

The Canada Lancet

VOL. XLVIII. TORONTO, DECEMBER, 1914 No. 4

EDITORIAL

MEDICAL RECIPROCITY.

The present war has brought this topic to the surface once more in an acute form. Time was when a person holding a British registrable qualification could register in Ontario. The Ontario Medical Council sought and obtained power to discontinue this practice, as many Ontario medical students went to Britain and secured a diploma from some one or other of the colleges and then returned to Ontario, and registered.

This was not an ideal state of affairs and, perhaps, the proper thing to do was to do what was done, namely, end it. But this argument should not be allowed to govern the action of Ontario and Great Britain now. Many changes have taken place in twenty-five or thirty years. The standard of the British qualifications has been decidedly raised. This would justify the Ontario Medical Council in making some modification in the present regulations.

It might transpire on investigation that there may still be some qualification in Britain that could not be admitted as on a par with the Ontario license or a degree from one of the Ontario universities. Surely, however, some arrangement could be reached whereby such qualifications as F.R.C.S., Edin., or Eng., or M.R.C.P., or F.R.C.P., or M.B., Edin., or Lond., and others that could be named, would be admitted to registration in Ontario, and in return the M.C.P.S.O., or M.B., University of Toronto, would be accepted in Britain.

It does not seem quite fair that the medical degree from McGill is accepted, while that from Toronto or Queen's is debarred. Great storms purify the air. The present war has raised new problems that must be dealt with in the British Empire; and one of these problems is that of medical reciprocity. Some of the Canadian provinces have reciprocity, and it has not deranged things medical. We feel confident it would not do so in Ontario.

THE CARE OF MOTHER AND CHILD.

This subject has engaged much attention. In New York careful attention has been given to the prevention of disease and death, both in the case of the mother and the child. Among other suggestions from the Department of Health we find the following, as summarized by the *Boston Medical and Surgical Journal*:

1. A reduction of the general infant mortality and morbidity, more particularly from the congenital diseases and during the first month of life.
2. A decrease in the number of still and premature births; thus increasing the number of births and, indirectly, the general health of mothers and resistance of infants.
3. The encouragement and increase of maternal nursing and the promotion of intelligent motherhood.
4. The production of healthier and stronger children.
5. Prevention and reduction, in the mother, of disease and injuries, improvement of her general well being, and betterment of home conditions under which the family lives.
6. Indirectly, an improvement in the practice of midwifery, because of increased supervision by personal contact of specially trained nurses and midwives.
7. Diminution in the number of cases of ophthalmia neonatorum by instructing mothers to insist that "silver drops" be instilled into their infants' eyes directly after birth.
8. The bringing of mothers and babies under an educational and prophylactic influences of milk stations immediately after the first month of the infant's life.
9. The establishment of a confidence in the mothers which will induce them to seek this instruction in future pregnancies.

These suggestions, if carried out, would lessen both mortality and morbidity. Many women suffer seriously because of lack of some very elementary information on the care of her health. Faulty obstetrics has been responsible for no end of injury to mothers. Many children are blind because mothers did not know the necessity of securing timely help for inflamed eyes. Vigilance is the eternal price of liberty; and education is the great saviour of health.

 WAR WOUNDS.

The war has lasted now for some months and the sort of wounds the surgeons have to deal with has become known. The large percentage of the wounds is caused by the big guns. It is the French 7.5 gun and the German siege mortar that are causing most harm. It is generally admitted that the rifle firing on the part of the Germans is not

good. The shrapnel and shell wounds are those from which the Allies suffer.

The rifle bullet, if it does not kill, usually inflicts a wound that heals rapidly and with few complications. The friction of the bullets in the rifles and their high speed through the air renders them aseptic. When these bullets hit end-on they make a very small hole, and the tissues immediately fall together. In this way must be explained the many recoveries that follow abdominal wounds. It cannot be that the bullets pass between coils of the intestines and cause no perforations. In the case of the lungs, bullets may pass through these organs with impunity, and the recoveries are numerous and rapid. These bullets pass through the clothing and do not carry portions into the wounds. The emergency field dressing usually prevents infection.

The round ball of the shrapnel makes a very different sort of wound. These balls are not aseptic, they are round, they are projected at a comparatively low speed, and frequently remain embedded in the tissues instead of passing through them. They frequently carry clothing or other substances into the wounds. They also tear up the tissues much more seriously and leave an open surface for infection. The worst sort of wounds are those made by fragments of burst shells. Very few bayonet or sabre wounds are reported on the part of the Allies. One would almost expect a bayonet wound to be fatal, made as they are in the central portions of the body, and under the conditions of a bayonet charge.

The proportion of the wounded has been very heavy, and at first, this over-taxed the ambulance workers. Many lay on the field for a considerable time before any assistance reached them and their wounds became infected. This has now been overcome in a great measure. In their eagerness to render first aid, the surgeons have been close upon the firing line, and many of them have laid down their lives in the discharge of their duties. For a time at the commencement of the war tetanus was very prevalent. Efforts have been made with much success to lessen the frequency of this complication. The bravery of the doctors and nurses at the front has been so noteworthy as to merit for them the most unstinted praise.

NATURE'S CREATION FOR CONSUMPTION.

The proprietors of Nature's Creation, the medicine advertised as a cure for tuberculosis, were up in the Police Court recently on charges of knowingly publishing false statements in connection with the medicine.

Dr. Arthur Jukes Johnson, Toronto's chief coroner, testified that

he had analyzed Nature's Creation and found it to be: Liquid extract of sarsaparilla, a small quantity of iodide of potash, 6 per cent. of alcohol, and minute quantities of other drugs, worth about 30 cents a bottle, including the bottle, and selling for \$5.00.

"And in my opinion, as a remedy for tuberculosis, it is useless," said Dr. Johnson. "Its claims to cures are false and absurd."

Dr. W. J. Dobbie, head of the Toronto Free Hospital for Consumptives, expressed his opinion that the drugs in Nature's Creation could have no effect on tuberculosis.

Most interesting were Dr. Johnson's statements regarding tuberculosis.

"There is no cure for it," said he. "But 90 per cent. of the population of Toronto are tubercular. The thousands of bodies I have examined in post mortems at the Morgue are seldom free of tuberculosis in some form."

FOR THE AFFLICTED PHYSICIANS OF BELGIUM.

The physicians of Belgium are in direct need. Starvation and cold will soon cause the most terrible suffering unless steps are at once taken to save them and their dependents.

The great urgency of the situation has made it necessary to hasten our efforts and a committee organized under the auspices of *American Medicine* has undertaken the collection of a fund for Belgian physicians.

Every medical man, every medical journal, every kind-hearted person in America, is urged to contribute—if only to the amount of twenty-five cents. Every penny will help.

Contributions may be sent directly to the Fund for Belgian Physicians, care of *American Medicine*, 18 East 41st Street, New York City, or, if preferred, to *Canada Lancet*.

The all important thing is to send your contribution, however humble it may be, at the earliest possible moment. Winter is close at hand, and the suffering our sorely afflicted brethren are sure to undergo will be appalling unless we who are placed in happier circumstances do something now—right away—to-day to lighten their burden of sorrow and distress.

Only a small contribution is solicited from each individual, but if a goodly number will respond, it is certain that a sum will be realized that will save our Belgian colleagues from the horrors of famine and the cold.

Send in your contribution to-day. Address, Fund for Belgian Physicians, c/o *American Medicine*, 18 East 41st Street, New York City, or if you prefer the editor of this journal will receive your contribution and forward it to the committee in charge of this movement.

BIRTHS, DEATHS, AND MARRIAGES.

The report on Births, Deaths and Marriages in Ontario for the year 1913 contains much information. During the year there were 125,831 registrations, an increase of 5,966 over the previous year. In the year 1913 there were 64,516 births, or a ratio of 24 per 1,000 of the population, and 34,317 deaths, or 12.7 per 1,000.

The number of illegitimate births was 1,394, or 138 more than for the year 1912. This gives a ratio of 21.6 per 1,000 births.

The marriages were 26,998, or 10 per 1,000 of the population. This was a decrease of 1,847 for the year compared with 1912. This was due to the recent marriage law which makes the conditions more exacting.

There were 34,317 deaths, or 12.7 per 1,000. This is an increase of 2,167 over 1912. The diseases giving the highest death rate were heart disease, 2,829; tuberculosis, 2,294; pneumonia, 2,076; infantile diarrhoea, 1,993; cancer, 1,806; cerebral hæmorrhage, 1,199; diseases of the arteries, 1,116; Bright's disease, 1,070; paralysis, 556; broncho-pneumonia, 517. Typhoid fever caused 447 and diphtheria 339 deaths. The infant mortality under one year was 117.7 per 1,000.

THE MEDICAL ASPECTS OF THE COMPENSATION BOARD.

In the working out of the Workman's Compensation Act the board will require the assistance of medical men. There must be one medical man and an assistant at the head office of the board. The head office must, however, receive information of the accidents that happen throughout the province.

This is where the board is going to find its greatest difficulty. Two courses have been under consideration. One to appoint a sufficient number of doctors to travel through the province and investigate the accidents. The other one is to appoint local doctors to do this. There are advantages and disadvantages in both plans. The engagement of a permanent staff would ensure greater experience and efficiency. The doctors would always be at this work and would become familiar with all its details. They would also be quite independent of all local environments and influences. There might be the disadvantage in this plan of being more costly than that of working out the system by local doctors, who would be paid by the case, or in proportion to the work they might be called upon to perform.

On the other hand, the local doctor might know something of the local conditions that would throw some light upon the adjustment of the claim.

All things considered, we have no hesitation in urging that the board secure the whole-time services of competent doctors who will travel over the province and investigate accidents and report to the board their findings. In the long run this method will ensure a greater degree of accuracy and speed than by working these adjustments through the assistance of local representatives. There are great possibilities for errors and mistakes in the administration of so complicated an Act, that the best method should be inaugurated at once. The question of cost should be a secondary consideration.

ONTARIO MEDICAL ASSOCIATION.

It has been decided that the meeting of the Ontario Medical Association will be held in Peterboro on May 25, 26, 27 and 28 next, and that the Provincial Health Officers' Association, under the presidency of Dr. Hall, of Chatham, will hold its meeting in Peterboro also during the same week. The joint meeting of the two associations will secure a very large attendance of the profession throughout the Province, and will probably result in single fares being obtained for the delegates.

The accommodation for these meetings will be unusually good, as the Committee of Arrangements have succeeded in obtaining the use of several large halls, as well as of the Armouries, all of which lie side by side, and are but a short distance from the hotels.

The Committee on Papers and Business, under the direction of Drs. H. J. Hamilton, of Toronto, and G. C. Cameron, of Peterboro, has already had several meetings, and the programme is in an advanced state. It is expected that about ten papers will be read in each of the main sections, and the names of readers already secured ensure a programme of great interest.

On the evening of the first day there will be a public welcome, given by the city of Peterboro, and a public address on some health topic will follow. The president's address will come on the second day.

Members of the association desiring to read papers should communicate at once with Dr. Mann, of Peterboro, or Dr. Strathy, of Toronto, forwarding the titles of the papers which they desire to read. The committee has decided that no papers will be presented unless an abstract thereof be placed in the hands of the committee before the first of March.

ORIGINAL CONTRIBUTIONS

HERNIA: A NEW DIAGNOSTIC TECHNIQUE.

BY GORDON GROTE COPELAND, B.A., M.B., Toronto, Canada.

Assistant Obstetrician to the Western Hospital, Toronto.

THE diagnosis of those herniæ that may be palpated externally, especially inguinal, femoral, umbilical and perineal ruptures, has long been made by getting the patient to cough while the examining fingers feel over the suspected opening for an impulse on coughing, and also by pushing the skin before the finger in trying to insinuate it into the abnormal opening. In a straightforward case with a large opening or with permanent injury to the structures around the canal, these methods are usually successful. The contents of the abdomen may descend into a hernial sac so as to show as a definite swelling externally, especially after accidental straining, fatigue or long exercise.

There are, however, a fairly large number of cases of rupture in which the above technique fails to show the hernia. It is the not uncommon experience of surgeons of wide hospital practice to have patients present themselves complaining of rupture and asking for a radical operation. These cases cannot by the above methods be shown to have a hernia at the first examination. And so they are kept in the hospital, being purged and walked around the wards in the hope that the hernia may come down and show itself to the satisfaction of the surgeon or his representative, for naturally and properly the surgeon wishes to make his own diagnosis before operating. This delay in a doubtful case and the subsequent discharge of the patient without operation since no rupture could be made out, has led in not a few cases to malingering.

There are several good reasons why this condition of affairs can exist in the case of a person who truthfully asserts that he believes himself to be ruptured, or, in doubtful cases which subsequently are diagnosed for sure before, or at operation, but which, at the first examination, cannot be shown to have a hernia, by the named methods. Some of these reasons are as follows:

(1) Immediately next to the opening in the abdominal wall, the coils of intestine may be loaded with feces or tightly distended with gas so that they are more or less rigid, and hence will not pass out of the narrow passage even if several coughs be given. The great omentum may also not be in a position to be driven out at the time.

(2) In the case of early or recent hernia, that portion of the canal into which abdominal contents might easily go from above downwards or

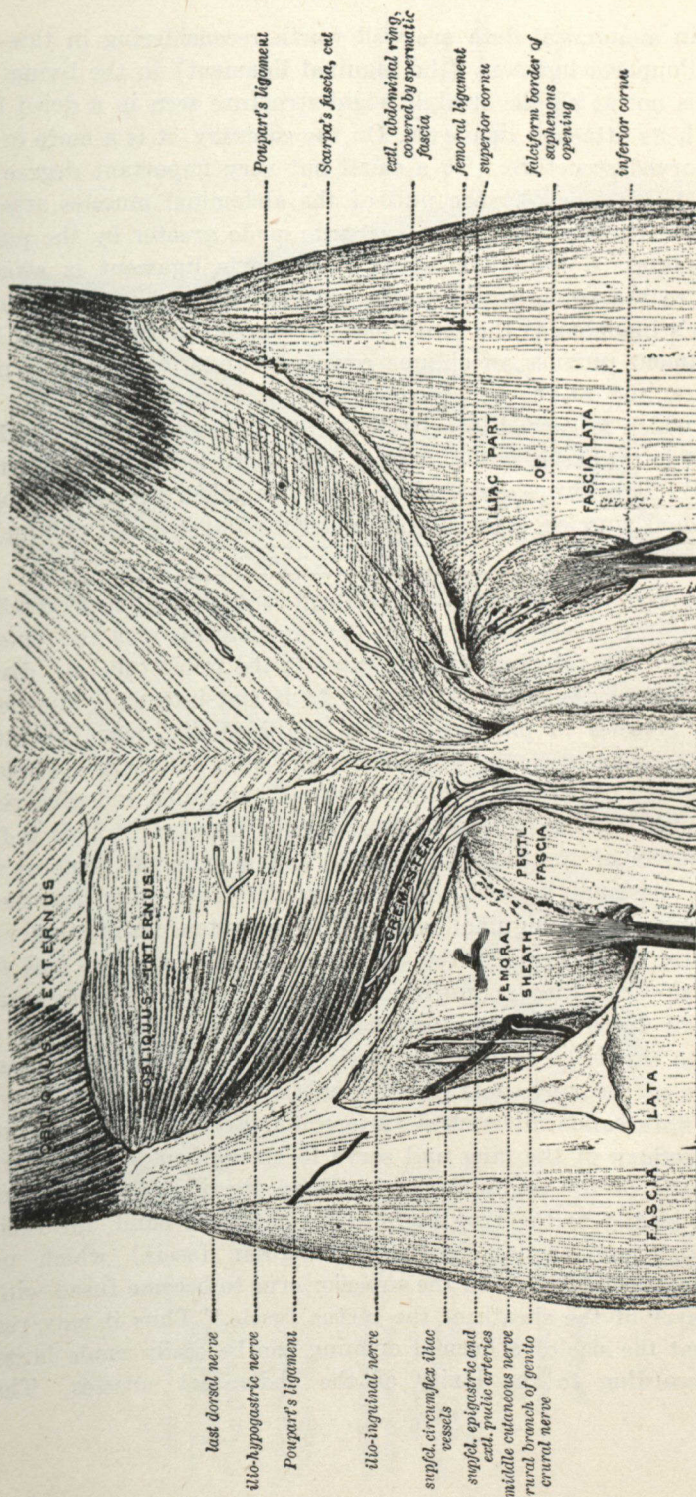
within outwards, may not extend to the distal end of the canal, and so the finger might readily fail to be pushed into the canal from without inwards.

(3) The patient usually stands erect while being examined and coughs with the head raised or turned sideways so as not to cough in the doctor's face. The effect of this posture is to cause a contraction of the muscles of the abdomen and a tightening of the fascia lata due to the strain of standing erect. This results in a shortening and straightening of their fibres which has a special importance in the neighborhood of the pillars and the conjoined tendons, causing a diminution of the inguinal canal in the first place, and of the femoral opening in the second, while in the case of an umbilical defect, the recti are more closely approximated and unyielding. This decrease of size may well account for and is a reasonable explanation of the fact that a hernia will show itself at one time and not at a subsequent occasion in the same individual. Of course, this is not the exclusive reason in every case, as other factors also have to be considered.

(4) In lying down, the act of coughing also throws the abdominal muscles into spasm before the explosive release of air from the throat occurs. Hence all those points of weakness in the abdominal wall are tightened and diminished, and it is only where permanent stretching or injury has taken place at these locations that a cough will cause the abdominal contents to protrude. For in the normal body the inguinal canal, for example, by reason of its valve-like structure, is more tightly closed during straining than at other times.

In addition, in the horizontal posture the force of gravity is acting away from the openings and thus the bowel and omentum lack this factor that is present naturally during such times as the hernia would come down of its own accord in the ordinary course of events. This is well shown in those cases of huge inguinal herniæ in which the scrotum may bulge as large as two fists when the patient stands, but which may show very little swelling even during a cough or two in the horizontal position with all the contents inside.

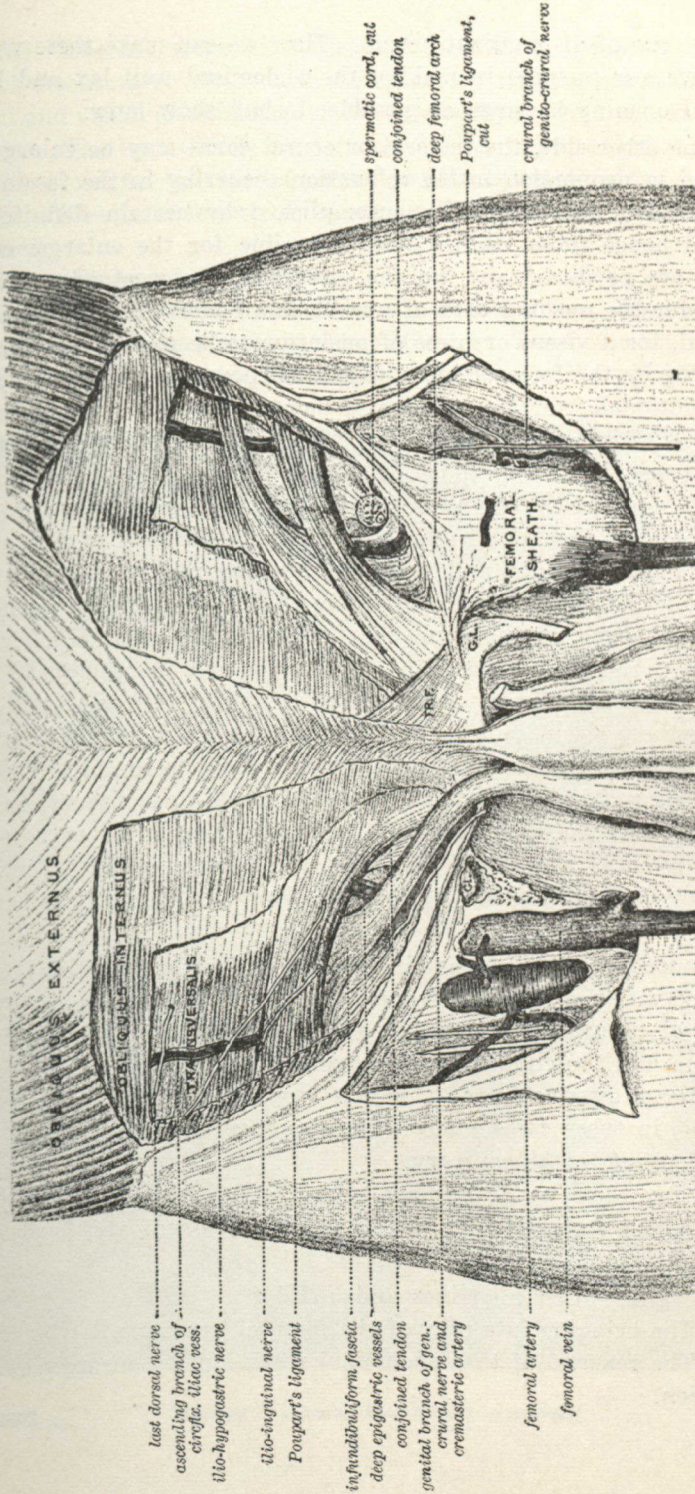
(5) In the act of coughing, the whole belly wall is jerked and a sudden impulse is conveyed to the examining fingers, whether there be a hernia or not; and furthermore, this sudden jerk may be felt at any point on the abdominal wall. This is a confusing factor that may get rid of as I shall show. In an excessively lean person the rings may bulge considerably where no hernia exists. At the opposite extreme, in a very fat individual the thick pad of fat blurs the tactile impressions, especially when this is at the same time confused by the sudden impulse, due to the cough.



(From Quain, slightly accentuated). Note curved structure of Poupart's ligament, the attachment of the fascia lata and of the anterior abdominal muscles into it.

Certain anatomical data are well worth reconsidering in this connection. Poupart's ligament (the inguinal ligament) in the living normal body is not at all the straight rigid structure seen in a dried bony pelvis, with its attached ligaments. On the contrary, it is a more or less movable curved structure. To a small but very important degree this curve can be flattened by the pull of the abdominal muscles attached directly or indirectly into it, or the curve made greater by the pull of the fascia lata. Cunningham says: "Poupart's ligament is attached internally to the spine of the pubis, and (2) through the medium of Gimbernat's ligament to the inner part of the ileo pectineal line. Poupart's ligament pursues an oblique course between the iliac and pubic attachments, and at the same time describes a gentle curve, the convexity of which is turned downwards. By its lower border it affords attachment to the fascia lata and when this is divided, it loses its curved direction." This curve would then, I say, be taken up by the pull of the abdominal muscles, especially the external and internal oblique and the transversalis.

Morris says: "The inguinal ligament is a strong band which extends along the distal margin of the aponeurosis (of the external oblique) from the anterior superior spine to the pubic tubercle, distally the fascia lata of the thigh is attached to it and internally the deeper abdominal muscles in part arise from it. Medially near the attachment of the ligament to the pubic tubercle (spine) diverging fibres are given off which pass to the pecten (crest) of the pubis and give rise to the triangular lacunar ligament (Gimbernat's ligament). This is fused with the fascia of the pectineus muscle and bounds the femoral ring. Above the inguinal ligament near its medial extremity lies the external opening of the inguinal canal. (The sub-cutaneous inguinal ring.) This opening is formed by the diverging of the lower medial fibres which composed the aponeurosis of the external oblique muscle. The superior fibres form the upper boundary, superior crus, of the ring and pass to the front of the symphysis pubis. The inferior fibres, inferior crus of the ring, pass to the public tubercle (spine), between these two fibre bands intercrural (intercolumnar) fibres arch about the lateral boundary of the ring and serve to strengthen the exterior and interior walls of the inguinal canal. From the inguinal ligament beneath and medial to the ring there arises a fibrous band, the reflected inguinal ligament (colles ligament triangular fascia) which passes medially and upwards behind the superior crus to become fused with the anterior layer of the sheath of the rectus muscle." Thus it may readily be seen that the size of a hernial opening can be easily made larger or smaller according to the laxity of the abdominal muscles. This is



Note the curved position of the pillars and the conjoint tendons, when contracted, they diminish the size of the inguinal canal. (From Quain, slightly modified.)

especially true of an inguinal hernia. How we can make these various forces serve our purpose in making the abdominal wall lax and hence the hernial opening as large as possible, I shall show later.

On the other side, the femoral or crural canal may be enlarged or diminished in proportion to the relaxation occurring in the fascia lata. This relaxation can be readily accomplished by certain definite postures, and hence those factors most favorable for the enlargement of the canal are produced and, on the one hand, the most advantageous condition for the pushing back of a reducible femoral hernia or, on the other hand, for a viscus or piece of omentum to be pushed out through this opening by the force of intra abdominal pressure and gravity, produced intentionally for the purpose of demonstrating a femoral hernia. Appropos of this, Cunningham says: "When attempts are made to reduce a femoral hernia the position of the limb during the procedure must be attended to. When the thigh is fully extended and rotated outwards, all the fascial structures in the neighborhood of the crural canal are rendered tight and tense. When the limb is flexed at the hip joint and rotated inward, on the other hand, the superior corner of the falciform edge of the saphenous opening and even Gimbernat's ligament are relaxed. This, then, is the position in which the limb should be placed during the reduction of a hernia." And, I will add, that this is the position, more or less, in which the thigh should be placed when trying to demonstrate a femoral hernia, though the body position in attempting *reduction* of a femoral hernia should be horizontal or with hips higher than the head, whereas, in trying *production* of a hernia intentionally, the body should be almost vertical and slightly forwards to bring the force of gravity into play, and remove the strain of standing erect.

My procedure aims at certain definite anatomical positions which cause a relaxation of certain groups of muscles and fascia and takes advantage of natural laws to aid in the production of those conditions favorable to and the elimination of adverse factors from the deliberate and intentional production of a hernia for purposes of demonstration or diagnosis in those cases where a hernial opening actually does exist or positive proof to the contrary.

These favorable conditions are:

- (1) As lax an abdominal wall, Poupart's ligament and fascia lata, as possible.
- (2) Well-emptied intestines and bladder.
- (3) The bringing into play of the force of gravity.
- (4) The removal of that abdominal strain due to an erect or vertical position.

(5) The allowance of sufficient time for the progressive protrusion of omentum or viscus and the necessary time to make an accurate digital and visual examination of (and percuss) the bulging mass, if any.

(6) The removal of the jerk or sudden impulse due to coughing and the avoidance of the dangerous and disagreeable cough altogether.

(7) The production of a steady and efficient intra-abdominal pressure.

The technique is as follows:

Get the patient to stand stripped, with the feet about six inches apart at the heels and eight inches at the toes. The knees are to be bent about 25 deg. This causes the thighs to be bent on the pelvis also. The



Method of causing the tumour to appear.

knees are turned very slightly outwards so as to give room to examine the groin and also leave it free. This, when the thigh is flexed, will not appreciably tighten the fascia lata. The body is slightly bent forwards, the face turned downwards. This throws the strain of standing onto the posterior group of trunk muscles and removes the postural strain on the abdominal muscles present in the erect position. The patient is to hold his mouth firmly closed and pressing his nostrils between thumb and forefinger after taking a breath, closes the nose tightly and blows, allowing no air to escape. The face should turn red, the veins stand out. (Signs of straining). At this moment the examiner palpates the suspected hernial opening. If a mass gradually becomes perceptible and progressively increases in size, and especially if resonant on percussion, a hernia is most certainly present. The progressive protrusion into the hernial sac I attach great importance to. The patient can rest and repeat several times until ample time is given for an investigation that settles the question one way or the other.

It is true that the abdomen will be tense, but it is a tension due to intra-abdominal pressure, and where the fibres are stretched rather than contracted.

That this almost vertical position, combined with forward bending, does actually relax the abdominal walls is well shown by Alfred E. Thayer, M.D., in the *International Clinics*, Vol. 4, series 15, 1906.

If a hernial sac does exist, the above method will almost certainly cause a protrusion of some of the abdominal contents which advance in a steady manner, so far as they are allowed by the size of the hernial sac into which they go, and its extent.

Other methods of producing steady intra-abdominal pressure, such as trying to blow up further an already full football bladder, etc., may be used on especial occasions, though the above method has given very satisfactory results in my own hands.

Babies may be held up under the armpits in the position described and by getting them to cry, the hernia will come down. It is advisable to have their feet touching a surface, as this can be used to make their knees bend.

I have tried this method, which I discovered some four years ago, on several hundred persons whom I have examined for the presence of hernia. On not a few occasions it has shown a hernia to exist where other methods failed.

It was suggested to my mind by seeing a woman straining in labor and making evident a small umbilical hernia which was unsuspected and which between pains was not made apparent by coughing.

I wish to thank Dr. S. M. Hay for kindly loaning me patients, and Dr. J. C. Beatty for taking the photographs of them.

So far as I know, I am the originator of the method, as I have never seen it described, and I have demonstrated it to several competent surgeons, who were convinced of its utility. I believe that its value lies not only in the fact that it is an alternative method to those commonly used, but it will show a hard-to-detect hernia which is far the most dangerous, when other methods fail.

I hope the method will prove as uniformly trustworthy and helpful to the profession as it has to me.

73 Bloor Street East, Toronto.

UNDESCENDED TESTICLE AND ITS TREATMENT.

BY CHAS. B. SHUTTLEWORTH, M.D., C.M., F.R.C.S., (Eng.).

THE changes of location which the testicle undergoes is a conspicuous feature of its development. To understand this clearly it is necessary to recall the relation of the mesonephros or Wolffian body and the genital gland to the peritoneum. Since both of these bodies arise from the outer wall of the body, necessarily they lie between the body wall and the parietal peritoneum, that is, behind the peritoneum and covered by it.

The testicles until near the end of intrauterine life are placed in the abdominal cavity, lying at first on the posterior wall of the abdomen at the level of the two upper lumbar vertebræ and just below the level of the future permanent kidneys. The testis is held in place by a fold of peritoneum or mesentery known as the mesorchium.

This mesorchium is prolonged up to the diaphragm as the diaphragmatic ligament and also downwards towards the inguinal region as the inguinal ligament of the primitive kidney, since the latter organ is the largest constituent of the projecting mass. When the primitive kidney has disappeared as such, the inguinal ligament mentioned seems to connect the testicle with the inguinal region of the abdominal wall. This ligament contains between its folds connective tissue and some unstripped muscle fibres. These become the gubernaculum testis in the male. As the body of the foetus continues to grow while the tissues of the ligament remain stationary or grow less rapidly, the testicle is gradually displaced from its position at the side of the lumbar spine and by the third month of intrauterine life reaches the false pelvis, and at the fifth month it is in contact with the abdominal wall near the internal

abdominal ring, but during this month the elongation of the gubernaculum becomes more rapid and causes a slight ascent of the testis so that it now lies at a higher level in the abdominal cavity. This stage, however, is of short duration and is succeeded by a stage of final descent.

Meanwhile the musculo-fascial layers of the ventral abdominal wall in the neighborhood of the attachment of the inguinal ligament (or gubernaculum testis) undergo evagination resulting in the production of a shallow pouch, the inguinal bursa, into which a sac of peritoneum, the processus vaginalis, extends, together with the closely associated inguinal ligament. The inguinal bursæ, in turn, sinks into the shallow scrotal pouch which has independently developed as an integumentary fold from the labio-scrotal fold.

It is to be remembered that the layers of the scrotum are identical with the layers of the abdominal wall for the various muscles of the abdominal wall have their counterpart in the various layers of the scrotum, which later lose their muscular characters and become membranous. It will be thus seen that the scrotum is, in reality, a pouch directly continuous with the abdominal wall and is in every respect identical with it in construction and after the descent of the processus vaginalis, lined by a process of peritoneum which is continuous above with the general peritoneal cavity.

In the eighth month of intrauterine life the testis enters the inguinal canal and shortly before birth it leaves the inguinal canal and enters the scrotum.

Since the testicle is from the first behind the parietal peritoneum, in the extra-peritoneal tissue, in its descent it passes downwards retroperitoneally, passing behind the vaginal process to the bottom of the scrotum to its permanent position.

The condition which is thus acquired persists for some time after birth, the testicles being readily pushed upwards into the abdominal cavity along the course by which they descended. Later the peritoneal cavity is shut off from the processus vaginalis, which, in turn, wraps itself around the testicle to form the tunica vaginalis.

The testis carries with it in its descent its blood vessels, the spermatic artery and vein; its duct, the vas deferens, as well as its artery and lymphatic vessels; and these structures collectively form the spermatic cord.

Monorchism, or the total absence of one testicle, has been shown by autopsy to occasionally occur, and is attended by no symptoms whatever.

Anorchism, or total absence of both testicles, may be inferred when the scrotum is empty or undeveloped and there is a rudimentary condition of the external genitalia, impotence, sterility and the physical and mental attributes of eunuchism appear later.

Arrest of descent of one or both testicles may occur at any point between the lower border of the kidneys and the hollow of the scrotum.

The chief forms are (a) *Abdominal* (cryptorchism, unilateral or bilateral). The testicle may be situated on the posterior abdominal wall in close relation to the lower outer border of the kidney, and may be provided with a long mesorchium or mesentery, allowing it a free range of movement in the abdominal cavity, or it may lie in the iliac fossa close to the internal abdominal ring. (b) *Inguinal Retention*. The testicle may be arrested at the internal abdominal ring, in the inguinal canal or at the external abdominal ring. It is here usually freely movable unless fixed by subsequent inflammation and adhesions. (c) *Cruro-scrotal Retention*. Here the testicle passes through the external abdominal ring, but fails to descend completely, lying close to the ring or at varying distances below it. The second variety, or inguinal retention, is the commonest form of these.

Various causes to explain these forms have been given, such as pre-natal peritonitis, with resulting adhesions for the abdominal form; small size of the external ring or abdominal development and size of the epididymus for the inguinal variety; and undue shortness of the spermatic cord or any one of its constituents for the cruro-scrotal form.

Aberrant descent (ectopy) in which the testicle leaves its normal course may occur in one of several forms:

(a) In *peno-scrotal ectopy* the testicle is found above the penis under the skin of the abdominal wall. (b) In *perineal ectopy* the testicle is found on one side of the perineal raphe and in front of the anus. (c) *Femoral ectopy* appears as a movable tumor in the site of a femoral hernia over the saphenous opening. The testis may always be recognized by its physical characters and its peculiar sensitiveness and the absence of the corresponding organ from the scrotum of that side.

Of these forms the perineal variety is the commonest, and the cord may often be traced up from the misplaced testicle to the external abdominal ring.

Irregular development of the gubernaculum and abnormal attachments or overdevelopment serve to explain these latter forms.

In its bearing on the development and the course of hernia and inflammation, the relation of the misplaced testicle to the peritoneal pouch which accompanies it, is of great importance. The pouch may remain open to the general peritoneal cavity, predisposing to hernia or the extension of inflammation upwards. It may be closed above but open below, favoring the development of hydrocele; or it may be obliterated. Exceptionally the testicle may be retained and the funicular process of the peritoneum may extend to the bottom of the scrotum and

thus allow a hernia to pass beyond the position of a retained testicle.

Complications which may arise: The misplaced testicle may become twisted on its longitudinal axis and bring about torsion, an accident which usually affects undescended testicles, but is not confined to them. In slight cases the epididymus alone becomes infiltrated by constriction, to which the vessels are subjected, but in severe cases the entire gland with its epididymus becomes gangrenous.

A misplaced testicle is much exposed to injury, and a sub-acute traumatic orchitis often occurs. It is stated, but the accuracy of which is open to doubt, that such organs are very prone to become the seat of malignant changes. Any of the inflammatory or pathological conditions of the testicle, cord or epididymus may, of course, involve the misplaced organ and give rise to considerable and even dangerous consequences, especially when the testicle is lying in close proximity to the peritoneum.

In all cases of retained or misplaced testicle in the adult the organ is atrophic and often functionally useless. At first it is normal in texture, but as a result of repeated and continued pressure it is likely to undergo degenerative changes. If only one organ is affected it matters little, but if both are involved the individual is probably sterile. It has, moreover, been shown that a misplaced testicle does not develop properly, but if transplanted to its normal scrotal position, that it will develop and functionate.

Treatment. Palliative. When the condition is discovered at birth and the testicle is partly descended or abnormal in position, repeated gentle traction by the mother on the testicle and cord towards the root of the scrotum practised twice daily for several minutes at a time may at last be rewarded by success in causing the organ to assume its normal position in the scrotum.

The writer has noticed in several cases that as the baby develops the partially descended testicle may gradually descend until it reaches the scrotum, the process of descent being simply retarded.

No apprehension need be felt for the testicles, usually both, that are high up in the scrotum and are already outside of the abdominal ring, for with the development of the rest of the body the testicles usually descend still further.

When the testis becomes diseased or torsion occurs, then operative interference is indicated. The testicle had better be removed, together with the cord, and the inguinal canal closed.

When a hernia develops in childhood, a retained testicle also being present, the hernia is dealt with by operation and at the same time the testicle is transplanted into the scrotum.

When a hernia complicating a displaced testis is met with in an adult, on account of the non-development of the organ and its probable uselessness, and where the other testicle is healthy, it is better to remove the atrophied organ and do a radical operation for hernia by closing the inguinal canal and rings.

In early life when the child has reached the age of five years and the testis shows no sign of further descent, it is advisable to operate and **transplant** the displaced organ into the scrotum.

The writer now has had eighteen cases which have gone on to operation. The first attempts were aimed at freeing the testicle and trying by various means to increase the length of the cord or by loosening the epididymus from the body of the testicle, but it was found that the organ later on found its way back to its former mal-position.

Attempts to suture the mobilized testicle to the bottom of the scrotum or to the skin of the thigh by traction sutures through the bottom of the scrotum or fixing the testicle by sutures to wire appliances buried or to splints applied to the perineum all ended in failure or at best only partial success.

It is essential for the success of all operative work of a plastic nature that there shall be no tension whatever on any sutures or to any retentive apparatus used. So all the above operations were discarded as wrong in principle.

The writer was induced to follow the technique described hereafter from experience gained at an operation carried out on an aged patient referred to me by Dr. C. J. Copp. This patient had been operated on twice in the Old Country without success. A third attempt on my part was followed by a recurrence of the hernia, due to a weak scarred abdominal wall and the presence of a very bulky spermatic cord. A fourth operation was then done after getting the patient's consent to a removal of the testicle if it was deemed necessary to the success of the operation. The cord was divided at the internal ring and at the root of the scrotum and removed, and the testis was returned to its bed. Then the entire length of the inguinal canal was securely closed after removal of the scar tissue which was abundant. The testicle was now deprived of all its blood supply, except that through the scrotal tissues behind and the organ was carefully watched. The testis eight months afterwards was slightly softer and a little smaller than its fellow.

It was thus made plainly evident that the testicle could survive with but a fraction of its normal blood supply, and this led to the procedure outlined below.

This operation was first performed by the writer in July, 1902, but at that time I was unaware that Bevan, of Chicago, had read a paper

on an operation for the relief of this condition that was practically the same in principle, but differing much in detail. A further paper by Bevan appeared in the *J. A. M. A.* in September, 1903, on the same subject.

An incision is made through the skin and subcutaneous tissues extending from the internal abdominal ring to the root of the scrotum. The external oblique aponeurosis is now slit up and the coverings of the cord, i.e., the cremasteric and infundibuliform fascias, are incised to the same extent as the external oblique. The sac of peritoneum nearly always present is opened and then cut through above the testicles, peeled loose to the internal ring and ligated off there with catgut. The distal end of the peritoneal sac is closed with catgut to make a tunica vaginalis. Now the mobilized testis is drawn upon and then all the coverings and all structures of the cord with the exception of the vas deferens, with its deferential artery, and the few accompanying veins are transversely divided, including the spermatic artery, and ligated. The spermatic artery may be spared if its shortness does not interfere with bringing down the testicle.

There is now no difficulty in bringing down the testicle by gentle traction and easing with the tip of the finger in the subperitoneal tissues at the internal ring of the remaining structures which now emerge there. The testis is then placed in a pouch made for it by the forefinger in the empty scrotal sac. No sutures are necessary to retain it there, with the exception of a purse-string at the external abdominal ring to provide against future contraction of fibrous tissue.

This operation has been carried out in eleven cases to date, ten in children and one in an adult, with uniform success. Only three of these cases have been traced after periods of two, three and seven years, and in all the testicles have developed and are apparently normal.

Discussion.—Dr. W. E. Gallie said that he uses the same technique as that described by Dr. Shuttleworth. It was, in fact, the method taught him when a student. He had seen cases treated in Boston, one of which proved conclusively that the organ subsequently functionated in a normal manner. Since the vas in most cases of the inguinal type was curled upon itself, there was no difficulty in getting the organ down.

Dr. Primrose referred to a paper by Bevan, of Chicago, in which some sixteen or eighteen different operations were described to deal with the condition, quite obviously proving that undescended testicle was very difficult to treat. It was interesting to note that the testis could survive even after division of all the structures of the cord, and Bennett was able to inject the testicle through the artery to the vas. He was not convinced that mechanical causes were exclusively responsible for

the non-descent of the testicle, but thought that developmental faults had something to do with it. In illustration he referred to a specimen now in the anatomical museum of the University of Toronto, which he obtained from a patient of Mr. Cameron's some years ago. There was a sarcomatous testicle lying in the iliac fossa and this was associated with hermaphroditism with a particularly well developed prostate utricule. He was convinced, moreover, that sarcomatous change was more frequent in undescended testis.

Dr. F. N. G. Starr thought the cure was difficult. He thought the best results were obtained from the wire splint described by him before the Academy of Medicine some years ago. Its chief use is in keeping the scrotum stretched.

Dr. Shuttleworth in reply showed wherein his method differed from Bevan's. The latter tore all the structures of the cord except the vas and its artery, while he clamped on either side and cut between. He found that in this way hæmorrhage was much less. He thought that in many cases the undescended testicle was atrophic and not worth bringing down. Indeed he believed that it is because of the atrophic condition that it failed to descend.

478 Huron Street, Toronto.

I. CASE OF DILATATION OF THE OESOPHAGUS. II. CASE OF STRICTURE OF THE OESOPHAGUS WITH DILATATION ABOVE THE POINT OF STRICTURE.

BY FREDERICK W. MARLOW, M.D., C.M., F.R.C.S., F.A.C.S. (Toronto).

Associate Professor of Gynaecology, Toronto University.

FIRST.—Mrs. L., age, 57 years, consulted me in June, 1914, regarding her pelvic condition. Nothing of importance was found other than a slight degree of cystitis. She was a small, emaciated woman weighing about one hundred pounds, the mother of five children, of whom the youngest was twenty-nine years of age; and had passed the menopause at the age of forty-two. Her general condition was poor, but had been so for many years.

Enquiry into her digestive processes revealed the fact that for over thirty years she had difficulty with her meals, but experience had taught her how best to manage them. The technique which she had developed consisted of taking her meals in the ordinary way, then retiring to a convenient water supply, either tap or pitcher, and drinking at least three pints of water, after which she would rest for a while with a

feeling of considerable fulness, and then relief would come more or less suddenly. Sometimes no vomiting preceded relief, but more frequently the water was vomited and very seldom was it mixed with any of the food previously taken.

I had her placed under observation for a few days in the Toronto General Hospital, where her method of taking meals was verified by the nurses in the ward, and by Mr. Fenner in the X-ray department.

Examination with the screen while a large Barium meal was taken showed the meal dropping down into an enormously dilated oesophagus, but it did not pass into the stomach. Several glassfuls of the meal were accommodated there without much discomfort. Similar examinations for some hours afterwards would reveal the meal still in the oesophagus, but if a free supply of water was allowed to be taken vomiting would ensue after a short interval and subsequent examination would show that the meal had passed into the stomach. While vomiting, the water returned clear without a trace of the Barium meal. Once into the stomach the meal passed on without any very marked delay. Repeated examinations gave the same results.

The X-ray plates showed the oesophagus greatly dilated in its entire length. At the upper end it was two inches in diameter and it gradually expanded from above downwards until at its widest part its diameter was a little more than four inches. This widest part was like a large pouch and had sagged down, pushing the diaphragm before it to the level of the second lumbar vertebra. The terminal part was at a slightly lower level and was deflected strongly to the left, being marked off from the large pouch by a somewhat constricted area. Its end was abrupt, without tapering off. Plates taken from the side showed an equal amount of expansion. Plates of the stomach after the meal had passed into it showed an elongated stomach shaped like the capital letter J. Its upper end was abrupt and was distinctly marked off from the lower end of the oesophagus. Its lower end occupied a very low level, but later plates showed that there was no marked stasis from this point onwards.

So far as could be demonstrated there was no reason to believe that there was any marked stenosis of the cardiac opening into the stomach. The capacity of the oesophagus was equal to that of the stomach, or even greater, and the passage of the meal through the cardiac opening took a very short time once it began. Just why the taking of large quantities of water after the meal would cause it to pass could not be judged from the plates. Neither could one explain why the water would return unmingled with the meal.

As the patient was not seeking advice on account of this condition

and was not disposed to resort to treatment for it, nothing was advised.

Second.—Baby H., female, age, four years, seen at the Toronto General Hospital on August 5th, 1914, in consultation with Dr. Tilley, of Bowmanville, had about six months previously swallowed a quantity of Gillett's lye. The result was little short of being fatal and after the acute reaction subsided great difficulty of feeding persisted. Emaciation was marked. Food given was promptly vomited, unless given in the minutest quantities in the form of Horlick's malted milk tablets chewed slowly, or Liquid peptonoids. By this process, combined with rectal feeding, the child was kept alive.

X-ray examination during and after the administration of a small quantity of a Barium meal showed the upper part of the oesophagus dilated to about two inches in diameter as far down as the junction between the seventh and eighth dorsal vertebrae. Here it abruptly narrowed down to a small tapering point, showing a marked stricture. Under anaesthesia careful attempts at passing various kinds of small bougies were unsuccessful. These were not long continued on account of the weakened state of the patient. After careful consideration it was decided that as the child was not only holding her own but showing signs of improvement, and was at the time too weak for operative procedures, she should be left to see if further improvement could be attained. If so it was thought that later on a gastrostomy might be performed and probably some means might be undertaken to dilate the stricture.

A recent communication from her physician states that she is considerably stronger and is able to run about, although she does not gain very much in weight or appearance.

Discussion.—Dr. Primrose thought Dr. Marlow's first case one very suitable for dilatation. The method used was that of Plummer at the Mayo clinic, although he was not its originator. The patient swallows a thread with his food, to which is later attached a dilating apparatus. He asked why in the second case a gastrostomy was not done. He had seen the stenosis lessen after such a procedure. He referred to Roux's patient, whom he had seen in Vienna. Here a coil of small intestine freed from the intestinal tract had been transplanted beneath the skin of the chest and connected with the oesophagus above and stomach below. He preferred, however, that some one else do the operation.

Dr. Gallie had one case of oesophageal stricture from Gillett's lye. He did a gastrostomy, but the child did not pick up very rapidly. Following Pawlow's experimental work, he had the child chew meat after the food was put into the stomach. Two months after the operation the child was dead.

Dr. Shuttleworth never saw any good result from the attempt to pass bougies in these cases. They all died from some injury, the bougie generally perforating the tube. He invariably sends such patients to those skilled in the use of special instruments.

Dr. Anderson referred to a huge dilatation of the oesophagus, functional in origin, exhibited by the late Dr. G. A. Peters. He was sure bougies were extremely dangerous. Even instruments with light attachments were not free from danger. Recently he saw a patient die from hæmorrhage following the use of the oesophagoscope. He did the post mortem and there was no stricture of the gullet present.

Dr. W. J. Wilson referred to a patient who seven years ago had a gastrostomy done and is still living with a tube in her stomach.

Dr. C. L. Starr thought Dr. Wilson's case a very pathetic one and little better than death. In reference to Dr. Marlow's second case the method of Abbé he thought would probably give the best results. A string is swallowed, then a gastrostomy done and by sawing movements the stricture is divided.

Dr. Marlow in concluding the discussion said that his first patient came to him regarding her pelvic condition and her cardio-spasm was discovered by accident. He thought there was no possibility of any organic stenosis being present. As to the child he pointed out that when seen it was showing some signs of improvement. It was in a very weak state and thought it better to wait. Operative procedures can be considered later.

417 Bloor Street West, Toronto.

SPURIOUS AND GENUINE TREATMENT OF PSYCHONEUROSIS, ILLUSTRATED BY CASES.

BY TOM A. WILLIAMS, M.B., C.M., (Edin.), Washington, D.C.

Corres. Mem. Soc. Neur. and Psychol., Paris, etc.; Neurol. to Ephiphany Dispensary, Washington.

WHAT is familiarly known as the influence of the mind over the body needs no illustration nowadays; and a historical retrospect would only burden an attention likely to be strained by what is already involved. An understanding of how disturbances, apparently physical, are easily influenced by means we call mental, is clouded in errors most detrimental to the understanding of not only what we call individual disease, but of the behaviour relationship of human beings in general.

My first endeavor is to expose the fundamental fallacies and danger-

ous implications imminent in the practice of those persons or sects who pride themselves upon being non-medical. But readers may take no pride that they themselves are not as those, for my second endeavor has been to show that, for the most part, the mental healing of many medical men is not only less efficacious, but more unscientific than that of mental healers themselves. I have made no explicit demonstration of this latter contention, for it is so apparent among the facts related that even he who runs may read. My third endeavor is to convey an inkling, at least, of the principles of the methods which should be used against certain functional nervous disorders.

In the therapeutic results of the kind I describe are by loose thinkers attributed either to suggestion, to faith, or to confidence in the physician, and it cannot be too strongly stated that neither of these factors is the true one in any of the cases with which I have to do.

Were confidence the important element, I should not succeed where the family physician had failed; for while in him the patients usually put a trust almost blind, to me most of them have come almost sceptically. Confidence, of course, has to be gained, but neither apparatus nor manner is of an imposing character in my consulting room, that confidence comes only as a result of the patient's appreciation that an understanding of the situation is being developed.

As to suggestion, I take the greatest pains to avoid fallacious shortcuts to the removal of symptoms, of which I seek to reach a foundation by giving the patient a rational understanding. When this is done, the patient needs no moral support from the physician nor anyone else; for having learned his own psychology, he knows how to direct himself. Hence, when the cure is complete, relapses do not occur.

TREATMENT OF ANAL FISSURE BY TINCTURE OF IODINE.

Maschat deprecates the use of the knife in treating this simple malady. He is satisfied that the use of tincture of iodine as a means of cauterization is both simpler and surer. He has for some years now treated all degrees of fissure in this manner, and with uniformly good results. The cauterization is done on three or four occasions, with two or three days' interval. After the first application there is, in twenty-four hours, considerable diminution of the pain, and the fissure is generally cured by the fourth application. The pain following the first cauterization is rather severe, but does not last more than a few minutes, and there is usually no necessity for local anæsthesia. In no case was there a return of the trouble.

CURRENT MEDICAL LITERATURE

—
MEDICINE
—

ORIGIN OF SOME WELL-KNOWN MEDICINES.

Dover's powder, introduced into the "British Pharmacopoeia" in 1748, was the result of the work of Thomas Dover, who was born in 1668; studied under Sydenham; practised in Bristol in 1684. During the year of 1708, when Thomas Dover was captaining a privateer expedition, he landed in Peru, and following this his seamen became afflicted with the plague. Together, with four surgeons, he treated 180 seamen by bleeding each 100 ounces and by using the powder. In 1742, after he had returned to London, he brought out this powder for gout, and it was called by him diaphoretic powder.

"Fowler's Solution" was introduced by Tom Fowler, an apothecary, in Yorkshire, England. A proprietary medicine, named "Tasteless Ague and Fever Drops," was quite popular at that time, so Fowler analyzed it and found arsenic in it. He worked out the formula, added spirit of lavender, and called the resulting preparation Fowler's Solution.

Laudanum was a name invented by Paracelsus in 1500, who applied it to an aqueous extract of poppy, which he gave in five grain doses. Sydenham first introduced liquid laudanum, acetum opii, which continues to-day as the laudanum of the continent. The word paregoric was first used as an adjective, meaning to speak words of comfort, and at first to describe an elixir. Lemort, a Leyden chemist, brought forth paregoric elixir early in the eighteenth century. Many of the older Green and Latin physicians had paregoric elixirs.

One of the oldest known combinations is that of *Hiera Piera*, sometimes referred to as *Hickera Pickera*, or *Hickory Pickory*.

Hiera was applied to prescriptions in early Grecian medicine, and these contained either aloes or scammony, or both. Each physician had his own particular *Hiera*; Galen's consisted of aloes. The pill of aloes and myrrh was first introduced as *Rufus Hiera*.

Friars' Balsam, introduced by Fridasor, a friar, first consisted of Balsam of Peru, later benzoin was substituted.

Blaud's pill, introduced by a Frenchman in 1841, consisted of iron sulphate and potassium carbonate.

Citrine ointment made its début in 1650, and at that time consisted of lead and grease. In 1722 mercury was dissolved in nitric acid and mixed with lard. A Yorkshire physician was responsible for this.

Diachylon, meaning a precipitation of juices, was of importance, from a medicolegal viewpoint, in England, where it was used by the ignorant class to produce abortion. This ointment dates back to the time of Tiberius.—*Merck's Report*.

PITUITARY DISORDERS.

The eighth Weir Mitchell Lecture before the College of Physicians and Surgeons of Philadelphia was delivered by Harvey Cushing, Boston, February 25th, 1914, and appears in *The Journal A. M. A.*, October 31st, 1914. After noticing the more recent additions to our knowledge of pituitary disorders and the fact that they are met with in the ordinary walks of life to a recognizable degree, though not causing the patient to seek medical aid, he reviews the disturbing symptoms which they may produce when accompanied with an extreme glandular enlargement or when the secretory activity of the gland is embarrassed. These are essentially of a mechanical nature and the aspects of pituitary diseases dealing with the glandular enlargement or tumor are the chief topics of the lecture. We must not, however, overlook the fact that the constitutional symptoms may not correspond with the size of the growth. The subject is rendered still more complex when we attempt to differentiate between the two lobes of the gland which have quite different functions. Another cause of complexity is the polyglandular nature of every gland disorder which in some cases may cause doubt as to which of the endo-secretory organs was first at fault. The now prevalent view is that any derangement of the correlated glands excites disturbances in the others, but with the qualification that the primary disorder of any individual gland, either of oversecretion or undersecretion causes its own peculiar group of symptoms. The insufficiencies of adrenal, parathyroid and pineal glands, of the islets of the pancreas and the cells of the sexual organs give rise to their peculiar syndromes, and while we know little of the reverse conditions, except in the thyroid and anterior lobe of the pituitary, the recognition of primary overaction of the other glands will doubtless be forthcoming. It now appears that functional hyperplasia of the anterior lobe stimulates tissue growth, especially of

the bones and integument, and at the same time excites the reproductive apparatus as shown by the secondary characters of sex. Little is known, however, of the functional hyperplasia of the posterior lobe which seems to be more concerned with tissue metabolism, for when rendered inactive by disease or compression, metabolic processes are checked and the symptoms produced somewhat suggest the phenomena of hibernation. The tendency toward a relative glandular inactivity seems to occur in most cases of pituitary disease and commonly symptoms of glandular insufficiency come in time to be superimposed on those of outspoken acromegaly. The term dyspituitarism has come to be used to cover all types, though in some cases hypopituitarism appears from the start. Many former obscure symptoms, such as certain forms of obesity and leanness, polyurias, etc., undue drowsiness, delayed or precocious puberty. Promising results have followed glandular therapy and surgical procedures have been indicated in some cases to relieve pressure symptoms, etc. Cushing gives an analysis of 148 cases, 101 of which presented definite tumor symptoms and skeletal changes, and forty-seven lacking these local signs of the disease. The affections of neighboring organisms, such as the optic chiasm, are also treated of and the forms of the sellar enlargement accompanying glandular tumefaction. Cases of abnormal sellas with hypopituitary symptoms need only glandular and not surgical treatment. The operative procedures for suprasellar tumors compressing the chiasm are discussed. Some intracranial procedure is necessary, but Cushing's experience has not been especially happy with the lateral subtemporal route of Horsley or the frontal approach advocated by Hartley, Krause and McArthur, though he has had but few operations as yet in which either was employed in cases in which there was no great deformity of the sella. The operations for tumors distending the sellar fossa have been much more encouraging and the procedure he has come to employ is a modification of the Schloffer operation, suggested by Kauffman, Hirsch and others, and adapted to his own requirements. The operation, Cushing says, combines all the advantages of the endonasal procedure of Hirsch and affords almost double the room that operating through one nostril affords. In many of his cases a simple decompression was employed; in four cases on both sides, and in a number multiple operations were performed, such as transphenoidal operation or sellar or subtemporal decompressions. The details of the paper are instructive, but do not lend themselves to abstracting. In ninety-five patients there were 125 operations with ten fatalities, the results improving in this particular with his greater experience.

DIFFERENTIATION BETWEEN ANEURYSM OF THE ASCENDING AND TRANSVERSE AORTA.

ANEURYSM OF ASCENDING AORTA.

Physical Signs. Pulsation often expansile, in second and third inter-spaces.

On palpation, systolic thrill and diastolic shock to right of sternum.

Dullness to right of sternum, above cardiac area.

Rough systolic murmur, loud clanging second sound. May have diastolic murmur from implication of aortic valve.

Parts liable to pressure and results of pressure. Vena cava superior; dilated superficial veins, edema of head and neck.

Innominate artery; weakness of right radial pulse.

Heart; downward displacements of apex.

Ribs to right of sternum; pain.

Right bronchus; defective respiration on right side.

Right recurrent laryngeal (rarely); paralysis of right vocal cord.

ANEURYSM OF TRANSVERSE AORTA.

Pulsation in episternal notch.

Systolic thrill in episternal notch.

Dullness over manubrium sterni.

Murmur more distinct over manubrium. Diastolic murmur rare.

Left innominate vein; edema of left side of head and neck.

Any branch of the arch; weakness of right or left radial pulse.

Manubrium sterni; pain.

Trachea or left bronchus; paroxysmal dyspnea, altered cough, defective respiration on left side.

Left recurrent laryngeal; paralysis of left vocal cord.

MEDICAL EDUCATION IN CHINA,

The Rockefeller Commission, which has been recently investigating medical education in China, finds that it is of extreme importance to teach the Chinese to treat themselves and not to rely altogether upon foreign physicians.

"The commission, which is represented at Peking by Dr. Harry Pratt Judson, president of the Chicago University, and Dr. Francis W. Peabody, of Boston, has not gone far enough to commit itself to any definite project, but its report undoubtedly will be largely concerned with the problem of making the foreign trained native physician respected in China.

"The American State Department has temporarily detached Roger S. Greene from his consular post at Hankow to aid the commission as an interpreter and guide on its tour of investigation, and the Chinese Government, both central and local, has furthered, rather than impeded, the work of the commission.

“The country is so vast and the need of medical men so extensive that all the physicians and surgeons in America could be utilized in China. Such a great invasion, or even enough to make any wide impression, is impracticable. The solution must be the training of the Chinese physicians. At present there are only a few score of them trained along modern lines, and these have difficulty in making a living. The Chinaman is suspicious of the second-hand training of the modernized Chinese physician, and if he is moved to resort to foreign treatment he prefers to go direct to the foreign physician.

“It was only three years ago that the first class of Chinese educated in China took their medical degrees from the Union College (where American and British missionaries work together), in Peking. Last year in the first class a small number of women physicians graduated. Because of prejudices against the treatment of women by men, women physicians will have a valuable place in medical work in China. While the class of Chinese who prefer the old-style physician is still in the majority, the foreign physicians have more than they can do.”—*Boston Medical and Surgical Journal*.

SURGERY

UNDER THE CHARGE OF A. H. PERFECT, M.B., SURGEON TO THE
TORONTO WESTERN HOSPITAL

A NEW OPERATION FOR CHRONIC ASCITES.

Rosenstein (*Centralbl. für Chir.*, February 28th, 1914) describes a device which he employed for the relief of a case of chronic ascites. The patient, a female, aged 62 years, had suffered from ascites secondary to cirrhosis of the liver for two years. Rosenstien had already operated upon her twice; two years ago he made an anastomosis between the portal vein and the inferior vena cava. The amelioration of symptoms which resulted was but temporary. A year later he operated to produce adhesions between the parietal peritoneum and the spleen, liver, and great omentum, again without permanent benefit to the patient. An operation was then devised, and carried out a year later, with the object of providing a permanent drain from the peritoneal cavity into the urinary bladder. A valve had to be formed in such a fashion that the ascitic fluid could drain into the bladder, but that the bladder con-

tents were prevented from regurgitating into the peritoneal cavity when the viscus contracted. Free access to the pelvis was obtained through a sufficiently large incision in the abdomen, and that portion of the bladder which is covered by peritoneum was drawn up. A silver ring of 3 cm. in diameter was then placed on the summit of the bladder. The circular portion of the bladder wall enclosed by the ring was then incised, and turned inside out over the ring so as to cover the latter all round. The circumference of this portion was stitched to the bladder wall immediately below the ring by silk sutures, serous coat to serous coat. A circular strip, 4 cm. wide, and running round the bladder immediately below this suture, was then excised. The strip removed included peritoneal and muscular coats, but left the mucous membrane intact. The upper and lower edges of this broad wound were then stitched together, muscle being stitched to muscle and peritoneum to peritoneum. Though the drawing together of the outer coats, the mucous membrane corresponding to the excised strip was compelled to infold itself, and to protude within the bladder in the form of a diaphragm with a central aperture, placed just below the channel of communication between the peritoneal cavity and the bladder. When now the viscus contracts, the reduplicated ring of mucous membrane will close in, and act as a valve preventing the back flow of fluid into the abdomen. The immediate result of the operation has been good. Paracentesis was not required for several months after the operation, and since being performed eight weeks ago has not yet required repeating. The urine contains albumin, leucocytes and fatty granular cells, such as are contained in the ascitic fluid. Cystoscopy shows that the bladder fills up from below; an air bubble which happened to rest against the mucous valve did not pass through, suggesting that the valve is functional. An instantaneous photograph obtained cystoscopically showed the folded mucous membrane coming in contact with the opening. The operation is not likely to be extensively employed, but may be useful in similar intractable cases of chronic ascities. Suitably modified, the procedure might be used to prevent incontinence in obstinate cases of vesico-vaginal fistula. If the operation when employed for ascities is to be a success, adhesions on the part of the intestine or omentum must not be allowed to form in the neighborhood of the opening. It is, therefore, necessary that not all the ascitic fluid should escape into the bladder, but that a certain amount should remain within the abdominal cavity, so as to float the other viscera up away from the communication. A point in technique which is recommended is to fix the bladder rather high up on the abdominal wall, so that the organ may not be compressed by the ascitic fluid, but maintained in such a position that it is always ready to be filled with fluid.—*British Medical Journal*.

APPENDICITIS.

J. E. Moore, Minneapolis (*Journal A. M. A.*, August 29, 1914), says the last word will not be spoken concerning appendicitis until it is no longer ever fatal. Little has been added to our methods of diagnosis. The average case is the easiest of all abdominal conditions to recognize, but there are exceptional cases that may puzzle the ablest diagnostician. The most common mistake is to make a diagnosis of appendicitis when it does not exist, but refinements in diagnosis should not be undertaken before operation because they may lead to disastrous delay. The prognosis is improved each year, but there is still room for more improvement. The present mortality rate is near 5 per cent., and with skilled hospital surgeons it is less. His rule has been, during the last few years, to operate as soon as the diagnosis is made, but he would not recommend this to the unskilled operator without hospital facilities. In the Minnesota Hospital they have had eighty-seven patients with acute appendicitis operated on with a mortality of but 3.4 per cent. All the deaths occurred while they were occupying a frame building as a temporary hospital. With the last forty-four cases in the new hospital there have been no deaths. Christian Science is responsible for more deaths from appendicitis than are operations. Moore is positively opposed to the removal of the appendix in every case of appendicitis. He has removed the appendix in about 95 per cent. of his cases, but in a few cases, about one in twenty, it was better to leave it as safer than its removal. That it may call for another operation was unimportant compared to the danger to life. Patients should be operated on after an acute attack to avoid further attacks as a routine practice, and this should be insisted on in child-bearing women. Appendicitis in a pregnant woman is more than twice as dangerous, and two lives are liable to be sacrificed. The exact method of removal of the appendix and treating the stump is immaterial so long as it is skilfully done. In suppurative cases drainage is important and often improperly carried out. Moore's personal practice is never to use gauze for drainage unless it is surrounded by a rubber tube or rubber tissue, and then only for a few hours. Neither does he use the sitting posture for the patient after operation. Large-sized rubber tubes should be passed to the bottom of the pelvis, and they need not drain down hill, for the intra-abdominal pressure will care for that.

COLEY'S MIXED TOXINS IN SARCOMA.

T. W. Harmer concludes that the treatment of primary or recurrent inoperable sarcoma with mixed toxins must be intensive. The

severity of the reactions may be lessened by certain measures and the author sees no contraindication to the treatment. The increment of dose and the interval between injections require some experience, but even after a considerable experience this method of treatment is always uncertain. Indeed, it is so uncertain and distressing that its institution is unjustifiable in any case in which operative measures of reasonable safety offer a possible hope of cure. A frank statement of the nature and severity of the reactions and the possibility of benefit should be instituted. This should be used in no case unless the tumor has been proven microscopically to be sarcoma. The percentage of apparent cures may be regarded as varying from 9.4 to 18.8. The author's study suggests that the toxins offer no expectation of benefit in cases of multiple melanotic growths, in cases of mixed cell growths, in cases with intra-abdominal growths, and in cases with growths arising from subcutaneous tissue or bone, excepting, perhaps, giant cell growths. The Coley toxins may be legitimately tried in cases of single melanotic growths. They are apparently of value in cases of sarcomata arising in the nose and accessory sinuses, whether spindle-cell, giant-cell, or round-cell. The operative treatment of true giant-cell tumors gives in the majority of cases such good results that the toxins are not indicated. Their use is, however, warranted in those cases in which the growths are so situated that complete surgical eradication is impossible (such as giant-cell tumor of the spine) and in these cases the author believes that the attack should be primarily surgical, followed immediately by toxin treatment.—*Medical Record*.

SURGERY IN THE WAR.

According to a statement by Dr. Henry de Varigny in the *Journal des Débats* (quoted by the *Times*), among over 6,000 wounded men admitted to the Vichy Hospital only some 600 operations were required, and of these not ten were amputations. This is, we believe, in accord with the experience, so far, of the general hospitals in this country, but we fear that it cannot be taken as fully representing the facts. The worst cases have not been brought to this country from the British forces in France, and it is unlikely that cases from the French fighting line have been removed as far as Vichy, which boasts itself to be the central town of France. There is much evidence that the conditions by which the surgeon in this war is confronted are very different from those encountered in South Africa. The general experience seems to be that bullet wounds are comparatively rare. There are wounded men re-

turned to this country from the seat of war who have never seen a German soldier, and it is to shell fire, often at long ranges, that most of the serious casualties are due. Some of the shell wounds are extensive and severe, and we fear it will be found that the number of amputations it has been necessary to perform has been greatly in excess of experience in recent campaigns. The rapid collection of wounded from a position which is being searched by the enemy's heavy artillery must often be a physical impossibility. In spite of all that can be done—and the casualties in the Royal Army Medical Corps have unfortunately been heavy—severely wounded men must sometimes lie out perhaps for many hours before aid reaches them. The congestion of the railways at the rear of the Allies has often caused great delay in getting them to hospital, and this has combined with the severe nature of the wounds and their frequent contamination by earth to make tetanus and traumatic gangrene more frequent than in the past. A medical correspondent at Aix-les-Bains informs us that since the beginning of September a large number of wounded have been admitted to the hospitals in that well-known watering place. Many of them had been two or three days in the train in horse trucks without change of first aid dressings, and the grave cases were in a pitiable state. Since then all the big hotels have been converted into hospitals. The first batch, which arrived at 1 a.m., were, thanks to a very good distribution service, in bed in the hospital by 2.30. The two British surgical volunteers worked on till 10.30 a.m. before the more serious cases had been attended to. Since then attendance at the hospital has averaged seven or eight hours a day, and a good many operations have been performed. There were very few cases of bullet wounds, most of the men suffering from shrapnel wounds, especially of the thighs, buttocks, and genitals. At the time of writing, about a fortnight ago, there had been five deaths, two of them from tetanus and two from secondary hæmorrhage. Many of the fifty serious cases in the hospital were then still in a very precarious condition.—*British Medical Journal*.

GYNÆCOLOGY AND OBSTETRICS

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

CAUSE OF TUBAL PREGNANCY.

In spite of the frequency of ectopic pregnancy, there has been found no cause which seems to explain adequately all cases. One difficulty is

the condition of the tissue removed. Operation is rarely performed before rupture of the pregnancy, and the bleeding and resulting inflammatory reaction, whether from tubal abortion or tubal rupture, obscure the original condition of the tube. It is probable that fertilization of the ovum takes place in the tube, and in tubal pregnancy, the most frequently occurring form of ectopic pregnancy, implantation takes place before the ovum reaches the cavity of the uterus. The most widely accepted view is that some mechanical interference with the progress of the ovum is the determining cause of tubal nidation, for example, a diverticulum into which the ovum passed, a kink of the tube by a tumor or inflammatory adhesions, a loss of cilia from old inflammation giving defective propelling forces, or some abnormality of the ovum.

Huffman's thesis is that the cause is biological, and depends on the property of the tissue which permits nidation. This peculiar tissue is derived only from the Müllerian duct, and in ovarian and abdominal pregnancies the decidua-like cells are misplaced Müllerian duct tissue. This theory was promulgated by Webster, in slightly different form, in 1895.

Huffman supports his view by evidence as to the presence of anomalies of formation in the tubes in which pregnancy has occurred. These anomalies are found in a surprisingly large number of cases, considering the previously mentioned condition of the tissues. They comprise diverticula, accessory ostia, anomalies of the opposite tube and accessory ovaries. With these anomalies he assumes that there are displacements of "embedding" tissue.

He rejects the mechanical theory, because it does not seem to explain all cases. While it seems probable that the ovum will not become implanted if the tissue is not prepared in some way for nidation, and it may be that only tissue derived from the Müllerian duct is capable of this preparation, the argument of Huffman is not convincing for it proves too much, and the question arises, since the tube is derived from the Müllerian duct, how does the ovum ever get through the tube and into the uterus? Why does it not always embed in the tube? The question is at present not susceptible to proof. Probably both mechanical and biological elements are factors, but Huffman's presentation of the biological side is interesting and deserving of careful consideration.—*Boston Medical and Surgical Journal.*

PUBIOTOMY VERSUS CAESAREAN SECTION IN INFECTED CASES.

A. J. Rongy (in *Am. Jour. Obs.*) points out that a great deal of

work of the consulting obstetrician is in those cases where there is dystocia, due to disproportion of the size of the fetal head and the pelvis, in which attempt has been made at delivery by the general practitioner, and in which asepsis and antisepsis has not been scrupulously observed.

There are three methods of delivery at our command. First, high forceps; second, Caesarean section; third, pubiotomy. He believes that high forceps in the light of our present surgical knowledge is hardly justifiable, especially in primiparae. The effect on the mother is bad. Most of the plastic operations are the result of badly managed forceps cases. It is the only procedure in surgery where an attempt is made to pull a mass through an opening too small to admit its easy passage without first enlarging the opening, or making the mass smaller. Its effect on the child is too well known to need discussion. Accordingly we are left with either pubiotomy or Caesarean section.

Here Rongy distinctly states that he is not attempting to place pubiotomy in competition with Caesarean section. Pubiotomy he regards as an operation of emergency and not of election. He believes that pubiotomy is the only operation in border-lines cases that have been mismanaged or misjudged. It adds but little additional risk to the mother. The head should be somewhat engaged and forceps should have been attempted and if then the child is alive, pubiotomy should be performed. He has followed the technic of Döderlein and he reports in detail nine cases in which he has done the operation. He feels that the operation should not be attempted except by a carefully trained gynecological surgeon as the injuries to the soft parts, the bladder and the urethra may be quite extensive. The sacro-iliac joint may be injured and if this possibility is not borne in mind, permanent disability may result. Hemorrhage may be profuse. Communicating vaginal tears may take place. However, in such cases that have been misjudged and neglected, with the child still viable, it is the only method of procedure, and only an experienced obstetrician should undertake its performance.

His conclusions are as follows:

1. A close study of statistics of Caesarean section of various operators compel us to assume that such cases which are brought into the hospital with a history of long and tedious labor, who were frequently examined or where delivery by forceps has been attempted, are supposedly infected and therefore abdominal section should not be the operation of choice.

2. In such cases pubiotomy becomes the operation of necessity, for it adds very little danger to the mother and it saves the child.

3. Pubiotomy is not an operation of election.

4. Cesarean section and pubiotomy never compete. In cases when Cesarean section is indicated, pubiotomy is contraindicated and vice versa.—*Boston Medical and Surgical Journal*.

RESULTS OF RADIUM TREATMENT IN UTERINE AND VAGINAL CANCER.

The results of radium treatment in more than 150 cases of uterine and vaginal cancer are tabulated by Chéron and Rubens-Duval (*Arch. d'electr. med.*, January 25th, 1914). The authors have relied upon massage dosage and the use of penetrating rays and heavy filters. Applications made with apparatus containing 1 or 2 eg. of radium salt may give appreciable results in favorable cases, but most frequently doses as small as this are unavailing. The failure should be attributed, not to radium-therapy, but to the tentative and insufficient methods employed. In only two cases have the authors met with entirely negative results, and these were patients whose exhausted organism was incapable of taking advantage of the therapeutic agent in its defence. One of them, for example, was a woman, alone in a foreign city, ignorant of the language, evidently suffering from privations, and believing herself incurable owing to a large cancer on the neck of the uterus. Her nervous vitality, therefore, was low, and there was no spontaneous defensive power available for the radium to assist. On the other hand, turning to their successful cases, the authors assert that massive doses have brought about the cure clinically of an inoperable cancer on the neck of the uterus after only two applications, and in one such case they have been able to verify the cure anatomically. The patient had a large tumor of the right half of the uterine neck, infiltrating the base of the large right ligament, and adhering to the bladder. Two applications of radium were given, with a two months interval between them, and the growth disappeared completely. The patient, however, had an affection of the nerve centres, from which she died fifteen months after the radium treatment had been stopped, and at the autopsy, which included a histological examination of the organs previously affected, no trace of cancer was found. The following is the authors' summary of results in their 158 cases of inoperable uterine and vaginal cancer and relapses after hysterectomy:

Cure verified anatomically	1
Complete clinical disappearance maintained—For more than one year (in some cases four years)	22
For about one year	15
For varying periods, but patients lost to view	9—46
Purely local or temporary regression with return or extension—	
<i>In situ</i>	16
In neighboring organs (bladder or rectum)	9
Metasases	6—31
Improvement under radium rendering operation possible	12
Improvement, but treatment interrupted from—Extra- medical circumstances	2
Intercurrent disease	2—4
Palliation (arrest or diminution of haemorrhage or pain, improvement in general state)	62
No appreciable clinical result	2

British Medical Journal.

PERSONAL AND NEWS ITEMS

Ontario.

Dr. G. W. Anglin, surgeon Kingston General Hospital, has volunteered his services to go with the second contingent.

Last year the Children's Hospital, Toronto, had a deficit of \$18,000. In all departments 31,970 patients were treated.

The medical faculty of Queen's University recently adopted a strong resolution calling upon the Ontario Medical Council to arrange for reciprocity with Great Britain.

Dr. W. H. B. Aikins entertained at the York Clug, Dr. Sippi, of Chicago, on 3rd November. Many fellows of the Academy were present. Dr. Sippi lectured on gastric and duodenal ulcers before the Fellows of the Academy.

The annual meeting of the McKellar General Hospital, at Fort William, was held on 9th October. During the year 1902 patients had been treated and there were 122 births and 119 deaths. There were 705 operations.

The Hollinger Gold Mines Company will erect a hospital at Timmins. It will contain 30 beds. The present hospital is too small.

The first year students in Queen's number 76. Dr. A. H. Lothrop, formerly of Columbia University, has been appointed professor of biological chemistry.

Queen's University conferred the degree of LL.D. on Dr. R. S. Thornton, of Deloraine, Man. The degree of M.B. was conferred on F. W. Burden, St. John's, and J. M. Laframboise, Ottawa. The M.D. and C.M. were conferred on W. S. T. Connell, A. G. Kane, C. C. Ligoure and J. W. Saunders.

Mrs. D. B. Macdonald, Delaware Ave., Toronto, announces the engagement of her younger daughter, Ann Barclay, to Dr. R. E. Hartry, of Wiarton, Ont., second son of Mr. and Mrs. William Hartry, Seaforth.

Dr. H. S. Griffin, who sued William Somerville for \$1,962 for medical attendance on the plaintiff's wife, was given judgment by Mr. Justice Kelly for \$750 and County Court costs. His Lordship said the plaintiff understood he was paying according to the old scale, and said he should have notified him when the new scale came into effect in April, 1913.

In bringing in a verdict of accidental death in the case of William Thompson, Toronto, who was fatally injured a week ago at the Canadian Pacific Railway Avenue Road crossing, Toronto, Coroner Dr. H. Mason's jury wished to be put on record as criticizing the methods of ambulances in passing the nearest hospital to go to some other one in a case of emergency.

The Toronto branch of the Canadian Red Cross Society reports to the head office the receipt of subscriptions from the citizens of Toronto totalling \$93,560. Below is an additional list of contributors of \$100 and over.

The officers of the Army Medical Corps who are leaving shortly for Toronto, having volunteered for overseas service, were tendered a complimentary dinner at the Hamilton Club on 16th November. Lieut.-Col. Farmer, Major Kappele, Capt. Silcox and Capt. W. F. Nicholson were each presented with wrist watches and binoculars.

The Chinese of Toronto held a meeting in Victoria Hall recently to organize a campaign in aid of the Red Cross among all the Chinese in Ontario. Messrs. Lee Ling, Hali Suey and Ma Wow are in charge of the movement, and from the 300 present \$70 was collected. Envelopes bearing the Red Cross, with a quantity of Chinese writing on them, were distributed.

Major F. Etherington, C.A.M.C., offered on behalf of Queen's Medical Faculty to raise the personnel of a stationary or general hospital for overseas service from the staff, graduates and students. Queen's medical professorial staff includes enough officers for the hospital. The Minister of Militia has been notified of this offer.

In charge of the Field Ambulance being organized in the second military divisional area for service with the second Canadian contingent will be the following officers: Major G. D. Farmer, Ancaster, of the 12th Field Ambulance, to command; Major D. R. Kappele, Hamilton; Capt. W. E. Silcox, Hamilton; Capt. W. F. Nicholson, Hamilton; Lieut. H. Buck, Toronto; Lieut. N. J. Barton, Toronto; Lieut. K. G. McKenzie, Toronto; Lieut. J. F. Burgess, Toronto; Capt. F. Clark, Dundas, quartermaster. Lieutenants McKenzie and Burgess are members of the staff of the Toronto General Hospital.

Dr. R. A. Reeve has resigned his professorship of ophthalmology in the University of Toronto, and has been succeeded by Dr. J. M. McCallum; and Dr. G. R. McDonagh has similarly resigned his chair of otolaryngology and is followed by Dr. D. J. Gibb Wishart.

Dr. D. R. Avison, of Seoul, Corea, was in Toronto a short time ago. He was entertained by Dr. R. A. Reeve at the York Club. He addressed the Toronto Academy of Medicine on his work in Corea.

Dr. John Malloch, of Hamilton, was successfully operated upon a short time ago for gall-stones.

Dr. W. J. Cook, of Sudbury, took a post-graduate course in London and is now assistant surgeon on the Mauretania.

It is a pleasure to record that Dr. W. H. Ellis has been appointed Dean of the School of Practical Science, Toronto, and that he is eminently successful in his new sphere of duties.

Hon. Dr. Reaume, former Minister of Public Works for Ontario, has been appointed registrar of the County of Essex.

Prof. J. B. Leathes, of the department of pathological chemistry in the University of Toronto, has resigned to accept the professorship of physiology in the University of Sheffield.

Dr. Max O. Klotz, of Ottawa, will confine his practice in future to surgery and gynaecology.

Quebec.

The Victorian Order of Nurses at Montreal last week undertook to collect \$25,000 for the carrying on of the nurses' work during the coming season, but succeeded in getting only \$11,405.

About one hundred and twenty medical officers who have been on duty at Valcartier, Quebec, have gone to the front with the first contingent of Canadian troops. Among these are the following from McGill University: Lieut.-Cols. K. Cameron and C. F. Wylde; Majors R. P. Campbell, S. H. McKee and John McCrae; Captains A. MacKenzie Forbes and George Shanks; Lieutenants G. A. Ramsey, H. E. McDermott, H. E. Cummings, C. H. Robson; Dr. F. G. Finley, Dr. C. B. Keenan and Dr. George Shanks. Dr. Finley and Dr. Cameron will be in charge of the medical and surgical services, respectively, of No. 1 General Hospital. It is said that Dr. H. S. Birkett, dean of the medical faculty of McGill University, will follow shortly, and Dr. J. George Adami, professor of pathology, has enlisted as a private.

It is stated that the French Government will give \$15,000 a year to the proposed hospital at Maisonneuve. It is thought that the Mont de la Salle, the home of the Christian Brothers, will be converted into a hospital for French people from Montreal and Maisonneuve.

It is proposed to open free milk and dental dispensaries in Montreal. Milk will be supplied and poor children can have dental treatment.

The municipalities throughout Quebec are asked to contribute towards the maintenance of a military hospital in Paris. The Provincial Government has given \$10,000, which will be used to maintain a ward known as the Government of Quebec Ward.

The new hospital at Sherbrooke cost \$88,229, and was opened on 9th October. Dr. Bayne has been appointed resident surgeon.

Dr. A. Campbell Geddes, professor of anatomy in McGill University, has gone to Hull, England, to take up his duties at the recruiting station, Hull, England.

A delegation representing the General, Notre Dame and Western Hospitals appeared before the Montreal Board of Control recently, when the board was considering the 1915 budget and asked that the city of Montreal come to the assistance of the hospitals. The Mayor, while expressing sympathy, remarked that it was a matter of surprise to him that millionaires did not respond to the appeal of the hospitals. The three hospitals face a combined deficit of \$84,000.

Maritime Provinces.

Thirty-four medical and dental students have registered in the University of Dalhousie. The chair of pathology has not yet been filled. The Nova Scotia Department of Health has issued a bulletin dealing

with the method of spread of the contagion of typhoid fever, and the best methods of preventing the disease.

The Ladies' Aid have raised \$1,000 towards the nurses' home for the Moncton General Hospital.

It is proposed to spend \$30,000 on a hospital in Miramichi, N.B. Work will be commenced in the spring.

The teachers of Chatham, N.B., adopted a resolution in favor of medical inspection of schools and school children.

Western Provinces.

The Battleford Asylum is being enlarged by a commodious addition to the department for male patients.

The new wing that is being added to the Regina General Hospital is up-to-date in every way and will soon be completed.

The staff of the Regina General Hospital have elected the following officers: President, Dr. Coles; vice-president, Dr. Stephens; secretary, Dr. Alport; advisory committee, Drs. Cullum, Meek and Corbett.

St. Boniface Hospital, Winnipeg, is erecting a new pavilion at a cost of \$250,000. When this is finished the hospital will have accommodation for 500 beds.

A course of lectures were given at Vancouver by the Royal Sanitary Institute of the city, for the purpose of training men and women to assist in keeping military and refuge camps in a sanitary condition.

Dr. Eden McIntosh, formerly of New York, has purchased the practice of Dr. MacDermott, of Lang.

Dr. Hart, who was in charge of the tuberculosis work in Saskatchewan, is in Europe with the Canadian troops.

Dr. T. A. Morrison, of Regina, took a course of instruction in Winnipeg in army medical work.

Dr. F. L. de Verleuil, of Vancouver, was the medical officer on the British Good Hope, sunk off the coast of Chile.

Dr. Follinsbee, of Edmonton, has been appointed resident house physician to the Great Ormonde Street Hospital for Sick Children, London.

Dr. James Fysche, superintendent of the Edmonton General Hospital, has gone to the front in charge of No. 1 General Hospital.

The ratepayers of Wainwright voted down the by-law for a grant of \$10,000 to the hospital.

The College of Physicians and Surgeons of Alberta has donated \$500 to the Edmonton Academy of Medicine to aid it in the maintenance of its library.

Dr. B. L. Wickware has resigned his position as superintendent of the Moose Jaw Hospital, which he occupied for two years.

The Government school and hospital on Fisher Island, on the Saskatchewan River, was opened recently. The institution is for the Cree Indians. The direction of the work has been placed under Dr. Orok and Miss Jenner.

The city of Saskatoon has commenced a health publicity movement. Bulletins are issued daily on some health topic and publicly posted.

In Saskatchewan erysipilas, ophthalmia, monatorum and puerperal fever have been added to the list of diseases that must be reported.

The Government of Saskatchewan has had plans prepared for a small hospital of 10 beds, and costing \$6,000. These plans will be supplied to any town asking for them.

A hospital was recently opened at Summerland, B.C. The building will accommodate 30 beds.

Eighteen first year medical students have registered in the University of Alberta. This is the second year of the medical faculty.

Dr. Allan C. Rankin, bacteriologist for Alberta, went with the first contingent.

From Abroad.

No. 1 stationary hospital, under Colonel Shillington, with thirty-five nurses, has gone to establish a base at Boulogne. No. 2 hospital, under Major Drummond, has left Salisbury for London to arrange for the reception of the wounded there. The hospital now in the theatre of the war is equipped to handle over a hundred cases as they pass through and will aid the Imperial Medical Service until the Canadians get into action.

Permanent prohibition of the sale of absinthe and kindred alcoholic beverages in France may be a result of the war. Transportation and sale of absinthe were forbidden when the war began, but traffic in other intoxicants was continued. The Government has now supplemented its original order with another forbidding the sale of any alcoholic drinks similar to absinthe. There is a marked movement in all parts of France tending to perpetuate this prohibition.

Lieut.-Col. Hodgetts, of Ottawa, has established the headquarters of the Canadian Red Cross at 16 Cockspur Street, Trafalgar Square, in rooms placed at his disposal by the Lawrence Jones Company. He will work in co-operation with the British Red Cross, the chairman of

which is Arthur Stanley, who has received him most cordially and given him the privilege of attending the executive meetings. The Canadian War Contingent Association have received over 200 offers of private residences for convalescent homes, and are making selection of some, as they find it necessary to relieve the pressure on Shorncliffe Hospital by drafting the non-serious cases elsewhere.

No. 1 General Hospital is being erected at Salisbury Plains, where the ambulances were found insufficient, although the number of sick is said not to be abnormal, notwithstanding the bad weather for the past two weeks. No. 1 Stationary Hospital is being established at Hampstead Heath, North London, where the Mount Vernon Hospital has been secured. It will be opened in a few days, and will be in charge of Lieut.-Col. Lorne Drummond, of Ottawa.

No. 2 General Hospital at Salisbury Plain paraded recently for inspection, and made preparation to be ready at any hour to carry out departure orders for an unknown destination. The senior officers include Lieut.-Col. J. W. Bridges, Lieut.-Col. R. D. Rudolph, Lieut.-Col. W. A. Scott and Major C. W. Gorrell.

The Neurological wards of the Philadelphia General Hospital offer unusual facilities for post-graduate instruction in nervous disease, these wards containing about four hundred patients, illustrating all forms of organic, functional, and psychopathic disease. The Philadelphia Hospital for the Insane, which is a part of the General Hospital and situated on the same grounds, has more than two thousand patients.

The following is the daily ration given by the British War Office to its prisoners of war: Bread, $1\frac{1}{2}$ pounds, or biscuits, 1 pound; fresh or cold storage meat, 8 ounces, or preserved meat, half ration; fresh vegetables, 8 ounces; butter or margarine, 1 ounce; condensed milk, 1-20th of 1-pound tin; tea, $\frac{1}{2}$ ounce, or coffee, 1 ounce; sugar, 2 ounces; salt, $\frac{1}{2}$ ounce.

Dr. Thomas Opie, one of the founders of the College of Physicians and Surgeons of Baltimore, and dean of the institution from 1872 to 1905, died at the home of his daughter in Washington, D.C., on October 6th, aged 72 years. Dr. Opie was born in Martinsburg, Va., and was educated at the University of Virginia and the University of Pennsylvania, receiving his medical degree from the latter in 1861. During the Civil War he served in the Confederate army, first as a private and later as a surgeon in the 25th Virginia.

The daughter of Robert Koch, who is the wife of a German army surgeon, has given the Harben gold medal, presented to her father by the Royal Institute of Public Health of London, to the German Society for the Relief of the Families of those killed in war. The medals pre-

sented by English societies to Röntgen and several other German scientists, have also gone into the melting pot for the benefit of the Red Cross or relief societies. Professor Max Verworm, of Bonn, has written to the *Berliner Tageblatt* protesting against the renunciation of British honors by his colleagues, an action which he characterizes as childish and unworthy of German men of science.

It is announced that Sir John Rose Bradford, Sir Wilmot Heringham and Sir Almroth Wright have been appointed consulting physicians, ranking as colonels, with the British expeditionary force in France, and have already left England for the front. Field Marshal Earl Kitchener has also appointed a special army sanitary committee to advise with the army council on all matters pertaining to the health of the troops.

We regret to announce the death of Dr. Traill, the provost of Trinity College, Dublin, which took place on October 15th. For some time past he had been in bad health, and for several days before his death he had been practically unconscious.

The movement which developed into the international organization, conveniently designated by the general term "Red Cross," was definitely started at the conference at Geneva in 1863, held in response to the efforts of Henri Dunant. It should not be forgotten, however, that an independent organization for the aid of the wounded came into existence in America during the Civil War. At the outbreak of the war in 1861 a women's central association of relief was formed at New York.

Sir Henry Duncan Littlejohn, for many years professor of medical jurisprudence in the University of Edinburgh, died at the age of 86 at his home at Benreoch, on 30th September.

The recently-published sixty-third annual report of the inspectors of lunatics in Ireland shows an increase in the total number of insane in institutions in that country from 24,839 in 1912 to 25,009 in 1913.

It is announced that at the close of the current year the Chadwick trustees will award a Chadwick gold medal and £50 each to the naval and military medical officer who shall have rendered most distinguished service in promoting the health of men in the British army and navy.

At a meeting of the medical men of Bengal it was decided to express their loyalty to the King-Emperor, the names be taken for a medical corps, the medical men attend at reduced fees those who had been thrown out of employment by the war, and that an appeal be made for funds to equip a hospital ship.

Report from Burnet, Tex., on October 27th, states that a deposit of ichthyoliferous strata, underlying about 500 acres of land, has been located near that town. It is the only known deposit in the United States and is believed to be very rich. A company has been organized to undertake its production, and American ichthyol will probably be on the market before next spring.

The Alvarenga prize for 1914 has been awarded to Dr. H. B. Sheffield, of New York, for his essay entitled "The Fundamental Principles Involved in the Use of the Bone Graft in Surgery. It is also announced that the next award of the prize will be made on July 14th, 1915, provided that an essay deemed worthy of the prize shall have been received. Full details regarding the conditions of competition for this prize may be obtained from Dr. Francis R. Parkard, 19 South Twenty-second St., Philadelphia, secretary of the College of Physicians of Philadelphia.

On the evening of October 18th (St. Luke's Day, Feast of the Beloved Physician) a special service was held for the physicians and nurses of New York, when addresses were made by Dr. Howard A. Kelly, of Baltimore, and Dr. William H. Jeffries, of St. Luke's Hospital, Shanghai.

On October 7th the Red Cross fund collected in New York passed the \$200,000 mark, and on the 13th it had grown to nearly \$237,000. The fund for the relief of Belgian sufferers amounted to \$140,000, and the French relief fund to \$15,500. Seventy-five thousand dollars has also been subscribed for the American Hospital in Paris, at the head of which is the distinguished New York surgeon, Dr. Joseph A. Blake, and which is reported to be doing most admirable work.

The new dispensary of the Hospital for Deformities and Joint Diseases, at 43 East 123rd Street, New York, was dedicated with appropriate ceremonies on Tuesday afternoon, November 3rd.

Dr. George Livingston Peabody, who retired from practice in New York City in 1909, died suddenly from heart disease at his home in Newport, R.I., on October 30th, aged 64 years. Dr. Peabody was born in New York and was educated at Columbia University, receiving the degree of A.B. in 1870 and of A.M. in 1873, in which year also he was graduated in medicine from the College of Physicians and Surgeons. After post-graduate study in Vienna, Strassburg, Paris, and London he returned to New York, and in 1878 was appointed pathologist to the New York Hospital, thus beginning a connection which lasted through a long service as attending physician from 1884 until 1909, when he became a consultant.

OBITUARY

L. S. POULIN.

Dr. Poulin died at his home in St. Alexandre, Quebec, on 18th September, at the age of 71.

M. R. McGARRY.

Dr. McGarry died at North Sydney on 23rd September, in his 35th year. He was a graduate of Dalhousie University.

JOHN H. BELL.

Dr. Bell died in Liverpool, Eng., in the latter part of September. He was a graduate of McGill and a brother of the late Dr. James Bell, of Montreal. He was surgeon to the Adriatic of the White Star Line.

L. W. THOMPSON.

Dr. Thompson died in Listowel, Ont., on 14th September. He had been Medical Health Officer for Listowel for 21 years. He had practised in that town since 1886. He was in his 61st year, and leaves a widow, three daughters and one son.

STEPHEN GILLIS.

Dr. Gillis, who lived and practised at St. Louis, Prince Edward Island, died in Charlottetown Hospital of typhoid fever, September 16th. He was a graduate of McGill of the class 1910, and was 29 when he died. He is survived by his widow.

DR. DINGLE.

Dr. Dingle died at Oakville recently. He graduated from King's College, London. He was in his 42nd year. Appendicitis caused his death.

BRADFORD PATTERSON.

Dr. Bradford Patterson, Barrie's oldest citizen, died at his residence there on 8th November, at the age of 94 years. He was thrice

married and is survived by his wife and one daughter, Mrs. Byrne, of West Virginia, who was with him at his death. Deceased was one of the oldest Freemasons in Canada, and is said to have been presiding Master at the initiation of the late Sir John Macdonald. During the American Civil War he served in the Northern army as surgeon. He practised in Markham, Collingwood and Newmarket, and for the past thirty years resided in Barrie. Interment took place at Newmarket.

G. R. MINES.

G. R. Mines, professor of physiology at McGill University, met death mysteriously and tragically on 8th November in his laboratory at the university. Just what caused his death is not known, but Principal Peterson believes that Prof. Mines, in the course of experiments upon himself in his chosen branch of physiology, dealing chiefly with the phenomena of the heart action and respiration, probably lost his life through the apparatus which was attached to his body getting out of order in some unknown manner.

Prof. Mines had been in the laboratory all afternoon, working on his experiments, and his prostrate body was discovered by the janitor shortly after 6 o'clock. The broken mechanism was still attached over the professor's heart. Aid was at once summoned, and Prof. Mines was conveyed to the Royal Victoria Hospital, but he expired a little before midnight without having recovered consciousness. He leaves a wife and two children.

Prof. Mines was twenty-nine years of age. He was a Cambridge University professor, and came to Montreal from the University of Toronto, where he was a colleague of Prof. Brodie. He had been at McGill only a short time. The funeral was under university auspices.

Principal Peterson said the late Prof. Mines was one of the most distinguished of the younger group of scientists at Cambridge, where his death will be as deeply deplored as it is in Montreal. The McGill faculty all express sorrow at the untimely death of their colleague.

GEORGE MITCHELL.

Dr. Mitchell died at his home in Wallaceburg in his 78th year. He was born in Watford, and educated at Bellevue Medical College, New York, from which he graduated in 1865. He settled in Wallaceburg, where he remained till his death.

J. H. BURLAND.

Lt.-Col. Dr. Burland, of Montreal, died in England in the early part of October, at the age of 53. He left Montreal in September to take part in the Red Cross work. He founded the Montreal Tuberculosis Institute, and was a member of the Royal Tuberculosis Commission. He was a liberal giver to Montreal charities.

CALVIN SHAW.

Dr. Shaw, of Cleveland, and formerly of Toronto, died in the former city 12th October. The remains were interred in Toronto. He was a Trinity graduate of the year 1895.

EDWARD R. LANGRILL.

Dr. Langrill, of Queen Street East, Toronto, died suddenly on 13th October. He was a graduate of Trinity of the year 1900. For some time prior to his death he had been in poor health.

 BOOK REVIEWS

INTERNATIONAL CLINICS.

A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Obstetrics, Gynaecology, Ordiopaedics, Pathology, Dermatology, etc. Edited by Henry W. Cattell, A.M., M.D., and John A. Witherspoon, M.D., etc. Vol III. Twenty-fourth series, 1914. Philadelphia and London: J. B. Lippincott Company.

This volume contains articles on Treatment, Medicine, Electrotherapeutics, Surgery, Child Welfare, and Medical Problems. There are forty plates. The articles are all well written and very helpful along the lines they cover. We can speak highly of the contents of this volume, and can say that it will prove a good addition to a long and worthy series. The publishers are to be congratulated on the outcome of their enterprise, started twenty-four years ago, as there stands now one hundred volumes in this series, embodying the best of the progress of medicine, surgery and the various specialties for the past quarter of a century.

PARK AND WILLIAMS ON PATHOGENIC MICRO-ORGANISMS.

Pathogenic Micro-organisms. (Including Bacteria and Protozoa.) A Practical Manual for Students, Physicians and Health Officers. By William H. Park, M.D., Professor of Bacteriology and Hygiene in the University and Bellevue

Hospital Medical College, and Director of the Bureau of Laboratories of the Department of Health, New York City, and Anna W. Williams, M.D., Assistant Director of the Bureau of Laboratories, New York City, Consulting Pathologist to the New York Infirmary for Women and Children. New (th) edition, thoroughly revised. Octavo, 684 pages, with 210 illustrations and 9 full-page plates. Cloth, \$4.00 net. Philadelphia and New York: Lea & Febiger, Publishers, 1914.

The appearance of a new edition of this favored and standard work is not only justified but demanded by the advances which have been recorded in this department, and which the authors have presented in complete detail. They have not, however, limited themselves to bringing this work strictly up to date, but have added greatly to its general usefulness by a substantial enlargement of the sections devoted to the practical application of this science. The revision has been so thorough that this edition is virtually a new book.

The student and laboratory worker, the sanitarian and the practitioner will find this work equally well suited to their needs. The features that have won recognition in its previous editions have been substantially amplified, while every advance has been treated in the light of the authors' unexcelled opportunities for laboratory investigation, and summarized for reference.

New sections have been added and entire chapters rewritten. The material has been quite generally re-arranged in order to bring more closely together all the pathogenic organisms. Under this arrangement, Part One deals with general characteristics and methods of study of all the micro-organisms; Part Two includes the study of individual pathogenic micro-organisms and their near relatives; Part Three is devoted to "Applied Micro-biology."

The orderliness of its arrangement, simplicity of expression, and attention to details makes this work of particular value to the student. It is a thoroughly safe guide to laboratory procedure and affords valuable details of technique not available elsewhere.

Much essential data has been added to the sections devoted to the consideration of immunity, the filtrable viruses; preparation and use of media and aniline dyes. The work has a peculiar claim on the appreciation of the general practitioner. Its authors are bacteriologists who deal constantly with practical problems. It presents many points of value for him aside from its usefulness as a compendium of all that science has accomplished in this field and as a laboratory guide.

Its splendid index makes it a most convenient work of reference. It considers protozoa and bacteria in close relation to the symptoms and clinical manifestations produced by them, a point of interest to the practitioner in search of information on the practical application of this science.

The broad scope of this work is evidenced by the full consideration accorded such subjects as soil and sewage bacteria, the bacteria of industry; disinfectants; the bacteriology of milk in relation to disease; bacteriological examination of air, water and soil; and water purification.

WORK OF DONDERS.

Problems in the Accommodation and Refraction of the Eye. A Brief Review of the Work of Donders and the Progress made during the last fifty years. By Ernest Clarke, M.D., B.S., F.R.C.S., Senior Surgeon to the Central London Ophthalmic Hospital, Consulting Ophthalmic Surgeon to the Miller General Hospital. London: Bailliere, Tindall and Cox, 8 Hurrietta Street, Covent Garden, 1914. Price, 2s. 6d.

One of the very great men of the medical profession was Donders. What he did has stood the test of time. It is now fifty years since he gave the world his masterly contribution on anomalies of accommodation and refraction of the eye; and the work remains undimmed by time, and but little changed or extended by subsequent research. Mr. Ernest Clarke has given us a scholarly and sympathetic review of the investigations and writings of the famous Dutchman. Well may Holland be proud of Donders; but the world now claims he was too great for any one country. He wrote "not for his time, but for all time."

PRACTITIONER'S VISITING LIST.

The Practitioner's Visiting List for 1915. Four styles: weekly, monthly, perpetual, sixty-patient. Pocket size; substantially bound in leather, with flap, pocket, etc.; \$1.25 net. Philadelphia and New York: Lea & Febiger, Publishers.

This is a practical convenience which, once possessed by the busy medical man, immediately becomes indispensable. It is a matter of common remark that most forms of pocket memoranda are admirably designed to further the immediate and permanent loss of the data it is desired to preserve. This, happily, is not the case with this carefully designed Visiting List and pocket consultant, which is the final evolution of 30 years' experience in meeting and anticipating the needs of the practising physician.

It affords a simple and complete system for keeping the records of daily practice. In addition to the ruled pages for daily calls and their notes, general memoranda, addresses, cash account, etc., it contains specially arranged spaces for data desired for permanent record, such as

births, deaths, etc. The value of such records is best appreciated by the physician who has been suddenly confronted by the necessity of producing such data after the lapse of years and in the absence of an orderly system for its preservation.

If the record blanks constitute a complete and thoroughly convenient record of practice, effectual insurance against financial loss or an overburdened memory, the supplementary text constitutes a handy reference work of equal value in practice or emergency. Among the useful features are tables of weights and measures and comparative scales; a scheme of dentition; incompatibles; poisons and antidotes; directions for effecting artificial respiration; an extensive table of doses; an alphabetically arranged table of diseases and remedies; table of eruptive fevers; instructions for urinalysis and directions for ligation of arteries.

COMMISSION OF CONSERVATION.

The Fifth Annual Report of the Commission, Hon. Clifford Sifton, Chairman, and James White, Assistant Chairman. Toronto: The Bryant Press, 1914.

The report shows much very valuable work done. It discusses water powers, minerals, lands, fur, farming and forests. Several aspects of the problems of public health are dealt with in the report by well-known authorities. Dr. Hodgetts in a brief address summarizes the work of the Committee on Public Health, and, in addition, presents reports on such vital problems as "Infant Mortality," "First Aid to the Injured," and the work of the City-Planning Conferences held in Chicago and Boston in 1913. Mr. G. Frank Beer, president of the Toronto Housing Co., develops at some length the housing and city-planning question in Canada, with especial reference to the work of the Toronto Housing Co., and Col. J. H. Burland outlines the legislative requirements for town-planning.

PHYSICIAN'S VISITING LIST.

(Lindsay and Blakiston's) for 1915. Sixty-fourth year of its publication. Philadelphia: P. Blakiston's Son and Company, 1012 Walnut Street.

This is a very convenient pocket-book and contains many useful tables. The paper, limp leather binding, pocket flap, etc., all tend to make it specially useful for the doctor who wishes to keep a careful record of what he does from day to day. We can very highly recommend this book. The price is \$1.25 for 25 patients.

MOTHERHOOD.

Dr. E. S. Harris, Bridges Building, Independence, Mo., has prepared an excellent pamphlet on this important subject. He has manifested good judgment in the ground he has undertaken to cover. The pamphlet is offered in lots of 25 at the price of 10 cents per copy. The purchaser's name and address will be placed on the front page. The intention is that the purchaser will give a copy to his patients, and that this copy will appear as his own writing. The pamphlet is certainly a good gift to any mother.

MISCELLANEOUS

MEDICAL RECIPROCITY.

Recently the Medical Faculty of Queen's University adopted a resolution expressing the opinion that the time is opportune to establish reciprocity between the General Medical Council of Great Britain and the Ontario Medical Council, and suggested to the executive of the latter body that a special meeting should be called to deal with it. Similar action has been taken by the Medical Faculty of the University of Toronto.

It is now announced that the executive of the Ontario Medical Council has declined to call a special meeting. If this is the case, it is evident that the Ontario Medical Council does not realize its opportunity and duty and does not truly represent the medical profession throughout the province.

In 1906 the Imperial Parliament passed an Act known as the Lawrie amendment to the Medical Act, offering to the Provinces of Canada medical reciprocity. The standards of the various Provinces were recognized as equal to those of the British Medical Council, but the arrangement had to be reciprocal. Those registered as qualified practitioners in any Province of Canada would be admitted to the register of Great Britain, provided those on the British register were granted a like privilege in the Provinces.

The first Province to take advantage of this was Nova Scotia. Reciprocity has been in force there since 1907. Since that date up to June, 1914, nine physicians had registered in Nova Scotia, on British certificates. On the other hand, during the same time, twenty-seven registered in Great Britain on Nova Scotian certificates. In Nova Scotia the arrangement is particularly satisfactory to the whole profession.

In 1909 Quebec accepted the proposals and since that time twenty have registered in Quebec upon British certificates. The number registering from Quebec in Great Britain is not available, but it is known that a number have done so.

More recently New Brunswick and Prince Edward Island have adopted reciprocity, so that now there are four Provinces under reciprocal agreement with Great Britain.

Those who are opposed to reciprocity in Ontario give two reasons for the stand taken. First, the minimum standards for qualification in Great Britain are inferior to those of Ontario, and, second, that Ontario would soon be overwhelmed by practitioners from Great Britain.

The first of these objections has no basis in fact. Previous to 1906 it was the case, but it is not so at the present time. The truth is that the British standard is now considerably higher than that of the Ontario Medical Council.

As to the second objection, there was, in the years gone by, some reason to believe that it might prove well founded but the position of the medical man in Great Britain has been greatly improved by the Insurance Act, and at the present time the demand for qualified men is greater than the supply. There can be no question that if reciprocity is adopted, the experience of Ontario will be like that of Quebec and Nova Scotia. The number of those taking advantage of it from abroad will be without effect upon the profession generally. On the other hand the advantages to the profession by its acceptance are material.

The immediate reason for full consideration of the question is that application has been made to the British War Office by a number of physicians registered in Ontario for appointments in the Imperial Army and Navy Services. These have all been rejected for the reason that the applicants had no professional standing, owing to the inaction of the Ontario Medical Council. At the same time a number of men from Quebec and Nova Scotia were accepted and are now on service. If no other reason could be advanced in favor of its acceptance this alone should stir up the Council to some action.

The young graduate just out of the university may wish to complete his training in London or Edinburgh. It would be greatly to his advantage to be able to take his qualifying examination there while attending hospital and clinics—a qualification which will permit him to register in his home Province if he decides to return and at the same time opens up to him almost the whole British Empire. Ontario and the Western Canadian Provinces are the only portions of the Empire remaining outside. Moreover, the Army, Navy and Indian Medical Services will be open to him at the same time.

There is another class to whom it would be of great benefit. Many graduates cannot afford to go abroad for post-graduate work at once. They qualify at home as quickly as possible and after a few years of practice, enough money is saved to pay for the trip to Britain to take post-graduate work. If it were possible to register the Ontario qualification they would be eligible for hospital appointments and locum tenens work and such opportunities would greatly widen their experience and training and at the same time reduce expenses. Now they merely visit hospitals and listen to lectures, unless they have time and money enough to review and prepare for examinations again to give them the standing which they should obtain automatically.

The present situation cannot continue indefinitely. If the Ontario Council is opposed to reciprocity or unwilling to take the responsibility of accepting it, some opportunity should be given to the members of the profession throughout the Province to express an opinion upon the subject.—*Toronto Daily News*.

ONTARIO MEDICAL LICENTIATES.

The following is a list of candidates who have passed the final examination of the College of Physicians and Surgeons of Ontario: Vernon H. Craig, Kingston; John Albert Dobbie, Kingston; Franklin Mortimer Durr, Uxbridge; William Gordon Hamilton, Elgin; Samuel Ross Delap Hewitt, Toronto; John Nelson Humphrey, Tara; Edmund Percy Lewis, Toronto; Reginald Allen Matthews, Toronto; William Verne McIntosh, Windsor; Alex. McLeod, Bayfield; Ernest Alexander McQuade, Toronto; Frank Harten Pratten, Toronto; George Alonzo Simmons, Simmons, Que.; Harold Chester Sutton, Cooksville; William John Taugher, Prescott; Harold Murchison Tovell, East Toronto; Edmund Coulter Syer, Pontypool; William Virgil Watson, Toronto; Charles Frederic Williams, Cardinal; Robert Roy Wilson, Toronto; Clarence Francis Wright, London, Ont.

A CONVENIENT METHOD OF TYING THE UMBILICAL CORD.

Editor *Canada Lancet*:

Take a piece of umbilical tape about six inches long and using one end tie the cord one inch from the abdomen. Then using the other end, tie the cord about three inches from first knot. With one stroke of the scissors sever the cord and tape one-half inch distal to first knot. I

find this a very convenient method and much superior to using two pieces of tape.

H. C. BURROUGHS, M.D.,
Swift Current, Sask.

JAPAN'S EMPEROR AIDS HOSPITAL.

Emperor Yoshihito has donated \$25,000 toward the foundation of St. Luke's International Hospital at Tokio, which will be conducted under the auspices of the Episcopal Church Mission.

The announcement of the Imperial gift to a Christian institution, which is without precedent there, was made by Count Okuma, the Japanese Premier, at a luncheon recently attended by fifty of the most prominent persons in Tokio. The British Ambassador, Sir William Conyngham Greene, sent a letter, and the American Ambassador, George W. Guthrie, delivered a speech.

The substantial Imperial support, it is stated there, assures the success of the undertaking, which will cost about \$500,000. It is planned to make the establishment the most elaborate in the Far East, and it will mark a distinct advance in medical research work there.

Count Okuma said that the Emperor was personally desirous of solidifying the international understanding.

INCENSED OVER EXAMINATIONS.

The students of Queen's University, Kingston are incensed over the "fool questions" set at the recent examination by the Dominion Medical Council, which plucked ten out of eighteen students.

The student newspaper reprints some of the questions: "They were asked to give the death rate in Montreal from tuberculosis, and the chemical composition of oleo-margarine. Still another fool request was to give the bacteriological analysis of water in Mount Royal—as if ability to answer this was a test of medical knowledge?"

CONSUMPTION OF LIQUOR IN CANADA.

Canada last year produced 6,972,583 proof gallons of spirits, as compared with 6,458,452 gallons in the fiscal year of 1913. Some 15,362,100 pounds of rye, 72,170,255 pounds of Indian corn, 7,434,935 of malt, and 19,690,720 of molasses were used in their manufacture, according to inland revenue statistic just issued.

The per capita consumption of spirits in 1914 was 1.061 gallons, or a little less than 1,112 gallons in 1913. However, the average consumption has been going up in Canada since 1886, when it was only .711 per capita. Canadians are also drinking more beer, the consumption per head in 1914 being 7.200, as compared with an average in the last four decades of 3,840. There has been little increase in the per capita consumption of wines, which was .124 in 1914, as compared with an average of .119.

The consumption of tobacco per head was 3,711, a little less than the 1913 figure of 3,818, but more than the average of 2,431.

DEATHS BY CHIEF CAUSES IN TORONTO—SEPTEMBER,
1914 AND 1913.

Cause of Death.	No. of Deaths.		Sept., 1914.	
	Sept., '14	Sept., '13	Inc.	Dec.
Diarrhœa and enteritis (under 2) ..	90	149	..	59
Congenital debility, malformation ..	31	47	..	16
Organic heart disease	31	36	..	5
Tuberculosis (all forms)	28	31	..	3
Cancer	26	30	..	4
Acute contagious diseases	17	24	..	7
Violence (including 9 suicides)	23	26	..	3
Premature birth	23	17	6	..
Acute nephritis and Bright's disease	19	25	..	6
Pneumonit and broncho-pneumonia.	18	32	..	14
Simple meningitis	11	8	3	..
Diseases of the stomach	11	11
Cerebral hæmorrhage and softening	8	12	..	4
Old age	8	11	..	3
Bronchitis	6	8	..	2

BERT HARTE'S "HOW ARE YOU, SANITARY?"

Down the picket-guarded lane
 Rolled the comfort-laden wain,
 Cheered by shouts that shook the plain,
 Soldier-like and merry:
 Phrases such as camps may teach,
 Sabre-cuts of Saxon speech,
 Such as "Bully!" "Them's the peach!"
 "Wade in, Sanitary!"

Right and left the caissons drew,
 As the car went lumbering through,
 Quick succeeding in review
 Squadrons military:
 Sunburnt men with beards like frieze,
 Smooth-faced boys, and cries like these—
 "U.S. San. Com.," "That's the cheese!"
 "Pass in, Sanitary!"

In such cheers it struggled on
 Till the battle-front was won;
 Then the car, its journey done,
 Lo! was stationary;
 And where bullets whistling fly,
 Came the sadder, fainter cry:
 "Help us, brothers, ere we die—
 Save us, Sanitary!"

ACADEMY OF MEDICINE, TORONTO.

The November meeting of the Surgical Section of the Academy of Medicine was held on Tuesday, the 17th of November, 1914, with Dr. C. L. Starr in the chair.

After the reading of the minutes by the secretary, Dr. Herbert Hamilton presented a patient, aged 68, who, while walking leisurely along smoking a pipe, was knocked down by a dog in pursuit of a cat. He was unconscious for some time and bled very profusely from the mouth. It was observed that his pipe-stem was not to be seen, but nothing further was thought of it at the time. In falling he struck upon the right shoulder and side of the head. There was apparently no immediate loss of power in the arm, but in the course of a couple of weeks he complained of increasing weakness of the muscles about the shoulder, and it was this defect which caused him to consult Dr. Hamilton. Seeing an indefinite swelling in the neck he referred his patient to Dr. Geoffrey Boyd, who removed the pipe-stem from the neighborhood of the right tonsil. At that time there was a small area of epicritic and protopathic loss over the anterior part of the shoulder and paralysis of the supra and infraspinati, deltoid, biceps and brachialis anticus. The diagnosis, he thought, was Erb's paralysis, due to stretching of the 5th root at the time of the accident.

In discussing the case, Dr. George Wilson pointed out that the onset of the paralysis was hard to explain on the theory of stretching. The patient complained of increasing weakness of the arm, which supported

the idea that pressure from the pipe-stem was the etiological factor. Then, too, the sensory loss was against an Erb's palsy. The distribution of the paralysis, however, corresponded exactly with that of birth palsy.

The chairman presented a little girl, aged four, who fell carrying a milk bottle. The latter broke, cutting a deep gash in the wrist. She was carried to a doctor's office and anesthetized, but as she did not seem to be taking the anæsthetic well, nothing was done. She was thus left for three weeks, when she came to the Hospital for Sick Children, at which time Dr. C. L. Starr saw her. At operation it was found that both superficial and deep flexors of the fingers, the long flexor of the thumb and both flexors of the wrist, as well as the *Palmaris longus*, had been divided. The ulnar nerve escaped, but the median was severed. The ends of the nerve were half an inch apart and bulbous. The tendons were retracted and embedded in granulation tissue. The bulbous ends were cut away and the nerve united with fine catgut. The tendons were brought together with silk boiled in sublimate and then in paraffin. Dr. Starr emphasized the advisability of treating the silk in this way if one wished to avoid any subsequent trouble with buried silk.

Dr. Marlow drew attention to the efficacy of silk in a case of long-standing fracture of the papilla. There was about four inches of shortening and after freeing the upper fragment as much as possible bridged the remaining interval with silk, the patient getting a very satisfactory result.

Dr. H. B. Anderson presented a man, aged 28, with a swelling in the right inguinal region. The right side of the scrotum was empty. About three weeks ago, pain and tenderness were evident over the mass, evidently the result of a partial torsion which corrected itself. There was a distinct impulse on coughing over the inguinal area.

Dr. George Wilson showed a man, aged 39, who had been treated with alcohol injection for *tic douloureux*. Dr. H. B. Anderson, who had treated him more or less continuously for about three or four years, gave a brief resume of his symptoms. The attacks, which were typically epileptiform in character and very severe, were brought on by various means. A blast of cold air, speaking, eating or touching the moustache of the affected side were quite common. Tender points were particularly evident about the canine fossa and the inner side of the cheek in the region of the last molars. He was treated by the usual remedies and tonics and had a respite for nearly two years. Some weeks ago the attacks came on again, for the relief of which surgical measures were advised. The solution injected was the one used to Patrick, containing

about two grains of cocaine hydrochloride, two drachms of distilled water and alcohol to one-half an ounce. Two cubic centimetres were first injected into the superior maxillary division just after it emerged from the foramen rotundum. Although this was followed by immediate analgesia in the distribution of vii. no beneficial result was noticed. Consequently in three or four days' time the inferior maxillary division was injected. This was immediately followed by analgesia over its peripheral distribution and he has not had an attack since. Dr. Wilson outlined the technique used in the injection. A wooden probe with one end bent to a right angle is inserted into either the foramen rotundum or ovale of a skull. It is tied in position to the under border of the zygoma. With the skull held in a position similar to that of the patient's head little difficulty will be experienced in finding the nerve. A good eye is more essential than measurements. In many injections into the fifth nerve there is loss or disturbance of taste in the anterior two-thirds of the tongue. This patient's special sense was not disturbed to any appreciable extent.

Dr. Shuttleworth asked whether there were any dangerous results. Recently he had unded observation an inoperable sarcoma of the leg. For the severe pain he injected alcohol into the sciatic nerve, but only got anæsthesia in the sole of the foot. Later he divided the nerve and then the patient complained of pain in the originally anæsthetic area. He wondered if a neuritis had been set up by the injection.

Dr. Wilson referred to hæmorrhage as the chief complication. Cases have been reported where the bleeding was so severe after injection into the second division as to cause well marked exophthalmos with complete loss of sight for a few days. He pointed out that mixed nerves should never be injected for neuralgia as motor paralysis would result. In the case of the fifth nerve the motor loss is negligible, owing to the presence of the intact muscles of the opposite side. In this patient there was not total paralysis of the masseter and temporal muscles.

Dr. C. L. Starr objected to Dr. Wilson's dogmatic statement as to the use of the injection as he uses them in cases of spastic paralysis.

VITAL STATISTICS OF TORONTO.

Toronto was a fairly healthy city during the months of August and September, especially in the matter of contagious diseases. Diphtheria, typhoid fever and mumps all show an increase during August over September, but they are normal ones for this time of the year. Scarlet fever is not nearly so prevalent now as it was last month or in

September, 1913. The typhoid fever of September last year and this shows a remarkable drop from 132 to 45. One encouraging feature is the smaller number of cases of tuberculosis reported.

In the spring there was quite an epidemic of mumps, but this died down during the summer months, and in August seven cases were reported, but the number has risen to 40 now. The spring record was, however, away up in the hundreds, so the figure is not considered alarming. The following are the comparative number of cases reported:

	Sept. 1914	Aug. 1914	Sept. 1913
Diphtheria	60	36	58
Scarlet fever	12	18	35
Typhoid fever	45	28	132
Measles	24	73	13
Tuberculosis	41	51	46
Chickenpox	7	3	8
Whooping cough	19	24	6
Mumps	40	7	1

SHOULD THE DOCTOR PREVENT OR CURE?

The idea that physicians, like teachers, firemen, and soldiers, should be employed by the public and not be dependent on the ill-health of their individual patients, is being freely discussed by both laymen and medical practitioners. A Chinaman is said to pay his physician while he is well and cease to pay when he is sick. Medical Health Officers win their reputation by maintaining a high standard of health. This seems better than dependence for income on sickness.

CANADIAN RED CROSS.

The Canadian Red Cross Society has been requested to equip five field hospitals and three field ambulances for the Canadian contingent. In aggregating over 2,000 beds, these field hospitals would represent a capacity four times that of the Toronto General Hospital. They will consist of two general hospitals, of 520 beds each; one clearing hospital, 200 beds; two stationary hospitals, 200 beds each, and three field ambulances, 150 beds each. An urgent request has come to the Toronto branch to forward a list of the quantity of supplies that are available for this purpose.

The following is the list of donations received by the local branch to date: 2,000 pairs sheets, 1,500 pillowslips, 1,500 handkerchiefs, 6,000 cheesecloths, 1,000 pyjamas, 3,000 pairs socks, 2,000 shirts, 7,000 triangular bandages, 2,000 undershirts, 2,000 pairs drawers, 10,000 bandages, 500 nail brushes, 500 hair brushes, 500 combs, 50 candle lanterns, 5,000 towels, 2,000 glass covers, 100 pairs crutches, 1,000 cushions and pillows, 500 fans, 100 gross soap, 1,000 sponges, 1,000 yards waterproof sheeting, 1,000 pounds arrowroot, 6,000 tins beef essences, 4,000 pounds biscuits, 1,000 tins chicken broth, 1,000 tins calfsfoot jelly, 1,000 pounds cocoa, 1,000 pounds chocolate, 1,000 pounds cornflower, 1,000 5-pound tins jam, 1,000 tins milk (condensed), 1,000 pounds rice, 1,000 cereals, 1,000 vegetable compressed discs, 5,000 tins soups, 1,000 kit bags (invalid), 1,000 packs cards, 500 various games, 1,000 knitted comforters, 1,000 knitted caps, 1,000 bed-jackets, 1,000 tooth brushes, 1,000 jars toothpaste, 1,000 combs, 250 nail scissors, 1,000 pairs bootlaces, 500 pairs slippers, 500 pairs bed socks, 1,000 boxes talcum powder, 1,000 dressing-gowns, 100 basins, 200 eye-shields, 200 pairs colored protection glasses, 200 strong walking-sticks, 12 wheel-chairs, 1,000 yards mosquito netting, 1,000 pounds insect powder, 1,000 pipes, 200 hot water bottles, 200 ice caps, 100 boxes dominoes, 100 boxes checkers, 100 razors, 100 shaving brushes, 1,000 boxes shaving soap, 25 electric toasters, 1,000 pairs mittens, 100 boxes assorted needles, 1,000 bottles lime juice, 1,000 nightshirts, 500 hot water bottle covers, 500 pneumonia jackets, 500 surgical shirts, 2,000 cholera belts, 500 pairs gloves.

All this material will go with the Canadian hospitals, under Red Cross control.

A cheque for \$8,000 has been received by the Toronto branch from Ottawa and the Ottawa Valley branch. This is the second amount that has been received from that source.

CANADIAN ARMY DOCTORS.

The following are among those who are going with the Canadian contingent:

P. G. Goldsmith, George Strathy, D. E. Robertson, B. Robertson, Burgess, Humphry, McKenzie and H. Burnham.

D. W. McPherson is acting principal for Toronto district, in place of Dr. Fotheringham, retired.

No. 1 Clearing Hospital will be in charge of F. W. Marlowe, assisted by Drs. E. C. Cole, F. J. Munn, Dowsley, A. Campbell and Withrow.

The 10th Field Ambulance will be under W. B. Hendry, who is assisted by G. Hyland, W. H. Lowrie, H. L. Jackes, Smirlie Lawson, McKellop and Hanley.

The 11th Ambulance, under C. J. Currie, assisted by C. Warren, E. B. Hardy, H. R. Holme, W. L. McBeth, J. Wood, G. Rice, J. C. Colhoun, P. G. Brown and R. H. Sheard.

Dr. A. E. Ross, M.P.P., of Kingston, has charge of No. 1 Field Ambulance Corps.

Dr. A. E. Ross, M.P.P., of Kingston, has charge of No. 1 Field Ambulance Corps.

The 13th Cavalry Field Ambulance has for its chief Wallace Scott, who has with him R. S. Pentecost, G. R. Philp, N. J. L. Yellowlees, W. T. McLean, W. Ogden, P. K. Menzies and George Campbell.

Dr. D. B. Bentley, of Sarnia, will be the head of No. 1 Stationary Hospital in the foreign service.

Dr. R. D. Rudolf will be in charge of one of the base hospitals.

ONTARIO VITAL STATISTICS.

The statement issued by the Provincial Board of Health for the month of September shows the number of communicable diseases and deaths to have been slightly in excess of those of the same month last year, while the deaths are fewer. There has been a large increase in the number of cases of diphtheria and measles. Typhoid fever and scarlet fever cases materially decreased compared with the figures for the corresponding month last year. The statement for the month of August, 1914, is as follows:

Diseases.	1914	
	Cases.	Deaths.
Smallpox	6	0
Scarlet Fever	71	2
Diphtheria	172	10
Measles	148	2
Whooping Cough	52	5
Typhoid	126	10
Tuberculosis	124	72
Infantile Paralysis	11	0
Cerebro-spinal Meningitis	5	5

MEDICAL PREPARATIONS

A PROFESSIONAL GAMBLE.

Any imitation of a medicinal remedy is a gamble not only upon the reputation of the original product established solely through thera-

peutic merit, but upon professional standing and your patient's health as well.

The many imitations of Hayden's Viburnum Compound, the original Viburnum product, best tells the story of the commercial greed of imitators who would profit at your expense and by the professional favor accorded H. V. C., as the original and reliable product in the treatment of dysmenorrhea, amenorrhea, menorrhagia, metrorrhagia and other gynecological conditions.

H. V. C. is a product of known composition and from the fact that it has been accorded commendation by the medical profession for over 45 years, best indicates the therapeutic efficiency of this remedy, as well as the assurance of satisfactory results when the original and not an imitation is prescribed.

The manufacturers of imitation products care not for therapeutic efficiency, the foundation upon which Hayden's Viburnum Compound was built. It would seem advisable therefore that in administering H. V. C. that the original and not an imitation is given to your patients. Samples of the original H. V. C. with formula and literature will be sent on request to N. Y. Pharmaceutical Co., Bedford Springs, Bedford, Mass.

CORPORA LUTEA NOW AVAILABLE.

Physicians who have been desirous of prescribing Corpora Lutea, but have been unable to do so through inability of their druggists to supply it, will be glad to know that the manufacturers, Messrs. Parke, Davis & Co. have taken steps to secure sufficient quantities of the glands in future to meet the probable demands of the medical profession.

As is known, perhaps, to most physicians, Corpora Lutea is largely used to control the symptoms following the removal of the ovaries, especially in young women, and to relieve the nervous disturbances attending the natural menopause. Reports have appeared on its successful employment in the treatment of amenorrhea, dysmenorrhea, chlorosis and menorrhagia. It is supplied in desiccated form, in capsules of five grains each, equivalent to about thirty grains of fresh corpus luteum. Only the yellow granular material from fresh ovaries is used in its preparation, the remainder of the gland being discarded because of its lack of therapeutic value.

While comparatively a new product, there is sufficient evidence at hand to warrant the opinion of one writer who expresses the belief that "in Corpora Lutea we have a preparation that will be a blessing to womankind."