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ADDRESS

DELIVERED TO THE GRADUATES IN MEDICINE AT THE FIFTY-NINTH ANNUAL CONVOCATION OF THE MEDICAL FACULTY OF MCGILL UNIVERSITY, APRIL 2, 1892.

By T. G. RODDICK, M.D.,
Professor of Surgery, McGill University.

Gentlemen-Graduates,—It is my pleasing duty, on behalf of my colleagues, to offer you our most cordial congratulations upon this auspicious termination of your labours. For the past four years you have been patiently working for the prize, which, with the customary ceremony, our worthy Principal has just presented to you in the name of the University, and now you are entitled to add to your ordinary signature the four letters—M.D.C.M. You have climbed the steep ascent and reached the summit of your present ambition, and though during the journey you have doubtless often experienced hours of despondency, and occasionally a hoplessness and even dread, your student days will now be remembered with feelings chiefly of pleasure. Hard work honestly done and opportunities faithfully improved will be prominent among the delightful associations which the retrospect will recall.

You are now well equipped for the journey of life. You are considered competent to enter the lists, and we, your trainers, are already beginning to speculate on the places you are likely to take in the great race before you. Hitherto the contest has been a friendly one, as between brothers of the same family.

Henceforth you must be prepared to cross swords with all comers. Be assured, however, that no matter in what part of the field you may be found, providing you are conducting a fair and honourable fight, you may always count upon the sympathy and support of those who have taught you.

You are to be congratulated not only on being elevated to-day to the position of master-workman, but also on being graduates of this world-renowned University. The Faculty in which you have served your apprenticeship has long been celebrated for its high standard of professional excellence, and the indications are strongly in favour of a still more brilliant future. Much of this well-earned renown has come down as a goodly heritage from the distinguished men who formerly occupied the various chairs, and many of whom your fathers best knew as teachers. But after all, it is to you, in common with all her graduates, that our Alma Mater looks to sustain this high reputation. With you it really rests whether or not she shall continue to be famous. In your safeguard is entrusted her honour and her credit. Remember, therefore, when striving for a front place in the ranks of our profession, that you are not only satisfying a laudable ambition, but you are at the same time honouring this Faculty, and through it this University. We feel that you will continue to take a lively interest in the affairs of the McGill Medical Faculty. As a class you have been with us now through many trials. In the brief period of your studentship no fewer than three professors have passed away. It is true the late Dr. Godfrey, formerly Professor of Hygiene, had not been on the active staff for some years, but to the last he was much interested in the welfare of the Faculty. Then what a loss we have recently sustained in the death of the gifted MacDonnell. Still a young man, he had already made an indelible impress on the medicine of this country, if not on the science of medicine wherever taught. The very fitting eulogium just delivered by our Dean, and the appropriate reference of your own valedictorian, leave nothing that I can add.

You are fortunate in having been students of this Faculty during the lifetime of the late Dr. Howard, whose memory is

ever green among his colleagues and former pupils everywhere. It is not now my intention to dilate on the great professional ability and the many virtues which characterized him, as these have already been related from this platform on more than one occasion, and by more eloquent lips than mine ; but I take this opportunity of stating that there exists among our graduates everywhere, and also in this city among the old friends and patients of our late lamented Dean, a strong feeling in favour of the establishment of a Howard Memorial Fund. This might take the shape of an endowment of some kind, and would be but a fitting tribute to the memory of one whose untiring exertions in the interest of this school and for the advancement of the profession generally in this country are universally recognized. The project has already been thought out, and will doubtless take some practical shape during the next few weeks.

Gentlemen, the profession of your choice is an arduous one, and full of responsibilities. It likewise demands from its members the greatest devotion and a large share of self-denial. On the other hand there is no calling which in itself tends more to elevate and refine its followers, nor in which one's life can be made so useful,—and what greater gift than that of daily usefulness to one's fellow-creatures. I think, likewise, we can claim for it that it is the most unselfish profession. Even Dr. Samuel Johnson, who was not an admirer of doctors, and who, you may remember, defined their profession as a melancholy attendance on misery, a mean submission to peevishness, and a continual interruption of pleasure, was still sufficiently generous to admit that he had found in physicians great liberality and dignity of sentiment, very prompt effusion of beneficence, and willingness to exert a lucrative art where there was no hope of lucre. There is no calling, besides, where the exercise of sympathy is more constantly demanded, and where, I believe, it is more freely yielded. You will do well, therefore, to cultivate kindness of heart and sympathy, and by so doing you will not only become better men and more attentive physicians, but you will win the esteem of those who employ you. Hospital practice, to which you have been accustomed, has a less refining influence on the

student than the old system of apprenticeship, where he was brought early in contact with the better classes. As beginners your practice for some time, however, will be chiefly confined to the poor, to whom be ever kindly in your manner and generous of your services.

In the discharge of your professional duties be always truthful, but withal, cautious. Always avoid haste in forming your conclusions. Nature does not reveal her secrets to the hasty or superficial observer. Having recognized a grave or fatal malady, exercise a prudent reticence else you may take away hope and thus deprive yourself of a powerful assistant in the future management of the case. Since the establishment of training schools, and the presence in almost every community of so-called professional nurses, the work of the practitioner is made infinitely casier and freer from anxiety. In order that the nurse may be the more helpful she should be made acquainted with the salient points in the case and also with the line of treatment, for thus you prepare her for emergencies, and the alarm which odd and unexpected symptoms often produce is prevented. You will constantly be obliged to entrust important cases to unskilled attendants. Here you should be most careful to give the plainest instructions, especially in surgical cases where hemorrhage or gangrene might occur. After the setting of fracture, for instance, take some trouble to point out to some intelligent person in attendance how the condition of the circulation should be tested. Thus may much unnecessary suffering and other unpleasant consequences be avoided.

I cannot impress upon you too forcibly the great necessity for constantly enlarging the knowledge which you have acquired here. Hitherto you have been really learning how and what to study. Continue, then, your habits of study. Remember that medicine is pre-eminently a progressive science, opening up day by day fresh fields for investigation. Every man, then, in our profession must be a student through his life. The one who remains stationary is really retrograding, when all around him are moving on in advance. Our task is, moreover, made doubly difficult, because we have to unlearn, as well as to learn. We

are obliged, every now and then, to discard, as useless, knowledge formerly acquired, to forget and throw away the debris of exploded theories, and the dry and useless husks of an obsolete practice. We see this illustrated every day in connection with the pathology of inflammation, of pulmonary consumption, of tubercle generally, and of tumours, etc. So the surgeon has had to unlearn the meaningless technique which, before the days of Lister, made him almost ridiculous. There is one great charm in the study of medicine which you will appreciate more fully as you go on, namely, its constant variety. Besides, it is so many-sided, bringing us into contact with so many other branches of human knowledge. .

During your earlier years of practice you will have ample time to write up your cases and occasionally to publish them. The routine of general practice always affords many cases worth reporting and commenting on. Attend all meetings of medical associations held within a reasonable distance of your homes. There you will brush against men of varied experience, and will be afforded an opportunity of ventilating your own. It is in such assemblies that you learn to marshal your facts and to speak concisely.

Of late years it has become the custom—and a very good custom it is for those having the leisure and the wherewithal—to travel abroad for a time in order to prosecute their studies in a general or special way. I believe this is much preferable to beginning the studies abroad, because, on the whole, it is better that each man should receive his medical training in the country (meaning with us the continent) in which he intends to practice. Thus he gets to understand the constitution and habits of the people among whom he intends to spend his life, and can more easily adapt himself to circumstances. One of the greatest charms in connection with foreign study is that of meeting the giants in the profession of whom one is constantly hearing. Many graduates commit the error of limiting their travel to Great Britain. The great teaching centres on the continent, more especially those of Paris, Berlin and Vienna, should also receive a visit. Here unlimited facilities are offered for study

even with a limited knowledge of the language. With regard to the taking out of British and other qualifications, unless you can spend at least two years abroad I question the wisdom of such a procedure.

To the State you have a certain duty to perform in connection especially with preventive medicine. The local authorities will look to you to report cases of infectious disease and to advise them on sanitary matters generally. You will find a lamentable amount of ignorance even among the better educated regarding the simplest laws of health. Among the poor and ignorant there is usually no kind of knowledge on the subject. While your mission, then, will mainly be to cure the sick, much of your time will be occupied in preventing disease.

Until you become independent of practice (and I may warn you that few fortunes are made in our profession), you should eschew party politics. For each doctor who succeeds as a politician over twenty fail. In *medical politics*, however, you should at once begin to take an interest. Our chief want in this country at present is a Central Examining Board, sitting every year at Ottawa, which shall have the power to grant licences to practice medicine in any province in this Dominion. Indeed there is good reason for believing that if such a scheme could be instituted every country in the British Empire, including Great Britain herself, would reciprocate. Even at once, as graduates of this University, you can assist us in our endeavour to equalize the requirements of the various licensing bodies throughout the Dominion, so that we may be enabled to arrange our courses in accordance with the more advanced notions of medical education. You are aware that the tendency of all medical teaching is to decrease the theoretical and didactic teaching and to increase the practical. As a school we have been looking in this direction for years, but are hampered at every turn by the great diversity, with regard to requirements, that exists among the various provincial licensing bodies.

Lastly, I would impress upon you the necessity for cultivating the goodwill and esteem of your fellow-practitioners. You should study the Code of Ethics adopted a few years since by

the Canadian Medical Association. On entering any place with a view to practice, I would advise you to call upon two or three of the leading men in the profession and announce to them your intention to settle among them. Begin in a manly and straightforward manner and you will disarm opposition. Patients often cannot understand the good reasons underlying those admirable rules which we have adopted for our guidance and will ridicule our apparently straight-laced etiquette. Never mind that, but do your duty as gentlemen. The Code will show you a way out of every difficulty. Of course no rules can be made to govern every case.

Now, gentlemen, the time has come to say farewell. Be assured you have the best wishes of every member of this Faculty for a happy and prosperous career. *Always do the right thing*, and hereafter you will look back with those feelings of pleasure and satisfaction which a well-spent life never fails to afford. Farewell!

EXCISION OF THE CERVIX UTERI

IN CASES OF LONG STANDING LACERATION AND OF PROLIFERATING ENDOMETRITIS. (NINETY-ONE CASES.)

BY T. JOHNSON-ALLOWAY, M.D.,
MONTREAL.

Probably the greatest advance made in uterine surgery of late years has been Emmet's trachelorrhaphy for the repair of laceration of the cervix uteri. Before Emmet's genius had worked reform in the treatment of this lesion, afflicted patients were subjected to the enforcement of various blind routine procedures, which we at present do not feel very proud of. But although the key-note of reform in this matter was first struck by Emmet, it is no reason why we should rest content and abstain from effort at still greater improvement in methods for the repair of the lesion in question. Several years ago I recognized the difficulty of obtaining good results by Emmet's method in cases of old standing lesions, where great eversion had existed, and where connective tissue hypertrophy with extensive cystic disease were present. On removal of the tissues at the margins and high up in the angles of the tear, an elevated central plateau of diseased gland and connective tissue structure, situated in the centre of each lip, was left. When these central ridges had been tightly approximated by the application of the sutures, two serious defects became obvious. No provision for drainage after curetting the uterine cavity, and tension so extreme was brought to bear upon the sutures, that in many cases the ones nearest the apex cut out, and allowed a bad ectropium to result. Probably Dr. Emmet does not curette the uterus at the same sitting, and therefore would not require to provide for drainage; he may also introduce his sutures in such a manner that they do not cut out so frequently as in other and less skillful hands. Be this as it may, results were always excellent in recent cases, but were not so in the more chronic.

It occurred to me about this time that the defect may have been in the pathology and that we had not due regard for the diseased ridges left in the centre of each cervical segment, and from this standpoint the operation was really only partially exe-

cuted. Again, although we took away a large slice on each side and the cicatricial plugs in the angles, we left a much more densely diseased central portion. How now to get over this difficulty (*i.e.*, how to remove the central portion of diseased structure without committing the surgical crime of so-called mutilation) was a problem which occupied my mind until Schröder's method of dealing with catarrhal erosions occurred to me.

It will now become apparent to all who are familiar with Schröder's method that not only the sides and cicatricial angles, but also the diseased central ridges before alluded to are removed, and flaps formed from the portio-vaginalis. It will, however, be recognized that the operation virtually amputates the cervix close up to the internal os uteri, and that thereby the patient is deprived of her cervix and its functions, whatever they may be. This brings us to an important question relating to this subject. What are the physiological functions of the cervix uteri? Every gynæcologist is familiar with its pathological bearing, but can any one ascribe a useful part played in the sexual economy by the ordinary diseased cervix seen every day at our clinics? I know from experience that it plays a dangerous part in parturition. In the direct ratio of its length and connective-tissue disease so is the labour prolonged and the suffering intensified. We know that its laceration during labour opens up a channel for infective material to become absorbed, the serious results of which we are all familiar with. Again, when there is an abnormally short posterior vaginal wall, or when the pelvic floor has been impaired by labour, the elongated or enlarged cervix will, by its descent on the posterior vaginal wall, become tilted forwards, and consequently the fundus and body will be dropped backward into retroposition. I have become aware of this strange fact from observing that the uterus in such cases has shown a tendency to struggle backward after shortening the round ligaments, but have never observed this tendency on the part of the uterus when the cervix was excised at the same sitting, for the uterus in the latter instance always remained in a position of extreme anteversion.

There are other reasons why we should encourage the removal of the abnormally long or diseased cervix. It is an acknowledged

cause of sterility. It tends to convey infection—gonorrhœal and other—to more vital parts. It is the seat *par excellence* of catarrhal inflammation in the delicate young, and malignant disease in the middle aged. Also, the extreme state of general debility and anæmia which fungus endometritis will induce, associated either with a diseased intact cervix or badly lacerated one, calls, I think, for the total removal of all the diseased endometrium. When we consider that the infantile uterus is composed chiefly of cervix and fundus, and that the body becomes developed as the individual advances to puberty, it can be easily understood that anything which interferes with developmental evolution will give an abnormally long cervix, dense in texture and conoid in shape. We must therefore look upon a cervix of this nature as an abnormality and not as an essential to the economy. Given, then, that the cervical portion of the uterus is often a source of trouble and danger to the individual possessing it, what will be the consequences of its extirpation? We may confine ourselves here to the part it plays in three phenomena, viz., fecundation, pregnancy, and labour. As regards the first, its removal will tend to cure the existing sterility, should this be due to an elongated conoid cervix. From clinical observation I know that it does not interfere, one way or the other, with the progress of pregnancy. During this period my observations have not led me to notice any change different from that under other circumstances. When labour begins, however, we do observe phenomena differing from those seen in ordinary cases. I have had the opportunity of attending several obstetric cases which had been previously operated upon, and in all, certain peculiar phenomena were strongly alike. The patient at her expected time would feel some uneasiness and discomfort. She would probably admit that a pain or two had been experienced, and thought it necessary to send for her physician. On arriving at the bedside, the bag of membranes are, to his astonishment, felt to be occupying the vaginal ring, and only arrested in its downward course by the perineum. No cervix or cervical canal can be reached; nothing, in fact, but a large bag of water occupying the vagina, through which the presenting part can be felt. The patient up to this point has practically not had a

severe pain and feels remarkably comfortable. The membranes are now ruptured by the physician and the head immediately begins to descend. These phenomena have been so constant in the cases I allude to that we cannot avoid the temptation of denominating the occurrence as "labour without pain," which in point of fact it truly is. Whether, now, this rapid painless labour is an advantage or not, is a matter for careful consideration. My own personal experience in this respect has been too limited to enable me to express an opinion which would be of any value. I can only say that in the cases I attended I experienced great satisfaction to myself and advantage to the patient. One advantage excision of the cervix has over restoration of the part is, that laceration can never occur during future labours, and consequently the liability to infection from without becomes practically nil. It cannot be denied that the practice so much in vogue of forcibly dilating the cervix during the first stage of labour is often a cause of septic infection and its ill-fated sequelæ. I will not here go into the phenomena of pain or its cause during childbirth, but it is well known to all observers the great difference in degree of suffering experienced by women in this state, and it has often suggested itself to my mind that a very dense unyielding cervix would require, and institute, powerful expulsive contractions on the part of the uterus to overcome that resistance which was directly proportionate to the density and length of the cervix.

In conclusion, I will describe a few points in the technique of the operation. I have performed it now in ninety-one cases. In none of these has there been a single rise of temperature above normal on or after the second day following the operation. I therefore consider it an absolutely safe procedure and it should have no mortality. The patient is placed in the exaggerated lithotomy position and the vagina made aseptic. The cervix is pulled down and dilated with a powerful steel dilator, and the endometrium thoroughly curetted with Martin's sharp curette until the ring of the instrument is distinctly heard upon the muscular walls of the uterus. All the mucosa having been thoroughly removed, the cervix is split up on each side by straight

scissors to the vaginal vault. A scalpel is then drawn across the base of the lower segment of the cervix until it is severed to the vaginal mucosa. A straight bistoury is then made to transfix the cervix from its lower end in such a way that the point of the bistoury emerges in the centre of the transverse incision previously made, and cuts outward each way. The flap is then trimmed off with scissors; silkworm gut sutures are passed from within the cervical canal outwards (two in number) and tied. The upper segment of the cervix is treated in the same way, and the operation finished by passing one suture on each side to close the gaping angles. This operation leaves a large open canal for drainage, and should be performed, including the curetting, in about fifteen minutes. The only special points in connection with the operation are: you must have specially curved needles and very strong; a very thin, straight bistoury for transfixing; silkworm gut sutures I have most often used, but lately I have been using sterilized catgut, and although I cannot work quite so rapidly as with silkworm gut, it has the advantage of disappearing by absorption in the course of eight or ten days. Silkworm gut also is liable to cut through the tissues and cause secondary hemorrhage. The dangers of the operation may be summed up in one word—"hemorrhage." You must work rapidly, as the blood loss is continuous and profuse, and can only be arrested by the application of the sutures. This is the reason I recommend one segment of the cervix to be done at a time. I have had three cases of secondary hemorrhage occurring on the sixth day, all due to the cutting through of the flap tissue by the silkworm gut, and in all of these cases I had to secure the flap again by suture. I would warn against loss of time with styptics and the tamponade. They will not arrest the hemorrhage and may endanger your patient through extreme loss of blood. Since I have been using catgut as suture material I have not had this accident.

No. Age	M. or S.	Children	Miscarriages	Menstrual History.	Symptoms Complained of and Present Condition.	Condition of Parts found at Examination.	Operation and Results.	REMARKS.
1	29	1	2	Menorrhagia and mucopurulent leucorrhœa.	Severe headache with morning vomiting. Backache very severe.	Large bulbous cervix cicatrised, bilaterally lacinated; extensive cystic disease.	Schroeder's excision of cervix uteri.	Headache gradually disappeared. Nausea and slight backache only at periods. General health became very good.
2	33	2	1	Dysmenorrhœa, scanty flow; profuse intermenstrual leucorrhœa.	Severe bearing down pains. Backache, extreme debility, lassitude, palpitation, breathlessness, and loud systolic bruit.	Uterus anteverted. Cervix lacinated bilaterally. Extensive ectropion and cystic disease. Chronic metritis.	Emmet's trachelorraphy performed December 15th, 1885, with temporary benefit. July, 1889, found that ectropic condition of cervix had reappeared. Performed Schroeder's operation. Present condition of health excellent.	This case exemplified the error of doing Emmet's operation for the relief of conditions due to chronic metritis, hyperplastic endometritis, and extensive cystic disease of an old lacinated cervix.
3	41	5	4	Menorrhagia for the last three or four years. Leucorrhœa profuse.	Severe pain in back. Headache constant. Constipation. Vesical irritation. Great debility and anæmia.	No tenderness over broad ligaments or ovarian region. Vaginal patulous. Uterus anteverted, enlarged, tender, and excessively hard. Cervix bulbous. Extensive cystic disease, result of an old bilateral lacination cicatrised.	Sharp curetted endometrium and did Schroeder's amputation June, 1882. Result good. Menopause arrived one year afterwards. Present condition of health excellent.	
4	24	1	1	Menorrhagia. Leucorrhœa profuse. Dysmenorrhœa.	Extreme prostration. Headache, backache, anorexia, nausea at times, anæmia.	Bilateral lacination of cervix. Extensive proliferating endometritis, ectropion. Uterus anteverted. Cervix bleeds freely on being touched.	Schroeder's amputation of cervix. Health restored. Present health good.	Normal labour two years after operation.

No. Age	M. or F.	Children	Mis-carriages	Menstrual History.	Symptoms Complained of and Present Condition.	Condition of Parts found at Examination.	Operation and Results.	REMARKS.
5	26	1	2	Menstruates every 3 weeks; flow not excessive, with severe pain; leucorrhœa.	Complains of constant backache and pain in left iliac region. Faint neuralgia, headache and general debility.	Uterus fixed in retroflexion. Fundus very tender. Bilateral incarceration of cervix. Hypertrophic endometritis.	Aug. 1884. — Elastic traction and massage restored uterus to its normal position in three months, performed Schroeder's amputation of cervix. Symptoms complained of have disappeared. Health good at present.	Uterus fell again into retroversion, but as patient suffers no inconvenience from it, no further treatment has been undertaken.
6	48	6	2	Menorrhagin.	Pelvic pain, double vision, weak condition of sight and general prostration.	Bilateral lacœr. of cervix. Cicatricial corners. Extensive cystic degeneration and bulbous form of cervix.	Oct. 1886. — Cured by endometrium and excised diseased cervix. Result good. Patient returned Jan. 17th, 1891. Uterus atrophic in normal position. No cervix. vaginal prolapse, result of old lac. of perineum. States health has been excellent until six months ago, when she first complained of a bearing down sensation.	Will put patient at rest and do anterior and posterior colporrhaphy.
7	44	5	3	Menorrhagin.	Complete loss of health. Severe pelvic pain of bearing down character and inability to empty rectum.	Cervix enormously hypertrophied. Stenotic lac. of cervix. Cicatricial corners. Extensive cystic degeneration.	Oct. 11, 1884. — Cured by endometrium excised diseased cervix. Result good. Patient underwent office treatment during following year and has remained in good health ever since.	

8	24	M.	7 Six births	0	Menorrhagia and leucorrhoea profuse.	Severe pain in back aggravated on walking; frequent micturition and headache.	Cervic lac. constricted extensively eroded.	Jan. 15, 1886.—Excised diseased cervix according to Schroeder's method. Result good.	Patient has borne one child since. Labour normal.
9	43	M.	4	0	Menorrhagia, leucorrhoea.	Suffers from severe dysmenorrhoea and irritation of bladder, backache, & enora prostration.	Extensive hypertrophy of cervix; irregular lacer. with fleshy band running across cervix in lateral direction. Submucous fibroid in posterior wall of cervix.	Jan. 7, 1886.—Excised cervix high up above the small fibroid. Performed Emmet's operation on the perineum. Patient returned Jan. 1885 on account of menorrhagia. Endometrium was curetted. Iodized phenol was injected.	This patient has borne one child since, and is now in perfect health.
10	28	M.	4	1	Menorrhagia, leucorrhoea.	No dysmenorrhoea; chief pain situated in the back; it renders her unable to leave her bed without assistance. Headache; and nausea frequent. (General prostration and loss of health.	Extensive bilateral incarceration of the cervix; hypertrophy. Cystic degeneration. Lac. on right side running up into the base of the broad ligament.	Oct. 10, 1888.—Curetted endometrium; excised diseased cervix. Results good.	This patient had some months of office treatment following the operation. The catarrhal discharge gradually ceased and she has been ever since in robust health having but occasional pain at her periods. She has not, however, become pregnant.
11	26	M.	0	0	Menorrhagia severe, dysmenorrhoea and leucorrhoea.	Complains of severe pain in the back; intense headaches.	Uterus anteverted somewhat, fixed in the pelvis. Cervix conoid and elongated, drawn upwards and backwards into posterior fornix by involuntary contraction. Utero-sacral ligaments. Extensive catarrh and erosion of cervical mucous membrane.	Jan. 18, 1888.—Divulsed and removed cervix by Schroeder's method. Result good.	This patient had been a chronic invalid for years, and had been under various forms of treatment during that time. She did not show evidence of much improvement immediately after the operation, but after one year had elapsed she became markedly improved in health, and has been ever since a very active woman and has enjoyed perfect health.

No. Ago	M. or S.	Children	Mis-carriages	Menstrual History.	Symptoms Complained of and Present Condition.	Condition of Parts found at Examination.	Operation and Results.	REMARKS.
12	33	M.	2	Menorrhagia, leucorrhoea profuse.	Pain in the back; no dysmenorrhoea; has always had pain in left iliac region. Late-ly has suffered from severe colicky pains, necessitating going to bed and applying hot applications.	Uterus retroverted, mobile. Pelvic floor impaired from lac.; vaginal walls and perineum. Cervix left lateral laceration. Hyperplastic enlargement and cystic degeneration.	Jan. 10, 1888.—Excised diseased cervix, sharp curetted the endometrium.	This patient suffered for some time after the operation from nervous prostration, presumably due to intercurrent attacks of diarrhoea. She, however, eventually regained her perfect health with the aid of seaside change. A month ago she returned to me, however, suffering from the same exhaustive diarrhoea and feeling of polydescent, due no doubt to the retroverted and prolapsed uterus. I will now do colpo-perineorrhaphy and shorten the round ligaments.
13	21	M.	2	Leucorrhoea very profuse. Has just weaned last baby and has not menstruated since birth.	Severe pain in back and sides and running down thighs. Pain across hypogastrum, severe at times; no headache. Bladder functions normal. Has been in extreme state of anaemia since birth of last baby. Temperature normal, but pulse very rapid.	Uterus in normal position and no evidence of pelvic inflammation. Cervix lac. (bilateral) and extensively eroded. Endometritis and profuse, fatty mucoid discharge.	March 3 (after three months' preparatory treatment)—Curetted and performed Schroeder's excision of cervix. Result good.	This patient had very rapid return of health, has borne a child since, and enjoys excellent health at present.
14	57	M.	8	Menstruation regular; very profuse; duration six days; quantity large. Leucorrhoea profuse; dysmenorrhoea.	Backache, frequent micturition. Debility and nervous prostration.	Perineum lac. Vagina relaxed. Uterus anteverted. Chronic metritis. Cervix bilateral lac. Cystic and eroded Endometritis.	Cervix, Schroeder's excision. Result good.	A year after operation patient reports herself in good health.

15	43	M.	0	4	0	Menstruation regular; menorrhagia; leucorrhoea.	Severe backache; nervous prostration and anaemia from loss of blood; dysmenorrhoea.	Uterus antverted. Uterine wall, thickened, hard and tender (chronic metritis). Cervix very large and bulbous from old standing bilateral lac.	Dilated cervix; sharp eructed Schroeder's excision of cervix.	This patient returned six months afterwards complaining of menorrhagia. Was again eructed and cavity injected with iodine. Reported in good health one year since last operation.
16	26	M.	1	1	1	Menorrhagia every 3 weeks; dysmenorrhoea; leucorrhoea.	Constant backache. Constant neuralgic headache. Debility and general nervous prostration.	Cervix very much congested, enlarged and slightly lac. Lac. chiefly internal. Uterus antverted and mobile.	Schroeder's excision.	Reports herself well twelve months afterwards.
17	28	S.	0	0	0	Menorrhagia, three weeks; dysmenorrhoea severe; leucorrhoea.	Great prostration; constant backache and bearing down pain; cannot walk without great suffering.	Parts vaginal. Uterus very low down in axis of outlet, retroverted. Cervix elongated, os dilated. Glairy mucus discharge, endometritis.	Schroeder's excision of cervix. Uterus drawn up by shortening round ligaments.	This patient returned to work in a factory two months after operation, and has remained well since.
18	28	S.	0	0	0	Regular; menorrhagia, leucorrhoea.	Frequent micturition. Severe pain in back and hypogastrum. Difficulty in walking without pain.	Parts vaginal. Uterus retroverted and fixed in pelvis, exudation, mass in Douglas's fossa. Cervix elongated.	Schroeder's excision and round ligaments shortened, after two months test in bed and preparatory treatment.	This patient reports herself in good health six months afterwards.
19	28	M.	0	1	0	Menstruation every three weeks. Menorrhagia; leucorrhoea.	Premenstrual dulling and dragging pain in hip and back. Periodical intense headache, occurring every week. Nausea and occasional vomiting. Nervous prostration.	Cervix bilateral laceration, eroded and antverted. Uterus retroverted. Endometritis, gairy discharge.	Schroeder's excision, and uterus drawn up by shortening round ligaments.	
20	26	M.	0	1	0	Menstruation irregular (every five weeks), scanty; severe dysmenorrhoea; leucorrhoea.	Constant pain in back and other parts of the body. Legs ache all the time. Headache severe. Intense prostration and debility.	Granular vaginitis. Cervix bilaterally lac. Eversion and erosion. Uterus retroflexed and excessively tender.	Schroeder's excision and shortened round ligaments.	This patient is now acting as a nurse in perfect health.

No.	Age or S.	Children.	Mis- car- riages	Menstrual History.	Symptoms Complained of and Present Condition.	Condition of Parts found at Examination.	Operation and Results.	REMARKS.
21	37	2	1	Profuse and very painful.	Severe pain in back, thigh region and head-ache.	Prolapse of vaginal walls. Uterus retroverted; cervix bilaterally lacerated and hypertrophoid.	Excised cervix, anterior and posterior colporrhaphy and shortened round ligaments at second operation. Result very good.	
22	49	1	0	Menorrhagia, painful, scanty, leucorrhœa.	Severe pain in back, thigh regions and hypogastrium; head-ache.	Pelvic floor destroyed. Anterior and posterior vaginal walls prolapsed; cervix bilaterally lacerated, eroded and contains a small fibroma in wall of posterior segment.	Excised cervix, anterior and posterior colporrhaphy. Result very perfect.	Operation three years ago. Patient has continued in excellent health.
23	32	0	0	Regular, profuse, severe pain, backache, and always pain on sitting down.	Very profuse; glairy, mucoid discharge; severe dysmenorrhœa and constant back-ache.	Enormous hypertrophy of cervix erosion extending to junction of cervix with vagina (Trophiforming endometritis).	Excised cervix (high amputation). Result very good.	This was an interesting case in the extreme degree of disease of the cervical glands, with such extensive hypertrophy simulating epithelioma. No return in three years.
24	40	1	2	Menorrhagia (every 2 weeks), profuse, intermenstrual, leucorrhœa.	Severe pain in right thigh region, back, and down thighs. Head-ache and pain down back of neck.	Cervix enormously hypertrophied; bilateral laceration with over-sion.	Cervix excised and endometrium curetted. Result very good.	This patient constantly heard from during past three years. Reports in excellent health.
25	32	4	0	Menstruation every 3 weeks; very profuse, quantity large; leucorrhœa.	Confirmed in a valid since birth of last child, one year ago, from constant pelvic pain. Brought to hospital on stretcher unable to stand.	Uterus low down, retroflexed, unilaterally lacerated. Chronic vaginitis; vaginal wall and cavity large.	Excised cervix; posterior colporrhaphy and shortened round ligaments. Result excellent.	This patient has been constantly heard from during past 3 years. Her health continues excellent.
26	30	1	1	Menorrhagia every 3 weeks; leucorrhœa.	Severe dysmenorrhœa; unable to work from constant pelvic pain.	Cervix elongated and eroded; chronic endometritis; uterus retroverted.	Rapid dilatation, curetting and excision of elongated cervix. Result not good.	Patient somewhat relieved by the rest necessary, but pain has relapsed and evidence of tubal and ovarian disease.

27	25	M.	1	1	Menorrhagia, leucorrhoea, dysmenorrhoea.	General loss of health; pain in back, sides and hypogastrum.	Uterus somewhat fixed and some localized peritonitis. Has had Emmet's trachelorrhaphy performed during the past year without benefit; cervix found much hypertrophied and laceration everted. Perineum badly lacerated.	After some preparatory treatment performed Schroeder's excision of cervix and flap of perineum.	Result in this case was most satisfactory. Patient recovered her health completely.
28	34	M.	0	0	Menorrhagia and dysmenorrhoea.	General debility and prostration; pain in back and limbs; headache constant and vomiting at onset of menstruation.	Uterus in anteversion; cervix bilaterally lacerated and segments everted; chronic metritis.	Schroeder's excision of cervix. Result very good.	Patient heard from occasionally. Did not make a rapid recovery, but eventually became quite well.
29	21	M.	0	0	Menstruation regular, profuse and free from pain.	States that she conceals no only on account of her sterile state.	Slight vaginitis; cervix much elongated and conically eroded and covered with glairy mucous discharge. Catarrhal endometritis.	Excised cervix, dilated with steel instrument and sharp everted cavity.	Lost sight of this patient and cannot tell whether or not she has become pregnant, as result of operation.
30	29	S.	0	0	Menstruation regular, but very profuse; leucorrhoeal discharge also profuse; frequent headaches; severe dysmenorrhoea.	Vaginitis; uterus in normal position; no inflammatory condition; cervix elongated; extensive catarrhal erosion covering a great part of the vaginal cervix.	Removed cervix; dilated (rapid) and everted endometrium. Result good.	This patient has been seen several times since treatment, and has been relieved from the symptoms complained of.	
31	37	M.	0	0	Menstruation over frequent; not excessive in quantity nor duration. Before marriage suffered severely from dysmenorrhoea, but not since.	Leucorrhoea very profuse; complains chiefly of great prostration and backache; asthenopia.	Position of uterus normal; cervix bilateral laceration; extensive hyperplasia and ectropium. Cystic disease; chronic metritis. Perineum fairly normal.	Dilated cervix; everted endometrium and excised cervix. Result very good.	Patient found in very robust health one year afterwards.

No.	Age	M. or F.	Children	Mis- car- riages	Menstrual History.	Symptoms Complained of and Present Condition.	Condition of Parts Found at Examination.	Operation and Results.	REMARKS.
32	22	S.	0	0	Menstruation every 3 weeks, painful and profuse.	Complains of general debility, headache, leucorrhœa, and asthenopia; irritability of bladder.	Uterus somewhat tending to a backward inclination; cervix high up and some tension on broad ligaments. Tenderness of pelvic floor generally, but mass palpable; cervix eroded and discharging glairy mucus.	Bilateral cervix with steel dilators; eroded endometrium and excised, elongated and eroded cervix. Result good.	This patient returned six months after operation for examination. There was no discharge from the uterus. Parts look perfectly healthy. No tenderness of pelvic floor. Patient was happy and in good general health.
33	42	M.	7	0	Regular but profuse dysmenorrhœa.	Asthenopia; complains of extreme exhaustion, vertigo, pain in back and left iliac region.	Perineum lacerated; vagina gaping; pelvic floor destroyed; bilateral laceration of cervix; enormous hypertrophy and cystic disease of cervix; uterus large and anteverted.	Excised cervix (high) and repaired perineum. Result good.	
34	30	M.	2	0	Menstruation regular, sometimes profuse.	Severe backache, headache; occasional attacks of vomiting.	Perineum lacerated; cervix bilateral lacerator; uterus retroverted; pelvic floor very sensitive to pressure. Protrusion of anterior vaginal wall; urethrectomy.	Schroeder's excision of the cervix; flap splitting operation on the perineum. Emmet's buttonhole operation on the urethra. Result good.	This patient was seen a year after treatment, and she stated that she was in very good health. Uterus remained retroverted which caused her some backache at times.
35	31	M.	2	0	Menstruation regular; leucorrhœa.	Severe pain in hypogastrium and back. Severe headache during menstruation; severe vomiting attacks; irritable bladder.	Uterus retroverted; very tender and incarcerated in the pelvis. Posterior lip eroded, hypertrophied and cystic, perineum lacerated and vagina very lax.	Schroeder's excised endometrium. Flap splitting perineorrhaphy and shortening of round ligaments. Result very good.	This patient seen one year after operation, and with the exception of a very occasional headache, her health is very good. Uterus found anteverted.

36	45	M.	1	2	Menstruation irregular; sometimes three and sometimes six weeks. No dysmenorrhea; no leucorrhoea. Pain in back and left side. Severe headache.	Great prostration; severe back and headache, anorexia and anaemia.	Perineum and pelvic floor destroyed; uterus down in retroflexion; heavy, bulky and elongated cervix. Protrusion of both anterior and posterior vaginal walls.	On account of pro-found anaemia and cardiac bruit only Schroeder's excision of the cervix and shortening of the round ligaments were done. Hegar's perineorrhaphy was deferred for another sitting.	This patient, seen a year afterwards, was in most excellent health. Uterus anteverted, but low in the pelvis. Patient has promised to have perineorrhaphy done.
37	38	M.	0	8	Menstruation regular; dysmenorrhoea; profuse leucorrhoea.	Severe backache, headache and loss of general health.	Bilateral laceration of cervix; great eversion and hypertrophy of cervical segments. Uterus anteverted, but low in the pelvis; vagina patulous; pelvic floor destroyed; extensive protrusion of vaginal walls.	High Schroeder's excision of cervix, and dome-trium everted, anterior colporrhaphy and Hegar's posterior colporrhaphy. Results good.	This patient was seen one year afterwards and reported herself in excellent health and free from former troubles.
38	57	M.	1	0	Menstruation very profuse; returning every other week; dysmenorrhoea, leucorrhoea profuse, frequent micturition.	Frequent micturition; has suffered from malarial fever in Florida; at monthly periods tonsils swell and become very painful; constant and severe headache; nausea and vomiting at times.	Uterus enlarged; chronic metritis; bilateral laceration of cervix; great eversion and cystic disease; endometritis.	Schroeder's excision of the cervix. Tail's flap splitting of the perineum. Result good.	One year afterwards this patient reports herself in good health.
39	30	M.	3	6	Menstruation regular; some dysmenorrhoea; leucorrhoeal discharge.	Extreme prostration; pain in left side and back; great nervous irritability and hallucinations.	Perineum lacerated; bilateral laceration of cervix; hypertrophied and cystic; Uterus anteverted; extreme tension on utero-sacral ligaments.	Schroeder's excision of the cervix. Perineum restored by flap splitting method.	This patient appeared much improved in general health one year afterwards.
40	35	M.	1	0	Menstruation regular; severe dysmenorrhoea.	Severe pain in back, hypogastrum and iliac region. Irritability of bladder.	Uterus strongly anteverted; bulky and sensitive to touch. Cervix lacerated, enlarged and extensively cystic, mucopurulent discharge; perineum lacerated.	Schroeder's excision of the cervix; sharp curetting of the endometrium; flap-splitting operation on the perineum.	One year after operation, patient reports very good health.

No. Age	M. or S.	Children.	Miscarriages	Menstrual History.	Symptoms Complained of and Present Condition.	Condition of Parts found at Examination.	Operation and Results.	REMARKS.
41	38	6	4	Menstruation regular; leucorrhœal discharge; some dysmenorrhœa.	Extreme exhaustion; anemia and constant headache; severe backache.	Perineum lacerated and pelvic floor much impaired; uterus anteverted; cervix lacerated; segments everted and cystic.	Schroeder's excision of the cervix; endometrium curetted and flap-splitting on perineum. Result good.	Patient seen one year after operation in perfect health and able to work without inconvenience.
42	37	4	0	Menstruation every 3 weeks; profuse dysmenorrhœa.	Severe pain in lower part of spine and left hip; severe headaches. Irritability of bladder.	Perineum lacerated; vagina very lax and large; cervix much enlarged; extensive left lateral laceration. Cystic degeneration and varicose condition. Uterus anteverted and somewhat fixed by inflammatory exudation.	Schroeder's excision of cervix; flap splitting operation on the perineum. Result good.	
43	37	3	0	Menstruation every 3 weeks; leucorrhœa profuse.	Constant bearing down feeling, headache, constipation, flatulence.	Perineum lacerated; vagina very lax; walls prolapsed; uterus retroflexed but easily replaced; cervix badly lacerated; proliferating endometritis.	Schroeder's excision of the cervix; currying endometrium; flap-splitting operation on the perineum. Shortening of the round ligaments (at the same sitting).	Patient in very good health one year after operation.
44	30	0	0	Menstruation regular; no dysmenorrhœa; menstrual loss large.	Headache severe; constant nausea; also backache; nervous prostration and annular.	Perineum lacerated; vaginal walls prolapsed; uterus retroflexed; cervix enlarged; posterior segment cystic.	Schroeder's excision of the cervix; endometrium curetted; anterior and posterior ligaments shortened (one sitting, one hour and 10 minutes).	Very good health one year afterwards.
45	35	4	6	Menstruation regular.	Has severe pain in left side and hypogastrium; general prostration and much nervous irritability.	Perineum lacerated and pelvic floor impaired; vaginal walls prolapsed; uterus anteverted; cervix lacerated; segments hypertrophied and everted.	Schroeder's excision of cervix; flap splitting on the perineum. Result very good.	Patient not been heard from.

46	33	M.	4	0	Menstruation regular; leucorrhœal discharge profuse.	Severe pain in back and left side; pretty severe headache; frequent micturition; constipation; complaints of distressing nightmare nearly every night.	Perineum lacerated; cervix lacerated; segments everted; cystic disease and hypertrophied; uterus anteverted.	Schroeder's excision of the cervix; endometrium curetted; perineum repaired; flap-splitting operation.	Patient in excellent health when last seen.
47	34	M.	0	0	Menstruation every 3 weeks; quantity large; duration four days.	Severe premenstrual pain over hypogastrium; pain constant in left iliac region; headache and constipation.	Uterus in normal position, freely movable; cervix hypertrophic and enlarged.	Rapid dilatation of cervical canal; incision of internal os; Schroeder's excision of the cervix.	
48	33	M.	5	0	Menstruation regular, but scanty; free from pain.	Complains of profuse leucorrhœal discharge; pain in back and bearing down feeling. General loss of health and nervous prostration.	Perineum lacerated; vaginal walls very lax; cervix large; bulbous and cystic; Uterus of normal size but anteverted.	Endometrium curetted. Cervix excised; perineum repaired; flap-splitting operation. Result very good.	Patient, when last seen, was in excellent health.
49	34	S.	0	0	Menstruation regular; sometimes profuse.	Complains of intense backache for some years back. General debility and nervous prostration.	Uterus extremely ante-flexed and very tender to examining pressure and somewhat enlarged; cervix eroded around os; cervical endometritis.	Rapid dilatation of cervix; endometrium curetted; cervix excised. Result very good.	Lately reported in excellent health.
50	30	M.	4	0	Menstruation every 3 weeks; quantity large.	Severe bearing down pain; constipation; profuse leucorrhœal discharge and loss of health.	Vagina very lax; outlet extremely patulous; pelvic floor destroyed; uterus ante-flexed; great tenderness over pelvic floor; cervix lacerated, inflamed, everted and very cystic; endometrium bleeds freely; uterus low down in the pelvis.	Schroeder's excision of the cervix, endometrium curetted, anterior colporrhaphy, flap-splitting, perineorrhaphy.	Patient in good health when last heard from.

No. Age	M. or S.	Children.	Miscarriages	Menstrual History.	Symptoms Complained of and Present Condition.	Condition of Parts found at Examination.	Operation and Results.	REMARKS.
51	35	2	0	Menorrhagia every 2 weeks; quantity large.	Dysmenorrhœa, severe backache and general prostration and inability to do house work.	Perineum lacerated to sphincter; cervix extensively eroded and connected; uterus in retroversion, but easily replaced.	Curetting, Schroeder's excision of cervix; perineorrhaphy and shortening round ligaments. Time operating, 52 minutes.	Result very good.
52	34	4	1	Regular but excessive in quantity; leucorrhœa profuse.	Severe pain and bearing down sensation in pelvis, general loss of health.	Perineum lacerated and pelvic floor destroyed; cervix lacerated and extensively cystic; uterus ante-flexed, but low down.	Curetment, Schroeder's excision of cervix, anterior colporrhaphy and flap splitting perineorrhaphy.	Very good. Health restored some months afterwards when seen.
53	31	3	0	Menstruation regular, but with constant headache; leucorrhœa profuse.	Extreme debility and subject to hysterical convulsion attacks; complains of bearing down sensation; continual pain in back and hypogastrium.	Vaginitis; perineum badly torn; vagina open and gaping; pelvic floor much injured; uterus lying in retroversion into right side of pelvis; cervix bilaterally lacerated and congested. Proliferating endometritis.	Curetment; excision of cervix, Hegar's posterior colporrhaphy.	Result very good. Has had a gradual lessening of hysterical attacks. They have now entirely disappeared.
54	31	4	1	Menstruation every 2 weeks; duration 8 days; quantity large. This condition has existed during past four years.	Dysmenorrhœa; severe backache, which is constant; very anæmic from constant loss of menstrual blood; patient extremely prostrate and exsanguinated.	Uterus in normal position; left ovary enlarged and tender; cervix bilaterally lacerated; proliferating endometritis; perineum lacerated.	Curetment; excision of cervix; perineorrhaphy (flap splitting operation).	This patient began to recover her blood and general strength immediately after leaving my hospital, and has been in most excellent health ever since. Menstruates regularly.
55	38	4	2	Menstruation regular, but scanty; leucorrhœa profuse at times.	Severe prostration and general debility; dysmenorrhœa severe; backache and headache constant. Unable to do housework.	Cervix enormously hypertrophied from long standing; bilateral laceration and cystic disease; perineum lacerated and pelvic floor impaired; uterus vented to 3°.	Dilatation of cervical canal and curettement; high excision of cervix; flap splitting, perineorrhaphy and round ligaments shortened.	Result excellent. Uterus remains in anteversion and well supported by pelvic floor.

56	40	M.	7	3	Menorrhagia every 3 weeks; quantity large, and general debility; duration 8 days; profuse leucorrhœa.	Perineum badly lacerated, but pelvic floor in fair preservation; cervix bilaterally lacerated and very much hypertrophied.	Curettement, excised cervix and perineorrhaphy.	Result very good. Patient has been in very good health, doing her own housework since operation, now one year.
57	38	M.	3	2	Complete loss of health during the past ten years. Nervous prostration; constant headache and backache.	Perineum torn through into rectum; small fibrous band taking place of sphincter; little or no control over contents of rectum; cervix bilaterally lacerated, everted, eroded and enormously hypertrophied; uterus low down and retroflexed.	High excision of cervix; curettement; perineum and sphincter am restored by flap splitting operation. On account of extremely prostrated condition of patient it was thought advisable to shorten round ligaments at a future operation, ten days afterwards, which was done.	Result a perfect cure and sphincter quite restored, giving a high, strong perineum. Uterus strongly anteverted. Patient completely restored to health. Stated she had suffered ill health for 18 years, since the birth of first child, when perineal rupture occurred.
58	27	M.	0	1	Menstruation irregular; generally every six weeks; quantity small.	Uterus enlarged and anteflexed; extreme tenderness of left iliac region, on pressure; cervix conoid elongated; os small (pin hole), and cervix strongly flexed on baby; proliferating endometritis; muco-purulent discharge from os.	Preparatory treatment of rest in bed. Then dilatation of cervix canal; curettement and high excision of cervix. Bilateral incision of internal os; gauze drain in cervical canal for 24 hours.	Result excellent. Patient several months afterwards was free from dysmenorrhœal pain, and was in robust health.
59	33	M.	3	1	Menstruation regular, but painful.	Bilateral laceration of cervix with hypertrophy. Laceration of perineum to muscle. Large oval recto-vaginal fistula situated at about two cm. from anal opening, through which tip of index finger can be passed; uterus in normal position.	Curettement, excision of cervix; perineum and recto-vaginal septum split to 2 cm. above fistula and perineal sutures so placed as to obliterate continuity of rectal with vaginal opening of fistula by overlapping of the parts.	Result perfect. Strong high perineum and complete obliteration of fistulous opening. Patient's health completely restored.

No. Age	M. or S.	Children	Miscarriages	Menstrual History.	Symptoms Complained of and Present Condition.	Condition of Parts found at Examination.	Operation and Results.	REMARKS.
60	48	M.	0	Menorrhagia.	Irritation of bladder; loss of general health and nervous prostration; insomnia; pelvic pain which causes almost confirmed invalidism.	Uterus retroflexed; cervix eroded; catarrhal endometritis; chronic metritis; pelvic floor destroyed, though there is a skin perineum; uterine annexa normal.	Curettement, excision of cervix; Hegar's posterior colporrhaphy and anterior colporrhaphy. The round ligaments were shortened at future sitting, ten days afterwards.	Result very good. Uterus remained inverted, but on account of the patient's extreme state of debility she took several months before she began to show improvement. Convalescence, when patient returned home, was delayed by an inter-current attack of pneumonia.
61	28	M.	0	Menorrhagia.	Great backache and constant headache and occasional attacks of vomiting; extreme prostration and general debility.	Vagina very lax; perineum lacerated; uterus anteverted; cervix bilaterally lacerated, everted and much hypertrophied; fungous; endometritis; excessive tenderness of pelvic floor during examination.	Curettement, excision of cervix and posterior colporrhaphy.	Six months after patient left my hospital she called to show me the satisfactory improvement in her general condition. She had no pain, her appetite returned, and her weight was much increased.
62	27	M.	0	Regular, scanty leucorrhoea, profuse.	Complains of severe bearing-down pain and headache; headache; extreme state of nervous prostration.	Perineum lacerated; pelvic floor destroyed; uterus lying in retroversion; cervix bilaterally lacerated; ovaries prolapsed and very tender during examination; endometritis.	Curettement, excision of cervix, perineorrhaphy, and shortened round ligaments.	Patient was restored to health some months afterwards.
63	20	S.	0	Regular; duration 4 days.	Intense dysmenorrhoea, especially after flow has been established; no other subjecting symptoms.	Uterus in anteverted position; mobile and free from tenderness. Cervix elongated, cystic, proliferating endometritis, cervical canal long and narrow.	Split cervix dilated, excised internal, os laterally, curettement and excision of cervix high up, gauze drainage in cavity for 36 hours.	Heard from this patient five months afterwards. She has had little or no pain, at times (does not know any difference during menstruation. General health greatly improved.

64	41	M.	3	0	Regular: duration of floor protracted; severe dysmenorrhœa.	Headache, very severe and constant, back-ache, great nervous prostration, anæmia and inability to do any house work, however light.	Perineum lacerated; cervix everted and hypertrophied; uterus retroverted; chronic metritis.	High excision of cervix, viz: perineorrhaphy and shortening of round ligaments.	Patient heard from recently. She is strong and doing farm work.
65	40	M.	5	2	Menorrhagia.	Constant and severe headache, backache and extreme nervous prostration; leucorrhœal discharge.	Perineum and pelvic floor destroyed; vagina large and vulva gaping; bilateral laceration of cervix; uterus retroverted and bulky.	Excision of cervix; curettement and Hegar's posterior colporrhaphy, shortening round ligaments.	This patient made an excellent recovery, and is now in good health. On account of her anæmic condition at operation the round ligament part was done ten days afterwards.
66	25	S.	0	0	Regular but deviation of floor protracted; severe dysmenorrhœa.	Severe menstrual pain; no pain between periods; general debility reduced mainly by menstrual suffering and loss.	Uterus retroverted to 30° and extremely painful to touch. Cervix congested and extensively eroded; endometritis; uterus easily anteverted.	Rapid dilatation; curettement; excision of cervix and shortening round ligaments.	Patient has been free from pain at periods since her return home and is improved in general health.
67	20	M.	1	0	Irregular; duration 3 to 4 days; flow scanty. Leucorrhœa.	Complains of feeling of great depression and general loss of strength; constant headache; patient greatly emaciated.	Uterus anteverted strongly; adnexa normal; uterus mobile, not tender; cervix eroded extensively; catarrhal endometritis; descent of anterior and posterior vaginal walls over badly lacerated perineum.	Dilatation of cervical canal; curettement; excision of cervix; anterior colporrhaphy, colpoperineorrhaphy.	Patient continued extremely prostrate and anæmic for some days after operation, but began to improve and is now in excellent health.
68	32	M.	1	0	Menstruation regular.	Pelvic floor and perineum destroyed; pro-lapse of anterior and posterior vaginal walls. Uterus retroverted and lying low down in wall of pelvis; cervix in tact.	Complains of bearing down sensation; headache and constant backache.	Excision of cervix. Hegar's posterior colporrhaphy, anterior colporrhaphy.	Complete restoration of parts. Patient satisfied with relief afforded.

No.	Age or S.	M. or S.	Children.	Mis-carriages.	Menstrual History.	Symptoms Complained of and Present Condition.	Condition of Parts found at Examination.	Operation and Results.	REMARKS.
69	23	M.	0	0	Menstruation regular; duration 7 days; not profuse.	Intense dysmenorrhœa, also intermenstrual pain constant and severe.	Uterus fairly mobile; retroverted and congested; cervix eroded and elongated; chronic proliferating endometritis.	Dilatation, curettement and excision of cervix; shortening of round ligaments.	Perfect recovery and relief from symptoms.
70	24	M.	1	0	Menstruation irregular; 3rd and 5th weeks, duration one day.	No dysmenorrhœa; no headache; severe backache constant, and passes around hips. Some irritation of bladder. Extreme debility.	Slight perineal laceration; pelvic floor destroyed; cervix shows many central nodules; curettement and perineorrhaphy.	Excision of cervix; carefully removing many central nodules; curettement and perineorrhaphy.	Result excellent. Patient reported herself some months afterwards in good health.
71	27	M.	2	0	Menstruation regular but profuse (7 days) and painful.	Premenstrual pain; leucorrhœa; pain in left lumbar region.	Bilat. lacer. of cervix. Papillary erosion; extreme eversion.	Schroeder's excision of cervix.	Union good. Patient discharged well.
72	55	M.	2	0	Menstruation regular.	Pain in back and left side	Retroversion, chronic metritis; lac. perineum; descent of pelvic floor.	Schroeder's excision of cervix; perineorrhaphy.	Result reported good.
73	23	S.	0	0	Menstruation once a fortnight with much pain.	Pain in back and side; leucorrhœa; menorrhagia; painful micturition.	Bilateral laceration of cervix.	Schroeder's excision of cervix.	Result good.
74	25	M.	1	1	Menstruation every 2 or 3 weeks; profuse and painful.	Pain in epigastrium; dysmenorrhœa; rectal tenesmus; pain up and down spine.	Perineum lacerated; cervix much hypertrophied.	Schroeder's excision of cervix; perineorrhaphy.	Result good. Had secondary hemorrhage from suture line six days after operation. Checked by album packing. Hemorrhage returned in a few days on removal of packing. Repacking stopped it. Final result was good union.
75	20	M.	0	0	Regular, painful first day.	Pain in back and both groins. Frequent and painful micturition; leucorrhœa; vomiting.	Retroversion, retro-uterine inflammation, cervix elongated, chronic cystitis.	Schroeder's excision of cervix.	

76	24	M.	1	1	Regular; not painful.	Pain in head and back. Vertigo. Pelvic pain. Frequent and painful micturition.	Cervix lacerated and eroded; cystic degeneration; uterus anteverted.	Schroeder's excision of cervix.	Good result.
77	21	M.	0	0	Regular and not painful.	Sterility.	Elongated cervix; endometritis (catarrhal); antelexion; left ovary enlarged and prolapsed.	Schroeder's excision of cervix.	Union good.
78	23	M.	1	1	Regular; painful, especially before flow.	Pain in epigastrum and back; vertigo; leucorrhœa; dysmenorrhœa.	Bilateral laceration of cervix with hypertrophy.	Schroeder's excision of cervix.	Union good.
79	38	M.	1	7	Regular; profuse.	Pain over sacrum and in both groins; leucorrhœa. Frequent and painful micturition.	Bilat. lac. of cervix; cicatricial constriction of broad ligament; uterus partly fixed.	Schroeder's excision of cervix.	Result good.
80	33	M.	2	7	Regular; pain before flow; last 7 to 9 days.	Flooding; pain in left groin and oversacrum.	Cervix lacerated with hypertrophy.	Schroeder's excision of cervix.	Result good.
81	19	M.	0	0	Regular till after marriage; since then rather irregular; Much pain first day of flow, which lasted 4 to 5 days.	Leucorrhœa; pain in back and in groins; difficulty in micturating.	Bilaceration of cervix and hypertrophy.	Schroeder's excision of cervix.	Result good.
82	25	M.	0	2	Never regular; interval 3 to 4 weeks; Much pain first day.	Bearing down pain in back and hips; pain and swelling in left side of abdomen.	Uterus retroflexed; chronic metritis.	Schroeder's excision of cervix; shortening of round ligaments.	Result good. Union complete. Uterus retained in good position.
83	34	M.	4	3	Regular; occasionally painful.	Leucorrhœa; pain in right inguinal region and in back.	Lacerated cervix; uterus fixed by cicatrices of inflammatory origin.	Schroeder's excision of cervix; perineorrhaphy.	Result good.
84	34	S.	0	1	Menstruation always painful and too frequent, 2 to 3 weeks.	Pain in back and in pelvis; worse on standing; menorrhœa; swollen feet; hernia.	Lacerated cervix; lacerated perineum; uterus fixed in right lateral inclination.	Schroeder's excision of cervix; curetting.	Patient did well.

No. Age	M. or S.	Children	Mis- car- riages	Menstrual History.	Symptoms Complained of and Present Condition.	Condition of Parts found at Examination.	Operation and Results.	REMARKS.
85	35	M.	1	Menstruation regular.	Pain and swelling in right side. Vomiting and constipation.	Retroversion; bilateral laceration of cervix; lac. perineum.	Schroeder's excision of cervix; perineorrhaphy; shortening of round ligaments.	Recovered well from operation. Came back in a week after discharge with pelvic pain. Uterus found to have gone back to retroversion and acid down by adhesions. Chased by full down stairs shortly after leaving hospital.
86	28	M.	2	Never regular; often every 2 weeks, and sometimes lasting 18 days; not much pain.	Pain in left iliac, hypogastric and lumbar regions. Nausea, vomiting and headaches.	Retroversion; chronic metritis; erosion of cervix.	Schroeder's excision of cervix; colporrhaphy; shortening round ligaments.	Good.
87	21	M.	0	Regular.	Abdominal pain, weakness and nervousness.	Lacerated cervix; lac. perineum.	Schroeder's excision of cervix; colporrhaphy.	Had 2 severe secondary hemorrhages. Temporarily checked by tamponing with gauze and perchlor. of iron, but recurred, due to sutures cutting through cervix, which seemed unusually soft. Fresh sutures finally inserted were effectual, and patient recovered well.
88	38	M.	0	Menstruation regular; pain and flow never excessive.	Pain in back and left side on exertion; headaches, constipation.	Prolapse of post-vaginal wall. Chronic metritis. Lac. cervix.	Schroeder's excision of cervix; Hegar's colporrhaphy.	Recovery somewhat slow, but final result very good.
89	42	M.	1	Menstruation regular.	Pain in back and left side, extending into thighs at times; leucorrhoea. Frequent micturition.	Uterus in retroversion and drawn to left side.	Schroeder's excision of cervix; round ligaments shortened.	Recovered well.
90	23	M.	0	Regular.	Dragging pain in lower abdomen; constipation.	Metritis, endometritis, bilateral laceration of cervix.	Schroeder's excision of cervix; Hegar's colporrhaphy.	Union perfect.
91	23	S.	0	Irregular menstruation; occurring about every two weeks. Great pain, lessening when flow begins. Flow often lasts a week.	Painful and frequent menstruation; constipation.	Retroversion, on left side of uterus a tender mass.	Schroeder's excision of cervix; curcetting; shortening of round ligaments.	Had one period which was painless before leaving hospital.

A CASE OF GASTRO-ENTEROSTOMY.*

BY JAMES BELL, M.D.,

Associate Professor of Clinical Surgery, McGill University; Surgeon to the Montreal General Hospital.

I beg to submit, for the consideration of the Society to-night, the following report of a case of gastro-enterostomy, or, to be more accurate, gastro-jejunosomy, performed for the relief of pyloric obstruction, caused by a cancerous growth in the stomach walls.

The patient, a young married woman, 31 years of age, was admitted to hospital, under care of Dr. George Ross, on the 24th of February, 1892. She complained of headache, dizziness, constipation, vomiting and pyrosis. The first appearance of these symptoms dates back to the fall of 1890, when they seem to have come on rather suddenly. The vomiting at this time is described as coming on in periodical attacks, at no particular time of the day, sometimes on rising in the morning, and at other times during or after meals,—never before. The vomited matter consisted of partially digested food, but never contained any blood. These symptoms continued practically unchanged until about four months prior to admission to hospital, when she consulted a physician, who examined her and diagnosed pyloric obstruction with consequent dilatation of the stomach, and had the stomach washed out every morning with great relief to the symptoms, especially the vomiting. Only about one month before admission to hospital was the tumour discovered by the patient herself. She thinks it has not increased in size since she first discovered it. She has been steadily losing weight since the illness began, but has never suffered any pain except a slight distress before vomiting, which was always relieved by evacuation of the stomach contents.

Personal history.—Patient was born in Scotland and came to Canada at the age of two years. She was brought up in the country and lived on a farm until twenty years of age, when she came to Montreal as a general servant. Five years ago she got married and returned to the country. She has had two children

* Read before the Medico-Chirurgical Society of Montreal.

and one miscarriage. The youngest child is five months old. She has always enjoyed good health, with the exception of an attack of inflammatory rheumatism when twelve years of age. Has never used alcohol in any form.

Family history.—Father dyspeptic; no history of cancerous, tubercular or neurotic disease.

Present condition.—Patient poorly nourished, though not emaciated; pale and anæmic. Bowels constipated, moving only every two or three days. Temperature 97°F.: pulse 92; respirations 30. Heart and lungs normal. Urine: sp. gr. 1028. clear amber colour, free from deposit, no sugar nor albumen. Abdomen somewhat distended, particularly about the umbilical region. A dilated stomach with a hard, nodular, movable and painless tumour at the pylorus is easily recognized; the tumour is apparently about the size of an orange, and lies below and to the right of the umbilicus. Hepatic and splenic dulness normal. The stomach was washed out daily, and on the 2nd of March the patient was transferred to the surgical side. Careful examination on two different occasions failed to show any free hydrochloric acid in the stomach contents. The only important point in diagnosis which could not be decided was whether the growth was malignant or simply cicatricial. The patient was prepared for operation as follows. On the 3rd of March the bowels were thoroughly cleared out by a saline purge. On the 3rd and 4th she was allowed only peptonized milk (three pints daily), and the stomach was washed out twice daily with warm water. The last food was given by mouth at 5 o'clock p.m. on the 4th, and the stomach was washed out at midnight with a boro-salicylic solution (Thiersch's). This was repeated on the morning of the 5th and again at 12.30 p.m., just before operation, the last washing being very thorough. The patient had two enemata of peptonized beef-tea on the morning of operation, the last being at 12 o'clock, and consisting of four ounces (the first of five ounces, at 8 o'clock a.m.). Her weight was 95 lbs. When the stomach was emptied the tumour was found to have receded up beneath the lower costal margin, and was only evident on expiration, when it came down below the border of the ribs. The patient

was etherized and an incision made in the median line from near the ensiform cartilage to the umbilicus. The stomach was drawn up through the wound, when it was found that the tumour consisted of an infiltrating growth of the stomach wall at the pyloric extremity, involving its whole circumference and more than a third of the organ in length. There were no adhesions and the growth was sharply defined by the pylorus, the duodenum being quite free. Hard, infiltrated and enlarged glands were found in the gastro-hepatic-omentum, the mesentery, and behind the peritoneum (retro-peritoneal glands). The tumour was evidently carcinomatous, and the disease had spread widely along the neighbouring lymphatics. On this evidence the question of excision of the growth was promptly negatived and the decision arrived at to establish an anastomosis between the stomach and the jejunum. The transverse colon and the great omentum were drawn upwards and the jejunum found without any difficulty. It was then approximated to the anterior wall of the stomach about an inch above the greater curvature, and an inch and a half beyond the margin of the growth. They were attached by a curved line of fine silk sutures (continuous), including the peritoneal and muscular coats only, which was intended to strengthen and perfect the approximation of the peritoneal surfaces below the inferior borders of the incisions. (These sutures could not be introduced after the rings had been inserted.) A longitudinal opening about $1\frac{1}{2}$ inches long was now made into each viscus about a quarter of an inch above the line of suture, which brought the incision in the jejunum to within a quarter of an inch of its free border and about 8 or 10 inches from the end of the duodenum. There was free bleeding when the incisions were made, but this was arrested as soon as the rings were introduced and a little pressure made upon them. Abbé's catgut rings were now inserted, each having an opening $1\frac{1}{2}$ inches long. The surfaces were then brought together and the threads tied, and another line of Lembert sutures was carried along the superior border of the rings to connect with the extremities of the one already introduced. Towards the pylorus this was continued for about an inch to prevent the too abrupt flexion of the distal extremity

of the bowel. These manipulations were conducted practically entirely outside of the abdomen, and the whole operation, from the first incision until the closure of the abdominal wound was completed, occupied fifty-six minutes. The anastomosis was completed in forty minutes. The original intention was, of course, if the condition of the parts had justified it, to excise the pyloric end of the stomach, invert the edges, and close the wounds in both stomach and duodenum, and then to establish the anastomosis as above described. As already stated, the intention of excising the tumour was abandoned on account of the extensive involvement of the neighbouring lymphatics. The patient's condition remained good throughout the operation. She was allowed nothing whatever by the stomach for 48 hours. She was then allowed a little water and a little peptonized milk alternately in gradually increasing quantities. On the fifth day she was allowed plain milk, and on the eighth day chicken broth and porridge. For three days after operation the beef-tea enemata were continued, and for the first 48 hours saline injections were given by rectum to relieve thirst, which was not excessive. Patient had a small stool on the night of the 5th (day of operation), and passed flatus by rectum freely next day. On the 7th there was some hiccough and patient vomited twice small quantities of dark liquid with a heavy, offensive odour (not faecal). Bowels moved again in the night.

March 8th.—Coughed some during the night. Vomited once 18 oz. of yellow liquid with offensive odour. Temperature, which had hitherto been normal, rose to $99\frac{1}{2}^{\circ}\text{F}$.; pulse also rose to 100. Bowels moved three times. Complained of great pain in right side of pelvis after last enema.

9th.—Patient much disturbed by cough, otherwise comfortable and inclined to sleep. Bowels moved once. Pulse 108; temperature 101° .

10th.—Cough very troublesome. Bowels moved three times. Patient slept well in intervals of coughing. Temperature reached 100° ; pulse 96.

11th.—Cough continues troublesome. Temperature reached 99.2° ; pulse 108. Patient slept well.

12th.—Temperature 99° ; pulse 108. Patient comfortable except for cough.

13th.—Temperature $98\frac{1}{2}^{\circ}$, pulse 104. Patient slept well; still coughing.

14th.—Vomited porridge, first vomiting since the 8th (five days). Slept well. Temperature reached $99\frac{1}{2}^{\circ}$; pulse 104.

15th.—Vomited again. Slept well.

16th.—Vomited 28 oz. fluid. Temperature 99.3° ; pulse 110.

17th.—Patient woke up in the night complaining of severe pain in the abdomen, which lasted 25 minutes. Slept two hours and awoke feeling cold, but had no chill nor rise of temperature. Pain continued at intervals. From this time till the afternoon of the 24th, when she died, the course was gradually downwards. Pain, requiring morphia for its relief, weakness, emaciation, some vomiting (not frequent nor severe), cough and perspiration were the symptoms observed. The pulse became weaker and ranged from 100 to 112, and the temperature remained practically normal, sometimes reaching 99.5° .

There were thus two distinct events occurring in the twenty days during which the patient lived after the operation. First, a troublesome cough coming on on third day, accompanied by rise in temperature and rapidity of pulse, but which gave rise to no physical signs; and second, sudden seizure of pain in the abdomen on the night of the twelfth day after operation, at which time I have no doubt the fatal peritonitis began.

The following is Dr. Lafleur's report of the autopsy made four hours after death:—

Report of Autopsy in Case of Carcinoma of Stomach Operated on by Dr. Bell.—"Body emaciated, sallow and anæmic. Visible tumour in right hypochondrium and epigastrium. Linear scar in median line, in epigastrium and upper umbilical regions. On opening peritoneal sac the peritoneal coat of the intestines was found reddened and turbid. Loops of small intestine adherent to the floor of the pelvis. Adhesions recent, and composed of yellowish fibrinous material; a few fragments of the same material were found on the surface of the spleen. A firm tumour mass, freely moveable, occupied the pylorus and the part

of the stomach immediately adjoining it. The operation-wound between the first portion of the jejunum and the lower and anterior part of the stomach was completely united and in a healthy condition. The jejunum, a short distance above the anastomosis, is adherent to the transverse colon, and, on tearing through a few recent adhesions, a small pocket of thick, yellowish-green pus, about 2×1 inches, was exposed, which lay partly in the meso-colon, which was thickened and infiltrated. In doing this a portion of the proximal jejunum, which was softened and necrotic at this point, was torn away. At this point the end of the duodenum appears to have been twisted into a sharp S-shaped curve, and was slightly strangulated. On opening the stomach the little finger could be forced with some difficulty through the pyloric orifice. This and a portion of the wall of the stomach were occupied in their whole circumference by a firm, pinkish-yellow, infiltrating mass of new growth. The exposed surface of this was irregularly nodular, and showed in places a distinct loss of substance. On section it involved all the coats of the stomach, was firm and resisting, and of a yellowish-white colour. The opening between the stomach and jejunum measured $1\frac{1}{2} \times 1$ inch, and was perfectly patent. Around the edges, in the stomach, and in the jejunum were the remains of the plates used at the operation; the plate in the stomach was still firm and scarcely altered in three-fourths of its periphery, while the plate in the jejunum was disintegrated and soft. The duodenum, from the pylorus to the point of constriction above-mentioned, was moderately dilated, and contained fluid material of a greyish-yellow colour. The lymphatic glands nearest the tumour were slightly enlarged and infiltrated, and were somewhat firm and of a yellowish-grey colour. There were no metastases in the liver, kidneys, spleen, lungs or peritoneum. The spleen was enlarged and soft. Cover-slip preparations from the small abscess cavity showed a variety of bacteria, chiefly short, thick bacilli in pairs, longer, thick bacilli, and a few cocci. There were no chain-cocci observed. The absence of stitch-abscesses and the healthy condition of the anastomotic wound, the appearance and diversity of the bacteria found in the pus, the late

development of peritonitis, and the occurrence of an abscess in proximity to a necrotic portion of the intestine, point to infection from the intestinal tract. The microscopic examination of a portion of the tumour shows it to be scirrhus."

The peritonitis, which was the direct cause of death, was not due to any failure in the technique nor to any yielding of parts and escape of contents. In fact the union is particularly good, as the specimen shows. According to Dr. Lafleur's explanation, it was due to kinking of the first part of the jejunum from having been doubled up too acutely upon itself. This is an interesting observation, as the rules laid down are to unite the jejunum as high as it can be attached without dragging. Ten and twelve inches are mentioned in several reports of successful cases as the point of attachment. In others where the jejunum could not be easily found, any convenient loop of small intestine has been attached. In one such case, mentioned by Lauenstein of Hamburg, the patient died of inanition, and at the autopsy the loop of bowel attached was found to be the lower part of the ileum. In the case which I have just reported, I judged that the incision was made about eight or ten inches from the end of the duodenum. There was no dragging, and the loop seemed quite long enough and showed no tendency to acute bending or kinking. Probably if I had continued my line of suture along this loop, as I did along the distal end to form a spur, the fatal result might have been averted. I cannot help thinking, however, that the acute bending of the bowel may have been due to some special cause—possibly, for instance, the regurgitation of part of the fluids taken into the stomach backwards into the duodenum, and the dragging of this weight especially during the paroxysms of coughing which began on the third day. The dilated condition of the duodenum shows that such regurgitation occurred, and, in fact, it cannot fail to occur in this operation. Again, it is, I believe, a recognized fact that patients in advanced malignant disease are more prone to inflammatory attacks of this kind.

There was in this case no room for any choice of operation. Had the growth been cicatricial and non-malignant—a condition

which before operation we felt that there were some reasons for hoping that we might discover—Loreta's operation of dilating the pylorus or the operation of incision and transverse suture would have claimed consideration in selecting the best method of re-establishing communication between the stomach and the intestines. As it was, however, having decided not to remove the growth, it only remained to establish the connection by lateral anastomosis, and for this purpose I used Abbé's catgut rings, which seemed to me to be the best of the various devices of the last few years for approximation purposes.

The operation recommended by Dr. Bernays of St. Louis of curetting the pylorus in malignant disease would have been quite impossible in this case owing to the great density and firmness of the growth, even if it could, under any circumstances, be considered a scientific or justifiable operation. This method of approximating the hollow viscera by means of plates or rings, which was introduced by Senn and adopted, until quite recently at least, by most American surgeons to the almost entire exclusion of other methods, has, since writing the above, been discussed in the New York Academy of Medicine. The reports of the discussion show that a number of objections were urged against the use of plates and rings and the method generally, while the tendency seemed to be towards a return to the older method of direct union, or, in suitable cases, lateral anastomosis by suture alone.

IS CANCER ON THE INCREASE IN CANADA ? *

By WM. B. PLAYTER, M.D., OTTAWA, ONT.

There would be no practical gain in considering the various theories and surmises prevalent at the present day with reference to cancer. Every member of the Association has the opportunity of reading up the whole subject; and, in fact, in the present condition of our knowledge of cancer, one medical man knows as much as the other with reference thereto.

What may be the bacillus or fungus, or whether is it due to either or both? Whether is it a general or local disease, or both? What is its family relationship to other diseases and diatheses? These and many other points have yet to be settled. Therefore they are not worth wasting our time about till the theoretical experts have settled on something definite.

It seems pretty well settled that cancer is on the increase in Great Britain. Is it also increasing in Canada? Of course, in considering the mortuary statistics, due allowance must be made for the imperfect way in which the *earlier statistics* were kept—for errors and uncertainties in diagnosis, and for general carelessness in reporting cases.

In getting at a correct answer to the title-question of this paper, I believe the members of the Association will agree that this is not a question of mere curiosity, but one, the answer to which has a direct bearing on the mental and physical welfare of many. In the official statistics we get the answer we are looking for. I would ask you to look into them. I must thank the officials at Ottawa for their kindness in furnishing information required.

<i>Population about the years</i>		<i>No. of deaths from cancer.</i>		
	1883.	1891.		
Montreal	200,000	216,000	109	86
Toronto	166,090	181,226	55	67
Quebec	64,000	63,090	Not given. } 1884-88	
Halifax	40,000	38,556	33	21
St. John	30,000	39,179	15	6

The Ratio per 1000 of Population for the Years

	1883.	1891.
Montreal .....	.545	.39
Toronto .....	.331	.36
Quebec .....	.594	.42
Halifax .....	.825	.54
St. John .....	.5	.15

I have commenced with the 1883 statistics, because they are the first reliable statistics since the Dominion was formed. It will be evident that cancer *has not* increased to any great extent.

I have given the statistics of the few representative places simply to keep the members of the Association from using bad language. The general results, however, as to percentage of deaths to population is much the same when taken over a larger area. Much might be written on this subject, but my object has been accomplished should I succeed in gaining the attention of some who may study the mortuary statistics of cancer more carefully.

Reviews and Notices of Books.

The Supreme Passions of Man: or, The Origin, Causes and Tendencies of the Passions of the Flesh. Setting forth the results of scientific inquiries into the appetite of mankind and the passions which they excite. A study of the crimes of the flesh and the efforts of Christianity to maintain purity. An essay on the true causes of drunkenness and the only way to prevent this evil. Observations on the relation of vice to the laws of nature and the existing educational systems. By PAUL PAQUIN, M.D., etc., editor of the "Bacteriological World," Director of the Laboratory of Hygiene, Battle Creek, Michigan. Published by The Little Blue Book Co., Battle Creek. 1891.

This book is the result of an attempt on the part of a modern medical biologist to show the relations between the passions and the mode of life, especially the diet, of man. It is high time morality was given a biological basis, or, to put it otherwise, that the dependence of the whole of the psychic nature of man on the physical was clearly pointed out; and we agree with the writer of this book that when such is the case the actual moral condition of men can be approached by reformers with weapons of which they are now ignorant. The noble earnestness of this little book cannot fail to impress every reader, and we have reason to feel proud that this work has been undertaken by a member of the medical profession, a profession fitted, above all others, to deal in a special and effective way with the failings of men. A few more lay sermons of this kind could not fail to do a vast amount of good; and if in every large city the physicians could be induced to give a course of medical or biological discourses with a moral bearing, we venture to believe that more might be accomplished than the pulpit, unaided, has yet effected, or ever can, by pure moral suasion of the sort which has held sway for so long. It is good so far as it goes, but it overlooks too much in human nature.

Dr. Paul Paquin has deserved well of his day and generation

by his noble appeals, based as they are, in the main at least, on sound science and equally sound sense. The book is cheap and should have a large sale.

W. M.

Bacteriological Diagnosis. By JAS. EISENBERG. Translated from the second German edition by NORVAL H. PIERCE, M.D. Philadelphia: F. A. Davis Co. 1892.

This work is too well known by bacteriological workers to require any commendation from us. We regret to see, however, that the translator has only given us the English version of the second German edition of 1887, instead of bringing it up to the third edition published some years later. In a rapidly advancing science like bacteriology this is a serious fault, and will render the book almost useless to investigators. An appendix of the technique used in the cultivation and staining of bacteria will prove of value for ready reference.

A Dictionary of Treatment, or Therapeutic Index. Including Medical and Surgical Therapeutics. By WM. WHITLA, M.D. Philadelphia: Lea Bros. & Co. 1892.

This book, originally intended as a therapeutic index to accompany the author's work on Therapeutics, has grown into a useful summary of the weapons, medical and surgical, with which we can attack disease. As implied by the title, the arrangement is alphabetical, under the heads of various diseases. Every page reflects the author's experience, although due prominence is given to the works and opinions of others. The subject of diet receives much attention throughout, and many useful hints are given under this important head. Most of the newer remedial agents receive consideration, but a wise conservatism is shown in the use of the older and well tried drugs which have stood the test of years. Thus digitalis is shown to still hold its position as the best cardiac tonic; the alkalis are regarded as useful adjuvants to the salicylates in rheumatism; and opium stands first in the list of remedies for diabetes. The use of baths in typhoid is regarded with favour, although the author does not quote any personal experience, and no reference is made to their

beneficial action on the nervous system in promoting sleep and preventing the appearance of the typhoid state. Where so much ground is covered it is impossible not to find certain points which might have been more fully treated. We miss any reference to the treatment of uræmia by morphia, or to the effects of cold water in the hyperpyrexia of rheumatism. Poultices are still recommended to "draw" deep-seated peri-typhlitic abscesses to the surface—a practice which, we think, is now universally condemned on this continent.

The book is of convenient size, fairly printed, and cannot fail to prove of great value to both practitioners and students.

A Manual of Diseases of the Nervous System.

By WM. R. GOWERS, M.D., F.R.C.P., F.R.S., Consulting Physician to University College Hospital; Physician to the National Hospital for the Paralyzed and Epileptic. Second Edition. Revised and Enlarged. Volume I.—Disease of the Nerves and Spinal Cord. With one hundred and eighty illustrations, including three hundred and seventy figures. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street, 1892.

In reviewing the first edition of Dr. Gowers' work on the Nervous System we have had no hesitation in saying that it was the most important volume on the subject up to that period published. We have much pleasure in saying the same of the first volume of the second edition. Many additions have been made to the new issue, and the whole has been thoroughly revised. It is devoted to Diseases of the Nerves and Spinal Cord. A very elaborate article on multiple neuritis, extending over fifty pages, gives the most recent and fullest information on this interesting and important disease. It is a striking fact that the voluminous literature of multiple neuritis has all been written within the past ten years. Previously all such cases were diagnosed as of spinal origin. The literature of nervous diseases in the past is, as a rule, only interesting historically.

The second part of the volume, dealing with the spinal cord, opens with a full account of the most recent researches in the anatomy and physiology of this part of the nervous system.

Nearly every page relating to the diseases of the cord shows that the author has spared no pains to present his subject in accord with the most recently acquired knowledge. Syringomyelia and the muscular dystrophies receive special attention.

The work is one which the practitioner can consult with the greatest confidence. He will always be able to find all that is really known up to the present time on those diseases. As pointing to the great worth of Dr. Gowers' work and its appreciation by foreigners, we may mention that a German edition of the second revision has just been published by Cohn of Bonn, and we understand that an Italian translation is also nearly ready. The American publishers are to be congratulated on the excellent form in which they have brought out the work.

Manual of Physical Diagnosis. For the use of Students and Practitioners. By JAMES TYSON, M.D., Professor of Clinical Medicine in the University of Pennsylvania, Physician to University Hospital. Philadelphia: P. Blakiston, Son & Co. 1892.

Professor Tyson, from his extensive experience as a clinical teacher, is well qualified to write a work on Physical Diagnosis. This small volume will prove especially valuable to students. It is clearly and well written, and will in all probability become as popular as the author's well known work on the urine.

Diseases of the Nervous System. By J. A. ORMEROD, M.D., F.R.C.P., London, Medical Registrar and Demonstrator of Morbid Anatomy at St. Bartholomew's Hospital; Physician to the National Hospital for the Paralyzed and Epileptic, etc. With numerous illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1892.

The author modestly says in his preface that he makes no claim for his work as a substitute for the elaborate treatises dealing with this part of medicine. It is only an "introduction and outline map of territory to be acquired." It is, however, an excellent outline for both student and practitioner. The in-

troductory part dealing with the normal and morbid anatomy of the peripheral and central nervous system is especially worthy commendation. The illustrations, many of which are original, are numerous and well executed. The work is one that will be popular with students, as it is free from many of the serious objections to outlines.

The Year-Book of Treatment for 1892. A Critical Review for Practitioners of Medicine and Surgery. Philadelphia: Lea Brothers and Co. 1892.

We gladly welcome this useful volume. It is in every respect an excellent summary of the work done in general medical and surgical therapeutics during the past year. The names of the writers is a sufficient guarantee of the quality of the work. Diseases of the heart and circulation are dealt with by Mitchell Bruce, diseases of the lungs by Markam Skerret, diseases of the nervous system by the late lamented Ross of Manchester and Ernest S. Reynolds, etc., etc.

A Practical Manual of Diseases of the Skin. By GEORGE H. ROHE, M.D., Professor of Materia Medica, Therapeutics and Hygiene, and formerly Professor of Dermatology in the College of Physicians and Surgeons, Baltimore, etc., etc.; assisted by J. WILLIAMS LORD, A.B., M.D., Lecturer on Dermatology and Bandaging in the College of Physicians and Surgeons, Assistant Physician to the Skin Department in the Dispensary of Johns Hopkins Hospital. Philadelphia: The F. A. Davis Co., Publishers, 1231 Filbert street. 1892.

Is there a teacher of dermatology and syphilis who has not written a book on the subject? Hardly a month passes by without a new work on these subjects appearing. This little handbook, though not urgently needed, puts the subject in a concise and readable form for students who have so little spare time to devote to such a special subject as dermatology. There is now a large choice of these books, and the one under consideration is quite up to the average.

The Diseases of the Skin. A Manual for Practitioners and Students. By W. ALLAN JAMIESON, M.D. Third edition. Philadelphia: Lea Brothers & Co. 1892.

This work is one that reflects great credit on the author, who is well known as a teacher of, and writer on, skin diseases. His connection with the Edinburgh Infirmary and the Edinburgh School of Medicine well fits him to write a successful work on this subject, and the fact that three editions have been called for in less than four years is a proof of the value of the work and of the uselessness of an extended review. Notwithstanding all this, the book is not suited for a text-work for students, because it is incomplete, many subjects being left out—*e.g.*, sarcoma of skin, drug rashes, ainhum, etc. Many affections are merely alluded to and not fully described. However, the author has succeeded in writing a most excellent book, well written and easily read. He follows Unna to a large extent in treatment, and quotes Mr. Jonathan Hutchinson frequently. He seems to have an accurate knowledge of the work done in America in this department of medicine, a knowledge which is not very widespread in Europe. Mr. Jamieson has his own opinions on disputed points and is not afraid to state them, and it can be easily seen that this work is the result of personal observation and experience. The book is illustrated with large coloured plates, whose usefulness is rather marred in many cases by the folding of the sheet in the middle. There is a good index of authors and subjects, which greatly adds to the convenience of the reader.

A Manual of Venereal Diseases. By EVERETT M. CULVER, M.D., and JAS. R. HAYDEN, M.D. Philadelphia, Lea Brothers & Co. 1891.

This is a useful epitome of venereal diseases and their treatment. The literature of this subject is already a large one, and this little work, although no doubt useful to students, will not add much to our knowledge of venereal diseases. There is no new matter; more than half the book is taken up with gonorrhœa and its complications, and the rest is on syphilis. The

first part is by Dr. Culver and the second by Dr. Hayden. The various lesions of syphilis are described methodically, each system, as nervous, vascular, digestive, respiratory, etc., being taken up *seriatim*. The book is nicely printed, with good index, and well illustrated with cuts of the various instruments employed by the authors. Students and practitioners who are fond of small handbooks will find this one better than those usually foisted upon them.

Selections.

HEALTH STATISTICS.

WHAT ABOUT FREE REPORTS? AN ADDRESS TO THE MEDICAL PROFESSION OF CANADA.

(For the Montreal Medical Journal.)

Robert Farquharson, M.D., M.P., long a prominent member of the Parliament of Great Britain, at the late seventeenth annual congress of the Sanitary Association, of which he is president, said "the foundation of all effective progress in preventive medicine must be education." Indeed it has now been found out in Great Britain that much greater progress can be made by educating the masses than by trying to coerce them.

In Canada, our Provincial Legislatures may enact laws, and local Boards of Health may be organized by hundreds, and although all this is a good beginning and essential, much more still remains to be done. Sanitary work is but begun when good laws are passed and local boards organized. These do not create the public realization of their usefulness. Health acts are now in advance of the public feelings. The people often instead of welcoming them take their enforcement as an intrusion and interference with individual rights and liberties. The masses of the people are not disposed to inconvenience themselves by keeping their body and premises clean and their infected family isolated to gratify the whim of their neighbours or even their law makers. They require to be taught that compliance with health rules and regulations will be a direct benefit to themselves, yea, money in

their own pockets ; that non-compliance with such rules and regulations is the cause, indeed the only cause, of disease, with all its attendant pains, expenses and loss of time ; that wherever there is a high mortality or a high sickness rate, there surely will be found unsanitary conditions or environments which demand attention.

In this education of the people, although not at all akin to the education of the schools, it is very desirable that a spirit of emulation be stirred up, in order that the various districts or municipalities shall vie with each other in showing a low death-rate, and a "clean bill of health" by keeping themselves free from epidemic and other diseases.

It is and has long been the universal opinion of sanitarians that the basis of all public health, work, and progress, both educational and coercive, is a system of health statistics—of births, marriages and deaths. Beyond this, it has become clear, in recent years, that for the best, or even fair, preventive progress, statements or reports (not exactly statistics, for they cannot practically be complete or accurate) monthly or oftener, of prevailing diseases, especially of any outbreak or cases of infectious disease of importance, are absolutely essential. It will not do to *wait* for the *death* returns. Not only the local boards, but the central organization should be early informed of any such diseases.

Returns and records of these statistics and reports or statements of prevailing disease would form a most valuable record, year after year, for the Federal (the Canadian) Government to possess, but to be of practical value, the information obtained from month to month, or oftener, especially of prevailing diseases, must be scattered freely amongst the people, at least monthly, as by means of a bulletin. These reports not only show where unsanitary conditions need attention, but they give rise to the desired spirit of emulation amongst the different municipalities. Every community, then, would have a strong tendency to endeavour to prevent, as far as possible, any outbreak of disease each in its own respective locality, and to preserve a "clean bill of health," as ships at sea usually desire to do, for their own credit.

Now it must be obvious to anybody, even if he be not versed in political economy, that it would be much more economical, on the whole, for but one centre in Canada, the Federal Government, to carry on this work of collecting statistics and reports, recording them, and issuing a bulletin of their condensed facts, etc., than for each province to do so on its own account, while the results in the former case would be incalculably better. If done by the one central government, all the information obtained would be in one central Canadian record, and, more important still, the information conveyed by the returns would then be distributed throughout all the provinces; done by each province, each would only collect and distribute within its own boundaries, except, perhaps, to a few outside officials; and the people of each would therefore only receive and obtain the information gathered within and relating to their own province. Whereas, it is almost as essential for the Eastern or Western provinces, for example, to learn in what special localities any epidemic or prevalence of disease exists in Ontario or Quebec, as in their own provinces, while the same principle holds good with regard to Ontario and Quebec in relation to the East and West. In short, if done by the one centre, all the provinces would get the good of all the information obtained; if done by each separate province, each would only get that relating to itself—a vast and most vital difference.

There appears to be a good deal of misapprehension amongst members of the profession relative to this question of federal and provincial public health legislation and action, arising apparently from want of time amongst the busy practitioners to consider thoroughly the whole question in all its bearings. Coercive legislation, enactments, by-laws, etc., and the carrying out of the same, must remain as now under provincial and municipal control. But any one who will give the subject due thought and consideration will surely see that the collection of the proposed statistics and reports and utilization of these for the public instruction and benefit, as above indicated, can be much more thoroughly, economically and profitably done by one centre than many, with vastly better result in every way. In agriculture,

the one Central Experimental Farm can be utilized for the education of the farmers of the whole Dominion much better than for each province to sustain such a farm and attempt the instruction separately. Somewhat similar it is in relation to the analysis of food, etc., in the Dominion; and to the quarantines and diseases of animals. Moreover, it may be well to note here that, if we desire to make Canada as soon as we can the great country she is surely destined to become, while defending in a large measure provincial rights and privileges, we must as far as possible encourage a spirit of Canadianism, a unity and oneness, in all possible questions and subjects and not manifest too much "provincialism."

As already in several of the provinces there is in a large measure provision for obtaining a record of births, marriages and deaths, it has been well suggested that, at least for some time to come, each province may as well in its own way collect such statistics and then allow them on some terms to be utilized by the central department and dealt with for the public benefit in all the provinces: those provinces which have not now a system for this purpose being induced in some way to provide such.

It appears that it is now proposed to endeavour to obtain for the statistical department in Ottawa the information above indicated, from physicians in all parts of the Dominion, relating to the prevailing condition of the public health—*i.e.*, reports of any epidemic or cases of the most important diseases, by providing the physicians with blanks for this purpose. Doubtless the Government, any liberal government, would be quite willing to pay fairly for such reports, if the people through their representatives in parliament were willing to vote the money for the purpose. Are the people willing? Many members of parliament, including at least one physician, say, decidedly no; that if they were to vote for a sum requisite for such purpose they would be censured by their constituents. Then we can only, or must, first of all, educate the people up to a right appreciation of the importance and necessity for such information. They will then doubtless be willing to pay fairly for it.

Now this is largely, almost wholly, in the hands of the medical

practitioners of Canada : what will they do in this behalf ? It has been repeatedly said by a few of them that physicians now do too much without remuneration, more than their share, etc., and that the government, the people, *i.e.*, of course, should pay for all such information. This is very true ; the people should pay ; but as it is now, they will not pay, at present. Shall we not then endeavour not only to teach them the value of having it done for their own sakes, but also to be willing in course of time to pay for the same ?—teach them without pay, for a time ? What else can be done ?

Medicine, it may here be observed, is not a business, but a liberal profession, perhaps the most liberal of all the professions, once chiefly practiced free by the priesthood. Is not the profession, nor are not the members of it as a class, worthy and desirous that it shall ever remain thus liberal, free, noble, bounteous ? The physician gives what cannot be weighed or measured, and hence well estimated as to its money value. He must, however, get a livelihood for his family, and in this business age a certain amount of business energy is necessary. As the *New York Medical Record* (Jan. 15, '92) says : The physician's sympathy for the suffering, and his absorbing interest in the scientific aspects of his cases, raise his mind above financial considerations, and cause him to forget that he is working for the support of himself and his family, as well as for the good of humanity. The physician has furthermore, as a rule, an inborn repugnance, or incapacity, for money-making pure and simple. He dislikes the financial relations and would gladly treat patients without a thought of fee, if he could be guaranteed an income to supply the needs of his family. Owing to this shrinking from even the appearance of being mercenary he often hesitates to prosecute his just claims.

No one knows better than the writer how much has already been done by the medical profession in Canada in promoting and advancing the public health interests in the Dominion. It has always been foremost in this work, and indeed all sanitary progress is due to its efforts. Will physicians not now, "one and all," continue thus liberal, and not allow the question of "pay"

to influence them to the neglect of any public benefit or scientific proceeding?

Colton, it appears, long ago said, "Physicians are becoming too mercenary." But he wickedly added, "parsons too lazy and lawyers too powerful."

Notwithstanding the influence which wealth now gives, there is that which wealth cannot purchase or procure. If the profession desires to retain its high position, or to push itself up to its proper place in society, as the first of all professions, the members of it must not approach the "mercenary," although they may properly and should place a high value on their services with all those who are able and especially not unwilling to make full returns for the same.

When an effort is made, as it may be, to obtain a fair recorded return from the medical practitioners of Canada of the general condition of the public health, especially as relating to infectious or malarial diseases in their respective localities, hundreds will doubtless cheerfully respond to the calls of science and the public weal. Will they not all do so? Many earnest workers for the public good will hope so, and trust. When the work has been done for a time and the value of it has been manifested, proper representation of it to the government and the people will doubtless bring the reward. The great majority of the masses of the people prefer to pay fair, full value for all or anything they receive from their fellowmen; although it may not be always easy to get them fully awakened to an appreciation of the value of some services.

There are always a number of able "medical members" in the Parliament of Canada who look to the interests of the profession, and the profession may be sure that so soon as the public will sanction a vote of money to remunerate physicians for such public service as making returns of sickness for the public good—in the cause of the public health, such vote will be urged upon the Government by the medical members and asked for in the estimates by the Government. Cast our "bread upon the waters"; it will surely "return."

EDWARD PLAYTER.

REMARKS ON TRACHEAL TUGGING AND ON ITS
CLINICAL VALUE.

BY WM. EWART, M.D. CANTAB, F.R.C.P.

Owing to the circumstance that Dr. Grimsdale's able and suggestive thesis was, of necessity, a strictly separate production, towards which nothing beyond a series of observations conducted by myself, and very kindly recorded by Dr. Grimsdale and by Mr. L. Moysey, and various incidental remarks made as the occasions arose, was contributed from me, it differs in some particulars from the account which I had intended giving of the investigation. I therefore desire to state as clearly as possible, and without entering into much detail, the leading points in the inquiry, and the main conclusions arrived at by me.

At the time when Mr. MacDonnell's paper called attention to the subject, I had under treatment in St. George's Hospital a case of inveterate cough and bronchial catarrh, beginning, so, I thought, with gouty bronchitis, and presenting the usual signs. Up to that time, neither by myself, nor, as far as I gather, by anyone else, had any suspicion of aneurysm been entertained. The existence of aneurysm of the arch of the aorta was at once revealed to me when I applied Dr. Oliver's test, and shortly after the treatment had been modified, the cough and the noisy *râles* abated, and dulness and tubular breathing could be recognised in the interscapular region and to a very slight extent in the right infraclavicular space also. The patient is still in bed, and presents several obvious signs of aneurysm, but no pulsation. He owes his improved health and probably his life, through Mr. MacDonnell's agency, to Dr. Oliver.

Since that date I have regarded "tracheal tugging" as an important aid to diagnosis; and hearing that its value was doubted owing to its presence to some healthy persons, I was led to inquire into the frequency of its occurrence, independently of aneurysm, in the two sexes, at different ages, and under various states of health. With this inquiry I combined observations as to the relative value of Dr. Oliver's method of eliciting the sign, and of that which I had happened to devise and to use from the first.

The Method of Examination.—The process recommended by Dr. Oliver is as follows:—“Place the patient in the erect position, and direct him to close his mouth and elevate his chin to the fullest extent, then grasp the cricoid cartilage between the finger and thumb, and use gentle upward pressure on it, when, if dilatation or aneurysm exist, the pulsation of the aorta will be distinctly felt transmitted through the trachea to the hand. The act of examination will increase laryngeal distress, should this accompany the disease.”

I have carefully recorded the patients estimates of the relative discomfort of the two methods. Those with soft and tender larynx (chiefly women and children) were about evenly divided in favour of one and in favour of the other. Many others, including even some children, were quite free from discomfort under examination; and this was almost invariably the case in subjects of mature age, with stiffened cartilages. The second method has one disadvantage affecting the observer—that it is almost too delicate, the fingers appreciating the slightest traction, whilst accuracy of observation is favoured by the patient's head being firmly steadied.

The Occurrence of Tracheal Tugging in the Absence of Disease of the Aorta.—Sixty male subject and fifty-seven females were examined with both methods. In 28 per cent of the females and in 50 per cent of the males, some degree of “tracheal tugging” was recognised, the higher percentage in the males being partly accounted for by three cases of aneurysm, which gave the tug, being included in the list. This unexpected frequency appeared to detract from the diagnostic value of the sign; but, in reality, a large majority of the cases were described as “doubtful or very slight, a few as “moderate,” and three only as “marked;” and these were the three cases of aneurysm. In none of the females was the tugging pronounced, and in several it was present only during excitement.

Although, in a modified sense, Dr. Oliver's views had been confirmed, yet the upshot of the inquiry was to show that the significance of the sign was not so simple a question as had been stated originally, and, that, before any final conclusions could be drawn, much more numerous observations were needed than I had had leisure to make. It had also come to light that some account must be taken of the personal factor

in the perception of the slighter degrees of tugging, and in the appreciation of their value.

Circumstances Influencing the Occurrence or the Degree of Tugging.—Early in the inquiry I had suspected that thoracic conformation and the size of the lungs might have some connection with the existence of this peculiarity, and I had imagined that a short thorax and pulmonary emphysema might favour the occurrence of tugging. These were only suggestions, which I have not had an opportunity of putting to the test. Two points were very clearly made out—(1) the favouring influence of cardiac excitement (this was most obvious in several females), and (2) the favouring influence of forcible inspiration. The former might have been expected. The latter is, I believe, explained by the stretching of the air passages as a whole during inspiration, and particularly by the slight inspiratory descent of the larynx, which perceptibly intensifies the traction already made on the cricoid by the observer's fingers. In anticipation of remarks which are to follow on the subject of the probable mechanism of the tugging in aneurysm, it may be provisionally stated that in that disease tugging, when present, has been, in my experience, unmistakable and easily obtained even with so rough a method as tilting the cricoid cartilage on the tip of a single finger or thumb placed in the middle line and whilst the patient remained in the horizontal position.

The Value of Tracheal Tugging in the Diagnosis of Thoracic Aneurysm.—I have related an instance in which Oliver's sign led to the diagnosis of aneurysm and to its proper treatment. The following is an instance of the failure of diagnosis in a case where this method was not employed:—

“A middle-aged man was admitted under my care suffering from severe dyspnoea, universally audible *rales*, and abundant, thin, frothy, mucopurulent expectoration. He was supposed to be the subject of asthma and bronchitis. The chest was everywhere hyper-resonant, and the loud *rales* precluded a satisfactory examination of the heart. In the absence of any other indication the case was diagnosed as one of acute bronchial catarrh complicating pulmonary emphysema. My attention having of late been engaged with the subject of aneurysm, the thought that the patient's symptoms might be due to aneu-

rysmal pressure on the trachea arose vividly after I had finished my rounds, and I returned to the hospital in the later afternoon for the purpose of detecting aneurysm if it could be traced. This was in vain ; no further information was yielded by the chest ; an internal examination of the larynx was out of the question ; and no collateral signs threw any light on the case. The diagnosis was not made, but the necropsy, which occurred two days later, proved that my suspicion had been correct, though the means of diagnosis were at fault. The patient had died from the pressure of an aneurysm of the arch of the aorta on the trachea and bronchi. Had I had the additional help of a sign such as tracheal tugging (but this was long before the appearance of Professor MacDonnell's paper) the case would most probably have been correctly diagnosed."

Similar instances must be within the experience of most hospital physicians. They form a distinct class, in which Oliver's test is indispensable, because it may supply confirmatory evidence for a diagnosis which otherwise would be pure guess-work, and because it can be applied, even in the worst cases, without danger or distress to the patient. In my opinion, the value of the test is not destroyed by the fact that slighter degrees of tracheal tugging are to be observed in a large number of healthy individuals.

Two important questions will require for their solution further observations and careful study: (1) Can an aneurysm of the arch of the aorta be present without yielding Oliver's sign ? and (2) Is tracheal tugging ever strongly developed, except in cases of aortic aneurysm or dilatation involving the transverse portion ?

Professor MacDonnell has shown, and I am now able to show, that aneurysm of the ascending aorta does not necessarily occasion tugging. This, again, might be thought to lessen—my own impression is that it raises—the practical value of the sign. In these cases the difficulty does not reside, as when the disease is limited to the transverse portion, in the discovery of the aneurysm, but in an estimation of its size. What we want to find is whether the aneurysm does or does not involve the arch of the aorta also. If strong tugging could only be produced by disease of the transverse portion its localising value would be in proportion to this strict limita-

tion; and we should derive from its occurrence in disease of the ascending portion most important information.

I have at the present time under treatment two cases of aneurysm of the ascending aorta, with pulsation in the right third intercostal space, between the nipple line and the sternum. In one of these men marked tracheal tugging occurs; in the other (whose pulsating tumour was rather larger than that of the first) it is completely absent. How do these two aneurysms differ in size and in shape? Do they both, or does only one of them, implicate the arch? Tracheal tugging may in the future enable us to determine important differences of this kind; for the present it has at least succeeded in calling our attention to the possibility of diagnosing them long before the stage of laryngeal symptoms—this alone is an advance.

With regard to aneurysm, it may be remarked that, since internal space is occupied—whether the lower or whether the upper aspect of the transverse portion be involved—closer contact with or even pressure on the bronchus would result in both cases. When the ascending portion is alone involved the conditions are quite different. Pressure may bear on the right bronchus and on the tracheal bifurcation, but no pressure arises from above such as would depress the left bronchus. Indeed, if I am right in thinking that the effect of an aneurysm of this sort is to lengthen the axis as well as the transverse diameter of the aortic segment involved, a previously tight-fitting arch might become loosened. This explanation has suggested itself for the apparent anomaly in one of the two cases of pulsating aneurysm mentioned above. It is open to us to assume that in this patient—not presenting tracheal tugging—the transverse part of the arch is free from dilatation, whilst dilatation probably exists in the other case.

If, however, Dr. Grimsdale's idea should prove to be correct, and that it should be established at some future time that tracheal tugging can result only from such aneurysms as involve the posterior and inferior aspect of the vessel, then the localising value of the sign would be still greater, and we might even find ourselves in possession of two alternative means of diagnosis; tracheal tugging occurring without laryngeal symptoms might point to the existence of a very small aneurysm, threatening death by rupture into the left bronchus;

whilst paralysis of the left vocal cord, occurring in the absence of tracheal tugging, might be interpreted to mean that the bronchus was not under pressure, although some bulging of the anterior surface of the arch had occurred.

The General Clinical Value of Tracheal Tugging.—The foregoing remarks, although partly speculative, may justify the view which I take of the importance of tracheal tugging in the diagnosis of aneurysm. There is, however, a further aspect to this subject. What significance are we to attach to the relatively frequent occurrence of slight tugging in healthy persons? The presence or the absence of this peculiarity constitutes a difference between individuals which must have its meaning, and which probably will have its future uses, perhaps in directions far removed from the diagnosis of aneurysm. Any clinical sign is worth studying in itself, irrespective of its practical applications. Moreover, the uncertainty still prevailing as to the mechanism of tracheal tugging in particular should be an additional incentive to research. As an outward sign of deep-seated internal events, I believe that tracheal tugging will acquire as much clinical importance as the other vascular and cardiac impulses which we have been trained to observe. In any case, this is a subject worthy of thorough investigation on a much larger scale than I have had leisure to attempt; and physicians should not lightly neglect the opportunity afforded to them by a large proportion of subjects of indirectly feeling the pulse of the transverse aorta.

It has not yet been pointed out that the left bronchus has a still closer connection with the left pulmonary artery than with the aorta, whilst the arch formed by the former vessel is much shorter and less curved than the aortic arch. Perhaps the slight tugging discovered in healthy persons may have its origin in the normal pulsation of the pulmonary artery.—*British Medical Journal*.

Apthous Sore Mouth in Children.—

Apthous sore mouth in children caused by the use of milk from cows affected with apthous-fever is the subject of a report by Dr. Allinier, published in *La Revue Médicale de l'Enfance*, January, 1892, as follows:—

“ Although some specialists in children’s diseases assert that the transmission of aphthous diseases is extremely doubtful, and that some of them, as Bohn, positively deny its possibility, it is certain, nevertheless, that the milk of cows or of goats having aphthous-fever may produce an aphthous stomatitis in persons who use it. The facts related by Ollivier are quite conclusive on this subject.

“ As long ago as 1765 Sagar observed, in a convent, an epidemic which left no doubt in his mind as to its origin ; all the cows from which the milk for the institution was supplied were attacked with aphthous-fever, and the religious who used the milk were attacked with fever and confluent eruptions in the mouth.

“ In 1834 three Prussian veterinary surgeons—Hertwig, Mannaud and Villain—drank of the milk of cows suffering with *cocotte* or aphthous sore mouth (aphthous-fever), and all three were attacked after a short period of incubation with the characteristic eruption.

“ Since that time numerous facts have been brought to light and numerous experiments, voluntary and involuntary, have been made and published by Delest, David, Proust, Nancara, Declainche, who have cited many other incidents besides their own. In a case of Goubaux, an infant raised on the bottle in the country was taken with a confluent aphthous eruption in the mouth ; the cow that gave the milk was examined and found to be suffering with the disease.

“ At Lyons M. Chauvau observed the following case : In a boarding-school of young ladies the pupils were accustomed to take unboiled milk every morning, which was supplied from a neighbouring farm on which the cows were found to have aphthous fever ; nearly all the young girls were attacked with the local vesicular eruption.

“ Fränkel reports four cases which he observed, some of them in adults and some in children, and believes that they were transmitted by the milk used. Wassenberg maintains a similar opinion in regard to the transmissibility of the disease.

“ From many facts observed by Dr. Ollivier in the hospital

for sick children, he was able to show that children who used the milk of diseased cows almost invariably contracted the disease.

“If, then, we can admit with Monti that aphthous stomatitis may be due to the presence of alimentary substances in the mouth for a long time, or to the alteration of the secretions, or the production of an irritant or toxic substance in the mucous membrane, we must also recognize the fact that aphthous stomatitis may be transmitted by milk from cows or goats having aphthous-fever, for many facts and many examples can be adduced to prove it abundantly.

“Can the disease be transmitted from one individual to another? Some observations made by Chaumier in 1886 seem to prove it.

“But what gives rise to the contagion? Fränkel has found the staphylococcus pyogenes citreus of Passet and the staphylococcus of Rosenbach, but they afford nothing of a special nature.

“Milk from Diseased Animals and its Effects is reported in the *Giornale della Reale Societa Italiana d'Igiene* for January and February, 1892.

“It is well known that many hygienists attribute much influence to the milk of diseased animals in the diffusion of tuberculosis. Hirschberg wished to determine definitely the transmissibility of tuberculosis, and made extensive experiments on animals with matter taken from others affected with or suspected of having the disease. The author found that the milk of cows having general or local tuberculosis always possessed the property of giving the disease to animals which were inoculated with it, and it seemed that the active agent had the form of spores, which were more resistant than the bacilli.”—*The Sanitarian*, May, 1892.

New Treatment of Acute Gonorrhœa.

—Cotes and Slater (*Lancet*, February 27, 1892) describe a new treatment for acute gonorrhœa. The patient is first made to micturate, and thus remove as much discharge from the urethra as possible. The endoscope tube, warmed and oiled, is

then passed into the urethra, the patient lying on a couch. As a rule, the passage of the instrument gives rise to but slight pain, but occasionally, in sensitive patients, a ten per cent. solution of cocaine, previously injected into the urethra, will be found useful. The urethra is then thoroughly mopped with dry cotton-wool, fixed in a stilet, and examined by the electric light. The exact limit of the inflammation can be clearly seen. It is, as a rule, quite five inches from the meatus; it may be four as early as the third day. The implicated surface is at once to be recognized by its swollen, bright-red appearance as contrasted with the rosy colour of the healthy urethra. It is important not to pass the endoscope needlessly far back of the posterior limit of the inflammation, which is usually sharply defined. The diseased membrane should now be carefully mopped again so as to remove every vestige of secretion. A mop of cotton-wool, on a stilet, charged with a solution of nitrate of silver (10 grains to the ounce), should be pushed through the endoscope tube and out at the distal end. The tube and the mop are then simultaneously withdrawn. For the two inches of urethra near the meatus a fresh mop is used, so as to completely saturate this part, where the disease commences, and the inflammation is most intense. Patients generally complain of slight pain afterward, which, however, passes away in the course of ten minutes. The patient is recommended to take a hot bath that night and remain in bed the following day. A saline purgative and an alkaline or copaiba mixture are given internally. From four to six times daily the patient should use a simple cleansing injection—say Condry's fluid (one drachm to the pint). The forty-two cases treated in this manner have been cured in a little over twelve days; a few cases had lasted for some days, and some were associated with chordee. The principal points of this treatment are: (1) The urethra can be cleansed so that the application comes directly in contact with the diseased membrane. (2) The exact extent of diseased surface may be seen. (3) The remedy is applied when the urethral walls are stretched, so that all furrows are obliterated. They think that nitrate of silver is the best of all injecting fluids, from the fact that, in the strength of

1 to 2,000, it kills the organisms and produces very little irritation, and at the same time exerts a healing influence on the inflamed membrane.—*University Medical Magazine*.

Dermatitis following Local Application of Iodoform.—Hahn, in the *Therapeutische Monatshefte* for February, 1892, calls attention to the fact that authors differ as to the cause of the inflammation of the skin which sometimes follows the application of iodoform. Some ascribe it to the itching and consequent scratching of the part, and others as due alone to the action of the medicine. He quotes two cases which he has observed, and in which he thinks the inflammation was due to the iodoform alone. In both cases an inflammatory swelling arose after the application of iodoform to ulcerated regions. The skin was red, œdematous, and hot to the touch. At the same time a vesicular eruption spread from the periphery. The individual vesicles were close to one another, and were from the size of a millet-seed to a pea; the contents were bright yellow and clear. The first case was of short duration and disappeared by indifferent treatment. The second case was treated by a dusting powder of starch and zinc, and then with Lassar's salicyl paste, and was shortly cured. In neither of these cases did scratching occur in the region of the ulceration. An itching occurred first *after* using the iodoform.

Anomalies of Milk Secretion.—At the meeting of the Gynecological Society of Dresden, Dec. 10th, 1891, (reported in *Centralblatt f. Gynækologie*, No. 12, 1892), Rupprecht reported some interesting cases under the above title. He divided his cases into those of apparent milk secretion, absence of milk secretion, and milk secretion at irregular times. As examples of the first, he described cases in the newborn, in young girls, and boys at the age of puberty, when, in some instances, drops of colostrum could be squeezed out of the enlarged and hardened glands; in women with mammary tumours, either malignant or benign, from whose breasts could be squeezed a few

drops of a turbid or hemorrhagic fluid, in which could be found round and epithelic cells, cholesterin and bacteria, but no fat particles; in women with chronic eczema of the retracted, inverted or atrophied nipple, in whom the diseased surface kept up a constant weeping, that is often taken for milk secretion. As an example of entire absence of secretion, agalactia, the case of a woman, 33 years of age, was described. Two years before she had had her first child, which she had nursed out of the right breast for eight months. The left breast furnished a small amount of milk only for four months, then "water," and in a little while nothing. The gland on this side was hard and not easily held between the fingers. Rupprecht believed it to be the seat of pericanalicular fibroid formation, otherwise called cirrhosis of the breast, a condition necessarily interfering with functional activity of the gland, and furnishing, moreover, in its ultimate stage of shrinkage, the foundation for carcinomatous formation. As an example of milk secretion at odd times, Rupprecht described the following case: A woman, 43 years of age, had married at the age of 31, and had had five children. On account of retracted nipples she had never been able to nurse her children, but always had plenty of milk in the breasts. From the time of her first delivery the breasts had never been empty, and were to-day, two years after the birth of the last child, actively secreting. Since the last delivery there had developed in the right breast a lump, which a physician opened, thinking it an abscess. There was no pus; but a quantity of turbid fluid, stained with blood, ran out. A few days later there occurred the same phenomena seen on the third day after delivery—sudden congestion of the breasts and their engorgement with milk. The incision did not heal, but left a lacteal fistula. In endeavouring to slit this open, Rupprecht encountered a small new growth in the breast, which proved to be a carcinoma. The right breast was consequently amputated. The left breast still continues to secrete actively.—

Univ. Med. Magazine.

Barbaric Midwifery.—Dr. J. K. Simpson of Alaska gives, in a recent number of the *Occidental Med. Times*, a sketch of the obstetric customs of the Alaskan Indians. His

observations were made in the south-east of Alaska. When a woman arrives at full term a tent or hut is erected, and a hole dug in the middle and lined with moss. When labour commences the woman goes to the hut and squats over the hole, as in the act of defæcation, grasping a pole driven into the ground in front. She is attended by three squaws; one sits behind her, and when a pain comes on clasps her arms firmly about the abdomen, while the other two women press firmly with their shoulders against the knees of the parturient woman. The child drops into the hole, occasionally breaking a bone or sustaining other injury. The umbilical cord is divided about four inches from the navel by twisting it and pinching with the nails, and is not tied. The squaws maintain their relative positions during the third stage of labour; a binder, consisting of two pieces of cloth or skin quilted together, and strengthened by pieces of bark, is applied, and the woman, if a primipara, remains where she is for ten days, but if a multipara, often goes about her work the first or second day; in neither case is she washed for ten days, so that antiseptic midwifery is not followed. In spite of this, puerperal fever appears to be uncommon. The child, after remaining in the hole five or ten minutes, is drawn out, and the midwife dresses the stump of the cord with a foul-smelling mass consisting of the leaves of some herb chewed months before. The child's face is wiped, and it is put unwashed into a bag, stiffened with bark, which covers all but the head. Certain superstitions exist as to the placenta and cord. As a rule the placenta is burnt and the ashes carefully preserved; when the individual dies the ashes of the placenta are placed with those resulting from the cremation of his body in a small burial house. When the stump of the cord becomes detached from the infant's navel it is enclosed in an embroidered buckskin cover and stitched to the front of the child's clothing, where it remains like a rosette until he is three or four years old. At that age the child goes into the woods and hides it.—*British Medical Journal*.

ON THE DANGERS OF WASHING OUT THE
STOMACH.

In the current number of the London *Practitioner* there is a valuable and timely article by Dr. Soltan Fenwick of London on the dangers of washing out the stomach. After pointing out the usefulness of this therapeutic measure in suitable cases, he deals with the dangers attending it, and the harmfulness arising from its employment in unsuitable cases.

Twenty-five cases of convulsive seizures in chronic diseases of the stomach are collected, and in six of these the attacks were apparently brought on by the use of the stomach tube. Both general convulsive seizures and tetany may be brought about by any irritation other than by mechanical means of the gastro-intestinal canal, but in some of the cases reported by Dr. Fenwick it is impossible to eliminate the stomach tube as being the active factor. Tetany arising from gastric disturbance is very fatal, upward of 60 per cent. proving fatal. A case of perforation of a gastric ulcer occurring immediately after the use of the stomach tube is reported. Hemorrhage from the use of the stomach pump is not uncommon in cases where there is at the time ulceration of the mucous membrane, as in carcinoma and chronic ulcer.

Dr. Fenwick has been able to collect three cases of boracic acid poisoning from the employment of this agent as an antiseptic in disease of the stomach; two of the three cases proved fatal. The irrigation of the stomach not having been thoroughly performed, a sufficient quantity of the acid remained behind, absorption of which proved fatal.

The proportion of cases in which any of the grave accidents related make their appearance is certainly very small, but the possibility of their occurrence should ever be before the practitioner's mind before deciding on using the stomach pump. In some quarters it has become a routine practice of late to wash out the stomach for nearly all affections of this organ. This is a practice not only of questionable benefit in many cases, but decidedly injurious, if not dangerous, in a considerable number. The employment of the stomach pump in the gastric neuroses can do no good, and may be productive of much harm.

A MILITARY MEDICAL ASSOCIATION.

It is proposed to form an Association of Medical Officers of the Militia of Canada, having the following objects:—

1. The bringing of medical officers in closer personal relation, and the development of a departmental *esprit de corps*.
2. For discussion of matters relating to the medical department of the militia.
3. For the discussion of military matters from a medical point of view.
4. For reading of papers on military medicine and surgery, hygiene and equipment.

COLLEGE OF PHYSICIANS AND SURGEONS OF THE PROVINCE OF QUEBEC.

We are indebted to Dr. Campbell, Registrar, for the following report:—

The half-yearly meeting of the Governors of the above College (Provincial Medical Board) was held in the Laval Medical School, Montreal, on the 11th inst. The Credential Committee met the previous day and examined the qualifications of all the candidates for the license, and the presentation of their report was the first business, after the chair had been taken by the Hon. Dr. Ross, President.

The number of licences granted was about forty-five, princi-

pally graduates from McGill, Laval and Bishops. Before the report of the committee was adopted,

DR. BEAUSOLEIL enquired how many of the candidates had presented certificates of preliminary examination from other Provinces than Quebec, and from what Provinces?

DR. F. W. CAMPBELL replied that eighteen had certificates from Ontario, three from Manitoba, and one from the University of Edinburgh; the remainder were from this Province.

Enquiry was made as to whether any reply had been received from the College of Physicians of Ontario to the communication sent from the Quebec College a year ago with a view of arranging a basis of reciprocity.

DR. CAMPBELL replied that last fall he had been informed that the Ontario College was, at its last meeting, so occupied with other matters, it had been found impossible to take the matter up, but he had hopes that it might be taken up at the meeting to be held in June.

A resolution was accordingly moved by Dr. Beausoleil, seconded by Dr. Fiset, to the effect that this College would not, in future, accept the preliminary examination of any Province which did not reciprocate with the Province of Quebec—the same to apply to graduates.

FIFTY-NINTH CONVOCAATION OF THE MEDICAL FACULTY OF MCGILL UNIVERSITY.

The annual convocation for conferring degrees in medicine in McGill University took place on Saturday afternoon, April 2, in the William Molson Hall. Sir Donald A. Smith, who had come down from Ottawa for that particular purpose, was in the chair as Chancellor, and he was surrounded with the full Faculty. The hall was crowded, the students occupying the rear portion, the friends of the newly passed men the body of the hall, and the graduates, some fifty in number, had seats specially reserved for them directly in front of the platform. Rev. Dr. Cornish opened the proceedings with a short prayer, after which Dr. Craik read the class and honor lists. Then

came to the students the most interesting portion of the programme. Mr. T. Jameson was asked to step forward to receive the Holmes gold medal at the hands of Sir William Dawson. The other recipient of a similar honor was Mr. A. Davidson, who was presented with the Sutherland gold medal.

The ceremony of conferring degrees also fell to the lot of Sir William Dawson, assisted by Dr. Ruttan. This portion of the programme passed off quietly enough.

Dr. T. JAMESON, as gold medalist of the class of '92, had to perform the office of reading the valedictory for his colleagues, a task which he discharged to the satisfaction of everyone. He referred in feeling terms to the loss sustained by the class in the deaths of the late Dean Howard and Dr. MacDonnell, and discussed other matters of interest to his own class and to the students generally.

Dr. RODDICK then delivered the Faculty valedictory. (See page 801.) After which,

Dr. CRAIK, Dean of the Medical Faculty, made the following address:—

After the ceremonies and addresses which to-day have marked the close of the fifty-ninth session of our Medical Faculty, it may, perhaps, be proper for me to add a few words having reference to the conduct of the session, to the changes of *personnel* which have occurred since our last meeting of convocation, and to allude very briefly to the progress and future prospects of the Faculty as an integral portion of the University.

The actual working session has not been an eventful one in any special sense. The students have been regular in their attendance and attentive to their studies: Their conduct has been everything that their best friends could desire, and the results of the examinations have borne good testimony to the earnestness and intelligence with which they have applied themselves to their work.

It can scarcely be necessary for me to remind those whom I am now addressing of the great—I had almost said the irreparable—loss which this Faculty and the University sustained by the death, last summer, of one of their brightest ornaments, Dr. Richard MacDonnell, the able and accomplished Professor of Clinical Medicine. Though young in years, he

was ripe in all those qualities which make such a life valuable and useful. Talented, highly educated and accomplished, he was a born teacher and leader of men, and particularly of young men. Amongst them his influence was almost unbounded, and always and entirely for good. His was a nature that could not conceal its contempt and dislike for everything that was mean or ignoble, and nothing savoring of dishonesty, license or vulgarity could survive in the pure atmosphere with which he was always surrounded. Nature had endowed him, in an uncommon degree, with those gifts and graces which fit so well into our ideal of a perfect man, of a gentleman in the highest sense of the word. It was my privilege to have known him intimately from his childhood upwards, and if it were permitted to us to follow him into the domestic circle where, perhaps, the true character of a man is better known than almost anywhere else, I could tell of him as the most loving and devoted of sons, the most warmhearted and helpful of brothers, the best and truest of husbands. The influence of such a man lives after him, and it is some consolation to know that the memory of his virtues will tend in some degree, at least, to assuage the grief that otherwise would be inconsolable.

Happily for the Faculty, circumstances pointed plainly to his best possible successor. Associated with him in the work of Clinical Medicine during the session of 1890-91 was Dr. James Stewart, then Professor of Pharmacology and Therapeutics. Dr. Stewart having already shown his fitness for the work of Clinical Medicine, he was, with the full concurrence of the Faculty and of every one connected with the University, appointed to the vacant Chair.

The Chair of Pharmacology and Therapeutics having become vacant by the resignation of Dr. Stewart, the professorship was conferred upon Dr. Alexander D. Blackader, B.A., a graduate in medicine and in arts of this University. Dr. Blackader brings to the work of his chair the learning, the ability, the earnestness and the energy which have characterized him throughout his career, and which eminently fit him for the important work which he has undertaken.

In the chair of Theory and Practice of Medicine also we have the satisfaction of seeing Professor George Ross again at

work, with restored health and the prospect of long years of usefulness to the Faculty and the University, as well as to the community at large. To assist him in the arduous work of the chair Dr. H. A. Lafleur, B.A., late of the Johns Hopkins University of Baltimore, has been appointed as his assistant, and he brings with him those stores of knowledge and experience acquired in a two years' residence in the Johns Hopkins University Hospital, probably the best field for scientific medical research of an advanced kind in America. Dr. Lafleur has also performed for us the practical pathological work of the session, work which he had previously performed for us in the absence of our demonstrator of pathology, and in this work also, Dr. Lafleur has had the advantage of study under Professor Welsh, of Johns Hopkins University.

The lectures on General Pathology have been given this year by Dr. Wesley Mills, professor of the allied subject of Physiology, and it is scarcely necessary to say that that gentleman has performed the work with all his well known ability and thoroughness.

To mark the appreciation of the long and able services of Dr. Ruttan in connection with chemistry, the appointment of Assistant Professor of Chemistry has been conferred upon him, and in like manner in recognition of Dr. James Bell's valuable work in connection with Clinical Surgery, he has been made Associate Professor of that Chair.

In consequence of the increased labor connected with the chair of Clinical Medicine, Dr. Stewart has found it necessary to resign the position of Registrar to the Faculty, an office which he has held for many years with credit to himself and with much benefit to the students and the University. Dr. Ruttan, Assistant Professor of Chemistry, has been appointed Registrar in the place of Dr. Stewart, resigned, and with his well known energy and earnestness, and his intimate knowledge of the wants of the students and of the profession throughout the Dominion, he will undoubtedly make a most valuable officer.

We have had the satisfaction this year of seeing the increase in the number of our students returning to something like its former ratio. For reasons which, happily, have proved only temporary, this ratio has been somewhat interrupted for

several years. The panic which followed the outbreak of smallpox in 1885 brought our numbers down from 237 in 1884-85 to 227 in 1888-89. In 1889-90 the number rebounded to 261, but in 1890-91 there was no increase, possibly because in that year we had been compelled, in consequence of our gradually increasing expenses, to add somewhat to the amount payable by students entering on and after that date. This year, however, the number of our students has risen to 291, a number greater by 30 than in the preceding year, and, of course, greater than in any year in the history of the Faculty. This is particularly gratifying to us at the present time, for it shows us that, notwithstanding many changes and many depressing influences, we have still been able to retain the confidence and the good will of those friends throughout the length and breadth of the land, on whom we have always relied in maintaining our leading position among medical schools. But there is another circumstance connected with the number of students this year which calls for more than a passing mention, and which is peculiarly pleasing to us. It is that among the various provinces and countries from which our students are drawn, Ontario still maintains its leading position, with 115 students. The Province of Quebec comes next with 105, and then follow, in the order of their numbers, New Brunswick, Nova Scotia, Prince Edward Island, Manitoba, the United States, British Columbia, the West Indies and Newfoundland.

But, it may be asked, what is it that enables the Medical Faculty of McGill University—in Montreal—in the French province of Quebec—in the face of disadvantages of climate, of varied and often adverse medical legislation, of local and other influences, to attract students from other and more favored provinces and countries? The principal reason is that, being aware of the disadvantages under which we labor, we have striven with the greatest earnestness to utilize to the utmost such advantages as we happen to possess. Chief among these is our unrivalled field for clinical instruction, for it may safely be claimed for the hospitals and charities of Montreal, and for the old Montreal General Hospital in particular, that no institutions on this continent, and very few in any part of the world, have done more for the cause of

sound and practical medical education. To the credit also of our medical students let it be said, that so uniformly decorous and seemly has been their conduct while in the wards of the hospital that it has never been found necessary to exclude them, as has only too often been the case elsewhere.

But great as have been our facilities for practical medical instruction, they are soon largely to be increased by the opening of that magnificent pile now approaching completion, the Royal Victoria Hospital, the joint gift of our large-hearted Chancellor, Sir Donald A. Smith, and another large-hearted and warm friend of this university, Lord Mount-Stephen. It would, of course, be premature to attempt at present to gauge the benefits likely to accrue to us from the opening of this noble institution; but whatever our opportunities may be, it behoves us to see to it that they are utilized to the utmost, in the cause of suffering humanity and of sound, scientific medical learning.

The functions of large hospitals in their relations to medical education have been considerably changed of late years, and these changes have been becoming more and more pronounced from year to year, chiefly in the direction of minute modern pathological research. Modern microscopic and bacteriological investigations have shown that this universe of ours is apparently as limitless and as potent for good or evil in its minuteness, as it is in all its vastness, and while the Astronomer and the Spectroscopist are from time to time discovering and analyzing new nebulae and stars and comets, of whose influence upon ourselves we are only as yet dimly suspicious, the Pathologist and the Microscopist are every now and then detecting some new form of bacillus, bacterium or microbe, whose influence upon our minds and upon our bodies has been only too well shown to be deleterious and deadly. Pathology has become the necessary complement to medical practice. It is the key by which its mysteries may be unlocked, the test by which its processes may be verified and corrected. Such being the case, it will at once be seen how imperfect any system of medical education must be where pathological research does not play a prominent part, and how great must be the advantage to those institutions where its importance is properly recognized and duly provided for.

A properly equipped Pathological department in connection with our medical school, with a well trained and skilful professor, would go far towards placing our Faculty on a permanently self-sustaining basis; for with our unrivalled hospital facilities rendered thus more valuable than they could ever otherwise become, we could fairly ask of the student to submit to such slight modification of the fees, as would be sufficient to convert our present constant state of financial weakness into one of permanent and assured strength.

Our late lamented Dean, Dr. Robert Palmer Howard, had deeply at heart the importance of such an achievement. A well equipped and adequately endowed Chair of Practical Pathology was the dream of his declining years. Will not those who loved him and respected him for his many noble qualities, help us to realize his dream?

SIR DONALD SMITH supplemented the remarks of Dr. Craik. He said he had already apologized for not being present before, but the loss was his, not theirs. This was the fifty-ninth convocation of the medical faculty of McGill, and when they looked back not fifty-nine, but only twenty-five years, what a difference there was in the faculty and what immense strides had been made by the university. Now it was a household word on the continent of America, and justly celebrated in the old world as a university where one could get a medical training second to none. Those who had gone out from it already proved it. Not only as medical men, but as gentlemen, were they determined to hold a high place in the world. Not only in Canada, but in America, there were to be found graduates of McGill, and if not wealthy, they were, at least, laying the foundation of a future competence. Dr. Roddick gave kindly advice when he told the class of '92 to go through life not only in a manner not to discredit the Alma Mater, but to add fresh lustre to her fame. "I believe you will do that," continued the Chancellor, "and keep up the record of old McGill. Your Dean has spoken of a pathological professorship. I hope the day is not far distant when this will be an accomplished fact." Sir Donald concluded by saying: "There is no more honorable profession than that of medicine. It is more so than politics; but when medical men have secured a compe-

tence and see that their country needs them, then let them enter the arena of politics. It is such men the country requires to guide her."

Dean Carmichael gave the benediction and the Convocation was ended.

The total number of students enregistered in the Medical Faculty during the past session was 291, of whom there were from—

Ontario.....	115	United States.....	7
Quebec.....	105	Manitoba.....	7
New Brunswick.....	27	British Columbia.....	4
Nova Scotia.....	12	West Indies.....	3
P. E. Island.....	10	Newfoundland.....	1

The following gentlemen have passed their Primary Examination, which comprises the following subjects: Anatomy, Practical Anatomy, Chemistry, Practical Chemistry, Physiology, Practical Physiology, Histology and Botany:—

Bazin, A. T.....	Montreal
Brouse, J. E.....	Brockville, Ont.
Byers, G. M. W.....	Gananoque, Ont.
Carroll, R. W.....	Stratford, Ont.
Davidson, A.....	Burns, Ont.
Drysdale, W. F.....	Perth, Ont.
Fergusson, W.....	Pictou, N.S.
Fowler, E. S.....	Hudson, Wis.
Fry, J. M.....	Montreal.
Gorell, C. W. F.....	Brockville, Ont.
Haight, M.....	New Durham, Ont.
Hall, M. K.....	Franklin Centre, Que.
Hamilton, G.....	Bright, Ont.
Hanington, J. P.....	Montreal.
Hart, E. C.....	Baddeck, N.S.
Henderson, W.....	Dickenson, Ont.
Holohan, P. A., B.A.....	Newcastle, N.B.
Jacques, H. M.....	Upper Dyke, N.S.
King, H. S.....	Sarnia, Ont.
Kinghorn, H. McL., B.A.....	Montreal.
Masten, C.....	Lacolle, Que.
Matheson, R.....	Cardigan, P.E.I.
McCarthy, G. S.....	Ottawa.
McCrea, J. J.....	Laggan, Ont.

McLaron, J. F.	Belle Creek, P.E.I.
McLaughlin, J. A.	Avonmore, Ont.
McIntosh, L. Y.	Strathmore, Ont.
McKenzie, L. F.	Montreal.
Manchester, G. H.	Brighton, Ont.
Mathewson, G. H., B.A.	Montreal.
Mitchell, W.	Lachute, Que.
Neill, J.	Aylmer, Que.
Nicholls, A. G., B.A.	Newry, Ont.
O'Connor, E. J.	Ottawa, Ont.
Pritchard, J., B.A.	N. Wakefield, Que.
Richardson, A.	South March, Ont.
Rimer, F. E.	Bryson, Que.
Robertson, A. A., B.A.	Montreal.
Richardson, H. J.	Chesterfield, Ont.
Ross, D. W.	Grand Falls, N.B.
Ross, H.	Glenshee, N.S.
Ross, J. J.	Dowittsville, Que.
Shaw, H. S.	Montreal.
Shillington, A. T.	Kemptville, Ont.
Stening, W. A.	Coaticook, Que.
Wolf, C. G. L., B.A.	Winnipeg, Man.
York, H. E.	Metcalf, Ont.

The following gentlemen, 56 in number, have fulfilled all the requirements to entitle them to the degree of M.D., C.M. from the University. In addition to the Primary subjects mentioned, they have passed a satisfactory examination, both written and oral, on the following subjects: Principles and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Infancy, Gynæcology, Pharmacology and Therapeutics, Medical Jurisprudence, Pathology and Hygiene,—and Clinical Examinations in Medicine, Surgery, Ophthalmology, Obstetrics and Gynæcology conducted in the wards of the General Hospital and Montreal Maternity:—

Berwick, G. A.	Farnham, Que.
Binmore, J. E.	Montreal, Que.
Bowen, G. A.	Coaticook, Que.
Boyce, B. F.	Norham, Ont.
Brown, F. W. A.	Brockville, Ont.
Brouse, J. E.	Brockville, Ont.
Bruce, D. A.	Grandview, P.E.I.
Brunette, J. E.	Cornwall, Ont.
Carmichael, H. B.	Montreal, Que.
Chabot, J. L.	Ottawa, Ont.

Chipman, R. J.....	Halifax, N. S
Day, A. R. A.....	Guelph, Ont.
Duncan, G. H.....	Duncanville, Ont.
Girdlestone, C. W.....	Winnipeg, Man.
Glendenning, R. F.....	Trumanville, N. S.
Graham, W. C. R.....	Prescott, Ont.
Grant, H. A.....	Cardigan, P. E. I.
Halliday, V.....	Peterboro, Ont.
Hayes, P. J.....	Montreal, Que.
Henderson, J.....	Markworth, Ont.
Hogg, D. W.....	Winnipeg, Man.
Jack, Du Vernet.....	Montreal, Que.
Jameson, T.....	Rochester, N. Y.
Johnston, A.....	Ottawa, Ont.
King, H. S.....	Sarnia, Ont.
Lang, F. W.....	St. Mary's, Ont.
Langley, A. F.....	Victoria, B. C.
McCann, A. E. A.....	Montreal, Que.
McKay, D. T.....	Clifton, P. E. I.
McKenty, J. E.....	Montreal, Que.
McKenzie, R. T.....	Montreal, Que.
McKinnon, O. T.....	Kinross, P. E. I,
McNally, H. H.....	Fredericton, N. B.
Mair, A. W.....	Clinton, Ont.
Martin, C. F.....	Montreal, Que.
Martin, T. H.....	Savages Mills, Que.
Massiah, W. B. H.....	Barbadoes, W. Indies
Meade, C. J.....	Morrisburgh, Que.
Meikle, W. F.....	Morrisburgh, Que.
Neill, J.....	Aylmer, Que.
Paterson, L.....	Harbour Grace, N. Fld
Peake, J. P.....	Fredericton, N. B.
Phelan, E. D.....	Montreal, Que.
Robinson, B. E.....	Orillia, Ont.
Rogers, W.....	Montreal, Que.
Smith, W. H.....	Winnipeg, Man.
Taplin, M. M.....	Addison, Ont.
Taylor, T. T.....	Chatham, Ont.
Taylor, J. N.....	Ottawa, Ont.
Tompson, J.....	Moulinette, Ont.
Travers, J. B.....	St. John, N. B.
Wade, A. S.....	Perth, Ont.
Walker, W. G.....	Stratford, Ont.
Walsh, T. N.....	Ormstown, Que.
Walsh, W. E.....	Ormstown, Que.
Wasson, H. J.....	Peterboro, Ont.

Messrs. H. S. King and H. H. McNally have passed all the examinations required for the degree of M.D., C.M., but are not of age. They will receive their degree on attaining their majority.

HONORS AND PRIZES.

The following Gentlemen have obtained First Class Honors in the Final Subjects :—

1 Jameson, Thos.	6 Wasson, H. J.	11 Walker, W. G.
2 Henderson, Jas.	7 Hayes, P. J.	12 Wade, A. S.
3 Massiah, W. B. H.	8 Taylor, T. T.	13 Bowen, G. A.
4 Day, A. R. A.	9 Chabot, J. L.	14 Berwick, G. A.
5 Martin, C. F.	10 Chipman, R. J.	15 Boyce, B. F.

The following Gentlemen obtained First Class Honors in Surgery and Clinical Surgery :—

1 Jameson, Thos.	6 {	Bowen, G. A.	13 Day, A. R. A.
2 Henderson, Jas.		Walsh, W. E.	14 Walker, W. G.
3 Martin C. F.	9 {	McKenty, J. E.	15 {
4 Massiah, W. B. H.		Martin, S. H.	
5 Chabot, J. L.		Taylor, T. T.	Taplin, M. M.
6 Chipman, R. J.		Wasson, H. I.	17 {
			Binmore, J. E.
			Halliday, V.

The following Gentlemen obtained 1st Class Honors in Medicine and Clinical Medicine :—

1 Jameson, Thos.	7 Martin S. H.	13 Bowen, G. A.
2 Massiah, W. B. H.	8 Henderson, J.	14 Boyce, B. F.
3 Wasson, H. J.	9 Walker, W. G.	15 Lang, F. A.
4 Day, A. R. A.	10 Langley, A. F.	16 McKay, D. T.
5 Hayes, P. J.	11 Wade, A. S.	
6 Martin, C. F.	12 Chipman, R. J.	

The following Gentlemen have obtained Honors in Obstetrics and Gynæcology :—

1 Henderson, J.	7 Binmore, J. E.	13 Walker, W. G.
2 Massiah, W. B. H.	8 Chabot, J. L.	14 Muir, A. W.
3 Day, A. R. A.	9 Wade, A. S.	15 Paterson, L.
4 Jameson, Thos.	10 Boyce, B. F.	16 Chipman, R. J.
5 Berwick, G. A.	11 Martin, C. F.	17 Taylor, T. T.
6 Wasson, H. J.	12 Lang, F. A.	

The following Gentlemen have obtained First Class Honors in Ophthalmology:—

1 Robinson, B. E.	6 Taylor, T. T.	11 { Carmichael, H. B. Glendenning, R. F. Martin, C. F.
2 { Chipman, R. J. Halliday, V.	7 McKenzie, R. T.	
4 Wade, A. S.	8 Henderson, Jas.	9 { Boyce, B. F. Massiah, W. B. H.
5 McNally, H. H.		

The following gentlemen have obtained 1st class Honors in Hygiene:—

Taylor, T. T.	Phelan, E. D.	McLennan, D. A.
Lang, T. A.	Barrett, H. H.	Shaw, M. W.
Massiah, W. B. H.	McKay, D. T.	Taplin, M. M.
Henderson, J.	Wasson, H. J.	Wade, A. S.
Chabot, J. L.	Duncan, G. H.	Jack, Du Vernet.
Jameson, Thos.	Graham, W. C. R.	Outwater,—
Chipman, R. J.	Hogg, D. W.	Bowen, G. A.
Martin, C. F.	Paterson, L.	Brown, F. W. A.
Robinson, B. E.	Bruce, D. A.	McKenzie, R. F.
Hayes, P. J.	Taylor, J. N.	McNally, H. H.
Cooper, M. A.	Thompson, J.	Yates, H. B.
Ellis, W. L.	Walker, W. G.	McGuire,—
Grant, H. A.	Fulton, J. A.	Halliday, V.
Girdleston, C. W.	Walshe, W. E.	Coburn, A. D.
Langley, A. F.	King, H. S.	McKinnion, O. T.
Muir, A. W.	Smith, W. H.	Meade, C. J.

MEDALS AND PRIZES.

THE HOLMES GOLD MEDAL FOR THE BEST EXAMINATIONS IN ALL THE BRANCHES COMPRIZED IN THE MEDICAL CURRICULUM, is awarded to Thomas Jameson.

THE PRIZE FOR THE BEST EXAMINATION IN THE FINAL BRANCHES is awarded to James Henderson.

THE PRIZE FOR THE BEST EXAMINATION IN THE PRIMARY BRANCHES is awarded to A. Davidson.

THE SUTHERLAND GOLD MEDAL is awarded to A. Davidson.

THE CLEMESHA PRIZE IN CLINICAL THERAPEUTICS is awarded to W. B. H. Massiah.

PROFESSOR'S AND DEMONSTRATOR'S PRIZES.

BOTANY	X. L. Anthony.
ZOOLOGY.....	P. C. Leslie.
CLINICAL CHEMISTRY.....	J. Henderson.
SENIOR ANATOMY.....	L. Y. McIntosh.
JUNIOR ANATOMY.....	{ W. W. Wickham.
	{ F. L. Thomson.

Personal.

—Our old friend and colleague, Dr. Wm. Osler, was married a few days since to the handsome and accomplished widow of the late Dr. Samuel S. Gross of Philadelphia. They have our earnest wish for a long and happy life.

—Dr. James Stewart, Professor of Clinical Medicine, McGill University, and one of the editors of this JOURNAL, has gone to Vienna, and will be absent from the city for about two months.

—An election to fill the positions of Resident Medical Officers of the Montreal General Hospital was held last month, and resulted in the appointment of Drs. Jas. Henderson, H. J. Wasson, C. F. Martin, W. H. Smith, and R. T. McKenzie,—all graduates of McGill Medical Faculty. Drs. Berwick and Boyce, graduates of this year, have been appointed Resident Physicians to the Montreal Maternity.

Medical Items.

SALICYLATE OF LITHIA.—Dr. Vulpian states that salicylate of lithia is more efficacious than salicylate of soda in cases of acute and progressive subacute articular rheumatism. It also has some effect in chronic cases when a certain number of the joints are still deformed, swollen and painful.

ANTIDOTE FOR HYDROCYANIC ACID.—Prof. Kobert has proven experimentally that hydrogen peroxide is an antidote for hydro-

cyanic acid poisoning. It is to be given both by the mouth and hypodermically until all symptoms subside, and the odour of the acid can no longer be recognized in the exhalations.

—Thiol is recommended as a substitute for ichthyol in the treatment of skin diseases, because it is clean and never irritates, while ichthyol is impure and often irritates; ichthyol smells disagreeably, thiol does not; ichthyol spots the linen, thiol does not; moreover, its cost is about half that of ichthyol.—*American Druggist*, April 15, 1892.

MONOBROMIDE OF CAMPHOR FOR SPERMATORRHŒA.—The *Medical Summary* says: The monobromide of camphor has been successfully used in the treatment of spermatorrhœa, where a host of the usual remedies had been administered with no satisfactory results; finally the monobromide of camphor was given with prompt effect and perfect cures.

INCRUSTATIONS ON PERMANENT CATHETERS AND HOW TO DISSOLVE THEM.—Drs. De Pezzer and Sonnerat (*Le Bulletin Médical*, No. 7, 1892) find the deposits which incrust upon permanent catheters may be divided into two classes: whitish incrustations, consisting of phosphates of lime or ammonia and magnesia, which also contain a certain quantity of organic elements; and yellowish deposits, soluble in alkaline solutions, and which consist of the urate of soda, free uric acid, and sometimes a little of the oxalate of lime. The yellowish deposits are easily dissolved by a dilute alkaline solution—carbonate of lithia, bicarbonate of soda, Vichy water, etc.; the whitish are removed by a dilute solution of some acid—carbonic acid, phosphoric acid, lactic acid, etc. Hence when a catheter is to remain for some time in a patient's bladder his urine should be examined and injections of these solvents made into the bladder now and then to dissolve the deposits upon the catheter.—*Lancet-Clinic*.