## Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below. L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

Coloured covers / Couverture de couleur		Coloured pages / Pages de couleur
Covers damaged / Couverture endommagée		Pages damaged / Pages endommagées
Covers restored and/or laminated / Couverture restaurée et/ou pelliculée		Pages restored and/or laminated / Pages restaurées et/ou pelliculées
Cover title missing / Le titre de couverture manque	$\square$	Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
 Coloured maps /		Pages detached / Pages détachées
Cartes géographiques en couleur		Showthrough / Transparence
Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)	$\checkmark$	Quality of print varies / Qualité inégale de l'impression
Coloured plates and/or illustrations / Planches et/ou illustrations en couleur	[]	Includes supplementary materials /
Bound with other material / Relié avec d'autres documents		Comprend du matériel supplémentaire
Only edition available / Seule édition disponible		Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / II se peut que certaines pages blanches ajoutées lors d'une
Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.		restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.

Additional comments / Commentaires supplémentaires: Continuous pagination.

# THE CANADA MEDICAL RECORD.

#### VOL. XIV.

### MONTREAL, JULY, 1886.

No. 10

# CONTENTS.

ORIGINAL COMMUNICATIONS. SOCIETY PROCEEDINGS. Medico-Chirurgical Society of Montreal..... 555 CORRESPONDENCE. 562 Our London Letter..... PROGRESS OF SCIENCE. 554

Drundard's Epilepsy.....

Original Communications.

CLINICAL LECTURE.

Delivered at the Montreal General Hospital, March 2nd, 1886.

By FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P. I. (Dean of and Professor of the Theory and Practice of Medicine in the Faculty of Medicine, Bishop's College.

#### CATARRHAL JAUNDICE.

GENTLEMEN,-The patient now before you is 35 years of age, and is a domestic. She has, as a general rule, enjoyed good health, although occasionally she has noticed evidence of gastric trouble, which she has observed was connected in some degree with changes in the weather. She has considerable washing of clothes, and has to place them on the line in the yard,-I was going to say, for the purpose of drying, while in truth it is to freeze. About two weeks ago, while engaged in this occupation, and the temperature was very cold, having just left a heated kitchen, she felt chilled, and was obliged to desist. She took a drink of warm ginger tea, and felt better, continuing her work for the day. On the following morning, although she resumed her duties in the household, she was feverish and uncomfortable and as her bowels were somewhat confined she took a purgative, which only acted fairly well. Next day she felt still more uncomfortable, having a decidedly bad taste in her mouth, and, as she noticed the conjunctiva becoming yellow, she came to the Out-door Clinic. This was last Thursday, the 25th inst. Her condition was

On the Treatment of Painful Men-	۱	I
stuation and Sterility from Flexion.	566	
To arrest Nasal Hemorrhage	572	0
Cold Rondoming of the Leg in Isom-		
nia	572	6
Hydrastis Canadensis in Metrorrha-		
Hydrastis Canadensis in Metrorrha- gia	572	5
B		I V
Safe, Simple and Effective Mode of		E
Treating Prolapse of the Rectum	573	C
and Hemorrhoidal Tumors.	573	12

)	Dermatology	574
56	EDITORIAL.	
72	College of Physicians and Surgeons	
72	of the Province of Quebec	572
2	Canada Medical Association	574
	New York Medical Monthly	574
$\mathbf{^{72}}$	Wyeth's Liquid Malt	574
	Philadelphia Medical Items	575
	Correspondence	575
73		576

at that time in brief as follows : eyes, face and body of a decidedly lemon color, frontal headache, foul tongue, pulse of 64, and small, and bowels constipated. Her last motion was sticky, pale and very offensive. The diagnosis was catarrh of the bile ducts or catarrhal jaundice. This is a disease of somewhat common occurrence in Canada, owing to the changeful character of our temperature, especially in Autumn, when we have warm days and cool nights. It is also met with somewhat frequently in the malarial districts of the western portion of our neighboring province. It, as a rule, is not a primary disease,-I mean by this statement that the catarrhal condition does not first attack the mucous membrane which lines the bile ducts. As a rule, there has existed for one or more days evidence of a catarrhal congestion in the gastrointestinal canal, but more especially in the duodenum, that portion of the intestinal canal which is immediately next the stomach, and into which the bile ducts empty. The disease, as a rule, then, generally extends from the duodenum up the ducts. The initial lesion is a congestion or hyperæmia of the mucous membrane, which becomes swollen, and coated with a tenacious mucus. In this way the canal becomes partially obstructed, in some cases wholly obstructed, so that little or no bile passes into the gut. In about four or five days the congestion begins to disappear, while at the same time a good deal of debris is cast off. This debris blocks up the canal for a short time, but it gradually liquifies, escapes into the duodenum, and once more the duct is clear. The symptoms of this disease, in addition to those which I have named as being present in the case now before you, are a sensation of weight and soreness in the right hypochondrium,-actual pain may exist, but is rare. The spirits are much depressed, and the patient is apt to become melancholy. In fact, the patient feels far more sick than his actual condition, as illustrated by general symptoms, would seem to warrant. The staining of the eyes and skin is noticed about the fifth day, sometimes earlier. Heart's action weak, and is slow and labored. The urine is the color of porter or dark coffee, owing to the quantity of bile, which is being excreted through the kidneys. It also contains the urates in great amount. The urine will stain yellow any linen with which it may come in contact. The coloration of the skin is due to the presence of bile pigment in the transuded liquid, which infiltrates the tissues. Sometimes even the perspiration gives a yellow stain to clothing, especially the perspiration from the axilla. The depressed condition of the circulation is due to the action of the biliary salts on the heart itself. If you will remember the physiological action of bile on the food which it meets on entering the duodenum you will at once understand how certain articles of diet, such as the fats, for instance, pass on, improperly prepared for further action in other portions of the intestinal canal. If you remember the fact that bile possesses strong autiseptic power you will understand how its absence allows the food in the gut to decompose, the result being the formation of a large quantity of abominably fetid gas. This causes much flatulence. The absence of bile causes the stools to be light clay or chalk color-they are pasty, and it often requires much straining to empty the rectum. The skin is itchy, sometimes excessively so-now and then it prevents sleep. In severe cases, when the bile-staining of the skin is very deep, vision is yellow, from the quantity in the humors of the eye. In about 10 days from the first symptoms matters begin to mend, the feverish condition passes away, the tongue cleans and the appetite returns-still the skin continues markedly yellow and the bowels remain constipated. About the fifteenth day the evacuations from the bowel first show evidence that bile is resuming its natural channel by being darker. In a couple of days the normal in this respect is reached-when the fetid odor and flatulence become memories of the past. The skin discoloration is the last evidence of the disease which disappears. Until this takes place there continues to be evidence o bile in the urine.

Generally these cases make a complete recovery, but occasionally you meet with one which, from some cause which you are notable to explain, does not. The jaundice then becomes chronic and there occurs serious organic changes in the liver.

The treatment in the case now before you was very simple. It consisted of the local application of hot linseed poultices over the right hypochondrium, with the internal administration of half drachm doses every four hours of phosphate of sodium. This remedy is in much favor with American physicians. She also got two doses-one night and morning-of Grey powder, i.e., Hydrarg cum cretæ with rhubarb. In this disease mercury is often very useful, not as a purgative or an hepatic stimulant, but for the purpose of allaying the great irritability of the mucous membrane. For this purpose calomel is the best preparation, and should be given in doses of  $\frac{1}{18}$  to  $\frac{1}{12}$  of a grain. Saline waters, as the Carlsbad, Vichy, Saratoga, and our own Canadian waters-Plantagenet and St. Leon, will be found excellent, with a view of keeping up free elimination from the kidneys. Bitartrate of potash lemonade may be freely used. Two grains of euonymin and four grains iridin given at night, and followed by a salir e in the morning, has recently given excellent results. Attention to diet is requisite, as an excess in eating and drinking sometimes produces it. All fatty, surchy and saccharine substances must be omitted, for they require bile either for solution or absorption or to prevent dccomposition. Milk, with lime water, especially skimmed milk, makes excellent diet. Conium is also said to be used by some physicians with success

Those who saw this patient when she was here last week will of course recognize a considerable improvement: her eyes are brighter, her heaviness is gone, and the discoloration of the skin is showing marked signs of a rapid disappearance. Her bowels are more readily moved, and in their color there is an improvement. The case has not been a severe one, but it has given me an opportunity of saying a few words on a disease which, when you have commenced practice, will not unfrequently claim your attention.

DRUNKARD'S EPILEPSY.—In view of Magnin's assertion that in France the frequent cases of epilepsy occurring in drunkards are due, not to alcohol, but to absinthe, MOELI has reviewed the German statistics of the subject, which may be thus summarized :

In Germany 36 to 40 per cent. of the subjects of delirium tremens are also victims of epileptic attacks. An attempt to determine whether the occurrence of such attacks was correlated with the abuse of any special kind of distilled liquor was unsucces ful, but it was found that in twenty-six almost exclusively beer and wine drunkards, only one was peileptic.—*Centralblatt fur klin. M.d.* No. 1, 1886.

Meetings,

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, April 2nd, 1886. Geo. Wilkins, M.D., 2nd Vice-President, in the Chair.

Primary Cancer of Pancreas, with secondary deposits in other organs.—Dr. ROWELL exhibited the specimen, and DR. ARMSTRONG related the clinical history of the case :

Mrs. M., aged 80, widow, enjoyed good health until three years ago. Father and two brothers are said to have died of cancer. Admitted to Western Hospital in December, 1885, suffering from loss of appetite, pain after eating, and vomiting. On examination, a hard, round, circumscribed lump, about the size of an orange, was found occupying the epigastrium, just over the region of the pyloric end of the stomach. As little was to be gained from medical treatment, a mixture containing bismuth, hydrocyanic acid and mucilage was prescribed, and she was removed by her friends to her home. It was learned at the trae of her death that since her removal from the hospital the vomiting had continued persistently, the most bland liquids, even water, being immediately regurgitated. She had also suffered much pain, for which she had taken morphia pills. Nothing passed bowels for two weeks before death. and she became distinctly jaundiced. At the post-mortem examination, 36 hours after death, only the abdominal cavity was examined. On opening the abdomen, the omentum was found adherent to the anterior abdominal wall. Liver very much enlarged, extending down to level of umbilicus, and containing several large cancerous nodules. Gall-bladder much distended, containing eight ounces of bile and a dark-colored gall stone the size of a cherry. Upon raising the liver, the head of the pancreas was found to be occupied by a cancerous mass, and the surrounding tissues were infiltrated and adherent to it. The walls of the stomach were free from disease. Complete obstruction of the duodenum occurred four inches from the pylorus, caused by pressure of this cancerous mass, together with the adherent and infiltrated vissues about it. A number of the mesenteric glands were also involved. Intestines empty. Spleen slightly enlarged.

New Method for the Relief of Ruptured Perincum. -DR. TRENHOLME read a paper on this subject exhibiting drawings of the new method as follows : -This disease must be as old as parturition itself, and yet, beyond the adjustment of the parts, binding the knees together, in recent cases no really successful advance had been made for its cure till the late ever-lamented Dr. Sims introduced his silver suture. The operations of Baker Brown and others were not of any real value, and perhaps the cause or nature of failure was not fully brought out till Emmet's paper upon this subject was given to the world. Now, I do not propose to go over the many points connected with this trouble and the operations attempted for its cure. How much progress has been made can hardly be conceived of by those who have graduated during the last twenty-five years. One of the best and most esteemed surgeons of this city, and, I might say, of this country, endeavored to dissuade a confrere from attempting the operation, stating that "it was sure to be a failure." Not only did he do this, but used his endeavors to prevent the lady from having the operation performed. Thanks, however, to the silver suture and the courage of the operator, the operation was successfully performed and the patient cured. This, occurring in our good city, speaks volumes. For my own part, I think the evils resulting from severe lacerations are very great, and if anything I may say will direct more attention to the prevention of these evils, I will be satisfied. I feel confident that the sum-total of the sorrow and misery arising from this cause vastly exceeds our conception. It is a recognized factor in the causation of subinvolution of the vagina and uterus, and I am persuaded its results are not limited to these organs, but that the tubes and round ligaments share in the same mischief. It is a fruitful cause of retro-luxations of the uterus and prolapsus of bladder. Of all the marital misery and personal distress I need say nothing; these, of course, vary with the peculiarities of individual cases and the extent of the disease. I will not speak of the well-known preparation of the patient required, especially in extensive lacerations; you all know as to this and the after-treatment als >. There is one remark I wish to make as to what is known as the perineal body. Some writers have made light of its existence, because its anatomy and relations are not sufficiently definite to merit, as they think, this appellation. That every uninjured perineum has such a body is unquestionable,

and the restoration of this body is the one object of perineoraphy. An operation is successful or unsuccessful, according as to whether this end of the operation is or is not attained-without it the natural support of the pelvic viscera is impossible. Not only is there apt to be hernia of the anterior rectal wall, but prolapsus of both bladder and uterus-and this in the order I have given them. The best success heretofore has followed Emmet's operation. His conception of the trefoil character of the surfaces to be brought together are based upon a right conception of the anatomy of the parts The perineal body being the central, and the lateral surfaces the outside leaves of the trefoil, each sulcus represents the lateral borders of the vagina and rectum. Perfect union of these surfaces leaves but little more to be desired. What remains to be attained is the object of what I now offer. In the first place, the loss of any tissue is to be avoided, and sure union by first intention the desideratum to be attained. My operation is based upon the recognition of the immense value of the perineal body. I denude the surfaces to the fullest extent of the parts injured. This denudation is accomplished by the removal of the covering of the parts to be denuded -i.e., the cicatricial surface in one piece. For this purpose the first incision is made at the upper part where the edge of the skin coalesces with the cicatricial surface-(the dotted line in sketch No. 1 shows this); the knife is entered at the highest point on the right side, and the incision brought down to the lowest part of the fourchette, when it is met by a similar incision on the left side. The lowest part of the angle is then seized with the forceps and carefully dissected upward, taking special care to remove the whole surface without incising the flap; this dissection is carried on till the surface represented by the original wound is uncovered. This flap, when raised with the hook, is seen in drawing No. 2. The next step is the introduction of the shield-sutures (and here I would say a word in favor of the catgut suture which I adopt.) It is by far the best, as it gives the greatest possible extent of surface to surfacemuch greater han can be secured by the interrupted or any other suture. Two deep sutures usually suffice, and these-whether silver, silk, or catgut-are passed in and secured by clamp shot upon an ivory shield. The first suture should be inserted low down, and about three-quarters of an inch from the edge of the wound. It must be passed under the denuded surface so as not to appear, and

brought out on the opposite side at a point corresponding to that of insertion. The second deep suture is similarly introduced higher up. The last deep suture should catch the flap, and the interrupted suture will do for this. The edges of the wound are coapted by horse-hair sutures, and the upper part of the flap and around on the right and left side are secured by catgut sutures ; this leaves the united surfaces in the shape of the letter T. The vaginal surface is perfectly covered, and in no way can a drop of fluid enter the wound or interfere with union by first intention. There is very little pain, inasmuch as the deep shield-suture allow of distention. Interrupted sutures should not be used. Where the rupture extends into the rectum the flaps are carefully brought together by a running catgut suture, and the operation completed as in this case. The objection to all other operations was that it left the vaginal incision open, which sometimes, therefore, interfered with union by first intention. By my method this is now impossible, and when catgut is used the results of the operation leave absolutely nothing more to be desired. The following points are gained : Perfect union, perfect restoration of the perineum, no loss of substance, and no after-fever worthy of the name. Sketch 3 shows the condition of the parts at the completion of the operation.

Dr. WM. GARDNER said that, as a rule, extensive lacerations of the perineum were mischievous and produced symptoms, yet he had seen many exceptions to this. In numbers of cases, even where some fibres of the rectum have been torn, no inconvenience followed, due, no doubt, to the integrity of the vaginal walls and to individual peculiarity. He had also seen procedentia uteri in virgins and in multiparous women, where there was no rupture at all. The principle of the method advocated by Dr. Trenholme was not new. Hart and Barber had described a similar operation, but denuding in two segments; and Tait, five or six years ago, proposed an operation similar to Dr. T.'s, with the exception of introducing the sutures somewhat differently. Dr. Gardner had performed this (Tait's) operation twice, but was not favorably mpressed with it. Convalescence was not so satisfactory as when he had performed Emmet's operation.

Dr. ARMSTRONG thought that the different degrees of injury resulting from laceration of the perineum in different cases depended upon the character and extent of the tear. He doubted

whether a simple tear of the so-called perineal body which consisted principally of cellular tissue and skin, was followed by much harm. There was good evidence to the contrary. The evil results charged to laceration of the perineum only obtained when either the pelvic fascia was torn or when the muscular floor of the pelvis was injured, either by a separation of the levator ani muscles in th middle line, or when one or both of these muscles were torn away from their origin from the rami of the pubes or from the ischial spine. This fact is pretty clearly established by Emmet, by Dr. Schatz of Rostock, and by Dr. B. E. Hadia of San Antonio, Texas. The best operation is that which the most perfectly restores the parts to the condition in which they were before the injury was sustained. Eminet's new operation has yielded good results in the Western Hospital. He was not aware that, so far, any attempt had been made to unite the divided muscles in the median line or to the pelvic fascia.

Lanolin.—Dr. REED mude a few remarks on this drug, a new basis for ointments, introduced by O. Liebreich, obtained from the fat of the keratin tissues and principally from wool. The very strong recommendations of this cholesterine fat in the articles in the British Medical Journal for February would cause it to be extensively tried by the profession. The advantages of rapid absorption and ready miscibility with aqueous mixtures were in a measure confirmed. Manufactures were preparing for a great demand, and an abundant supply at a moderate price would soon be on the market. A specimen was passed round.

Operation for Intra-uterine Fibroid—Accidental Inversion of the uterus and rupture of the Perineum.-Dr. GARDNER reported the case as follows : Mrs.—, childless, was sent to him from Ontario. She had had severe hemorrhages for the past five years; of late they have been very excessive, and produced great blanching. On examination, a tumor was found about the size of a child's head and completely filling the vagina and uterus. Operation-The tumor was fixed by an assistant and removed piece by piece by means of scissors, fingers and serrated scoop. Towards the end of the operation, whilst dragging strongly on the remaining portion of the tumor it suddenly gave way, tearing the perineum and inverting the uterus. The uterus was easily replaced, but sutures were not applied to perineum in order to facilitate irrigation and drainage of the uterus. For this purpose Dr. Gardner always employs the double tubes fixed to the cervix. Convalescence proceeded very satisfactorily for five days, when the temperature rose and diarrhea set in. This condition persists in spite of treatment. It is feared she has amyloid disease of the liver and other organs, the liver being now enlarged and smooth. She is also passing large quantities of urine containing albumen.\*

#### Stated Meeting, May 1st, 1886.

#### T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Tuberculosis of the Tongue.-Dr. STEWART exhibited a woman, aged 28 years, who has been complaining for over four months of cough, purulent expectoration, night sweats, loss of flesh, etc. She has lost a brother and sister from pulmonary consumption. Her father and mother are still living, and enjoying good health. When she first came under observation, three months ago, there was distinct evidence of consolidation of both apices. This condition still continues. The patient is hoarse, and complains of pain in the larynx and also in the throat when swallowing. Dr. Major, who kindly examined the larynx, found a tuberculous nodule about the size of a grain of wheat in the inter-arytenoid space. The tip of the tongue is superficially ulcerated to the extent of about a five cent piece. From the centre of this ulcerated surface a fissure extends into the substance of the tongue to the depth of about a guarter of an inch. The tissues immediately surrounding this fissure are hard and nodular. There is no pain on pressure, however, neither is there any discharge from the ulcerated surface of the tongue. Shortly after the sore on the tongue was noticed, the patient experienced a severe pain in it, which continued to increase in severity up to the time when she first came under treatment, when it had reached such an exquisite degree that she found it almost impossible to eat or even to speak. The local application of iodoform quickly relieved the pain, but otherwise it does not seem to have had any influence over the course of the local trouble. Lately, a half per cent. solution of papayotin in equal parts of glycerine and water has been applied several times daily, the object being to directly influence the tuberculous infiltration, from the well-known properties that this drug has in dis-The case is unsolving albuminous tissues.

doubtedly one of a typical tuberculous ulcer of the tongue. Although the secretion from the ulcer has been examined on two occasions, no bacilli have been found.

In reply to a question raised by DR. SHEPHERD as to the influence of iodoform, when used as a local application, in producing pneumonia,

Dr. MAJOR stated that he had used the drug extensively in nasal and laryngeal disease for many years, and he had not, thus far, encountered any untoward result.

Dr. R. J. B. HOWARD has seen iodoform freely used in Vienna in cases of excision of the tongue, and there it is said to be free from danger.

Eversion of the Laryngeal Ventricles .- Dr. MAJOR presented a case of eversion of both laryngeal ventricles in a male aged 27. The case had been under observation and treatment for over two years, and showed decided improvement. A tuberculous condition was present, as evidenced by lung signs and a local development in the postlaryngeal wall. He referred to a case of complete eversion of the right sacculus, which had been demonstrated at the throat clinic of the Montreal General Hospital in April, 1884, occurring in the person of a syphilitic subject, where the ventricle was completely returned under treatment. Reviewing the literature of the subject, allusion was made to the fact that in the majority of the few recorded cases some dyscrasia was prominent, notably accompanying syphilitic, tuberculous or cancerous disease.

Peculiar Skin Disease of the Fect. Dr. R. J. B. HOWARD exhibited a boy, 12 years of age, of healthy family. He has angular curvature, involving the lower dorsal region. First noticed when he was  $3\frac{1}{2}$  years old. His feet were first affected in his sixth year. A small "scurfy" spot appeared first on the right foot, and has spread steadily, healing at the centre. When he came to the Dispensary it appeared as a lupiginous patch about 4 inches across, on the right ankle and instep; smaller similar patches existed on the outside of the right little toe and left great toe, at metatarso-phalangeal joint. The patch is covered with a crust or scab of a somewhat papillary appearance. Not tender or painful at any time, and never ulcerated. Dr. Howard brought the case for diagnosis. He thought it was due to some derangement of the spinal cord at the seat of the curvature, as nerves from this region supplied the skin of the feet.

Dr. SHEPHERD believed it to be a form of lupus. The PRESIDENT suggested that the parts be poulticed to remove the crust, and the boy be again brought to the Society.

Compound Fracture of both Legs .- Dr. Shup-HERD presented a case with the following history: -Edward N., aged 33, sailor, on the 11th of September, 1885, whilst working on his ship, fell through the hatchway into the hold, a distance of twenty feet, breaking both his legs. He was immediately admitted to hospital, and on examination, it was found that he had sustained a compound fracture of both legs about their middle third. The wound in left leg was about two inches long, and the fracture was comminuted. The right leg had the soft tissues much lacerated, the wounds being multiple, the largest some 4 inches long. Large pieces of muscle protruded, and there was much riding of bones. After cleansing the wounds with bichloride solution 1-1000, dusting them over freely with iodoform, and covering them with jodoform gauze and sublimate jute, the left leg was immediately put up in plaster, a window being left opposite the wound, some jute being placed over this and kept in place with a gauze bandage. Owing to the size of the wound and amount of the laceration in the right leg, it was thought wiser to put it up in a McIntyre splint, after placing the bones in as good a position as possible. The same evening, owing to the large amount of oozing, the external dressings were renewed, but were not again touched for one month, at the end of which time the wounds were found perfectly healed; the fracture of the left leg was firmly united, but although the extensive wound in right leg had healed, there was no union, so, after rubbing the bones together, it was put up firmly in a plaster-of-paris bandage. From time to time this bandage was renewed, the patient be ing allowed to move about with crutches. At the present time, seven months after the accident, the patient could walk about without support, and during the next week intended joining his ship. The right leg was still encased in plaster, and although the union was not quite perfect, it was daily improving. There was one inch and a half shortening of the right leg. After exhibiting the patient, Dr. Shepherd remarked that he had now no fear of compound fractures, and that all the cases did well if the wound was thoroughly cleansed

with bichloride, dressed with iodoform and jute dressing, and left undisturbed. Of course, if the temperature rose, it was wise to examine and change the dressing. He considered this a case which a few years ago would have demanded amputation.

Dr. R. J. B. HOWARD said that Esmarch reported a case where there were three compound fractures of the leg, thigh, and forearm. The treatment used was similar to Dr. Shepherd's and a good recovery followed.

Dr. JOHNSTON exhibited the following pathological specimens :

1. The Cord and Brain from a case of nontubercular cerebro-spinal meningitis in a child. Patient was suddenly seized with severe pain in the lead and vomiting. A few days before death exchymotic spots appeared over the chest and anns. The illness only lasted a week.

2. The Uterus and Heart from a case of malignant endocarditis in a patient suffering from puerperal fever. Patient did well for the first twelve days after confinement, when she was suddenly seized with rigors, her temperature running up to  $105^{\circ}$ . Nothing local was found to account for this. There was no pain in the abdomen. The heart showed endocarditis, with vegetations over the valves. The uterus showed signs of septic endometritis. There was also a diphtheritic-looking membrane in the cervix and on the inner sides of the labia. There were infarcts in the kidneys and spleen, but no pyæmic abscesses.

Dr. J. C. CAMERON read a paper entitled

Notes on the Determination and Causation of Sex.

By P. W. P. MATTHEWS, LL.D., M.R.C.S.E., Etc.,

Dominion Coroner for the North-West Territories and Medical Officer of the Hudson Bay Company, etc.

of which the following is an abstract :---

From earliest times, men have been anxious to learn the sex of the foctus in utero, and for this purpose many quaint methods have been devised. The following aphorisms enunciated by Hippocrates are to this day believed and practised by midwives in the East:

I. If the child be a male the mother will have a good color; but if a female, a bad color.

2. The male foctus is usually seated on the right side, the female on the left.

The ancient astrologers directed a drop or two of the mother's milk to be squeezed out upon a clean knife or glass, or upon the finger-nail. If the milk spreads about, the child is a female; if it remains still the child is a male.

M. Venette, the author of a popular treatise in France, directed that if a son is desired the gencrative act should be performed when the wind is in the north. Others held that the right testicle secretes female sperm and the left male; others that the right ovary discharges male ovules and the left female, and directed the woman to lie on the right side during coitus if a male child is wanted. This belief still lingers among some of the Hudson Bay Indians.

Pythagoras thought that a vapor descended during coitus from the brain and nerves of the embryo, the grosser tissues being derived from the blood and humors found in the uterus.

Empedocles affirmed that a portion of the embryo was contained in the sperm and a portion in the germ, the child being formed by the union of the two.

Hippocrates taught that conception takes place in the uterus by the mixture of due proportions of the male and female elements, sex depending upon which is stronger.

Aristotle held that the material parts of the embryo are formed by the catamenial blood, and that the male semen imparts the principal of life when the body is formed.

In later times, Descartes and his followers affirmed that a sort of fermentation takes place when the male and female seminal fluids are mingled, a foctus being the result; while, according to the chemical school, the acid male secretion mixing with the alkaline female secretion causes a sort of double decomposition, a foctus being a precipitate.

In 1667, Ludwig Hamm contended that an immense number of animalcules exist in the semen of all male animals, which contain the perfect rudiments of the future animal, and that the female simply supplies the proper nidus or habitat and suitable nourishment. The discovery of movement in the minute seminal particles seemed to confirm this theory; while some writers went so far as to say that these animalcules are of different sexes and copulate so as to engender male and female offspring.

Thury of Geneva propounded the doctrine that in animals, males are always produced when completely matured ova are fecundated, and females when the ova are less mature. Thus by serving

the cow with the bull at the commencement of rut, a female calf is produced; by serving at the middle or end of the rut, a male is ensured. In further proof of his theory, he said that queen-bees always lay female eggs first, and males afterwards. Applying this theory to the human female, it has been argued that if the ovum which is discharged from the ovary at time of menstruation, is impregnated shortly after the conclusion of the menstrual period, a female will be the result; but if impregnation do not take place for ten days or a fortnight, the child will be a male. This rule has been briefly formulated thus: Female offspring result from post-menstrual, male from præmenstrual impregnation.

The relative age of the parents seems to have some influence upon the sex of their offspring. Mr. Sadler, from an investigation of nearly 15,000 cases, concludes that on an average the sex of the child is that of the parent whose age is in excess, In England the husband is usually older than the wife, and the proportion of live-births is 104.7 males to 100 females. Among illegitimate children, the proportion of males is somewhat higher, 106.3 to 100, probably for similar reasons.

Recently, Mr. Starkweather has published a book on the "Determination and Causation of Sex in Man and the Lower Animals," in which he lays down the law that sex is determined by the superior parent. In deciding this superiority, numerous factors are to be taken into account, such as temperament, activity, energy, will, intellect, features, color, physique, health and nutrition. This sexual superiority does not necessarily coincide with superiority as generally understood, nor does it necessarily imply superiority in mental and moral qualities. This theory is an expansion and extension of Hippocrates' dictum, that the parent who is physically more vigorous at the time of conception gives his or her sex to the offspring . or, as Cuvier puts it, "To obtain an excess of female offspring, the father should be young and ill-fed, and the mother of mature years and highly fed."

In 1863, Frankenhauser and others propounded the theory that the rapidity of the foctal heart varies according to the sex of the child, being greater in the female than the male. In 50 cases he succeeded in diagnosing the sex correctly, find ing :

124 = mean male footal heart-beat.144 = "female " " " Steinbach followed with 45 successful cases out of 57, finding:

131 = mcan male fœtal heart-beat. 141 = " female " "

Devilliers in France and Cumming in Edinburgh denied the truth of this theory, and maintained that the frequency of the foctal heart-beat depends upon the size and weight of the child rather than upon its sex. As it is usually slower in large and well-nourished children, and as males are generally larger and heavier than females, a slower pulse-rate in males is usually to be expected. Opinions seem to be contradictory respecting the truth of this theory; my own experience does not corroborate it. One strong argument against it is, that if the pulse-rate of a considerable number of children be taken within one hour after birth, the difference of rate in the sexes will be too slight to admit of any rule being deduced therefrom.

#### Remarks by DR. CAMERON :

In 1879-So-81 I made some observations which tend to confirm Frankenhauser's theory. Mc-Clintock, in the Sydenham Society's edition of Smellie's Midwifery, quotes some observations made by Dr. Frauk C. Wilson of Louisville, which are so similar to my own that I tabulate them together as follows :---

ASES.	<u>ب</u>	0	0	ŝ	10	16	29	3
rs C	M.	15	14	61	ŝ	3	J	40
DR. CAMERON'S CASES.	No. Cases. M.	15	14	7	15	61	30	100
	Remarks.	Almost certainly male	Probably "	Doubtful-chances of "	u u female	Probably "	24 Almost certainly "	
s CA	.н.	61	8	4	S	2	24	44
LSON'	M.	35	13	ŝ	61	61	6	63
DR. WILSON'S CASES.	No. Cases.	37	15	ü	2	6	26	106
	0	1						ř
μ		1	125-130	130-134	134-138	138-143	143-170	Ĭ
р		Fretal heart-beat, 110-125			" 134-138	" 138-143		

The lowest feetal heart-beat in my series was 98, in a very large male child. From this series of observations, it seems tolerably conclusive that a feetal heart-beat under 130 is generally diagnostic of a male; over 140, a female. To secure accuracy, the following precautions should be taken :

1. Observations should be made before or in the very early stages of labor, for as labor advances the foctal heart-beat tends to become more rapid or irregular.

2. Several observations should be made, and their mean calculated, for the painless contractions of the uterus frequently modify the foetal heartbeat 10-20 per minute.

Many failures in diagnosis may be referred to lack of attention to these precautions.

In discussing this question of sex, much confusion has arisen from the want of clear notions respecting menstruation, ovulation and conception. Menstrual flow and the discharge of a mature ovum from a Graafian follicle are supposed to occur about the same time; hence many conclude that these two processes stand in the relation of cause and effect. Although the question is not vet definitely settled, evidence is rapidly accumulating to prove that their coincidence is accidental rather than necessary, and that one process may go on independently of the other. Indeed they are essentially opposite in character: ovulation is progressive, being the preparation and discharge of ova fit for impregnation; menstruation is retrogressive, being essentially a retrograde metamorphosis of the soft decidual nest prepared for a previous ovum. It has, therefore, been aptly called "the funeral obsequies of defunct and disappointed ova."

Physiologists tell us that after a ripe ovum has heen expelled from its Graafian follicle, its germinal vesicle becomes nuclear and approaches the surface. A portion is eventually extruded from the egg in the form of the Polar Bodies, leaving the remainder to form the *female pronucleus*. The ovum then ceases to grow unless speedily fertilized, perishes, and is cast off. But if spermatozoa reach it in time and penetrate its substance, it does not perish; the heads of the spermatozoa detach themselves and become *male pronucleus*, which fuses with the female pronucleus to form the fertilized nucleus. Conception is said to have taken place and growth is thenceforth rapid. Morphologically the male and female pronuclei are closely allied,

both being derived from the primitive ova of early embryonic life. In the female, a primitive ovum develops into a permanent ovum, capable of producing a human being; in the male, a primitive ovum breaks up into a number of spermatozoa. That the sex of offspring must be due to the relative properties and powers of these male and female pronuclei is tolerably clear, but to what properties or what powers is not quite evident. The essential points of Starkweather's theory are the following:

r. The male and female element share equally in the determination of sex.

2. Sex is determined by the superior potentiality of one or the other.

3. The superior parent or element (at the time of fruitful intercourse) determines the opposite sex in the offspring--crosscheritage, as it has been called.

4. In the great majority of cases, it is possible to prognosticate the sex that will result from the union of certain parents.  $\sim$ 

5. The sex of offspring is or might be generally within the control of parents.

6. This law holds good for the lower animals as man.

He cites numerous life histories in support of his theory, such as Milton, Shakespeare and Sir Thomas More, and dwells upon the well-known fact that great men have usually great mothers. He holds that his theory accounts for the small excess of male births among western nations, the marked excess of females among mulattoes, and the temporary large excess of males after war, pestilence, etc. In certain families, too, there has been noticed a remarkable succession of sons in one generation, of daughters in the next, and of sons again in the next. These cases are explained as examples of crossheritage, the sex being determined by the superior opposites. In the controversy aroused by Starkweather's book, frequent appeals have been made to the experience of stock-breeders, both for and against his theory. On the whole, the evidence seems to be against the ability of man to control sex among the lower animals. Yorkshire men, the most experienced breeders in England, and probably in the whole world, have no confidence in their power of predetermining the sex of horses and cattle although it would be very much to their pecuniary advantage to be able to do so, but are confident that they can modify, develop, or eliminate any other physical quality to an almost unlimited extent.

Starkweather's theory is ingenious, and contains much truth, but is yet far from proven. As our knowledge and experience increase we may know more of nature's methods, but it is highly improbable that we will ever gain the power to regulate sex, for such power would be prejudicial to the best interests of the race. During countless ages, the diversity of man's environment, the unceasing struggle for existence, the survival of the fittest, and the gradual development of the race have continually, through barbarism and civilization alike, determined those laws tof reproduction which were from time to time most conducive co man's welfare. Nature's experience is greater than ours ; her wisdom, patience and unselfishness are greater than ours; her balance more justly equipoised than ours. But, though we cannot supplant her, we may learn important lessons by observing her methods. The careful study of sex-formation should throw much light upon the mysteries of heredity, and enable us to foresee, and possibly fore stall, many family taints or predispositions. The knowledge that a grandfather's peculiarities are liable to be propagated through his daughters to his grandsons should help us to grapple with such diseases as dipsomania, hæmophilia, or gout.

If, in any degree, it be true that the superiority of the parent is a powerful factor in determining • the sex as well as the strength of the offspring, it must be equally true that the deterioration of the parent will cause deficiency or deterioration of the opposite sex in the succeeding generations. If, then, the modern craze for the "higher education of zoomen" goes on unchecked till their physical powers are sacrificed to so-called mental culture, the prospects for coming generations of men will be dark indeed, and Miltons or Shakespeares will be well-nigh impossible. But nature's unerring balance eventually rights all things ; the enfeebled progeny of weak, neurotic parents inevitably succlimb before the vigorous offspring of the healthy and robust, for the fittest must survive.

Cottespondence.

#### OUR LONDON LETTER.

The central attraction for the medical man visitng London is her hospitals and medical museums. Whether they "do these things better in Vienna," as the Teutonophilist says they do, remains to be seen; but there can be no question about the great advantages here open to the student who will avail himself of them. The endless amount of material that comes to hand in the various general and special hospitals makes it possible to study all diseases in all shapes.

I have noticed that very few students or attachés of one bospital know much about the service of other institutions, and you can accordingly easily understand how difficult it is for one having less than six weeks to devote to study here to acquire more than a superficial notion of the relative merits of the numerous teachers and clinics with which London is studded. However I shall give you my impressions, such as they are, with the assurance that the men and things whereof I speak were personally investigated.

I have been frequently told that in this city and its suburbs professional competition is very keen, and that the good old days of the guinea fee are going quickly by. Also, that in the lower stata of professional life private dispensaries where medicine and advice can be had all the way from a shilling to half a crown are not uncommon. In spite of these statements my intercourse with all sorts and conditions of practitioners here does not lead me to believe that life is any harder with them than in our colonial towns. I am certain of this, that they are a more *leisurely* class. Whether that be due to the phlegmatic style of doing things which everywhere contrasts with our nervous American routine I am unable to determine, but I am sure we have something to learn from our English brethren in this respect. Probably the first thing in respect of disease that strikes the stranger is the large proportion of rachitic, tubercular and scrofulous affections that one daily sees in the Out-patient Departments as well as in the wards of all the hospitals.

I am inclined to believe that syphilis is more frequent than we have it, and I am sure skin troubles are in greater variety, if not in greater proportion, than in Canada.

Barlow, of the great Ormond St. Hospital for children, stated the other day that of all *post-morlems* held there tubercle is found in the proportion of 60 per cent. We have not far to look for the causes of this state of things. London is one example of the rule that the poverty and misery of a city are in inverse proportion to its wealth. Bad and insufficient food, close unventilated houses, narrow streets, foul air,—all these combine to pro-

duce types of disease which-let us be thankful for it-have not as yet invaded our shores. Again the London climate, with its fogs and concentrated essences of all that is vile in the way of volatile, organic odors must in certain seasons of the year be very inimical to the health of those whom necessity compels to live in the older parts of the city. If this be true, nothing also can be more admirable than the numerous plans adopted to cleanse and purify the by-ways and lanes of the town. The difficulties in the way of efficient drainage, ventilation and water-supply are enormous, and one continually wonders not that he occasionally encounters dirt and mal-odors but that in this endless collection of cities of all ages and all degrees of enlightenment called London he meets in with so little mal-hygiene. If you will pardon my want of arrangement in this straggling letter I wish to say something about children's hospitals. Besides mixed hospitals for women and children, and the great general hospitals that all admit children, there are at least eight special institutions where infants and children alone are treated. Of these probably the Evelina, in Southwark, where Drs. Goodhart and Taylor are the physicians and Messrs. Howse and Clement Lucas the surgeons, and the hospital for sick children in Gt. Ormond St., are the chief. In the latter clinics are given by Dr. Barlow, Mr. Howard Marsh and several others. Life in London bears heavily upon the children of the poor, and the pallid faces and warped bodies of the little patients suggest C. L. O. ferruginous tonics and good nursing as eloquently as the additional special treatment may be indicated by a closer examination. One sees Sayre's apparatus in nearly all the wards, but I think I am right in saying that it is rarely used for spinal curvature. Putting the child to bed for several months, tonics, good food, etc., are the indications. One of the teachers in the Great Ormond St. Hospital took the ground that, whatever else it might do in the way of keeping the child quiet, or of assisting to support the back, it did not succeed in keeping the diseased surfaces of the bones apart, and consequently failed to accomplish what was first claimed for it. The patience and quiet demeanor which are exhibited in crowded streets and entertainments by the English people are reflected in the manners of those who are obliged to take advantage of hospital treatment. There is very little argument or explanation or persuasion employed to induce a patient to undergo an operation or to

follow this or that line of conduct. I have rarely seen an applicant do other than follow the precise direction of the physician or surgeon. It seems to me that, apart from the phlegmatic temperament of the average hospital patient, such a state of affairs speaks well for the profession, and indicates a confidence in its members which does not obtain everywhere.

The façades of nine-tenths of the London Hospital buildings proclaim the fact that they are "supported by voluntary contribution," and, with the exception of very old institutions like Guy's, St. Thomas' and St. Bartholomew's, which own large estates in various parts of the country, they all "are in want of funds" and some of them (Guy's, for instance) feel the pressure of diminish ed land values and have had to shut up some of their wards in consequence.

Although the Austrian and German system (where a patriarchal government furmishes the needful) is said to be superior to this, there is something more in keeping with the spirit of this, the best republic in the world, that the people should, from a sense of their inherent value, give directly to these charities.

It would be equally as impossible for me to describe within the limits of a few letters the internal management of each hospital as it would be to give you an idea of the abilities and teaching powers of the many eminent physicians and surgeons that attend them. However, if I say anything at all about the latter, I presume I am right in still regarding Sir Joseph Lister as *primus inter pares*. A kindly, almost diffident, old gentleman with a well cut good face, is he. He is still a regular attendant upon that institution in Lincoln's Inn which has given the world so many celebrated surgeons—King's College Hospital.

He seldom uses the spray with which his name is connected, but he took good care to impress upon us that it was necessary in such cases to exercise all the more care in other respects. He is now experimenting with a new antiseptic with which many of the wounds in his wards, surgical and otherwise, are being dressed. Lister's treatment of goitre is to cut down the tumor, and with a smooth-edged scoop remove the *interior* of the gland, which in this particular situation is not well supplied with blood. Antiseptic dressings are applied and the shrinkage of the gland cures the goitre. Lister's bandages, gauze, wool, etc., are now colored with aniline blue which is discharged

when touched by blood serum, liquor puris, or other alkaline fluid, and in this way evidence is at once afforded, without entirely disturbing the dressing, as to whether redressing is required or not. He uses the mixed silk or cotton elastic bandages where pressure is needed over a wound, and nearly always where we would employ the simple cotton bandage. Drs. Lionel Beale, Burney Yeo and W. S. Playfair (the well-known obstetric writer) are in active attendance here. A bluff surgeon, still young in energy, though old in knowledge and getting old in years, is Mr. John Wood of "radical cure for hernia" fame. And it must be acknowledged that, from what can be seen upon any of Mr. Wood's days of attendance there, one cannot but admit the desirability of operating in such cases as Mr. Wood himself would choose. Here, too, Mr. Hy. Smith uses his own clamp and cautery for the removal of hemorrhoids-a friendly common-sense man whom one cannot follow without benefit. No visitor to London should omit from his programme at least two museums (although there are many others)-that of the Royal College of Surgeons in Lincoln's Inn Fields and the splendid collection of wax casts in Guy's; and if he will so arrange his visit to the latter hospital during Mr. Bryant's hours he will encounter a surgeon who is worth listening to. Here, too, attend<sup>®</sup>Drs. Pye, Smith and Galabin, with Messis. Golding Bird, Daires, Colley, and others equally well-known. Guy's hospital has attached to it obstetric wards where, in this land of rachitis, one can witness more Cæsarian sections, craniotomies and cases of deformed pelvis in one month than would be seen in the Lying-in hospitals of Canada during a year. The Out-door attendance upon the poor women of the South Thames region about London Bridge must be of great value to students of Guy's. It has been remarked with too much truth that London clinical teachers suffer from aphonia. Of course I shall not here mention names, but it is inexpressibly aggravating when one has crossed the Atlantic to "sit at the feet " of some medical or surgical Gamaliel to find that he speaks in a whisper and cannot be heard without the assistance of an car trumpet. I could mention the name of more than one of world-wide fame, the sound of whose voice does not reach the average ear if it be placed more than two feet away from the speaker's head. A man may be a very Solomon for wisdom, but he might as well speak to an audience of deaf-mutes as attempt to give bedside in-

struction in a whisper. No such accusation can be brought against Dr. W. R. Gowers, the shining light of the National Hospital for the paralysed and the epileptic. Dr. Gowers always has a large following of graduates principally, and his Out-patient Clinic is an admirable one, and should not be missed by the visitorto London. The building itself is a beautiful structure, and its situation on a quiet, shady side of Queen's Square is all that can be desired. For those who would make a further study of nervous diseases, there are the hospital for paralysis and epilepsy in St. John's Wood, and the clinic of Mr. Hughlings Jackson at the London Hospital. I must not forget the well-known names, in this connection, of Dr. Charlton Bastian and Dr. Ferrier, both physicians for out-patients, at the Queen's Square Hospital. One can revel in skin diseases here if he is so inclined. Skin departments of the general hospitals, special hospitals and dispensaries are crowded with cases.

I would recommend specially the Out Clinic of Dr. Liveing at the Middlesex Hospital, Dr. Stephen Mackenzie at the London Hospital, that of Dr. Radcliffe Crocker at the University College Hospital, and the Evening Clinics of the attendants upon St. John's Hospital for diseases of the skin in Leicester Square. J do not personally know anything of the Skin Hospital in Blackfriars, but the names of Messrs. Jonathan Hutchinson, Waren Tay, and J. F. Payne are among the attendants, and are a guarantee that the material is properly worked up. Sooner or later the majority of medical stragglers here reach the far off London Hospital, Whitechapel Road, situated in the midst of the poorest part of the city, "where it can do most good." There is nothing prepossessing about its exterior; it has nothing of the architectural beauty or delightful situation of St. Thomas', and cannot boast either the landed wealth or hoary associations of St. Bartholomew's or the aristocratic support of St. George's, but it probably has more beds constantly filled than any of these and more varied material than any one of them, while, for teaching, the Clinics of Mr. Treves and Dr. Stephen Mackenzic are largely attended and cannot be exceeded. Mr. Treves is especially attractive, with his pleasing manner, good delivery, conciseness of method and success as an operator. Sir Andrew Clark does not now attend here very regularly, and Mr. Jonathan Hutchinson's term of twenty years has expired. Among the other attendants are Dr.

Henry Sutton, Dr. Gilbart Smith, Dr. S. Fenwick (the author of the admirable little book on Diagnosis) and Messrs. Rivington and McCarthy. Diseases of women have not received as much attention here as in America, partly, perhaps, because in the latter country the other sex are more prone to their peculiar diseases than in England, and, as a consequence, the average English practitioner is not as conversant with the technology of the gynecological art as we are.

and the second secon

However, besides the gynecological department of most of the Lying-in and General Hospitals there are several institutions devoted entirely to gynecology. I speak particularly of the hospital for women in Soho-Square and the new hospital for women, Marylebone Road. I had a short time ago the pleasure of seeing, during the course of the same afternoon, abdominal sections by two extremists as regards Listerism. They took place in the Samaritan Hospital, near Portman Square, where visitors from all parts of the world are cordially welcomed. We signed the usual " antiseptic contract," and first saw Dr. Granville Bantock remove a large subperitoneal myoma of the uterus. There was nothing specially noticeable about the operation, except that chloroform was given throughout and antiseptics were entirely omitted. Dr. Bantock kindly explained that the fluid in which his sponges, instruments, hands, etc., were washed was plain unadulterated tap water, and that he did not employ any kind of antiseptic. He claimed that he has had a larger share of successful cases since giving up the spray and the so-called antiseptics, and referred us to his well-known article on carbolic acid poisoning in abdominal surgery. In a room below we saw Dr. W. A. Meredith remove an ovarian tumor amid a cloud of carbolic mist, surrounded by towels dipped in germicide solutions, and assistants glistening with sublimated dew. He washed his hands in carbolic lotion every few minutes and made the peritoneal toilet with unusual Listerian care-and we left wondering. To an ignorant Colonial like myself it occurred to me that the truth probably lay somewhere between these two extremes. The Samaritan is the hospital where Mr. Knowsley Thorton operates, and to which Sir Spencer Wells was formerly actively attached. The course in gynecology at the Soho-Square Hospital is said to be an admirable one, and under the direction of men like Mr. Mansell-Moulin, Drs. C. H. Carter, Edmund Holland and Mr. Reeves the

student should learn readily the elements of English gynecology. The student of diseases of the eye can have ample scope for his surplus energies in any of the Opthalmic or General Hospitals of London. I can only speak from personal experience of that fine institution in Moorfields, the Royal Ophthalmic, where Mr. Tweedy, Mr. Lawson and Mr. John Couper were in attendance, and where there appeared to be unlimited run of cases accessible to the student. Affections of the ear are usually treated here with throat troubles, a much more sensible idea than the usual association with the eye. The charity rendered famous by the labors of Dr. Morell Mackenzie is called The Hospital for Diseases of the Throat, and is situated in Golden Square, and is well worth a visit. On Gray's Inn Road is the Central London Throat and Ear Hospital of which Mr. Lennox Browne is chief surgeon.

I regret that, owing to his illness, I was unable to see Dr. Green, the author of the "Pathology" although I haunted Charing Cross Hospital, of which he is one of the physicians. From what I have seen of the work done in the *post-mortem* room here I do not know that either in their use of material or in the practical application of it for teaching purposes we have much to learn from the practical pathologists that I have seen.

Specialism has an entirely different significance here from that form of it which one encounters in Canada. Speaking generally, while the profession here is distinctly divided into surgeons and physicians it is not sub-divided into oculists, aurists, and throat doctors, nerve doctors and gynecologists. The man who devotes his time to one special group of diseases does not do so to the exclusion of the others, nor does he inaugurate his new departure in life by affecting to forget all his previous experiences of other departments of medicine and surgery. Indeed I have on more than one occasion heard a well-known specialist here declare his satisfaction at the advantage and help he derived in his special line from his general practice. And this has always seemed to me the proper antidote to the growing evils of specialism. The human organism is not a collection of isolated organs and structures but a correlated system making up a "harmonious whole," and should be trealed as such.

Many of the names familiar to us as household words are disappearing from the active hospital list, and are rarely seen within hospital walls. As

consultants in medical societies, and as writers of books and contributors to periodicals they are best known to the profession. Among many such are Sir James Paget, Sir Henry Thompson Sir Prescott Hewett, Mr. Jonathan Hutchinson, Dr. Russel Reynolds, Sir Win, Jenner and Mr. LeGros-Clark. Yet in their green old age many other celebrities still lead an active hospital life. Mr. Timothy Holmes still teaches at and attends St. George's ; Dr. Pavy at Guy's ; Dr. Playfair is still physician accoucheur at King's College Hospital; Drs. Wilson, Fox, Sydney, Ringer and Mr. Christopher Heath can be found at University College Hospital, and so on. I have been politely and kindly received at all the medical institutions here although I have doubtless been set down as an average specimen of a "walking interrogation point with the dyspepsia "-the formula by which the American visitor is sometimes designated. I hope before leaving England to give you an account of the meeting of the British Medical Association in Brighton where I hope to see a number of Canadian confrères. Dr. Holmes told me that he must leave here in time for the meeting in Quebec of the Canada Medical Association, of which, as you know, he is President. Mr. Fowke, General Secretary of the former Association, suggested to a few members of the Canadian contingent here that the C. M. A. should become a branch of B. M. A. How does that strike you?

LONDON, July 6th, 1886.

C. A. W.

Progress of Science.

#### ON THE TREATMENT OF PAINFUL MEN-STRUATION AND STERILITY FROM FLEXION.

A Clinical Lecture Delivered at the Hospital of the University of Pennsylvania.

BY WILLIAM GOODELL, M. D.,

Professor of Gynecology in the University of Pennsylvania,

GENTLEMEN: While our patient is getting her ether in the waiting room, let me give you her history. It is a history which will soon be to you as familiar as household words, whether you practice in cities or at cross-roads. She is a young woman who has been married eight years; but she has never conceived, and since puberty has suffered from very painful menstruation. Since her marriage, her periods, as is usual in such cases, have been getting more and more painful. At present, not only are they unbearable, needing large doses of opium, but she is yearning to become a mother.

Now, what lesions shall we probably discover in this case? Ten to one, a womb bent forward on itself, and a narrow uterine canal. True, the displacement may turn out to be a retroflexion, but this is a lesion almost peculiar to the childbearing womb, while anteflexion is the natural condition of the nulliparous womb. Here let me disabuse your minds of a prevalent error, viz: that anteflexion in itself is a pathological condition. Many text books speak of this flexion as a lesion, and exhibit many forms of pessaries devised to rectify this so-called displacement. But in the great majority of cases neither anteflexion, nor, for the matter of that, anteversion, is pathological. In almost every unmarried or barren woman you will find the womb either bent forward or tilted forward, and resting on the bladder; for this, in varying degrees, is its natural position. The mistake made is in attributing to this natural position of the womb the various forms of pelvic trouble, especially that of irritability of the bladder, to which women are so liable. But the kinship between the brain and the bladder is a remarkably close one. This has lately been studied by two Italian physiologists, Mosso and Pellacani, who go so far as to contend that "every mental act in man is accompanied by a contraction of the bladder." The irritability of the bladder is then one of the first symptoms of loss of nerve control. Everybody is liable to it. You, on examination day, will be annoyed by it. Many a lawyer before pleading an important case, and many a clergyman just before delivering a discourse, is compelled from sheer nervousness, to empty the bladder. So it is with the lower animals, which, when frightened, micturate involuntarily. A nervous bladder is then one of the earliest phenomena of nervousness. Now a hysterical girl, or a woman whose nervous system has collapsed under the strain of domestic cares, consults a physician for such symptoms of nerve prostration as wakefulness, utter weariness, a bearing down feeling, backache, and perhaps, above all, an irritable bladder. Upon making a digital examination he, of course, finds the fundus of the womb resting on the bladder, and at once jumps to the conclusion that the whole trouble is due to the pressure of the womb on the bladder, viz : to the existing anteflexion, or to the anteversion as the case may be. He now makes local applications, and racks his brain to adapt or to devise some pessary capable of overcoming the supposed difficulty, forgetting that the upward or shoring pressure of the pessary on the bladder must be greater than the corresponding downward, or gravity, pressure of the womb. There is, in fact, no pessary but the dangerous stem-pessary which can meet the end without pressing upon a fold, or double thickness, of the bladder. But, very fortunately, anteflexion is not often pathological. It is certainly not pathological in the foregoing instances; for the symptoms, especially the vesical ones, are not due to the pressure of the womb upon the bladder, but to

sheer nervousness, or nerve prostration, which is the thing to be treated, and not the womb. There are exceptions to this rule, but not many. For instance, a womb, heavy from subinvolution, or from the presence of a fibroid, may make uncomfortable pressure on the bladder.

If antellexion is the natural position and condiof the womb, when is it pathological? It is pathological whenever it is the cause of dysmenorrheea or of sterility. Usually dysmenorrheea and sterility are associated, but occasionally the latter is the only symptom; for it is evident that the crooked womb can more readily expel fluid contained within it than admit a fluid outside of it. The phenomena of a typical case of dysmenorrhea from antellexion or from retroflection, are as follows: At the outset of menstruation the first few drops are somewhat painful. The pain then severity until, 🦉 increases in reaching ~ its acme, a sligh gush of menstrual fluid takes place, followed by a full in the sufferings. The pain then gradually increases until it culminates in another gush. The meaning of this is, that the bend in the womb imprisons the menstrual fluid, which goes on collecting in the cavity , until the swelling up of the comb straightens out the bent portion, dilates the narrow canal, and allows the pent-up contents to escape, just as the coils of a hose first swell, and then straighten out before the water can flow through them. Relief from pain lasts until the fluid begins again to collect. This is called stenosis from angulation. Sometimes a girl has little or no pain at her menstrual periods. She marries, does not conceive, and by and by dysmenorrhea sets in, which goes on increasing. What is the explanation of this? It means that the flexed canal of the womb was originally just large enough to permit the slow escape of the mensurual fluid, but that the congestions from sexual intercourse have caused a thickening of the lining membrane of this canal, which has narrowed its calibre. Then, again, the uterine efforts to force out the pent-up fluid cause the various tissues of the womb to hypertrophy. We see this also in unmarried women, the dysmenorrhoa increasing with their age. Nature intends that the periodical congestions of the womb should be interrupted by pregnancy and lactation, and without these interruptions the mucous lining of the womb is liable to thicken, and by its thickness to narrow the canal. If then, to these menstrual congestions be added the sexual congestions of marriage, this hypertrophy is greatly increased, and the barren wife suffers more than the old maid.

But here comes our patient. Let me examine her. Sure enough, she has an antellexion, for through the anterior wall of the vagina I feel the body of the womb resting upon the bladder. The cetvix is long and conical, the os externum very small.

I pass the sound. It stops, as you see, at the internal os—viz : at the beginning of the bend—

and I can not coax it in any further. By introducing the speculum, and straightening the womb by traction made with a tenaculum, the sound now goes in, but even yet with difficulty. It gives a measurement of nearly three and a half inches, which is a large measurement for a young woman who has not borne any children. This hypertrophy is owing partly to such repeated congestions as I have just described, and partly to the muscular effort made by the womb to extrude not only the menstrual fluid, but its mucous secretions.

Now, what is the remedy for this condition? For a number of years the operation most in vogue, was the cutting, or bloody operation of Sims. By it the canal is enlarged by incisions. But the objections to this plan are: that it is a dangerous operation, having caused the death of many patients through peritonitis; that it is not a very successful operation, as the incisions are liable to heal up and the dysmenorrhœa return; and finally that it always deforms the cervix, and sometimes causes lesions analogous to those resulting from a natural laceration during the labor. I shall not, therefore, burden you with the details of this operation which, fortunately, is falling into disuse. Then, again, the cervix, is, at the present day, often dilated by tents, or by graduated bougies: but the former is dangerous, and both are painful, tedious, and unsatisfactory.

The operation which I can recommend to you: most highly, and one which I shall now perform on our patient, is that of forcible dilatation. The instruments which I use are two modified Ellinger dilators of different sizes, made under my supervision by Messrs. J. H. Gemrig & Son, of this city. Ellinger's model is the best on account of parallel action of the blades. which the dilate the whole track of the canal uniformly. The smaller of these dilators has slender blades, and it pilots the way for the other, which is more powerful, having blades that do not feather. The lighter instrument needs only a handles, but the stronger ratchet in the one should have a screw by which the handles are brought together. Lest the beak should hit the fundus uteri, and seriously injure it when these instruments are opened, their blades are made no longer than two inches, and are armed with a shoulder which prevents further penetration. The larger instrument opens to an outside width of one and a half inches, and its blades are roughened, or corrugated, by shallow grooves, in order to keep them from slipping out. The dilator has also a graduated are in the handles by which the divergence of the blades can be read off.

In a case of dysmenorrhea, or in one of sterility from flexion or from stenosis, as in the woman before us, my mode of performing the operation of dilatation is as follows: The patient is thoroughly ana sthetized, and a suppository containing one grain of aqueous extract of opium is slipped into the rectum. She is then turned on her back and drawn to the edge of the bed, each knee being supported by an assistant. The light must be good, so that the operator can see what he is about. My bivalve speculum being now introduced, the vagina is well swabbed out with a five per cent solution of carbolic acid. By the aid of a strong uterine tenaculum the cervix is steadied, and the smaller dilator is introduced as far as it will go. Upon gentle stretching open that portion of the canal which it occupies, the stricture above so yields that, when the instrument is closed, it can be made to pass up higher, Thus by repetitions of this manceuvre, little by little, in a few minutes' time a cervical canal is tunneled out which before could not admit the finest probe. Should the os externum be a mere pinhole, or it be too small to admit the beak of the dilator, it is enlarged by the closed blades of a pair of straight scissors, which are introduced with a boring motion. As soon as the cavity of the womb is gained, the handles are gradually brought together, and allowed to stay for one or two minutes. The small dilator being now withdrawn, the larger one is introduced and the handles are then slowly screwed toward one another. If the flexion be very marked this instrument after being with drawn should be reinwith its curve reversed to that troduced and the final dilatation of the flexion, then made. But in doing this the operator must sake good care not to rotate the womb off its axis and not to mistake the twist for a reversal of The other is now withheld, and the dilator flexion. kept *in situ* some fifteen minutes, when it is closed removed, and the vagina well syringed out with the same solution of carbolic acid. Occasionally a slight flow of blood will last for several days after the operation, stimulating the menstrual flux. Often the flux is precipitated, or it is renewed, if the operation follows or precedes it too soon. The best time for dilatation is, therefore, midway between two monthly periods. Were the case before us a retroilexion, I should, after the dilatation, put in a pessury long enough to span the ankle of flexure. This never fails to straighten of the womb, and in time to restore it.

Although this operation looks like rough work when compared with the neat but dangerous cutting one, the patient will probably need not more than two suppositories, and she will complain merely of soreness for one or two days. To forestall any tendency to metritis she will be kept in hed until all tenderness has disappeared. Pain will be met by rectal suppositories of opium, and by large poultices laid over the abdomen. From this operation I have seen only slight pelvic disturbance, but it has always been readily controlled and has not given alarm. In one case of dilatation, complicated by a fibroid of the womb, a merine colic lasted for several days, but it was finally subdued by asafeetida in large doses, and never became inflammatory. Should the temperature rise, and symptoms of pelvic inflammation appear, the ice-bag should replace the warm poultice. But I have not yet met with a temperature high enough to need this energetic mode of treatment.

In the great majority of cases I dilate the canal not to the fullest extent of the larger instrument, but, as in the case before us, to one and a quarter inches. Sometimes, in an infantile cervix, which does not readily yield, and might give way, the handles are not screwed closer than three guarters of an inch or an inch, but this is exceptional. Tearing of the cervix has happened in four of my cases---in two from the sudden slipping out of the beak, and in two from sheer stretching. Three of these were unmarried, and the cervix of each was split posteriorly, nearly half-way to the vaginal junction. The rent looked exactly like the incision of the cutting or bloody operation, but it was only half the length of the latter. As it kept the os externum patulous, and could not do any mischief, I did not sew it up. The fourth case was that of a multipara, whose uterine canal had been nearly closed up by applications of silver nitrate, made by her physician, with the view of curing what he supposed was an " ulceration of the os," but which was a bilateral laceration. The tissues, rendered cicatricial and brittle by the caustic, were torn by the dilator for about half an inch on the right side. Here the hemorrhage was free enough to need styptic applications and a light tampon. I could have stopped it by wire sutures, but this was not done, as it would have defeated the object of the operation.

For slight dilatations, such as for the office treatment of anteflexions and of stenosis, or for the introduction of the curette, or of the applicator armed with cotton, the more delicate instrument is quite strong enough, and an anæsthetic is not needed. I also use it in women who object to taking ether, but the operation is then very painful, and it has to be repeated several times, while the results are by no means so good as when the canal has been dilated by the larger instrument and under ether. Occasionally in virgins, in order to save the hymen I have dispensed with the speculum, and have dilated with the more slender instrument, passing it in along my finger, but this can not always be done, and it is usually unsatisfactory. I was led to this because, on one occasion, I was asked to give a certificate of virginity-in other words, to write and sign a paper stating that before the operation the hymen was intact. I also had to do this in the case of an unmarried woman, whose perineum, in spite of lateral cuts, was badly torn m my efforts to deliver with the obstetric forceps a very large fibroid tumor of the womb. When she returned home the village crones got up such a buzz of scandal that 1 had to go to her defense. Sometimes, in a very sharply anteflexed womb, the dilator can not be made to pass the os internun. This difficulty is overcome by first passing in a surgeon's probe, and then, along it as a guide, the dilator.

After a forcible dilatation under ether, the cervical canal rarely returns to its former bent or former narrow condition. Since lateral extension of elastic bodies antagonizes their length, the cervix shortens and widens, and the exudation provisionally thrown out by the submucous lesions sustained by the dilated part serves still further to thicken and stiffen its tissues. In other words, the stem-like neck of the pear-shaped womb is shortened, widened, strengthened, and straightened. Hence for straightening out anteflexed or congenitally retroflexed wombs, and for dilating and shortening the canal in cases of sterility, or of dysmenorrhœa arising from stenosis, or from a conical cervix, the dilator will be found a most efficient instrument. Sometimes, in sharply-bent wombs, I put in a stem-pessary immediately after the dilation. In retroflexions I always put in a pessary long enough to span the angle of the flexion, so as to straighten the womb by making pressure on the fundus. To this occasionally a stem pessary is added.

In its results this operation is not an infallible one. I have thrice been obliged to repeat the dilatation, and would like to do so in several cases did the women permit. In a very few cases I have been forced, as a final resort, to nick a pinhole os externum. But I had not then learned how far I could safely stretch open the uterine canal, and the operation of dilatation was, therefore, not so efficiently performed by me as it is now through a larger and riper experience.

It is not to cases of sterility or of dysmenorrhœa only that rapid dilatation should be limited. As before stated, I use it to stretch open the canal for the admission of the curette and of tents, or for the purpose of making applications to the uterine cavity. In cases needing irrigation of the uterine cavity, I first dilate the canal with the slender instrument, and introduce the nozzle of the syringe between the separated blades. This gives a free avenue for the escape of the liquid. and robs of its dangers this form of intrauterine medication. I also resort to the dilator in order to explore the womb with the finger. For instance, in a given case of menorrhagia, in which a polypus or some other uterine growth is suspected, in order to avoid the delay and the dangers inseparable from the use of tents, I put the woman under an anæsthetic, and after the rapid dilatation of the cervical canal to the utmost capacity of the instrument-viz., one and a half inches-am enabled to pass my finger up to the fundus. This is accomplished either by drawing down and steadying the womb by a volsella forceps fixed on to the anterior lip, or, in thin subjects, by forcing the womb down upon the finger through suprapubic pressure on its fundus. In this way I have, over and over again, at one sitting, discovered a uterine growth, twisted it off, and removed it. Usually in these cases more difficulty has been experienced in removing the polypus, or other growth, through the narrow canal, than in twisting it off from its

uterine attachment. It often has to be wire-drawn before its removal can be effected, and sometimes it will be found needful to enlarge the os- uteri by a few nicks. Usually, when the menorrhagia has been free, the cervical tissue is so lax that, after dilatation, the index-finger can penetrate the canal and reach the fundus, but sometimes only its tip can be made to pass the os internum. Yet even this limited degree of penetration is commonly quite enough to decide the presence of an inside growth. If it be not enough, I invariably search for the growth with a small pair of fenestrated forceps, and I have repeatedly seized and removed one, the existence of which was merely suspected. After such operations the uterine cavity and the vagina are thoroughly washed out with a two and a half per cent solution of carbolic acid.

I am sorry to say that I have not kept full records of all my cases of rapid dilatation. For instance, I have rarely tabulated office cases of dilatation, in which ether was not given. Nor has any note been made of cases in which dilatation was performed under ether for curetting, for digital exploration of the endometrium, or for the removal of uterine growths. I have tabulated merely cases of dysmenorrhea, in single or in married women. In the married, with but three exceptions which will be noted in the proper place, painful menstruation was associated with sterility.

Including all the cases of dilatation performed under ether, I must have had nigh three hundred and fifty cases. I have limited myself to these cases because the use of an anæsthetic implies full dilatation—one in which serious injury, if ever, would most likely be sustained; yet there has not been a death, or a case even of serious inflammation, in my practice, and the results have been most satisfactory—far more so than when the cutting operation was performed by me.

Let me read to you a brief abstract of the statistics of my cases of dysmenorrhœa : Of single women there were one hundred cases; of married, one hundred and nineteen, making in all two hundred and nineteen. Of the unmarried, twentyfour were unheard from after the operation, leaving seventy-six from which any data could be obtained. Of these, forty-five cases were virtually cured, twenty-four more or less improved, and seven were not at all improved. Of these seven that were not benefited by the operation. five subsequently had their ovaries removed—one of them by another physician, and four by myself; of the latter, one died. In each one the ovaries had become so changed by cystic or by interstitial degeneration as to make the dysmenorrhœa otherwise incurable. Of the twentyfour improved, there was one on whom oophorectomy was also performed; for, although the dysmenorrhœa was partly relieved by dilatation, ovarian insanity and menorrhagia were not. The operation was a successful one, and my patient was not only cured of her hemorrhages, but she regained her reason. Out of these cases, the majority, although not wholly cured. were greatly improved. For example, one of them was formerly bedridden during the whole period of her menstrual flux, and had then to take large doses of morphia. She also suffered at those times from hæmatemesis and epistaxis. Since the operation she experiences pain for merely two hours, needs no anodyne, and has lost her octopic hemorrhages. Her gain in health and flesh has been great. Another one, who was wholly crippled by her sufferings, and made nervous by the dread of them, is now a busy nurse. For one hour at every period she suffers acutely, but not enough to overcome her dread of taking ether and of having a second dilatation performed.

Of those cured, two had had Sims' cutting operation performed previously without benefit, and were afterward dilated; three were dilated a second time before a cure could be effected. The word "cured," in some of these cases, does not mean that the women were wholly free from any pain whatever, but that they did not suffer sufficiently either to go to bed or to take any stimulants or anodynes. The history of several cases merit more than a mere allusion. The sufferings of one of my patients, at every monthly period, has always been great, but while she was at boarding school they grew so excruciating as to cause furious delirium at those times. This finally culminated in permanent insanity, with suicidal impulses. While in this condition she was placed in my hands. After rapid dilatation of the cervical canal, the dysmenorrhœa wholly disppeared. The exemption from pain toned down some of her more extravagant delusions, but she did not wholly regain her reason until a few months afterward. She is now free from all menstrual pain, and is in the complete possession of her mental faculties.

A Hebrew lady, whose health had suffered from dreadful dysmenorrhœa, was so greatly improved by one dilatation that her physician and her friends were amazed at her rapid restoration to Not long afterward the doctor asked me health. to perform the same operation upon another one of his patients, who was, if anything, worse. Her sufferings were so severe that he wrote, "I fear that another period might kill her," and urged an immediate operation. The cervix in this case was conical and very dense. Fearing a tearing of the parts, 1 screwed the instrument very slowly up to one inch and a quarter, and kept up this amount of dilatation for twenty minutes. The cervix did not sustain any injury. The canal has since stayed open, and she is free from all menstrual pain. Another case was that of an unmarried lady, sent to me from a distant State, whose sufferings at her periods were so great that morphia, however administered, was not potent enough to allay them, and her nervous system became very much shattered. Finally, at her last monthly, she was compelled to have two physicians in attendance on her, who took turn about in administering

chloroform night and day for forty-eight hours. This experience decided them to send her to me. One dilatation of an inch and a quarter wholly cured her.

Of the married, sixty-nine were heard from. Of these, forty-seven were virtually cured, eighteen improved, and four unimproved. Out of these sixty-nine cases, eleven were not in a condition to conceive-four of them from fibroid tumors of the womb, two from destructive applications of silver nitrate to a torn cervix, three from being over forty-one years of age, and one from being a widow. This leaves but fifty-eight capable of conception, and of these, eleven, or about nineteen per cent. became pregnant. But the ratio is, in fact, larger, for I know that several of my patients, fearing pregnancy, employed preventive measures after the operation, and I suspected several others of doing the same thing. Then, again, I believe that yet others, who consulted me merely for painful menstruation, have not reported their subsequent pregnancies. For instance, of the eleven cases of pregnancy, five came to my knowledge incidentally, and not directly from the ladies themselves. It is not much more than a year ago that I learned, by the merest accident, the subsequent history of a clergyman's wife, whose cervical canal I had dilated six years ago. She had been making up for lost time by giving birth to twins within a year after the operation, and later to several other children. She had been married eight years before she came to me, and had had her cervical canal dilated by tents and siit up with Peaslee's metrotome by a skillful surgeon.

One word more: While you can expect much from this operation whenever it is for dysmenor thea caused by flexion or stenosis, you can not be so sanguine with regard to its results in sterility. The reason of this is, that sterility, associated with dysmenorthea, often leads to such tissue changes in the womb as in time to make it incapable of forming a nest for the ovum, which, therefore, either escapes or perishes.—*Medical News*.

#### SAFE, SIMPLE, AND EFFECTIVE MODE OF TREATING PROLAPSE OF THE RECTUM AND HEMORRHOIDAL TUMORS.

Dr. Q. C. Smith thus writes in Gaillard's Medical Journal :

By the method here proposed I have treated three cases of prolapse of the rectum and about a dozen cases of hemorrhoidal tumors.

The cases of prolapse of the rectum were all the result of parturition, and two of them were, or appeared to be, complete, *i.e.*, all the coats of the bowel had passed out through the external sphincter.

These cases of rectal prolapse and hemorrhoidal tumors were treated by injecting into the tissues with the hypodermic syringe an eight-grain solution of muriate of cocaine, plus an equal volume of phenol sodique.

The quantity of this solution injected varied from twenty minims, in small hemorrhoidal tumors, to one ounce in prolapsed rectum.

One injection was sufficient to cure hemorrhoidal in all my cases, while two to four trials were found necessary to cure prolapsed rectum. The syringe point was introduced at the most prominent point of the tumors-large or smalland thrust boldly to the most vascular part of their base, and a liberal portion of the solution deposited, according to the size of the tumor. Then the balance of the tumor was well saturated with the solution. After injecting hemorrhoids no topical treatment was applied, except a daily wash of dilute solution of boric acid, as hot as could be borne. After injecting prolapsed rectum a mild antiseptic healing salve was applied. The following formula was found very efficient;

B. Iodoform, in fine powder.

rouoronn, in jone point	1019
Balsam Peru,	,
Oil of camphor,	
Oil of sassafras,	aa 😳 ss.
Pine tar,	
Castor oil,	
Powdered aloes,	aa 5 j.
Subnitrate of bismuth	enough to make a
stiff salve.	

S.—Apply thoroughly twice a day, and cover with a soft cloth.

Before applying the salve each time, the parts were well washed with the syringe, soap suds from Packer's tar soap, as hot as could be borne, being employed for the purpose.

In addition to whatever general internal treatment may be indicated in any given case, I am in the habit of directing, with excellent results, something like the following :

Ŗ.	Fl. ext. witch-hazel	5 ss.
	Sat tinct. horse-chestnut	5 j.
	Muriate of ammonia,	3 j.
	Glycerine, ad	5 iv.
М.	ft. sol.	-

S.—A teaspoonful three times a day, just after meals, on alternate days.

Ŗ,	Muriate of hydrastin,			xxiv.
	Ergotin,		gr.	xij.
	Ext capsicum,			
	Ext. ipecac.,	, .		
	Aloin, aa		gr.	vj.
M.	Make 24 pills and	l silver-coat.		

S.—One pill three times a day, just after meals, on alternate days.

These last two prescriptions should be administered regularly, on alternate days, as long as the hemorrhoids or prolapse give trouble, and for several weeks after they have ceased to do so.

For bringing hemorrhoidal tumors to view, O'Neal's rectal speculum was found most convenient, though in some cases Woodward's and Sims' rectal speculums served a good purpose.

After operation on hemorroids patients were allowed to attend to their ordinary business at pleasure, and a majority of them did so.

The cases of prolapsed rectum were confined to bed until cured, which was in the mildest cases about two weeks, and in two severe or complete cases about four weeks. They were then allowed to move gently about the room, but the patients being parturients, the horizontal posture and quietude were doubly indicated. No general anæsthetic was found nece sary in any of these cases, as the operations produced but little pain or subsequent soreness. No inflammatory reaction followed the injections.

I have used various medicaments for injecting hemorrhoids, all with more or less success, never having met with any deplorable results; but the eight-grain muriate cocaine solution, in connection with an equal volume of French-made phenol sodique, has proved the best that I have tried.

In conclusion, the writer begs to state that he is familiar with what has been published in reference to this subject in standard and periodical literature for the last twenty years, and hence claims no originality in the treatment outlined in this communication.

# COLD BANDAGING OF THE LEG IN INSOMNIA.

Dr. Von Gellhorn has found the following plan very useful in inducing sleep in persons who suffer from insomnia. A piece of calico, about eighteen inches wide and two and three-quarter yards long is rolled up like a bandage, and a third of it wrung out of cold water. The leg is then bandaged with this, the wet portions being carefully covered by several layers of the dry part, as well as by a layer of guttapercha tissue, and a stocking drawn on over the whole. This causes dilatation of the vessels of the leg, thus diminishing the blood in the head and producing sleep. It has been found by Winternitz that the temperature in the external auditory meatus begins to fall a quarter of an hour after the application of the bandage, the decrease amounting to 0.4° Cent., and the normal not being again reached for from one and a half to two hours afterwards. The author has employed this means of procuring sleep, for a couple of years and finds it especially useful in cases where there is congestion of the cerebral vessels. Sometimes he has found it necessary to reapply the bandage every three or four hours, as it dried.-British Med. Jour.

#### HYDRASTIS CANADENSIS IN METRORR-HAGIA.

Dr. J. A. Akuloff, of Wilna, details (*Wilna Medical Society*) the case of a married woman, aged 42, who had been for nine years suffering from profuse flooding occurring every two weeks. Treatment by intra-uterine injections of perchloride of iron and subcutaneous injections of ergotin had wrought no improvement. On examination, there were found dilatation of the cervical canal, enlargement, hardness, and impaired mobility of the womb, considerable distention of the cervical veins, and numerous easily-bleeding erosions scattered over the whole mucous membrane of the cervix. Fluid extract of hydrastis Canadensis, in doses of twenty minims three times daily, was given for about three months. The first catamenia were yet profuse, lasting about ten days, but subsequently they returned only once a month and lasted each time three days, the amount of blood being moderate. A decrease in the bulk of the womb was also noted at the end of three months' treatment.—London Medical Record.

#### TO ARREST NASAL HEMORRHAGE.

We take the following practical suggestion of Prof. John Chiene, from the Edinburgh *Medical Journal:* 

In persistent hemorrhage from the nasal cavity, plugging the posterior nares should not be done until an attempt has been made to check the hemorrhage by firmly grasping the nose with the finger and thumb, so as completely to prevent any air from passing through the cavity in the act of breathing. This simple means, if persistently tried, will in many cases arrest the bleeding. The hemorrhage persists because the clot which forms at the rupture in the blood-vessel is displaced by the air being drawn forcibly through the cavity in attempt of the patient to clear the nostrils. If this air is prevented from passing through the cavity, the clot consolidates in position and the hemorrhage is checked.

THE CANADA MEDICAL RECORD.

A Monthly Journal of Medicine and Surgery-EDITORS :

FRANCIS W. CAMPBELL. M.A., M.D., L.R.C.P. LOND. Editor and Proprietor.

R. A. KENNEDY, M.A., M.D., Managing Editor.

ASSISTANT EDITORS:

CASEY A. WOOD, C.M., M.D.

GEORGE E. ARMSTRONG, C.M., M.D.

SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchanges must be addressed to the Elitors, Drawer 356, Post Office, Montreal.

MONTREAL JULY, 1886.

#### COLLEGE OF PHYSICIANS AND SUR-GEONS OF THE PROVINCE OF QUEBEC.

A special meeting of the Board of Governors was held July 13th, 1886. Present : Drs. Lemieux (President), Belleau, LaRue, Simard, Lachapelle, P. E. Mignault, R. P. Howard, Parke, Leprohon, Kennedy, Durocher, H. A. Mignault, Marmette,

Guay, De St. George, Hart, Rodger, Lanctot, George Ross, Austin and Campbell.

Reports of Assessors from Laval and McGill Universities were read and adopted.

Drs. Delaney and John Howe, graduates of Laval, Quebec, on presentation of their diplomas, received their licenses.

The report of the preliminary examination in May last was read, showing that the following gentlemen had passed : Messrs. Arthur Baribault, Rodolphe Chevrier, J. A. Charette, Frs. Desrosier, Emile Dumont, W.S. England, Paul Gagnon, Chs. Gerard, John Hayes, Edmond Huot, Henri Lanciaux, Theodule L'Ecuyer, L. E. La Roche, G. E. Le Sage, L. de Martigny, Pierre Lussier, Frs. Marchand, J. L. G. Mason, C. D. Meikle, Oscar Mercier, G. L. McKee, C. E. Morin, L. A. Noel. J.O. Poitras, Edmond Provencal, Euclide Rainville, Hector H. Roy, F. Serres, L. St. Germain, F. E. Thompson, L. V. Vezina, E. A. V. Villeneuve, Armand Bedard, T. Belanger, Ant. Brossard, L. M. F. Cypihot, Jules Dandurand, Joseph Desy, A. U. Dorais, Henri Fortier, E. Laurin, F. Lavoie A. Lecavalier, Jos. Lemai, Chs. Lemaire, J. A. Magnan, Jos. A. Rene, F. Richard, L. Robillard, Edmond Savard, A. Taillefer, J. C. P. Tasse, Chs. Vezina, Jos. A. Bedard.

The Secretary then read the report of the committee as published. A minority report was then read, when it was decided to take up the original report, and discuss it, clause by clause.

The College first decided in the affirmative that it was decided to have a Central Board of Examiners.

Clause 1 was amended to read as follows :---

The Board shall be known as the Central Board of Examiners, and shall consist of two (z) examiners on each subject. That the examinations shall be made in the language of the candidate, provided that the two examiners shall have the right to examine alternately, and when they disagree, the examination on the subject shall be taken before the full committee.

Clause 2, so as to read, "The Central Board of Examiners shall consist of two representatives from each medical school, and an equal number not connected with any school."

Clause 3 was amended so as to correspond to the amendment in clause 2,

The remainder of the report was carried with the following alterations :----

r. The Central Board shall meet alternately in Quebec and Montreal.

2. The preliminary examination to be held once a year, on the first Wednesday in July, in Quebec and Montreal alternately.

3. Graduates in Arts not exempted from the preliminary examination.

4. The Board of Governors to meet annually on the second Wednesday in May, alternately in Quebec and in Montreal.

The triennial meeting was held May 14, 1886. About 150 were present,

The minutes of last meeting were read and adopted. Dr. E. P. Lachapelle presented his annual statement.

Dr. Lemieux, President, addressed the College on the work done by their Governors during the past three years.

Dr. Fortier objected to some items of expenditure, and moved, seconded by Dr. Laberge, that the Secretaries prepare annually a statement of the work done by the College, and have it printed and a copy sent to each member of the College. This was lost. The College at one p.m. adjourned till two p.m. At two p.m. the College again met, and the following gentlemen were named Scrutineers-Drs. Kennedy, Beaudry, Faucher, Brunelle, W. Mount, L. Mignault, J. B. Gibson, S. Duval, C. S. Parke, Chartrand, Guay, Lanctot, L. LaRue and Hurtubise.

It was announced that the ballot would close at four p.m.

The Secretary for Montreal read the report adopted by the Board of Governors the previous day.

Dr. Cotton moved, seconded by Dr. Norman A. Smith, "That each judicial district be granted power to elect a Governor of the C. P. and S.P.Q. and that each said judicial district elect its representative. Carried.

A motion of Dr. Marcil, seconded by Dr. Durocher, as follows, was carried :

"That the preliminary examination for the study of medicine comprise, in future, the subjects of physics, chemistry and philosophy. That this preliminary examination be held on the second Wednesday in July of each year."

Moved by Dr. Dagenais, seconded by Dr. Brosseau: "That the primary and final examinations shall be held on the second Wednesday in July in each year."—*Carried*. At ten minutes past six o'clock the Scrutineers announced the result of the ballot to be as follows :---

City of Montreal.—Drs. T. A. Rodger and J. L. Leprohon.

District of Montreal.—Drs. H. A. Mignault, J. A. Duchesneau, J. B. Gibson, D. Marcil, F. D. Lafontaine, N. H. Ladouceur, A. Longpré, and J. E. Turcot.

City of Quebec.—Drs. A. G. Belleau, L. LaRue, R. T. Rinfret, A. Watters, C. S. Parke, and E. A. de St. George.

District of Quebec.—M. Guay, F. Fortier, E. Rousseau, F. E. Grandbois, L. H. Labrecque, Hon. T. Robitaille, and A. Laferriere.

District of Three Rivers.—Drs. Hon. J. J. Ross, Badeaux, and Desaulnier.

District of St. Francis.—Drs. Austin, Paré, and Thomas LaRue.

The College then adjourned.

MEETING OF THE NEW BOARD OF GOVERNORS.

The new Board of Governors then met, and elected the following officers :

President, Dr. W. H. Hingston (Montreal); Vice-President for Quebec, Hon. Dr. Ross (Quebec), re-elected; Vice-President for Montreal, Dr. J. L. Leprohon (Montreal); Treasurer, Dr. E. P. Lachapelle (Montreal), re-elected; Registrar, Dr. L. LaRue (Quebec), re-elected; Secretary for Quebec, Dr. A. G. Belleau (Quebec), re-elected; Secretary for Montreal, Dr. F. Wayland Campbell (Montreal), re-elected.

The following Assessors were named :---

McGill University-Hon Dr. Church and Dr. P. E. Mignault.

University of Bishop's College—Drs T. A. Rodger and H. A. Mignault.

Laval University, Quebee-Drs. Simard and Sewell.

Laval University, Montreal-Drs. Marcil and Gibson.

Victoria University-Drs. A. C. MacDonnell and O. Raymond.

A committee, consisting of Drs. Lemieux, George Ross, Hingston, F. W. Campbell, E. P. Lachapelle, Rodger, Belleau, and de St. George, were appointed to prepare amendments to the existing Medical Act, in accordance with the report adopted by the Governors at the special meeting on the 13th July and the resolutions passed at the Triennial Meeting.

#### CANADIAN MEDICAL ASSOCIATION.

The nineteenth annual meeting of this the Dominion Association will take place at Quebec, on the 18th and 19th of August. We hope to see a large attendance. In the absence in Europe of Dr. Stewart, the Secretary, Dr. James Bell of Montreal, is kindly preparing the dutics of that office. Arrangements for reduced rates for those attending the convention have been made. Certificates entitling to those reductions can be had from Dr, Bell. The following papers have been promised :

(1.) Heartclot, Dr. Osler, Philadelphia.

(2.) The Medical Jurisprudence of Crime and Responsibility, Dr. D. Clarke, Toronto.

(3.) Trachœotomy in Membranous Laryngitis, Dr. Bell, Montreal.

(4.) Diabetes Mellitus, Dr. Thos. Dupuis, Kingston.

(5.) The Treatment of Biliary Calculi, Dr. J. Ferguson, Toronto.

(6.) The Inhibition of the Heart in Diphtheria, Dr. Gardiner, London.

(7.) "Alexander's Operation" and the Treatment of Displacements of the Uterus, Dr. A L. Smith, Montreal.

(8.) Excision of the Elbow Joint, Dr. Roddick, Montreal.

(9.) The Treatment of Tuberculous Glands of the Neck, Dr. Fenwick, Montreal.

(10.) Myelo-sarcoma of the Arm—Amputation at the Shoulder-joint, Dr. Fenwick, Montreal.

(11.) A Case of Pelvic Abscess, Dr. Alloway, Montreal.

William H. Vanderbilt had the notion that New York ought to be the medical centre of the country, and about 18 months ago he gave the College of Physicians and Surgeons \$500,000 for the expressed purpose of buying grounds and erecting buildings. 'The family soon became imbued with Mr. Vanderbilt's interest for the Medical College. Mr. Vanderbilt's daughter, Mrs. Sloane, gave a maternity hospital to the institution. The Vanderbilt Clinic, the result of the last donation of \$250,000, is the joint gift of the four sons.— *Phila. Bulletin.* 

#### NEW YORK MEDICAL MONTHLY.

We have received the first number of the above Journal issued in May last; it is to be published monthly, as the name implies, at the astonishingly low rate of one dollar per annum. In the field of Journalism there is always plenty of room, especially when the object is practical illustration. The well-known names appended as contributors should ensure its Editor every success, which we trust it will have no difficulty in obtaining.

#### WYETH'S LIQUID MALT.

This is a very elegant preparation of the Extract of Malt, which has been put on the market by the well-known firm of John Wyeth & Bro., of Philadelphia, and which seems to supply a longfelt want. The numerous cases in which Malt Extract has proved useful has brought it into great demand. To some persons the semi-solid character of the preparation has been a decided objection. In such cases the liquid extract would seem to be the very preparation desired.

#### PHILADELPHIA MEDICAL ITEMS.

During the last five years the Medico-Chirurgical College which was chartered by the Legislature in 1850, has been located at the south-west corner of Broad and Market streets. The needs of this rapidly developing institution have outgrown its present quarters, and for some time the trustees have been looking for more commodious buildings. Recently they concluded the purchase of a large property on Cherry street near Logan square. The location is most excellent for the intended purpose; being near the centre of the city and yet sufficiently retired to give students and hospital patients the requisite quietude. The lot is 134 feet square. It is partly occupied by two large and substantial brick buildings, three stories high with good light on all sides.

Extensive alterations will be made, including the construction of an amphitheatre, clinical lecture room, laboratories and dissecting room, besides all the departments of a well appointed hospital. The lecture room will be fitted up with an eye to the comfort of the students, individual chairs replacing the benches usually supplied. The rooms for practical work will have all their fittings of the latest and most approved pattern: The hospital wards will overlook and have easy access to the large garden attached. Plans for the alterations are now being prepared by the architect, and when finished the corporation will have one of the most complete college buildings in the country.

Within the ample bounds of the newly-acquired property will be located the following institutions :

 The Medico-Chirurgical College, founded in 1850.
The Medico-Chirurgical Hospital, chartered

in 1852.

3. The Philadelphia Dental College, now at 10th and Arch streets.

4. The Hospital of Oral Surgery, whose clinics have no rival in that specialty, has coalesced with the Medico-Chirurgical Hospital.

5. The Philadelphia Hospital for skin diseases, now at 923 Locust street, which will also be continued at a department of the above-named in stitution.

The grouping of several institutions with allied objects in a single organization is a new feature in the history of Philadelphia Medical Charities. The old simile of a fagot in a bundle of sticks is most opposite here. While each retains its individuality and independence of action, the union permits each to assist the others and, by avoiding duplicate expenses, enables the authorities of each to accomplish more with the funds at their disposal.

Several notable changes have lately taken place in the Faculty of the Medico-Chirurgical College

Prof. Wm. H. Pancoast who for 27 years has been teaching anatomy at the Jefferson Medical College has resigned his professorship in that institution and has accepted the same chair in the Medico-Chirurgical College to which he was elected by the trustees. He brings with him the extensive Anatomical Museum collected by himself and his father, which for so many years was employed in teaching the classes at the Jefferson College.

Dr. John V. Shoemaker, lately Lecturer on Dermatology, and teacher of Skin Diseases, in the Post Graduate Course at the Jefferson College, has become Professor of Dermatology, at the Medico-Chirurgical.

Dr. E. E. Montgomery, Obstetrician to the Philadelphia Hospital and Surgeon to the Women's Hospital, has been elected Professor of Gynecology.

Some other changes of interest to those who wish the old-time reputation of Philadelphia as a Medical Centre to be maintained will be found in the annual announcement of the Medico-Chirurgical College, which will soon be published.

#### CORRESPONDENCE.

When I landed on the sacred soil of Great Britain I expected among other things to find professional advertising a *rara avis* among the . respectable class of medical men, but I have been somewhat disappointed. At least it was certainly unfortunate that in the first town where I inquired into the status of the profession (Mallow, in the South of Ireland) I should run across a printed circular setting forth the qualifications prizes, testimonials, etc., of which one of the principal doctors in the neighborhood was stated to be the happy possessor.

Nor is that sort of thing confined to the smaller towns of Ireland. It is not an uncommon thing even in Dublin and London to encounter magnificent door-plates setting forth the qualifications of the owners, and within a stone's throw of my lodging house a "D. Sc and M.R.C.S." sign on the door of a very respectable surgeon can easily be read half way across the square upon which it fronts.

I am told that competition reaches a height of which we know nothing in America, and yet it seems to me that neither Surgeon nor Physician is as tied down here as in Canada. If it be more difficult to acquire a practice in the larger centres here it is easier to manage and control it when once obtained. This is evident from the way in which a practice may bought and sold—a thing which cannot be done in Canada. And certainly it does argue well for the confidence which the public here entertain for the profession when they allow their right to choose their medical attendant to be bought and sold in this way.

I had a practical experience of the institution called "Hospital Saturday" in Belfast. On the afternoon and evening of a recent Saturday young girls were stationed on the principal street corners of that city soliciting aid for this charity. It was a sort of open-air bazaar, except that one got nothing but a smile for the cash, which, unless he desires to consider himself a "brute," was certain to be transferred from one's pocket to the basket of the fair one who stood in the way of the passer-by.

Here in London they reach the sinner's pocket through the medium of the churches, leading an outsider to imagine either that religious fervor is a more potent opener of the purse-string than it is in Belfast, or that it is a more feasible plan. Hospital Sunday last year yielded £,35,000, a sum which, as Cardinal Manning said in a recent speech, is very small when the numbers and wealth of the donors and the importance of the objectare considered. The meeting lately held at the Mansion House was for the purpose of devising some plan whereby the amount of subscriptions and contributions could be increased. Mr. B. Carter on behalf of the medical profession explained that there were over 100 hospitals and dispensaries in the city, most of which were dependent entirely upon voluntary contributions, and the science of medicine and surgery was largely the result of studies pursued within the walls of these institutions. In fact, said Mr. Carter, there would be no science of medicine without hospitals, and even if patients did not come to them voluntarily it would be a good investment if the community were to pay them for coming.

I quite fell in love with the Edinburgh Royal Infirmary. It reminds me, in point of situation, ventilation and general arrangement, of the Boston City Hospital. It has one of the largest and bestlighted operating theatres that I have yet seen and taken altogether, is a model hospital for patient, teacher and pupil. They tell me that the service of the Infirmary is very largely attended.

In Dublin the Rotunda is the centre of interest for the medical man, but I was attracted more by the museums of the Royal College and of Trinity College.

If they had a good cătalogue available to the student, I think they would favorably compare with the average school museum of the London Hospital.

The central object of interest to medical men visiting Dublin is the Rotunda or Lying-in-Hospita<sup>1</sup>. The building is circular, and by no means new. Every thing about the building is clean, and arranged so that the antiseptic treatment of accouchments can be thoroughly carried out. Solutions of carbolic acid and corrosive sublimate are freely used, and the results are manifested in the small number of deaths occurring in the practice of the hospital.

A goodly number of Canadian students and graduates are here, either on pleasure or for pur-

poses of study. Among the latter I may mention Drs. McDonnell, Stewart, Dawson, McConnell, De Cow, Armstrong and Finlay, of Montreal, with Dr. Fulton of Toronto, Allan, of Vermont, Miner, of London, and a number of others. In my next I hope to be able to say something about the various hospitals here, the men that attend them, and the impression which they made upon me. That is unless the festivities of the "season" and the chances for dissipation which it is just now the fashion to offer so freely to Colonials does not render me incapable of calm judgment.

LONDON, June 21st, 1886.

C. A. W.

NEW APPLICATION OF IODOFORM,

Dr. Richmond, of Greenock, Scotland, writes to say that he has cured a very severe case of diphtheria by means of iodoform only. It was applied to the patches on the palate and the fauces (with a camel-hair pencil moistened with mucilage) three times a day. The child also inhaled vapor of iodoform whenever he shewed croupy dyspnæa breathing, and was invariably relieved by it. The vapor was produced at the lowest possible temperature, so as not to change its chemical properties. The child was unable to swallow for two days previous to being seen by the Doctor, and within half an hour of the application of the iodoform he was able to take a drink of milk and afterwards continued to drink with ease. The tongue became clear, and remained so. The child got three teeth during his illness (which lasted thirteen days), and was slightly salivated towards the termination of the complaint. However, the salivation was little more than might take place in a perfectly healthy child, in teething. He never fevered, the muscular nerve twigs were not affected, consequently had no paralytic symptoms, and is now in good health.

Dr. Richmond has also been using iodoform with marked benefit in the treatment of various other complaints, viz., phthisis, erysipelas, herpes, burns, scalds, etc.

The phthisical patients inhale it frequently during the day, and all express themselves as having received general benefit. The Doctor thinks the magic power of the iodoform chiefly consists in its sedative properties acting on the inflamed nerves and their twigs. It has arrested tissue destruction at a stage that former experience would have said was impossible.