells have the power to produce a stimulus that acts upon themselves and cause them to act. It is amenable to stimuli brought to it. It has also conductivity, elasticity, and tonicity. For the proper performance of these functions there must be sufficient supply of blood. Cardiac failure may be caused by derangement of any one of these properties. The cardiac muscle may be strengthened by exercise. The heart has a relationship to the size and development of the skeletal muscles of the body. The heart may also have a certain size according to the weight of the body. In other people the heart may not be as large as it ought to be, because they have poor muscular development, and the heart may not be as large as it ought to be.

In the causation of heart failure, or rupture of compensation, the drain upon the heart is too great. There is an overdraft.

The conditions that reduce the reserve power must be considered, and the causes that give rise to too much work on the heart already in a weakened condition.

The heart muscle is weakened by poisons, as alcohol, tea, etc., and the coal tar products. Then exhausting conditions as anæmia are important factors. More attention should be given to the acute infections, as the heart muscle suffers in most cases, and this should be assumed in all cases. In post-mortems the myocardium is found to be diseased in very many examples of death during these diseases. Influenza is the most important of the acute infections in causing degeneration in the cardiac muscle. If to this be added the use of the coal tar products, the condition may be made very serious. Over exertion is a cause for failure, and in one with a weak heart, exertion may prove very disastrous. Worry, extending over many years, is a common cause of heart breakdown.

The symptoms are very important. The gastro-intestinal symptoms are common, such as indigestion, flatulency, and pain over the stomach. These cases may not show much that would direct attention to heart, and yet death may be sudden.

Then the appearance of dyspnœa, shortness of breath, inability to keep up exertion, etc., are early symptoms.

In the treatment, the aim must be to keep up the reserve force of the heart. Rest is the first and foremost therapeutic agent. We must see that the patients get enough sleep. The good effects following the use of morphia is due to the sleep secured. Alcohol, tobacco, etc., must be cut out. The diet must be plain and good. It should be more proteid than carbohydrate. Flatulency should be avoided by care in diet. The bowels must be regulated. Baths and massage have their place. In baths Dr. Anderson had not much confidence. By the removal of the œdema and dropsy much good is done. Punctures of the legs and purgatives are useful. The most valuable drug is digitalis. This is specially so in loss in tonicity with dilatation. In failure of conductivity digitalis may be dangerous. It is most useful in valvular lesions. When there is still a good deal of healthy muscle fibre digitalis is good. Morphia is valuable in some cases. The nitrites are of little value. The iodides may do good in cases with a syphilitic history.

Mr. V. E. Henderson took up the actions of drugs on the heart muscle. This is now becoming better understood than formerly. In the toxæmias the heart may be impaired but will still respond to the action of some drugs. Digitalis and caffeine may act quite well. In severe cases with frequent pulse, and dilated heart, there is no use administering digitalis. Caffeine increases rapidity and should not be employed in such cases. Adrenalin may be used in some of these cases by the intravenous method. Barium chloride now promises good results. It may be given intravenously. It acts on the heart muscle directly.

Even when there is dilatation with rapid pulse and low tone, the heart may still have normal rhythm. In these cases digitalis is of value.

The use of digitalis may not restore the heart to normal rhythm, but may restore it to normal rate. In instances where there is a loss of irritability caffeine is valuable. In some cases of the nervous type bromides and chloral may do good. When there is a deficiency in conductivity caffeine is valuable. Amyl nitrite lowers peripheral resistance and the heart may be able to do its work.

Drugs which dilate peripheral the vessels contract the coronary arteries and vice versa. The inference is that drugs which decrease arterial spasm are indicated in angina. In bradycardia the irritability of the heart is low, and caffeine is of value. Chloral also in its early action is of importance in increasing the quality known as cardiac irritability.

Dr. A. McPhedran said the subject was a large one and could not be discussed from all points of view in one evening. He was not in favor of the treatment of heart cases as he saw it at Badnaheim. He agreed with the importance of rest and the danger of making sudden exertion in cases of myocardial disease. He objected to the term ruptured compensation. The failure was gradual.

Dr. W. H. B. Aikens said he had seen a good deal of the both, and exercise treatment under the Schott method at Badnaheim and had seen much good from them. In speaking of rest he quoted a celebrated writer that rest of body, rest of mind, and rest from the pharmacopœia was a triple alliance that would bring much peace to the heart.

Dr. Graham Chambers emphasized the danger of myocardial disease in acute infections. He also spoke of the danger of making sudden exertion. A heart which might stand a good deal if tried carefully, might break down unexpectedly if tried suddenly. He thought that digitalis might be used for the purposes of aiding in diagnosis. If the heart responded to its use there was in it a fair amount of good muscle tissue.

Drs. Fotheringham, Anderson and Henderson replied. In answer to a question by Dr. J. Ferguson, Dr. Fotheringham said he thought the use of digitalis for diagnostic purposes would be dangerous practice, and might in some instances of myocardial disease give rise to serious results.

A doctor with good experience and testimonials wishes the position of assistant or *locum tenens*. Apply CANADA LANCET.

AMERICAN PROCTOLOGIC SOCIETY.

ELEVENTH ANNUAL MEETING, HELD AT ATLANTIC CITY, N. J.,
JUNE 7 AND 8, 1909.

The President, DR. GEO. B. EVANS, OF DAYTON, OHIO, IN THE CHAIR.

PRESIDENT'S ADDRESS.—"PROGRESS IN PROCTOLOGY."

The President, Geo. B. Evans, A.M., M.D., Dayton, Ohio,

Who stated that not many years since, the creation of Proctology as a specialty was frowned upon; for an indefinite period what was known of and what was done for diseases of the rectum was largely empiric, and not due to special knowledge or scientific study.

A few of us, at least, can remember when it was the rule among general practitioners to make no special effort to determine the pathology of diseases of the rectum; in fact, it was believed unbecoming the dignity of a high-classed, high-toned medical gentleman to so lightly esteem modesty as to ask for the privilege of seeking the naked truth. Without attempting to make a diagnosis, opium and lead wash, with catharsis, was deemed sufficient treatment for any case. Little was taught in medical colleges of these diseases, for little was known and no special desire to learn much concerning them seemed to exist. But, fortunately, in the natural evolution of this specialty, this ignorance and indifference in the main, has been eliminated, and this field of work has assumed that of an accredited, and justifiable specialty. No longer do we have to contend with the non-recognition of serious pathology, because of interposed modesty, ignorance and criminal indifference. A knowledge of the importance of being able to diagnose and treat intelligently diseases of the rectum is now considered essential for every general practitioner, and all this as a result of the creation of proctology by men who have made special effort to develop this field of work. The credit is due to such men as Adler, Allingham, Ball, Gripps, Edwards, Earle, Gant, Martin, Pennington, Kelsey, Matthews and others. To them are we indebted for progressive proctology.

As a matter of course, our pathology of this area is of necessity a modern pathology, and our knowledge of valves, varicosities, neoplasms, ulcerations and suppurations, are not based on hypothetical ideas of a quarter of a century since, but instead on the rather exact revelations of laboratory findings. The import of the presence of staphylococci, gonococci, colon bacilli and tubercle bacilli, is equally of as much importance to the rectal surgeon, as is the microscopical proof of the malignancy or benignity of a bit of tissue. With what greater assurance the proc-

tologist approaches examinations of rectal diseases than did the physician of some years since. With a wide open field, if necessary, the aid of anesthesia, the protoscope and the laboratory, there is usually not much difficulty in making a diagnosis,—a diagnosis inseparably linked with its dependents,—treatment and prognosis. Under the influence of progressive proctologic work, ignorance and indifference to the recognition and treatment of rectal diseases is rapidly disappearing from the average medical man, as well as from the average layman. As a result of which the sum total of human suffering is immeasurably lessened, and individual existence is not so frequently abridged. The victims of rectal diseases are to be congratulated that this branch of science, or pseudo-science, has sufficiently advanced, that it now occupies the serious attention of the most progressive and intelligent men. The Lister methods of that day have been so changed and improved that they now seem very crude. The value of thorough cleanliness, asepsis, and the antiseptic influence of certain drugs, is of immeasurable value. It is now understood that the recto-anal area can be placed in a surgically clean condition, and that there need be no fear following operative interference. In not a few instances, it obtains that relief is dependent on rectal surgery, when the subjects are unfit for narcosis produced from a general anesthetic, in cases of cardiac, pulmonary or nephritic disease, making it hazardous to use general anesthesia. Sometimes it would seem that this danger of the uses of an anesthetic is too lightly thought of, and consequently, the mortality rate is increased. Local anesthesia, under cocaine infiltration, for the most part, is satisfactory, and is a great convenience to the operator and a life-saving narcosis in many instances.

The palliative treatment of hemorrhoids by proctologists is largely a matter of enforcement, viz. : where they are not permitted the opportunity to relieve by radical methods. The operative methods of removing hemorrhoids are so well understood, simple and effective, that it is foolish to attempt to relieve them by drugs or palliative measures.

The Allingham, or ligature method, when correctly and carefully performed, is generally applicable, but is not so free from pain and so quickly convalesced from as the clamp and cautery method. Many regard the last mentioned method as the one to be preferred. I believe, however, that the enucleation method approaches nearest to the ideal in results, and that the retention of the plug is not so painful as some would have us believe.

Protoscopic examination is of importance, and is a distinct advance in rectal work. It is of great assistance in determining disease beyond discovery by ordinary methods. It is of distinct service in diagnosis, and of great value in aiding treatment in not a few conditions.

There is more hope for the ultimate cure of tubercular conditions; our better understanding of what environment means to these people will go far toward helping them to recovery, and there is not much reason for a delayed recognition of the condition, which is of paramount importance.

I believe there is possibly a better understanding of syphilitic conditions, ulcerations, infiltrations and strictures, but the eternal dependance on anti-syphilitic treatment to resolve hyperplastic tissue is not so conspicuous, and progressive workers in this field realize that incision and excision are often necessary.

Concerning malignant and benign growths, the surgical rules that apply in other anatomical regions apply here. Early discovery and early removal is the only hope, as we all know, in malignant conditions, and as an advance, the removal of cancerous growths not within easy reach from below may be dealt with from above, or supra-pubically, and just here it may not be inopportune to remark that it is to be believed that ere long it will be realized by the average physician that the removal of the rectum per se, is not as disastrous a matter as it is sometimes made to appear, especially since it is known that muscular transplantation will preserve more or less perfectly the function of the sphincters. The development of the technic essential to produce sphincteric power, will relieve rectal extirpation of one of its most unpleasant features and render less hesitant many sufferers who should have the benefit of the operation.

Another matter of progressive interest is that colonic or rectal ptosis is amenable to intra-pelvic or intra-abdominal fixation, bringing relief that in some instances cannot be hoped for by any other method of interference.

After all, the most encouraging sign is that the profession recognizes the fact that proctologists have a legitimate right to exist as specialists, and that diseases in the ano-rectal region deserves the same consideration as elsewhere. With the elimination of indifference, estheticism, modesty, the more universal belief in the necessity of early examination and diagnosis, we can but hope for greater progress and more relief to suffering humanity.

Gentlemen, when I consider the personnel of this Association, I am quite confident of the perpetuity of proctology as a distinct entity and am equally sure the progression in this special field of work will be in keeping with that in other specialties.

“A REVIEW OF PROCTOLOGIC LITERATURE FROM MAY, 1908, TO MAY, 1909.”

By SAMUEL T. EARLE, M.D., Baltimore, Md.

Among the interesting conditions referred to in the review by the author were the following:—“Congenital Idiopathic Dilatation of the Colon”

(Hirschsprung's Disease). In Dr. Finley's report of his case he reviewed the literature of the subject to January 1st, 1908, and collected some two hundred and six cases, after which he stated that while to Hirschsprung belongs the credit of having first called attention to this disease, a number of cases had been found in the literature antedating his classical description. In the article Dr. Finley discussed the various hypothesis as to the etiology of the disease and some ten theories, which have been suggested from time to time, as the causation of the malady, including that of hypernutrition, which was the author's principal theory. His conclusions as to the etiology of the disease were that no one theory apparently explained every case; that each one explains some.

The symptomatology was described and a complete clinical picture of the disease given with a list of a series of cases discussed in the Johns Hopkins Hospital,—eleven in all. Regarding the treatment, the author concludes that no one plan seems applicable in all cases and suggests the method employed in his own case as perhaps the one most applicable to the large proportion of case, to wit,—a preliminary enterostomy; then a colo-colostomy some months subsequently; finally a complete excision of the affected portion. The artificial anus is left open until after the success of the preceding steps are assured when it should be closed under cocaine anesthesia.

Dr. Earle in his report alluded to another case of "*Idiopathic Dilatation of the Rectum and Colon as far as the Hepatic Flexure,*" which was reported by H. Morley Fletcher, M.D., and H. Betham Robinson, M.S.* (*Clinical Society's Transactions, Vol. XL. p. 80.)

Another case of interest reported was that of a "*Sarcoma of the Rectum in a boy,*" aged ten years, by Cecil Rountree.* (*Proceedings Royal Society of Medicine, February, 1908.) The pathological examination showed the tumor to be a mixed cell sarcoma. Of five hundred and ninety-six cases analyzed in the Cancer Research Laboratory, of the Middlesex Hospital Reports, there were only six cases under thirty years of age,—the age of the youngest, a boy of sixteen years, who had a sarcoma of the rectum. There are likely to be many metastasis in sarcoma of the rectum. This malady is rare at any age.

Attention was called to the method of Dr. Dudley Roberts, of Brooklyn, N.Y. (*The Medical Record*, Vol. 72, p. 985), for "*Gradual Painless Dilatation of the Anal Canal by Dilatable Rubber Bags,*" which appealed to Dr. Earle forcibly as a very satisfactory means of accomplishing the purpose designed.

Attention was called to the article of Dr. Charles O. Files, of Portland, Maine (*New York Medical Journal*, Vol. 87, p. 1154), in which he considers that there are two important factors that should be studied in connection with the "*Treatment of Pruritus Ani.*" These are an analy-

sis of the contents of the rectum and the physical condition and mechanical efficiency of the sphincter and muscles,—external and internal.

The normal feces contains about 73 per cent. of water. This water holds in solution various volatile, fatty acids, and probably other irritating excrementitious substances. During the retention of the feces in the rectum a considerable portion of the water disappears. In prolonged constipation, the feces become hard and dry, some of the fluid passes by osmosis into the cellular tissue about the anus and thence to the skin. The liquid feces are very often irritating to the mucous membrane of the anus, and causes an intense burning sensation. When this acrid solution is absorbed into the cellular tissue, it causes an irritation of the skin, and we call that irritation, *pruritus ani*.

The sphincter muscle as long as it remains in a normal condition prevents the passage of any appreciable amount of fluid through it. When, however, the action of the sphincter is made somewhat irregular by the pressure of a hemorrhoidal condition some of the fluid leaks through the anus and causes *pruritus* by direct contact. The skin about the anus is often found to be moist in persons having hemorrhoids.

Dr. F. W. Dudley, of Manilla, P.I.* (*Journal of American Medical Association*, Vol. 51, p. 991), reports a "*New Bloodless Method of Amputating the Anus and Rectum.*" A description of the same being given.

Dr. W. Ernest Miles,* (*London Lancet*, 1908, Vol. 2, p. 1812), reviews the "*Perineal Excision for Carcinoma of the Rectum, and of the Pelvic Colon,*" and states that so far as he has been able to gather from the literature on the subject, the technic of previous operations seems to have failed in one important respect, namely, the complete eradication of the zone of upward spread of cancer from the rectum, whereby the chances of recurrence of the disease above the field of operation can be distinguished, if not entirely obviated. In his personal experience of fifty-seven such peritoneal operations, he found that recurrence took place in periods from six months to three years in fifty-four instances.

In order to ascertain the cause of his failures he made a post-mortem examination of such of his patients who died, and found that recurrence appeared in situations that were beyond the scope of removal from the peritoneum, namely: (a) the pelvic peritoneum; (b) the pelvic mesocolon; and (c) the lymph nodes situated over the bifurcation of the left common iliac artery. He considers that this area constitutes the zone of the upward spread cancer of the rectum, the removal of which is just as imperative, as is the thorough clearance of the axilla in case of cancer of the breast, if freedom from recurrence is to be obtained.

The appreciation of this important fact, induced him two years ago, to abandon the perineal methods of excision of the rectum and to substi-

tute, therefor, an abdominal method, comparable to those methods of performing abdominal hysterectomy known as the Wertheim and the Kronig-Wertheim. He then gives the technic of his operation in full, and has formulated what he considers certain essentials, which must be strictly adhered to, if satisfactory results are to be obtained, namely: (1) that an abdominal anus is a necessity; (2) that the whole of the pelvic colon, with the exception of the part from which the colostomy is made, must be removed because its blood supply is contained in the zone of the upward spread; (3) that the whole of the pelvic mesocolon below the point where it crosses the common iliac artery, together with a strip of peritoneum, at least an inch wide on either side of it, must be cleared away; (4) that the group of lymph nodes situated over the bifurcation of the common iliac artery are in all instances to be removed; and lastly, (5) that the peritoneal portion of the operation should be carried out as widely as possible, so that the lateral and downward zones of spread may be effectively extirpated.

B. G. A. Moyinham, M.D., Leeds, Eng.,* (*Surgery, Gynecology and Obstetrics*, 1908, Vol. 6, p. 463), calls special attention to the "*Frequent Recurrences After Removal of Carcinoma from the Upper Rectum and Sigmoid*," and also for the necessity of inguinal colostomy on account of the sacrifice of a large portion of the bowel in perhaps a large majority of cases.

"TREATMENT OF PRURITUS ANI, WITH A CONSIDERATION OF ITS PATHOLOGY AND ETIOLOGY."

By WILLIAM M. BEACH, A.M., M.D., of Pittsburgh, Penn.

The following conclusions were drawn by the writer:—

1. That pruritus ani occurs in mild and severe forms; mostly in middle life; the mild type with simple pruritus, the severe type with marked eczema and skin changes.

2. Certain aberrations in general metabolism, or in adjacent structures are simply incidental and should be considered as complications.

3. Intra-rectal growths, as hemorrhoids, adenomas, etc., or the presence of parasites are contributory.

4. The distinct pathogenesis of pruritus ani consists of single or multiple burrowings from the anal pockets, emitting a serous or sero-purulent substance, which sinus may be complete or blind and is always accompanied by proctitis, and frequently by cryptitis, and small ulcers at the ano-rectal line.

5. These sinuses when complete are the sequelae to an abscess history, but the origin of the blind recesses is in doubt, and yet it is not unlikely due to an infection by the colon bacillus.

6. The treatment is surgical for the purpose of obliterating the sinuses, correcting a rigid sphincter when necessary, and curing the proctitis and ulceration.

7. Gastro-intestinal and general metabolic disturbances must be met by rational measures.

“PRURITUS ANI, ITS ETIOLOGY AND TREATMENT.”

T. Chittenden Hill, M.D., of Boston, Mass., said that he was convinced that pruritus ani was practically always caused by some local lesions of the pelvic colon or rectum, which produced an unnatural moisture about the anal region.

He said the most common sources of irritation, in the order of their frequency, were as follows: (1) Superficial ulcerations and abrasions of the anal canal. This lesion he found in about 75 per cent. of all cases and attributed the frequency of its occurrence to the method of fusion of the proctodeum with the blind end of the bowel. (2) Rectitis and sigmoiditis, which are the sequelæ of habitual constipation, often bring about a pruritus, since the passage of flatus allows a small quantity of mucous to escape. (3) Hypertrophied anal papillæ and inflammation of the crypts of Morgagni are more often the cause of pruritus ani than is generally admitted. (5) Small polyps of the anal canal, protruding internal piles, prolapse of the rectum and anal fissure, do occasionally produce itching about the anus, but it is exceptional to find them the sole cause of chronic pruritus ani.

He stated that in order to attain permanent results, it was essential that the treatment be directed to the removal of the exciting causes. At the same time the skin in the immediate vicinity of the anus should receive appropriate treatment, since it is nearly always in a state of acute inflammation from scratching or so much infiltrated and thickened as to require stimulating applications,—nitrate of silver and ointments, in order to bring about a return of a normal epidermis.

PERSONAL AND NEWS ITEMS.

ONTARIO.

The Kingston City Council has appointed Dr. A. R. B. Williamson as medical health officer for that city.

The degree of M.D., C.M., Queen's, has been conferred on R. J. Ellis, Ellisville; A. J. Keely, Railton; and J. F. R. Fairbairn, Kingston,

Dr. Charles Stackhouse was thrown from a street car in Ottawa and severely injured.

Dr. C. A. Hodgetts, of Toronto, was elected First Vice-President of the American Public Health Association.

Dr. R. B. Harris, of Huntsville, was made an associate coroner for Muskoka.

Dr. F. A. Cleland announces that he will confine his attention to gynæcology, and has located his offices at 134 Bloor St. West, Toronto.

Drs. W. E. Gallie, Stanley Ryerson, and G. S. Strathy are now located at 143 College Street.

Dr. W. H. Lowry, of Toronto, has removed from 2 College Street to 102 College Street.

Dr. E. B. Hardy, of Toronto, has recently been appointed an associate coroner for Toronto.

Dr. Charles Trow, of Toronto, was married to Miss Gertrude Matthews, also of Toronto, in the latter part of September.

Dr. G. Sterling Ryerson, of Toronto, who attended the International Congress at Budapest, has returned and resumed practice.

Dr. J. O. Orr, General Manager of the Exhibition, has gone to Britain and the continent, and will be away for some months.

Drs. T. J. Johnston, R. S. Richardson, and J. R. Robert have passed for the M.R.C.S., Eng., and L.R.C.P., London.

Dr. O. T. Dinnick, of Toronto, is doing post-graduate work in London. He will likely remain abroad about a year.

A doctor wishes the position of assistant or *locum tenens*. Has had good experience could stay any desired time. He can furnish good references. Apply CANADA LANCET.

London's vital statistics for September show 74 births, 47 deaths (including 23 infants), and 40 marriages. In September of last year the figures were:—77 births, 55 deaths and 46 marriages.

Dr. W. J. Roe, of Georgetown, has been appointed an associate coroner for Halton County, according to the announcement in the *Ontario Gazette*.

Over 600 patients were marched out to safety in less than three minutes when fire was discovered in the main building of the London Asylum for the Insane on 18th October. The damage was less than \$50.

Dr. Sheard, City Medical Health Officer, Toronto, attended the convention of the American Public Health Association in Richmond, Va., on October 19 as the city's representative. He was appointed by the local Board of Health.

The Board of Trustees of the General and Marine Hospital, Owen Sound, have decided to build an addition to their institution. The annex will cost between \$12,000 and \$15,000, and will double the accommoda-

tion. Several thousand dollars will also be spent in making the old building modern in its equipment.

The Toronto Free Hospital for Consumptives, near Weston, held its graduating exercises for the nurses of the Training School. Miss Annie L. Bolton won the prize for general proficiency. The medal for practical nursing was awarded to Miss Minnie E. Ball. A special prize for cheeriness on night duty was awarded to Miss Florence A. Hubbard. Refreshments were served to the visitors.

February 1st, 1910, has been set as the time limit for submitting papers for the annual meeting. Abstracts of all papers are to be in the hand of the general secretary, Dr. George Elliott, Toronto, by April 1st, so as to provide for printing, and posting same.

MARITIME PROVINCES.

To the register of Nova Scotia during the year 13 names were added, 12 by examination, and 1 from Britain. There were 9 names removed by death.

Reciprocity in things medical is going on smoothly between Nova Scotia and Britain. The registrar has received many letters of enquiry as to the requirements and conditions.

The Medical Board of Nova Scotia has finally triumphed in the Dyas case. The case was carried into the courts where the judge held that the certificates were false, and upheld the Medical Board.

Some time ago a bill was introduced into the Legislature for Nova Scotia with the avowed object of permitting a certain person to register who had not completed a full course of study. The Medical Board succeeded in having the bill withdrawn.

The Medical Board some time ago issued a circular letter to the medical profession that it would be regarded as "infamous conduct in a professional respect" to employ as unqualified assistant or *locum tenens*, and that any one doing so would render himself liable to have his name removed from the roll. The same rule holds in Britain, with which Nova Scotia has reciprocity.

WESTERN PROVINCES.

Dr. Howard McDermid has been appointed Principal of the Deaf and Dumb Institute, in Winnipeg, in succession to his father, the late Prof. D. W. McDermid.

FROM ABROAD.

In Western Australia the insane number 546, and the population is 263,846. This in the ratio of 1 in 418.

According to the recent report of the Lunacy Commissioners for Britain, the insane number 128,787 or 1 in every 278 of the population.

In Australia and New Zealand the qualifications for registration are : registration in Great Britain, that the person is of good character, and that he is the rightful holder of the papers which he presents.

Throughout South Africa, that is, the Transvaal, Orange River, Rhodesia, Natal, and Cape Colony, the requisites for registration is the holding of a certificate of British Registration and proof of this.

Dr. Thomas Bridgewater, who had been chairman of the Council of the British Medical Association for a number of years, died recently at the age of 85.

Throughout India there is now a very general use made of anti-plague vaccination. From the Bombay laboratory no less than 533,315 doses were sent out.

In Cape Colony at the end of the year 1908, according to Dr. Dodds' report, there were 2,009 persons in asylums, goals, retreats, etc. This was an increase of 81 over the previous year of the insane of the colony.

In New South Wales there is 1 insane person to every 280 of the population. The total number of cases under treatment during the year was 6,355.

An elaborate system of medical inspections of schools is on foot in Aberdeen and the counties around it. The cost is estimated at about £2,000 annually.

The union of German medical practitioners has issued a report in which it points out the terribly overcrowded condition of the medical profession in Germany.

An important amendment has been passed to the medical acts of South Africa which will have the effect of curtailing the sale of opium to the public. Opium smoking was becoming a common vice.

Mr. Murray, the Premier of Victoria, Australia, has called for reports from several medical men on the evils of cigarette smoking, with the view of basing registration on the question.

Professor Pfannensteil, of Kiel, died a short time ago. He was born in 1862 and studied medicine in Berlin. His career was a very successful one. He held the Chair Diseases of Women in Kiel at the time of his death.

In Paris there are thirty hospitals all under city control. The opportunity for clinical teaching and dissections are specially good. All the hospitals are open, and the tuition and access to patients are free. There is a great wealth of clinical material.

According to the investigations of Drs. F. Hamburger and R. Monti, the children infected with tubercle rises from 9 per cent. in the

2nd year to 94 per cent. in the 12th year. The tests were the Von Riquet injections, and the use of tuberculin.

The next International Medical Congress will be held in London in 1913, and with great enthusiasm the Congress accepted the invitation of the British Government, and asked King Edward to be the patron of the meeting.

Dr. J. C. McWalter stated at the British Medical Association that during the year £2,400,000 had been expended on quack medicines, and that the government had received £300,000 in duties. This took the lead of any country.

In Italy the death rate has been reduced from 28 per 1,000 in 1877 to 20 per 1,000 in 1906. The deaths from malaria have fallen from 14,000 to 4,800. The deaths from tuberculosis have declined from 20 per 10,000 to 16. Suicides have increased from 1,429 in 1887 to 2,316 in 1908.

Professor Pearson has come out in Britain as a strong exponent of means to aid the rearing of healthy children. He contends that some of the money that goes to the support of degenerates should go to aid healthy parenthood. In France the same subject has been raised, and many leading men urge that some allowance should be made to every mother who rears a healthy child.

At the meeting of the British Medical Association in Belfast, the section in medicine devoted a session to athletics in schools. The discussion was calm and temperate and will do much good. A motion was carried that efforts be made to have a professional announcement as to how to secure the maximum of good with the minimum of risk by means of school athletics.

Dr. Inglis Pollock gave a paper at the meeting of the British Medical Association in which he showed that the defects of eye-sight stood at 10 per cent. in school children, based on the examination of about 124,000 children of about 1,196,000 attending schools in London. In the earlier years it was mainly hypermetropia, while in the later years myopia predominated.

OBITUARY.

C. F. FERGUSON, M.D.

Dr. Charles Frederick Ferguson, ex-M.P. for Leeds and Grenville, died suddenly at his home at Kemptville on 29th September, 1909. He was 76 years of age. For many years he had a very large practice and was very highly esteemed by all who knew him. The late Dr. Ferguson

was first elected to Parliament at the general election of 1874. He was unseated on petition, but re-elected the same year. In 1878 he was again elected. In 1896 he was defeated by Senator F. T. Frost, of Smith's Falls.

G. E. HUSBAND, M.D.

Dr. G. E. Husband, Main Street west, perhaps the oldest medical practitioner in Hamilton, dropped from his buggy on the Waterdown Road 1st October, after being seized with apoplexy, and was picked up unconscious. Medical aid was summoned from the city, but he passed away before it reached him. Dr. Husband had left his home in the city about one o'clock, to drive to Waterdown, where he owned a farm. There had been some trouble over the drainage of the farm, and Dr. Husband had been invited to meet the township councillors this afternoon, and talk over the matter with them. He had fulfilled his engagement, and was about to start back to the city. He tucked the robe about him as he sat in the buggy, and as he stooped forward to pick up the lines, he fell face downwards out of the buggy. The seizure was terribly sudden, and the unfortunate man never had time to utter a word. Dr. Husband had practised medicine in Hamilton for the last 35 years, having gone there from Galt. He made a specialty of homeopathy. He is survived by a widow and two sons, Dr. George Husband, of Niagara Falls; and Bright Husband, who lived at home. Dr. Husband was a brother of Dr. R. J. Husband, dentist, and a cousin of Dr. T. H. Husband, both of Toronto. He was about 70 years of age.

THOMAS MILSON, M.D.

Thomas Milson, M.D., died at his home in Dartmouth, N.S. He was born in Ireland in 1848. He was educated in Dublin, and on coming to America, studied medicine at Harvard. He located in 1870 in Halifax. For some years he was surgeon to one of the Inman vessels and was shipwrecked on the City of Washington. He married in 1875 and settled in Dartmouth. He took a very lively interest in municipal and educational affairs. He also founded the Orphans' Music Club, and took much interest in the choir of his church. He has a widow, one daughter and six sons. His funeral was very large and bore testimony of his popularity.

BOOK REVIEWS.

BACON'S MANUAL OF OTOLOGY.

By Gorham Bacon, A.M., M.D., Professor of Otolaryngology in the College of Physicians and Surgeons, Columbia University, New York. With an Introductory Chapter by Clarence J. Blake, M.D., Professor of Otolaryngology in the Harvard Medical School, Boston. New (5th) edition, thoroughly revised. 12mo, 500 pages, 147 engravings and 12 plates. Cloth, \$2.25 net. Lea & Febiger, Philadelphia and New York, 1909.

This work has been well termed the model of what a manual should be. It is from the pen of a high authority, and embodies in the matter his experience as a specialist, and in its method his skill as a professor. It is a well balanced presentation of otology, sufficing every need of the student and of the general practitioner as well. The steady succession of its editions is to be expected in the case of a work of such merit. The author appreciates the responsibility which accompanies the favor bestowed on his book and has responded again with a thorough revision incorporating all real advances eliminating anything that has become obsolete, and making many additions, so that in its newly revised form it will continue to be accepted as reflecting the subject in its latest development. Edition after edition shows steady advance. The author keeps his book well up to date. It can be recommended a very useful manual.

STARR'S ORGANIC AND FUNCTIONAL NERVOUS DISEASES.

A Text-Book of Neurology. By M. Allen Starr, M.D., Ph.D., LL.D., Sc.D., Professor of Neurology, College of Physicians and Surgeons, New York; ex-President of the New York Neurological Society. Third edition, thoroughly revised. Octavo, 904 pages with 300 engravings and 29 plates in color or monochrome. Cloth, \$6.00 net; leather, \$7.00 net. Lea & Febiger, Philadelphia and New York, 1909.

In planning this new edition, the author has evidently studied with care the matter of adapting it still more closely to the requirements both of students and practitioners. He has spared himself no trouble, as the work is completely re-arranged as well as thoroughly revised. The result is a very simple and natural presentation. In the first part he takes up methods of examination and diagnosis, with the necessary anatomy and physiology, and with this basis laid, he proceeds in the second part to cover the great division of organic diseases. In part third the functional diseases are fully presented, the space allotted having been more than doubled. Part four considers diseases of the sympathetic nervous system, closing the subject. The trend of the entire work is distinctly practical, embodying as it does the knowledge gained

by twenty-seven years devoted to this specialty. It covers all aspects, both medical and surgical, and the possessor of the work may feel assured that he has at hand the latest and most authoritative information in shape for application. It is elaborately illustrated. Dr. Starr is too well known to require any commendation for his work. This book lays before the reader the best that is known upon a most important branch of medical science.

BREWER'S PRINCIPLES AND PRACTICE OF SURGERY.

By George Emerson Brewer, M.D., Professor of Clinical Surgery in the College of Physicians and Surgeons, New York. Octavo, 908 pages, 415 engravings and 14 full-page plates. Cloth, \$5.00 net; leather, \$6.00 net. Lea & Febiger, Philadelphia and New York, 1909.

To present a well proportioned exposition of modern surgery in a volume of less than a thousand pages requires an author to combine broad knowledge, good judgment in determining what is really important, and a concise way of stating it. Both as a skilful surgeon and as a teacher in one of the leading colleges, Professor Brewer knows his subject and how to present it. He frankly states that his first edition was uneven and not sufficiently complete, a fault readily corrected after having the entire book in print before him, instead of simply the manuscript, as at first. The interval spanned by the original edition was, moreover, noteworthy for the immense amount of productive investigation. To represent the surgery of to-day in its full development, the author has revised every line of his work and incorporated new matter to the extent of two hundred pages, and he has correspondingly enriched the engravings and colored plates. It is interesting to note that the new process of color-photography direct from nature has been here employed for the first time in medical literature. As the work deals with the principle as well as the practice of surgery, it answers every requirement of students and surgeons who desire more than a manual and less than a portly volume. In this volume of medium size for such an extensive field of work, we have an excellent exposition of surgical science and practice. The work can be recommended with much confidence.

MARTIN'S SURGICAL DIAGNOSIS.

For Students and Practitioners. By Edward Martin, M.D., Professor of Clinical Surgery, University of Pennsylvania. Very handsome octavo of 764 pages, with 445 engravings, largely original, and 18 full-page plates. Cloth, \$5.50 net. Lea & Febiger, Philadelphia and New York.

This new work, by an eminent American surgeon and professor, takes as its keynote the axiom, often honored more in the breach than

in the observance, that the simplicity and safety of surgical intervention are as a rule proportionate to timeliness in diagnosis. Another feature of the work is the recognition of the fact that as it is the general practitioner who usually sees a case first, he has both the opportunity and responsibility of determining when surgical treatment is required, and he should be qualified therefor. Though providing thus for what may be termed the man in the middle, Dr. Martin has written also for the men at the two extremes of the line, namely, the student and the practising surgeon. Thus his work is one of great comprehensiveness, and that he has been able to cover so broad a field in a single volume is due to his epigrammatic style, which points his presentations and drives them home. Therefore, instead of inviting his readers to wait for the fully developed symptoms, when assistance may be too late, he lays stress on those of major or deciding moment, or, in their absence, upon the operative and laboratory means by which a conjecture may be transformed into a probability or certainty. A compact but complete section on laboratory diagnosis saves the reader the necessity of reference elsewhere. Similarly chapters on surgical diagnosis in gynecology, neurology and ophthalmology will be found most useful. A marked feature is found in the illustrations which, like the text, are inserted for instructiveness and not embellishment. They are mostly original and are designed to exhibit the diagnostic points. It would have been easier but worse than useless to fill the book with shocking pictures of fully developed and hopeless disease, but true to his theme, the author has chosen to delineate the early symptoms, showing them in as simple and clear a manner as possible. The indispensable uses of the x-ray in surgical diagnosis are excellently set forth in a separate chapter with over two hundred engravings carefully handdrawn so that the reader may acquire the art of interpreting these shadow pictures. We have much pleasure in giving this volume our careful examination. It will be found to be a safe guide on the subject of surgical diagnosis.

THE SANATORIUM TREATMENT OF PULMONARY TUBERCULOSIS.

The Open-Air Treatment of Pulmonary Tuberculosis. By F. Rufenacht Walters, M.D., B.S., Lond., M.R.C.P., F.R.C.S., Physician to the Crookshury Sanatorium, formerly Physician to the Mount Vernon Hospital for Consumption and Diseases of the Chest; author of "Sanatoria for Consumptives." London: Ballière, Tudall & Cox, 8 Henrietta St., Covent Garden, 1909. Price. 5 shillings net.

This book shows what is being done for the consumptive, and points out very clearly what can be done for such cases. The atmosphere is brighter than it was some years ago. It is now recognized that in early cases much may be done for the cure of these. And in the more advanced

cases a large measure of improvement may be effected. This book covers the ground wisely and well. There is nothing omitted. It is just a perfect guide to the management of a patient suffering from pulmonary tuberculosis.

HYDE'S TREATISE ON DISEASES OF THE SKIN.

For the use of Students and Practitioners. By J. Nevins Hyde, A.M., M.D., Professor of Dermatology and Venereal Diseases in the University of Chicago, Medical Department (Rush Medical College). New (8th) edition, thoroughly revised and much enlarged. In one very handsome octavo volume of about 1137 pages, with 223 engravings and 58 full-page plates, in colors and monochrome. Cloth, \$5.00 net; leather, \$6.00 net. Lea & Febiger, Philadelphia and New York, 1909.

When a work has passed through its original edition and seven successive revisions are demanded, its acceptance by the public as a standard is beyond question. Professor Hyde's masterly treatise exemplifies this statement. One of the foremost dermatologists in the world, and an equally successful teacher, he knows both his subject and how to present it effectively, both for the student and practitioner as well as for the specialist. Each of the prior revisions brought the work thoroughly abreast of its date, but never before has it been subjected to such a complete rewriting. Every line has been carefully revised with a view to possible improvement, everything that progress has discarded is omitted, and the real advances are incorporated, so that the possessor of this new edition has the net dermatology of to-day at command. As an indication of this it may be stated that changes and improvements have resulted in an increase of two hundred and fifty pages, and that the engravings and plates have been doubled, new photographs being substituted whenever a disease could be better displayed to the eye. It is risking nothing to predict for this admirable work in its new form, even greater favor than it has hitherto enjoyed with all classes of readers interested in dermatology. For many years this excellent text-book has been on the market. Edition after edition bears ample proof of the care which the author has bestowed upon its preparation. With this book in one's library there is no need for anything more on diseases of the skin.

MISCELLANEOUS.

MEDICAL FACULTY, UNIVERSITY OF TORONTO.

First Year—Biology, mammalian anatomy, histology, embryology, inorganic chemistry, organic chemistry, physics, anatomy.

Pass—J. P. Austin, T. L. Butters, F. C. Davis, G. P. Dunning, C. H. Edmunds, P. E. Faed, G. C. Graham, R. Home, A. Matheson, J. G. Morgan, H. R. Macintyre, S. A. Richardson, A. C. Rowswell.

The following are matriculant students who have completed the examinations of the first year—R. J. Davies, H. C. P. Hazelwood, G. W. MacNeil, Miss M. Tryon, I. N. Watson, G. A. Watson.

The following students have completed supplemental examinations in the following subjects:—Anatomy—E. J. Clifford. Biology—W. Heringer.

The following students are required to take supplemental examinations in the following subjects before completing the first year:—Mammalian Anatomy—E. J. Clifford, W. Heringer, E. L. McCardle. Embryology—L. R. S. Agassiz. Organic chemistry—L. R. S. Agassiz. Anatomy—L. R. S. Agassiz.

The following students have completed the following examinations of the first year, four years' course:—Biology—E. S. Baker. Physics—A. A. Thompson. Chemistry—S. W. H. Nelson, S. L. Spicer, N. B. Taylor.

The following students are required to pass supplemental examinations in the following subjects before completing the first year of the four years' course:—Biology—C. E. Trow. Physics—E. R. Wells, R. W. Young.

Second Year—Anatomy, physiology, embryology, histology, chemistry and materia medica.

Pass—H. H. Colwell, H. Heffering, A. J. Keeley, T. F. Kelly, M. Levy, H. K. Manning, A. C. Martin, A. F. Mavety, Miss A. J. McCarthy, C. D. McCulloch, G. A. O'Leary, R. A. Smith, H. F. Sproule, P. J. Sweeney, C. E. Trow, F. B. Ware, R. W. Young.

The following students have completed examinations in the following subjects:—Anatomy—W. D. Barrett, Miss L. F. Boyington, C. M. Burroughs, R. E. Davis, Miss M. A. Doherty, W. E. Ferguson, W. L. Hutton, L. P. Jones, H. DeW. Lees, R. D. Mace, M. McDonald, E. L. McIntyre, J. McLean, S. W. H. Nelson, L. J. Sebert, H. A. Taylor, A. A. Thompson, C. R. Wilson, H. M. Yelland, E. W. Zumstein. Physiology—J. K. Mossman, C. A. Macpherson. Chemistry—H. Bell, L. P. Jones. Materia medica—D. W. Allen, W. D. Barrett, T. J. Glover, G. J. Lunz, W. Mainprize, J. K. Mossman, C. J. McCabe, J. McLean, A. H. MacMurphy, A. Steinberg, W. C. Campbell, H. C. Davis. Histology—R. E. Brady, C. J. Finnerty, H. B. Moffatt, A. Steinberg, Miss E. I. Stewart, C. R. Young, D. A. Hopper, H. DeW. Lees. Embryology—J. C. Eager, G. B. Rose, A. A. Thompson.

The following students are required to take supplemental examinations in the following subjects before completing the second year:—Anatomy—H. DeW. Ball, T. F. Kelly, Miss A. J. McCarthy, A. H. MacMurchy, N. W. Rogers, H. B. E. Scott. Histology—H. H. Colwell, R. A. Smith. Chemistry—A. F. Mavety, C. D. McCullough, R. W. Young. Materia medica—A. C. Martin, Miss A. J. McCarthy, C. A. Macpherson, Miss E. L. Stewart, F. B. Ware, R. W. Young. Embryology—H. H. Colwell, T. F. Kelly, A. F. Mavety, G. A. O'Leary, A. Steinberg, F. B. Ware.

Third Year—Medicine, clinical medicine, surgery, clinical surgery, pathology, practical pathology, topographical anatomy, obstetrics, therapeutics, jurisprudence and toxicology.

Pass—Miss M. A. Doherty, F. S. Kane, J. G. Lee, G. F. McBride, E. A. McCort, V. A. McDonough, J. M. McLean, E. R. Tyrer.

The following students have completed examinations in the following subjects:—Medicine—J. R. Dickson, J. C. Eager, D. A. Hopper, W. W. Hume, W. G. Montgomery, S. M. McLay, P. D. Spohn, E. R. Wells. Clinical medicine—R. E. Brady, J. P. Campbell, W. W. Cruise, J. E. Eager, W. E. Ferguson, S. M. Holmes, T. S. Kirby, H. DeW. Lees, G. Linscott, F. W. Loring, F. O. Mahoney, H. B. Moyle, A. McAllister, P. D. Spohn, E. R. Wells. Surgery—H. Bell, W. E. Ferguson, G. J. Forster, W. W. Hume, T. S. Kirby, W. G. Montgomery, D. G. McKay, H. A. Taylor. Clinical surgery—R. E. Davis, J. C. Eager, G. M. Hanna, S. M. Holmes, W. W. Hume, R. T. Lane, J. Nedd, T. R. Pickard, C. Sheard. Pathology—W. W. Cruise, R. E. Davis, F. O. Mahoney, W. G. Montgomery. Topographical anatomy—J. C. Eager, S. M. Holmes, J. A. Kearns, F. O. Mahoney, H. H. Murray, D. G. McKay. Obstetrics—R. E. Brady, W. W. Cruise, H. A. Culham, J. R. Dickson, D. A. Hopper, T. S. Kirby, W. G. Montgomery, H. H. Murray, D. G. McKay, A. Steinberg. Therapeutics—D. G. McKay. Jurisprudence and toxicology—W. J. Defries, T. S. Kirby.

The following students are required to take supplemental examinations in the following subjects before completing the third year:—Medicine—F. S. Kane. Clinical medicine—H. Bell, R. E. Davis, F. S. Kane, J. G. Lee, G. F. McBride, E. A. McCort, V. A. McDonough, E. R. Tyrer. Surgery—R. E. Davis, F. S. Kane, G. F. McBride, E. R. Tyrer. Pathology—D. A. Hopper, J. B. Jupp, E. A. McCort, S. M. McLay, J. M. McLean, J. J. Quarry, N. W. Rogers, P. D. Spohn, A. Steinberg, E. R. Tyrer. Clinical surgery—F. S. Harper, F. S. Kane, J. A. Kearns. Topographical anatomy—E. R. Tyrer. Obstetrics—E. A. McCort. Therapeutics—J. M. McLean. Jurisprudence and toxicology—A. Steinberg.

Fourth year—Medicine, clinical medicine, surgery, clinical surgery, pathology, practical pathology, obstetrics, pædiatrics, gynæcology, hygiene, clinical psychiatry, otology, ophthalmology, laryngology and rhinology.

Pass R. T. Bayley, G. C. Kidd, G. Linscott, R. W. Wesley.

The following students have completed examinations in the following subjects :—Medicine—D. V. Currey, W. M. Ecclestone, S. Ellis, H. B. Ewens, J. R. Gibson, C. W. Graham, D. B. Jamieson, C. S. Mahood, Miss M. Mordea, W. L. McCullough, W. T. McLean, H. M. Nicholson, G. R. Philp, J. N. Richards, N. W. Rogers, Miss J. Smillie, N. Telford, J. T. Thomas, G. S. Wallace, E. R. Wells. Pathology—H. B. Ewens, C. G. Gunn, J. N. Richards, H. A. Taylor. Clinical medicine—G. W. Anderson, H. B. Ewens, G. A. J. Glionna, C. W. Graham, B. Hannah, W. T. McLean, J. D. McPhee, W. H. Robertson, N. W. Rogers, W. D. Slater, Miss J. Smillie, N. Telford, E. R. Wells. Surgery—C. G. Gunn, C. S. Mahood, S. W. H. Nelson, H. M. Nicholson, J. T. Phair. Clinical surgery—J. R. Gibson, W. Jamieson. Obstetrics—H. H. Moshier, H. M. Nicholson, G. R. Philp. Hygiene—N. Telford. Pediatrics—G. A. J. Glionna, B. Hannah. Ophthalmology, otology, laryngology and rhinology—S. Ellis, J. R. Gibson, G. A. J. Glionna, C. W. Graham, G. C. Gunn, C. S. Mahood, W. L. McCullough, H. M. Nicholson, W. G. Penny, W. D. Slater, J. G. R. Stone, H. A. Taylor, J. T. Thomas, G. S. Wallace, E. R. Wells.

The following students are required to take supplemental examinations in the following subjects before completing the final examinations :—Medicine—G. C. Gunn, G. C. Kidd, K. M. Murray, S. W. H. Nelson, J. G. R. Stone, L. B. Williams. Clinical medicine—W. M. Ecclestone, S. Ellis, W. Jamieson, G. C. Kidd, G. Linscott, K. M. Murray, W. L. McCullough, S. W. H. Nelson, H. M. Nicholson, W. G. Penny, J. G. R. Stone, J. T. Thomas, L. B. Williams. Surgery—W. T. McLean, E. R. Wells. Pathology—D. B. Jamieson. Gynæcology—G. C. Kidd.

ST. MICHAEL'S STAFF.

The following medical men will form the staff for St. Michaels Hospital for the year. Many of last year's practitioners have been re-appointed :—Surgery—Mr. I. H. Cameron, first service; Dr. J. F. Uren, sen. assist.; Dr. G. Silverthorn, clin. assist.; Dr. W. McKeown, second service; Dr. W. Scott, sen. assist.; Dr. M. H. V. Cameron, Dr. G. E. Wilson, clin. assist. Medicine—Dr. R. J. Dwyer, first service; Dr. W. McCoilum, sen. assist.; Dr. B. O'Reilly, Dr. A. Adams, Dr. J. H. McPhedran, clin. assist.; Dr. H. B. Anderson, second service; Dr. J. H.

Elliott, sen. assist.; Dr. H. S. Hutchison, Dr. R. W. Mann, Dr. Geo. Smith, Dr. W. H. Pepler, clin. assist. Gynæcology—Dr. F. Fenton, chief in charge. Obstetrics—Dr. A. H. Garratt, assist. in gynæcology; Dr. C. H. Page, registrar in gynæcology; Dr. M. M. Crawford, assist. in obstetrics; Dr. S. J. Magwood, registrar in obstetrics. Eye—Dr. C. H. Burnham, chief; Dr. Newbold Jones, Dr. H. A. McCullough, assist. Ear, nose and throat—Dr. J. McKenna, Dr. W. Gilday. Consulting staff—Dr. W. Oldright, surgery; Dr. Adam Wright, obstetrics; Dr. J. F. W. Ross, gynæcology; Dr. C. Meyers, neurology; Dr. W. Aikins, surgery; Dr. J. Amyot, pathology. Attendant physicians—Dr. J. Guinane, Dr. C. McKenna, Dr. T. J. McMahan, Dr. N. Allen. Assistant physicians—Dr. J. McCormack, Dr. P. W. O'Brien, Dr. F. S. Riches. Attendant surgeons—Dr. E. E. King, Dr. R. B. Nevitt. Clinical laboratory—Dr. D. H. Bodlington. Anæsthetist—Dr. J. F. L. Killoran. Pathologist—Dr. George Smith. Electrician—Dr. D. Frawley. House surgeons—Dr. T. L. Towers, Dr. F. C. Harrison, Dr. P. B. McFarlane, Dr. C. B. Parker, Dr. H. W. Baker, Dr. G. W. Anderson.

CANADIAN MEDICAL ASSOCIATION.

The officers and committees of the Canadian Medical Association are as follows:—President, Dr. Adam H. Wright, Toronto; General Secretary, Dr. George Elliott, Toronto; Treasurer, Dr. H. B. Small, Ottawa; Vice-Presidents and Local Secretaries, the presidents and secretaries of the provincial medical societies *ex officio*; Vice-President for the Province of Quebec, Dr. Normand, Three Rivers; Local Secretary for Quebec, Dr. R. P. Campbell, Montreal; Finance Committee, Dr. J. T. Fotheringham, Toronto (Chairman), Dr. F. N. G. Starr, Toronto, Dr. S. J. Tunstall, Vancouver, Dr. Murray MacLaren, St. John, N.B., Dr. James Bell, Montreal, and the President and General Secretary; Chairman of Committee on Medical Legislation, Dr. A. T. Shillington, Ottawa; Chairman of Committee on Medical Education, Dr. R. A. Reeve, Toronto; Chairman of Committee on Hygiene and Public Health, Dr. A. T. Shillington, Ottawa; Chairman of Committee on Amendments to Constitution and By-laws, Dr. H. B. Small, Ottawa; Chairman of Committee on Reports of Officers, Dr. E. Ryan, Kingston; Chairman of Committee on Necrology, Dr. J. H. Elliott, Toronto; Chairman of Milk Commission, Dr. C. J. Hastings, Toronto.

Dr. R. A. Reeve, Toronto, was elected chairman of the Executive Council, and the following members thereof were in attendance: Elected by the Association—Dr. R. W. Powell, Ottawa; Dr. A. T. Shillington, Ottawa; Dr. Murray MacLaren, St. John, N.B.; Dr. R. A. Reeve,

Toronto; Dr. John T. Fotheringham, Toronto; Dr. J. H. Elliott, Toronto; Dr. Chas. J. Hastings, Toronto; Dr. J. C. Mitchell, Brockville, Ont.; Dr. Ingersoll Olmsted, Hamilton; Dr. J. George Adami, Montreal; Dr. Edward Ryan, Kingston; Dr. H. A. MacCallum, London, Ont.; Dr. H. G. McKid, Calgary; Dr. James Bell, Montreal; Dr. R. A. Kennedy, McLeod, Alberta. Representing Nova Scotia Medical Society—Dr. John Stewart and Dr. George M. Campbell, Halifax. Representing the Ontario Medical Association—Dr. D. J. Gibb Wishart and Dr. F. N. G. Starr, Toronto. Representing Manitoba Medical Association—Dr. Harvey Smith (President), Dr. R. S. Thornton, Deloraine, and Dr. S. W. Prowse, Winnipeg. Representing British Columbia Medical Association—Dr. S. J. Tunstall, Vancouver. Special Committee on Medical Inspection of School Children—Dr. John Stewart, Halifax; Dr. Murray MacLaren, St. John, N.B.; Dr. S. J. Tunstall, Vancouver; Dr. R. W. Powell, Ottawa, and Dr. R. J. Blanchard, Winnipeg.

WORK DONE BY THE CANADIAN MEDICAL ASSOCIATION.

Dr. George Elliott, the General Secretary of the Association, submitted the following report to the Association at its recent Winnipeg meeting:—

There were two hundred and twenty-eight registered at the 41st annual meeting at Ottawa last year.

When last the Association met in Winnipeg in 1901 you were pleased to elect me your General Secretary. The number in attendance then was 178.

During the succeeding years the attendance was as follows:

Montreal, 1902	330
London, 1903	302
Vancouver, 1904	267
Halifax, 1905	222
Toronto, 1906 (B. M. A. Meeting)	79
Montreal, 1907	235
Ottawa, 1908	228

The total attendance for these seven years..... 1,463

An average of 209 a year. The previous seven meetings had a total attendance of 1,076, an average of 152 a year.

The total membership at the beginning of the Winnipeg meeting in 1901 was 900. Now the total membership is about 1,500.

Let us review, however, the work of the Association in other respects.

Besides the numerous addresses and scientific papers the Association has produced during the past seven years, which have gone to enrich Canadian, other British and United States medical literature, we have dealt with several questions of practical medical politics.

Established in 1901 in Winnipeg, the Canadian Medical Protective Association has perfected its administration, and has demonstrated to the medical profession of Canada and to others that it is an organization of the first importance in the medical life of the Dominion.

Dominion registration has not come under our attention these seven years, as about that time it had been placed in the hands of Dr. Roddick, who finally succeeded in having passed the Canada Medical Act, now standing as Chapter 137, Revised Statutes of the Dominion, 1906. Again this question comes before us. May we hope that it will be pushed to a final and successful conclusion.

The question of a Bureau of Health for Canada has year after year engaged the attention and consideration of this Association. Time and again the Federal Government has been requested to consolidate its various medical services, at present administered under four separate Departments of the Crown, into one Bureau of Health, under one of the existing Ministers—and then extension and expansion thereof. So far the Association has gotten the assurance from the head of the Government, the Prime Minister: "It is only by knocking at the door that the door will be eventually opened."

Re-organization of the Association has been successfully accomplished, which re-organization looks for the affiliation of all the provincial medical associations and the establishment of a journal to be the official journal of the Association.

A Milk Commission was appointed last year at Ottawa, which has been doing a great amount of work, the results of which will be brought before this meeting.

By Act of the Federal Parliament, assented to May 19, 1909, the Canadian Medical Association is now an incorporated body. The several projects before the Association at the present time call for good financial support. In the past the Association has endeavored to do a certain amount of useful work, but year after year it becomes manifest that the work of the Association cannot be carried along as successfully as it should be, and as it could be were its financial position assured. Now that the Association is an incorporated body, it may be permissible to suggest that there may be some members thereof who, either of themselves or through others, could voluntarily contribute to the financial support of the Association, and thus the more effectively ensure the carrying out of those projects the Association has set out to accomplish.

All of which is respectfully submitted.

WESTERN MEDICAL COUNCIL.

A meeting of representatives of the Medical Councils of the four western Provinces of Manitoba, Saskatchewan, Alberta and British Columbia was held at the Sanitarium Hotel, 19th September, at Banff, Alta., to consider the advisability of forming a federation of these Provinces regarding medical registration. Dr. Brett of Banff was voted to the chair, and introduced Dr. Stewart, Calgary, President of the College of Physicians and Surgeons of Alberta, who, on behalf of the profession of Alberta, welcomed the visiting delegates. Among those present were Dr. S. Spanky, member of the Ontario Medical Council. Dr. A. S. Mcnro, of Vancouver, was elected Secretary. Various committees were appointed to consider the question, and the meeting adjourned to meet again. Representatives present were:—Manitoba—Dr. J. S. Gray, Winnipeg; Dr. Thorton, Deloraine; Dr. J. M. Hutchinson, Winnipeg. Saskatchewan—Dr. W. A. Thompson, Regina; Dr. A. M. Young, Saskatoon; Dr. A. E. Kelly, Swift Current. Alberta—Dr. R. G. Brett, Banff; Dr. J. D. Lafferty, Calgary; Dr. S. A. Kennedy, Macleod. British Columbia—Dr. W. H. Sutherland, Revelstoke; Dr. A. G. Proctor, Vancouver; Dr. A. S. Monro, Vancouver.

 ONTARIO MEDICAL COUNCIL EXAMINATIONS.

The following candidates have passed the final examination of the College of Physicians and Surgeons of Ontario:—J. E. Bromley, Percy G. Brown, Caroline S. Brown, F. W. Cays, W. G. G. Coulter, Henry Cresweller, Fred R. Chapman, John L. Campbell, I. D. Cotnam, R. D. Dewar, J. H. Downing, R. E. Davidson, Henry William Feldhans, H. J. Ferguson, R. E. Gaby, G. P. Howlett, Thomas J. Johnston, D. A. Kearns, H. H. Moore, W. D. McIlmoyle, R. W. MacIntyre, W. A. Macpherson, W. E. Ogden, T. S. Orr, R. H. Paterson, R. S. Richardson, Estella O. Smith, James Thomson, Charles R. Totton, W. C. Usher, F. W. Wallace, C. B. Ward, C. C. Whittaker, H. A. Williams.

The following candidates have passed the intermediate examination of the College of Physicians and Surgeons of Ontario:—J. E. Bromley, Caroline S. Brown, John A. M. Campbell, F. W. Cays, W. G. C. Coulter, Henry Cresweller, F. R. Chapman, John de L. Campbell, I. D. Cotnam, R. D. Dewar, John H. Downing, Alexander Ferguson, R. E. Gaby, D. A. Kearns, R. W. MacIntyre, H. H. Moore, W. A. MacPherson, C. J. McBride, W. E. Ogden, T. S. Orr, R. H. Paterson, James N. Richards, R. S. Richardson, James A. Simpson, Estella, O. Smith, James Thomson, Charles R. Totton, W. C. Usher, F. W. Wallace, Charles B. Ward, C. C. Whittaker, L. B. Williams.

The following candidates have passed the primary examination of the College of Physicians and Surgeons of Ontario :—J. E. Bromley, Caroline S. Brown, F. R. Chapman, John L. Campbell, I. D. Cotnam, R. D. Dewar, John Henry Downing, George D. Fripp, R. E. Gaby, J. J. Healy, R. A. Ireland, L. P. Jones, D. A. Kearns, H. C. Mabee, Victor McCormack, James F. McKee, Claude Allison Patterson, George B. Rose, R. W. Tennent, James C. Watt, C. R. Wilson, Catherine F. Woodhouse.

MEDICAL PREPARATIONS, ETC.

THE MODERN TREATMENT OF HAY FEVER.

Whatever be the accepted views as to the pathology and etiology of hay fever, there is little difference of opinion concerning its importance and the severity of its symptoms. An agent that is capable of controlling the catarrhal inflammation, allaying the violent paroxysms of sneezing and the abundant lacrimation, cutting short the asthmatic attack when it becomes a part of the clinical ensemble, and, finally, sustaining the heart and thus preventing the great depression that usually accompanies or follows the attack—in short, an agent that is capable of meeting the principal indications—must prove invaluable in the treatment of this by no means tractable disease.

In the opinion of many physicians, the most serviceable agent is Adrenalin. While not a specific in the strict meaning of the word, Adrenalin meets the condition very effectively and secures for the patient a positive degree of comfort. It controls catarrhal inflammations as perhaps no other astringent can. It allays violent paroxysms of sneezing and profuse lacrimation by blanching the turbinal tissues and soothing the irritation of the nasal mucous which gives rise to those symptoms. It reduces the severity of the asthmatic seizure, in many instances affording complete and lasting relief.

There are four forms in which Adrenalin is very successfully used in the treatment of hay fever: Solution Adrenalin Chloride, Adrenalin Inhalent, Adrenalin Ointment, and Adrenalin and Chloretone Ointment. The solution, first mentioned, should be diluted with four to ten times its volume of physiological salt solution and sprayed into the nares and pharynx. The inhalent is used in the same manner, except that it requires no dilution. The ointments are supplied in collapsible tubes with elongated nozzles, which render administration very simple and easy.

It is perhaps pertinent to mention in this connection that Messrs. Parke, Davis & Co. have issued a very useful booklet on the subject

of hay fever, containing practical chapters on the disease, indications for treatment, preventive measures, etc. Physicians will do well to write for this pamphlet, addressing the company at Walkerville, Ont., or at branch, 378 St. Paul St., Montreal, Que.

GOOD RESULTS IN STUBBORN CASES.

Every physician knows full well the advantages to be derived from the use of antikamnia in very many diseases, but a number of them are still lacking a knowledge of the fact that antikamnia in combination with various remedies has a peculiarly happy effect. Particularly is this the case when combined with salol. Salol is a most valuable remedy in many affections and its usefulness seems to be enhanced by combining it with antikamnia. The rheumatoid conditions so often seen in various manifestations are wonderfully relieved by the use of this combination, and the painful stiffness of the joints which remains after a rheumatic attack are also relieved by "Antikamnia and Salol Tablets," containing $2\frac{1}{2}$ grs. each of antikamnia and of salol and the dose of which is one or two every two or three hours. Salol neutralizes the uric acid and clears up the urine. The pain and burning of cystitis is relieved to a marked degree by the administration of these tablets. This remedy is also reliable in the treatment of diarrhœa, entero colitis, dysentery, etc. In dysentery where there are bloody, slimy discharges, with tormina and tenesmus, a good dose of sulphate of magnesia, followed by two antikamnia and salol tablets every three hours will give results that are gratifying.

ANTISEPTIC ALCOHOL FOR EXTERNAL USE.

The advance in science has at last made it possible to remove from Wood Alcohol the objectional and impure parts which have heretofore made it unfit for application on the body on account of its peculiar odor.

Crude Wood Alcohol contains many products, acetone, aldehyde, creosote and keytone oils. By a special apparatus these various products are entirely removed from the alcohol leaving it a chemically pure methyl alcohol.

It may be of interest to know that *Squire's Companion to the British Pharmacopœia* prescribes ordinary wood alcohol internally in doses of 5 to 10 minims and the *British Pharmaceutical Codex* prescribes pure methyl alcohol internally from 30 to 60 minims, and while we do not

suggest the internal use of methyl alcohol, we would mention this fact to prove the claims of the manufacturers that the use of chemically pure methyl alcohol—"Columnian Spirits"—is perfectly satisfactory for external use. It is used by all principal hospitals and prescribed by many eminent physicians. It is more antiseptic and a far better solvent than ordinary ethyl alcohol, which often contains fusel oils.

We would call the attention of our readers to the offer made in this issue of our journal by the manufacturers, enabling physicians to try for themselves Columnian Spirits for bathing, rubbing, liniments and other external uses. The Standard Chemical Company, of Toronto, Limited.

OVER-FEEDING OF INFANTS.

Over-feeding kills as many babies as starvation, and it certainly is responsible for a large proportion of the ailments of early infancy such as gastritis, diarrhœa, etc. This is especially true in summer when the fretfulness of the child is often mistaken for hunger, may be due to thirst, the external temperature, warm clothing or indigestion. At such times it is wise to reduce the bulk of each meal, by at least one-quarter. It is difficult to impress mothers with the fact that milk should never be given to soothe babies' fretfulness, merely. Unmethodical and improper feeding is quite as bad as feeding with improper aliments.

When it becomes necessary to employ artificial feeding, there are two principles upon which it may be conducted. The first and most extensively practiced is to endeavor to obtain a food by modifying cow's milk, which corresponds, as nearly as possible, to the composition of human milk. The second is to adapt a prepared milk to the needs of each child as suggested by the state of its digestive organs and existing nutrition and development. The first method seeks to bring the child to the standard of the milk; the second to bring the milk to the standard of the child.

While some of the greatest successes of Bovinine have been seen in this difficult field of dietetics, there are still many who do not fully appreciate this fact or some of the reasons for using Bovinine for infants, even the youngest, as borne out by abundant clinical experience. It is justly claimed that for internal purposes the serum and nucleo-albumen in Bovinine are analogous in action and practically identical with the lactalbumen and colostrum of mother's milk. Another fact to be borne in mind is that the milk ferments cannot be found to any degree in Bovinine, although too freely found in milk, however, treated or modified.