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CANADA

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APRIL, 1885.

Original Communications.

VALEDICTORY ADDRESS TO THE GRADUATES IN MEDICINE, McGILL UNIVERSITY.

DELIVERED AT THE ANNUAL CONVOCATION, MARCH 30TH, 1885.

BY T. G. RODDICK, M.D., Professor of Clinical Surgery.

GENTLEMEN-GRADUATES,—On behalf of my colleagues, I congratulate you on the successful termination of your course in Medicine. The ceremony just completed virtually admits you to all the privileges and responsibilities of the profession of your choice. The document which you have severally received from the hand of our worthy Principal is a certificate of your competency to practice medicine and surgery and the various branches embraced therein. It is your just reward for the patient, plodding work and gentlemanly behaviour which have characterized you during the past four years.

I doubt not you prize greatly the parchment which you hold in your hands, but I question very much if you really appreciate its full value. I may tell you for your gratification (and I make the statement advisedly) that among the many prizes and rewards open to the ambitious student throughout the world to-day, there are very few the intrinsic value of which is greater than the diploma which this University is authorized to issue on behalf of its Medical Faculty. That you are a "McGill man" is a sufficient guarantee to the public of your ability as a physician, and among your *confrères* everywhere you will command a more than ordinary share of respect and esteem.

There are few, then, better equipped than you for the journey of life, and let us hope that you will make good use of the splendid advantages you have had, scoring many victories against injury and disease and adding fresh renown to your Alma Mater. Your success will, however, depend very much on the manner in which you apply the knowledge which you have gained here.

Remember, you are now to be thrown on your own resources. Hitherto the practical work in which you have been engaged, in the wards of the hospital, has been well supervised by some person responsible for the well-being of the cases allotted to your charge. Hitherto it made no material difference to the patient whether your diagnosis of his disease was correct or not; and in your capacity of dresser it mattered little, beyond the temporary inconvenience, if your splint pressed unduly on prominent parts or your bandage interfered with the circulation and threatened the integrity of a limb. Hitherto you have been able to leave your patients and return to your respective apartments with a light heart, knowing that your work would be well supervised and the defects therein corrected. Now, however, things are going to be vastly different with you. The tow-rope has been cut and you are rapidly floating off from the old ship, whose helmsmen have been doing the steering for you. You must now be prepared "to paddle your own canoe." It will make all the difference after this, both to your patient and yourself, whether your diagnosis and treatment be correct or not. It will not do now to overlook a pneumonia, mistake the eruption of small-pox for measles or to treat a broken bone as an ordinary sprain. Your dressings will no longer be subjected to criticism and correction, and if, through any mismanagement, your patient's life or limb is imperilled, you may have no one now to share the responsibilities with you.

I would advise you, therefore, constantly to hold a review of the knowledge you have acquired, adding fresh facts as Medicine progresses. Store up for future use the practical hints given you from time to time at the bedside. Always have the feeling that you are ready for any emergency, no matter how

grave. The bleeding artery will not cease to spurt while you are looking up your authorities to find where or how it should be secured, nor will the deadly poison stop its destructive work while you are looking up the proper antidote to administer. And here I would take the opportunity of advising you against being stingy with your knowledge. I have known men to go about work as if there was some great mystery connected with our art—as if to divulge any of its secrets, no matter how trifling, would be to commit an unpardonable offence against the dignity of the profession. There can be no greater mistake, and those who practice medicine and surgery in this way are constantly getting into trouble. Thus how often, especially in country places, has secondary hæmorrhage proved fatal after amputation or as the result of a wound, simply from the want of a little knowledge on the part of the attendants. So gangrene after fractures has gone on for days unheeded, the nurse having received the most positive instructions not to interfere under any circumstances; whereas if she had been taught how to test the condition of the circulation, and warned to loosen the dressings on the first appearance of discoloration, such a calamity would not be likely to occur. So with medical cases, after administering a dose of some powerful drug, explain to the person in attendance what the effect of the remedy may be, and thus prevent the alarm which odd and unexpected symptoms often produce. You will find it to your advantage, then, to have one or two intelligent women in your district somewhat trained, so that you could entrust to their care any severe cases. You may perform your operations very dexterously, but without proper nursing all your skill will be of little avail.

While, however, I would wish you to be apt in cases of emergency, I would advise you always to avoid haste in forming your conclusions. When pushed for a diagnosis in a doubtful case, never be too positive. No amount of knowledge can justify one in becoming dogmatical in his opinions regarding disease. In cases of doubt you need not be idle, however; treat the symptoms that exist while you are waiting for nature to reveal her secret. So with your prognosis; it should always

be guarded. Excepting in the case of pronounced and advanced organic disease, never give your patients up. In the case of children this advice is especially good, because their powers of endurance and recuperation are sometimes marvellous. We too often give the charlatan a golden opportunity, by allowing him to step in and get for his absurd nostrums the credit for the cure which Nature herself had unquestionably effected. On the other hand, I would not have you wilfully deceive people. If, after fortifying your opinion by consultation with a *confrère* (and this you should always do when in doubt), you have serious misapprehensions regarding the immediate ultimate result of a case, do not hesitate to state your fears to the friends, and if necessary to the patient himself. This, however, should not be done in a brusque, unfeeling manner, but in a kindly, confiding and hopeful way. Thus, in the case of those having worldly affairs to arrange, you will often do immense service by your frank and manly behaviour, and perhaps save the survivors from the annoyance of years of litigation.

In your intercourse with your patients generally, be gentle and forbearing. To the poor, especially, be generous of your professional services and kindly in your manner. The rich man is often ungrateful and exacting, and thinks that with his gold alone he can recompense you for the days and weeks of anxious care and thought bestowed upon him. The poor man has nothing to offer but his heartfelt thanks and earnest prayers for your welfare. It is true the latter will not enrich you, but the consciousness of having done good without hope of reward should bring pleasurable feelings to the bosom of every right-thinking man. Besides, your experience will be enlarged and your prospects, in many ways, advanced by such disinterested and charitable conduct.

I cannot impress upon you too strongly the necessity for cultivating the good will and esteem of your fellow-practitioners, especially those who labour in the same field with you. Some of you, doubtless, will be going forth now in search of suitable localities in which to begin work. To you I would say—Do not enter the town or village of your choice with the demeanour

of one about to steal something. The proper course to pursue is to approach the men who already occupy the field, and in a straightforward but respectful manner announce your intention of settling among them. You will thus often disarm those who would otherwise offer a vigorous opposition, and you will captivate the good will of others by your frank and gentlemanly behaviour. Nothing can be more unseemly than the bickerings and discord which prevail among the members of the profession in some places, and too often the impatient young practitioner—the last arrival—is to blame. I implore *you* not to resort to any mean or unworthy methods to build up a reputation. Should you be consulted by the patient of a brother practitioner, be careful how you criticise his practise in his absence. The fact that you differ from him in opinion does not justify you in vilifying him. Frown down on all occasions any attempt made by designing persons to extort money under the plea of malpractice. There is seldom the faintest justification for such a charge; and what more humiliating spectacle than to see one brother arrayed against another, with an ignorant and often jubilant public looking on. Let your course, then, be a straight one, just and fraternal, and in the long run you will come in the winner.

You will by reason of your profession, sooner or later, become prominent members of the several communities in which you practice, and the temptation will offer to take part in the great political questions of the day. If you are wise, however, you will eschew politics altogether. For one medical man who makes a success as a politician, fifty fail. In all questions, however, pertaining to the health of the people you should be prepared to take an active part, disseminating a correct knowledge of those sanitary laws which, when rightly understood, are capable not only of mitigating the severity of existing diseases but actually of preventing many of them.

In conclusion, gentlemen, I would beg you to endeavour, by your every word and deed, to exalt the reputation and extend the usefulness of the noble profession which you have entered to-day. Be assured that we who have been your teachers will

not soon lose sight of you, but will continue to take that lively interest in your welfare which has characterized our conduct in the past.

May every success attend you. Farewell!

COCAÏNE HYDROCHLORATE IN DISEASES OF THE NOSE AND THROAT.

By GEO. W. MAJOR, B.A., M.D.,

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In October last, at the invitation of Dr. J. Solis-Cohen, of Philadelphia, I had the privilege of conducting with him in his consulting room an interesting experiment with cocaïne.

The case selected was one of hyperæsthesia of the larynx, and occurred in the person of a gentleman, a professor of Lafayette College. The solution used was of the usual 4 per cent. strength, and though it lessened sensibility it did not overcome spasmodic action on the introduction of a sound into the larynx. This was, in point of fact, my first practical experience of cocaïne.

Since then I have employed cocaïne solutions of varying degrees of strength almost daily, and recognize in it a most valuable aid to the treatment of disordered conditions of the upper air tract.

The great scarcity of the drug, and its almost prohibitive price, have at times rendered it difficult to obtain solutions of reliable strength and purity, and were I influenced by the results obtained from worthless samples occasionally supplied me, I should as unsparingly condemn as I now wish to commend it. The most reliable make is that of E. Merck, of Darmstadt, and if obtained sealed, stamped and in the original package, the alkaloid will invariably be found to give good results.

Solutions of cocaïne undergo, when a few days old, some slight change, and a deposit of a fungus takes place; but this, in my experience, does not in any way impair the activity of

the drug. If the cocaïne be dissolved in distilled water, to which a small quantity of salicylic, boracic or carbolic acid has been added, the solution will remain stable—and for use in the air passages these additions are unobjectionable. The strength of the solution to be employed in the upper respiratory tract depends upon such conditions as each case may present and will vary from 1 to 20 per cent.

For all practical purposes of allaying pain the ordinary 4 per cent. solution has in my hands answered every expectation, but where mere steadiness or lessened sensibility is all that is sought, a one or two per cent. will generally be found sufficient.

Before applying cocaïne to the nasal chambers or upper throat it is well, for economical reasons as also for efficiency, to wash away the protecting mucus by means of a weak alkaline spray. This simple procedure facilitates its action and saves both time and material.

Generally speaking, a period of time varying from three to five minutes is required for the production of perfect anæsthesia, and this may be maintained indefinitely by repeating the applications at short intervals; anæsthesia will, however, last unaided for ten or fifteen minutes. Cocaïne only protects those parts to which it is directly applied, and does not, in my opinion, exercise any influence on contiguous surfaces. It is therefore necessary for success that all applications should be made carefully and thoroughly. The quantity of solution required for each sitting depends upon the region and the extent of surface to be influenced, and also upon the strength of the solution employed.

Before proceeding to make painful applications, it is prudent to test the extent of the local anæsthesia by means of a probe; when the sensation is that of pressure only, as perfect anæsthesia has been obtained as is possible, or indeed, required, for superficial operations.

For the purpose of making applications to the nasal passages, I use small camel hair pencils mounted on long and slender handles; for the upper throat, brushes of the same kind, but larger; for the larynx I first apply weak sprays, and after sensi-

bility has thus been lowered, I employ the ordinary rectangular throat brush. In all the regions under notice several *coats* are generally necessary. Before dipping the brush into the medicated solution it is well, for obvious reasons, to wet it thoroughly in simple water.

For operations in the larynx a stronger solution than the four per cent. is called for, as the latter, though it aids very materially any surgical procedure, still does not sufficiently overcome spasmodic closure, and this prevents a clear view.

The action of cocaïne as a local anæsthetic is but one of many remarkable properties possessed by it.

When applied to the mucous lining of the upper air way it causes at first a slight burning sensation, followed instantly by a numbness resembling the action of very hot water minus the pain; this is followed by a stiff, leathery feeling, accompanied by a desire to swallow, with at first a difficulty in doing so. The taste is acrid, bitter and very disagreeable, and the odor slightly vinous. Cocaïne unloads the superficial vessels, reduces swelling of the membrane by its very marked astringent action and produces blanching of the surface with which it is in contact.

Cocaïne, when administered internally, possesses the same power of narrowing peripheral arteries. This latter property has been known to laryngologists for years, and various preparations of cocoa (erythroxylon) leaves have been employed by them in cases of hyperæmia and irritable conditions of the pharyngo-larynx where sedatives have been indicated.

In cases of nasal disease, this property of contracting the soft tissues on their bones is one of very great moment, as it facilitates the view of parts otherwise invisible, aids very materially delicate manipulation and lessens the tendency to hemorrhage.

In the pharyngeal region its action is that of a sedative and astringent, and in the larynx it combines these properties with that of being a powerful voice tonic.

No remedy of modern times has in so brief a space become so widely and favorably known as cocaïne, nor has any, so far as I am aware, so well fulfilled all the promises its promoters advanced for it. There are still those who even now regard

cocaïne as a doubtful remedy, possibly founding their belief on their experience of a single case or an adulterated or inert sample.

The uses to which cocaïne may be applied in the nose and throat are legion. As a local anæsthetic it claims first place, and if properly handled it will not disappoint our most extravagant expectations.

The sensitiveness of mucous surfaces varies greatly in health and disease, and we must be prepared, if necessary, to increase the strength of our solutions should we fail to produce sufficient anæsthesia with one of lower power.

As a local anæsthetic, it may be employed in the nasal cavities to prevent immediate suffering from painful applications, as, for instance, chromic, acetic or nitric acid, nitrate of silver, and so forth; to allay the pain caused by the introduction of instruments, as probes, snares, forceps, &c.

In the galvano-caustic method it succeeds most effectually in controlling pain, as also in the removal of tumors, outgrowths and excrescences of whatever kind. Cocaïne also contracts the venous sinuses, and aids diagnosis and manipulation by opening up a previously occluded passage. It prevents altogether, or lessens, the tendency to hemorrhage or oozing, and thereby does away with one source of annoyance and discomfort. It arrests the tendency to sneeze so frequently met with in cases of nasal disorders. In coryza it will be found of at least temporary benefit, and will do much to hasten the cure by galvano-cauterization. In nasal asthma, a more common condition than is generally suspected, it must prove a valuable acquisition. In cutting through adhesions between turbinated tissue and the septum, in removing the angles of deflected septa, and in punching the same for correction of the deviation, it has already proved a signal help.

In the vault it may be employed in the removal of adenomata or other growths, and in fact in any operative procedure in that region.

In herpes occurring on the posterior surface of the velum,

a most painful and obstinate complaint, it affords marked comfort and relief.

In the pharynx and upper throat it will be found effectual in removing painful conditions—especially if accompanied by a hyperæmic state in the various ulcerations of the tonsil, pillars and parts surrounding, of such frequent occurrence in syphilis and occasionally seen in tuberculosis; in allaying the pain of cancerous disease and aiding the power to swallow. In rheumatic pharyngitis it has afforded relief. As an application before operating in follicular disease of the pharynx, it acts with certainty in relieving pain. In uvulotomy and in extirpation of the tonsils it has given fairly good results in my hands.

In the larynx it may be used with benefit in tubercular disease, whether characterized by ulceration or simply by swelling. Its valuable astringent and sedative properties render it particularly advantageous in these cases. Its influence in the prevention of cough is, to say the least, remarkable.

In œdema of the larynx I have seen it prove useful. In ulceration of the epiglottis, ary-epiglottic folds or post-laryngeal wall, rendering swallowing painful and difficult, it will allow of the taking of ample nourishment if applied ten or fifteen minutes before the meal.

In the various forms of vocal defect, the result of improper tension or faulty approximation of the vocal bands, cocaïne, in the form of a spray or troche, will render the voice more clear and powerful and less likely to break down from fatigue. Troches have been prepared to my order by Messrs. Kenneth Campbell & Co., wholesale chemists, each of which contains two milligrammes of the alkaloid. They have been found of much service by singers, speakers and others suffering from painful or relaxed throat.

In whooping-cough (though my experience has not been as great with the remedy as I should like, in order to speak authoritatively,) it has, in the few instances in which I have used it, yielded happy results. The cough has been completely checked for six or eight hours, and perceptibly mitigated for twenty or more. I believe it will score a great future success

in this malady. In all the endo-laryngeal operations it so steadies the parts that the progress of manipulation can be easily followed in the field of the mirror. Papillomata and growths of whatever nature and however small may be removed with expedition and accuracy by its aid.

For laryngeal use the 4 per cent. solution is not sufficiently powerful—8 or 10 per cent. answers much better, and even a 20 per cent. will probably be required in some cases.

In nervous subjects, when either post-rhinoscopic or laryngoscopic examinations are difficult or even impossible, it will, if used as a spray, greatly facilitate and simplify the undertaking.

We must not expect from cocaïne impossibilities; if it allays present pain, we must not regard it as a failure should after-pain ensue. In my opinion it modifies the painful character of wounds, reduces the amount of local irritation, and renders the nervous shock less.

My experience of cocaïne hydrochlorate is based on the almost daily use of it for over five months, and includes its action on upwards of a hundred and fifty individuals, representing quite three hundred sittings.

I regret that I have not kept a record of the results obtained under cocaïne in all the cases in which I have used it; but at first I regarded it only from its standpoint as a local anæsthetic, and so invariably acknowledged by my patients was its effect that I considered it superfluous and unnecessary. However, for the purposes of this report, I have tabulated a number of cases occurring in an arbitrary space of time, and give them in the order of their coming. I wish here particularly to state that there has been no attempt at selection or suppression of cases. The list includes all those in whom cocaïne hydrochlorate has been used, for any purpose whatever, from a certain date up to the time of writing. The cases are given in the order in which they came under observation, many of them, however, were already under treatment, and in some of them cocaïne had previously been used. For the purpose of accuracy a daily register was kept, and from this the accompanying statement has been made out.

The table shows the number of the case, the number of sittings, the region in which and the disease for which interference became necessary, the strength of the cocaïne application, and the character of the surgical or other procedure. The accompanying synopsis of the use of cocaïne is compiled exclusively from evidence afforded by private patients of the educated class, and may therefore be fairly accepted as an intelligent expression of the popular opinion of the remedy :—

No. of Case.	No. of Sittings	Region.	Disease.	Strength of Solution of Cocaïne.	Character of Surgical or other Procedure.
1	5	Nose and Pharynx.	Follicular Pharyngitis and Hypertrophy of Turbinated Tissue	4 per cent.	Galvanic cautery and nitric acid.
2	4	Nose	*True Membranous Nasal Catarrh*	4 "	Chromic, acetic & nit. acids, and galv. caut.
3	4	Nose	Hypertrophy of Turbinated Tissue	4 "	Nitric Acid.
4	2	Nose	" " "	4 "	" "
5	2	Nose	" " "	4 "	" "
6	3	Nose	" " "	4 "	" "
7	1	Nose	" " "	4 "	" "
8	4	Nose	" " "	4 "	" "
9	2	Nose	" " "	4 "	" "
10	3	Nose	" " "	4 "	" "
11	5	Pharynx & Larynx	Eversion of Laryngeal Ventricles	1, 4, 6 & 10 p.c	Atomized, and with brushes.
12	2	Nose	Hypertr. of Turb. Tissue	4 per cent.	Nitric acid.
13	1	Nose	" " "	4 "	" "
14	2	Nose	" " "	4 "	" "
15	2	Nose	" " "	4 "	" "
16	3	Nose	" " "	4 "	" "
17	1	Nose	" " "	4 "	" "
18	1	Nose	" " "	4 "	" "
19	5	Nose and Pharynx.	Follicular Pharyngitis, Varicose Vessels and Turbinated Hypertrophy	4 "	Nitric acid and galv. cautery.
20	2	Nose	Hyp. Middle Turb	4 "	Nitric acid.
21	3	Pharynx	Foll. Phar.	4 "	Galvanic cautery.
22	1	Palate and Pillars	Inflamed and painful state.	4 "	As a spray.
23	4	Nose	Turb. Hypertrophy	4 "	Nitric acid.
24	4	Nose	" "	4 "	" "
25	4	Pharynx	Foll. Pharyngitis	4 "	Galv. cautery.
26	1	Pharynx	" "	4 "	" "
27	3	Nose	Turb. Hypertrophy	4 "	Nitric acid.
28	2	Nose	" "	4 "	" "
29	1	Uvula	Relax'd Throat with swell'd and œdematous Uvula	4 "	Ablation.
30	2	Pharynx	Foll. Pharyngitis	4 "	Galv. cautery.
31	1	Pharynx	" "	4 "	" "
32	3	Nose	Turbinated Hypertrophy & acutely deflected septum.	4 "	Nitric acid and scalpel.
33	1	Nose	Turbinated Hypertrophy	4 "	Nitric acid.
34	2	Pharynx	Foll. Pharyngitis	4 "	Galv. cautery.
35	1	Pharynx	" "	4 "	" "
36	1	Nose	Myxomata of both Nostrils	4 "	Cold wire snare, forceps and galv. caut.
37	3	Nose	Right Middle Turb. Hyp.	4 "	Nit. acid and galvanic cautery.
38	4	Pharynx and Nose.	Foll. Phar., Polypus of Low. Mid. Turb	4 "	Galvanic cautery.
39	3	Pharynx	Foll. Pharyngitis	4 "	" "
40	2	Pharynx	" "	4 "	" "
41	2	Nose	Middle Turb. Hypertrophy	4 "	" "
42	4	Nose	" " "	4 "	" "

No. of Case.	No. of Sittings	Region.	Disease.	Strength of Solution of Cocaïne.	Character of Surgical or other Procedure.
43	1	Nose	Ant. Turb. Hydertrophy	4 "	Nitric acid.
44	4	Nose	" " "	4 "	"
45	2	Pharynx	Varicose Vessels of Pharynx and Pillars	4 "	Galvanic cautery.
46	2	Pharynx	Foll. Pharyngitis	4 "	" "
47	3	Larynx	Whooping Cough	1 and 2 p.c.	As a spray.
48	1	Larynx	Laryngeal Papillomata	2, 4 & 8 p.c.	" "
49	2	Nose	Turb. Hypertrophy	4 per cent.	Nitric acid.
50	2	Pharynx	Foll. Pharyngitis	4 "	Galv. cautery.
51	2	Nose	Hyp. Turb. Tissue and acute deflection of Septum	4 "	Galv. cautery, nitric acid and scalpel.
52	3	Nose and Pharynx	Foll. Pharyngitis	4 "	Gal. caut. and nit. acid.
53	1	Larynx	Tubercular Laryngitis and Aphonia	4 "	Spray.
54	4	Pharynx and Nose	Foll. Pharyngitis and Hypertrophied Turb. Tissue	4 "	Gal. caut. and nit. acid.
55	1	Larynx	Tubercular Laryngitis with incessant cough	4 "	As a spray.
56	1	Pharynx	Foll. Pharyngitis	4 "	Galv. cautery
57	3	Pharynx	" "	4 "	" "
58	1	Nose	Turb. Hypertrophy	4 "	Nitric acid.
59	2	Nose	" "	4 "	" "
60	3	Nose and Pharynx	" " and Foll. Phar	4 "	" and galv. cautery.
61	2	Nose	Fibroid Tum'rs of right lower Turb. and left Choana	4 "	Cold wire snare, and gal. caut. to pedicles.
62	1	Pharynx	Foll. Pharyngitis	4 "	Galv. cautery.
63	3	Nose and Pharynx	Foll. Phar. and Turb. Hyp.	4 "	" and nit. acid.
64	3	Nose	Turb. Hypertrophy	4 "	Nitric acid.
65	3	Nose	" "	4 "	" "
66	3	Nose	" "	4 "	" "
67	1	Pharynx	Hypertrophied Tonsils	4 "	Guillotine.
68	2	Larynx	Rh'matic infl. of Arytenoids	2 "	Spray.
69	2	Nose	Turb. Hypertrophy	4 "	Galv. cautery.
70	1	Nose	" "	4 "	Nitric acid.
71	3	Nose	Coryza and Headache from pressure	4 "	Galv. cautery.
72	1	Nose	Right Mid. Turb. Hyper.	4 "	" "
73	1	Nose	Turb. Hypertrophy	4 "	Nitric acid.
74	3	Larynx	Papillomata	2 and 4 p.c.	Spray.
75	2	Larynx	Neuralgia of Larynx	2 per cent.	"
76	2	Pharynx	Foll. Pharyngitis and cicatricial adhesions of Nasal cavities	4 "	Galv. caut. and scalpel.
77	1	Nose	Turb. Hypertrophy	4 "	Nitric acid.
78	1	Nose	" "	4 "	" "
79	2	Nose	Turb. Hypertrophy and cicatricial adhesions	4 "	" " and scissors.
80	1	Nose	" "	4 "	Galv. cautery.
81	1	Pharynx	Foll. Pharyngitis	4 "	" "
82	1	Uvula	Chronic relaxat'n of Uvula	4 "	Ablation.
83	1	Tonsil	Right Tonsil Hypertroph'd	4 "	Guillotine.
84	2	Larynx	Whooping Cough	2 "	Spray.
85	2	Nose	Right Middle Turb. Hyper.	4 "	Nitric acid.
86	1	Nose	Rt. Middle Turb. Hypert. and Polypoid growth	4 "	Galv. caut. and nitric acid.
87	1	Nose	Fusion of right middle Turbinated and Septum	4 "	Scalpel and galv. caut.
88	1	Nose	Left lower Turbinated Hypertrophy	4 "	Nitric acid.
89	4	Larynx & Trachea	Irritable jerking cough	2 "	Frequently as a spray.
90	1	Nose	Left lower Turb. Hypert.	4 "	Nitric acid.
91	1	Nose	Right middle Turb. Hyper.	4 "	Galvano-cautery.
92	1	Nose	Left lower and middle Turbinated Hypertrophy	4 "	Nitric acid.
93	1	Nose	Right lower Turb. Hyper.	4 "	" "
94	1	Nose	Ulceration of cartil. septum	4 "	5 p.c. sol. chromic acid
95	....	Larynx	Œdema of right ary-epiglottic fold, result of pressure of Thyroid Cyst.	4 "	Spray.
96	....	Larynx	Œdema of Ventricular bands in Bright's disease.	13 milligram. daily	As a Troche.

Of the 96 cases reported, the sittings, 200 in all, were disposed as follows:—

Painful operations on the nose, as the destruction of hypertrophied turbinated tissue by means of chemical agents or the galvanic cautery	127
Painful operations on the pharynx, pillars or neighboring parts by galvanic cautery	42
Ablations of the uvula	3
Tonsillotomies	2
Removal with the scalpel of the acute angles of deviated septa obstructing a nasal passage	2
Cutting through cicatricial adhesions or fusions of turbinated tissue and septum nasi	2
Eradication of myxomata or other nasal growths by means of snares, forceps &c., with subsequent galvano-cauterization of their pedicles	5
Application of 4% solution of cocaïne to inflamed and painful palate, pillars, &c.	1
Laryngeal sprays of from 1% to 10% for various purposes, as allaying cough; as a local astringent, and as an anæsthetic in the removal of laryngeal growths, &c.	18

In the hypertrophic nasal cases, cocaïne was had recourse to purely as a means of allaying the suffering caused by painful procedures, and in this it succeeded admirably. Nitric, acetic and chromic acids, as well as the galvano-cautery, were employed without causing the slightest discomfort. In fact, more complaints were made by the patients when the cocaïne was in course of application than when the caustics themselves were *in situ*. Regard was, of course, had to the extent of surface operated upon on each occasion.

The operations on the pharynx and neighborhood were principally for the destruction of enlarged follicles and varicose vessels. Cocaïne here answered the threefold purpose of lessening irritability, giving steadiness to the parts and rendering the application of the galvano-cautery electrode painless. It also reduced the calibre of vessels in a very remarkable manner.

Three uvulotomies were performed in the usual fashion with traction forceps and scissors, after painting the surface with cocaïne. There was no pain during the operation, but the ordinary amount of suffering afterwards resulted.

In the case of M. R. (No. 29 of the table), the uvula was swollen and œdematous to an enormous degree. The application of the cocaïne facilitated the cutting materially by contracting and hardening the tissue. He was not conscious of any pain during the operation.

In the interval of time covered by the table I employed cocaïne but twice in extirpation of the tonsils (Nos. 67 and 83), my previous experience of it tending to the belief that the immunity from pain bestowed was largely of mental origin. Tonsillotomy is not a very painful operation unless adhesions to the pillars exist, and under the latter condition the use of cocaïne is very beneficial.

M. S. (No. 67), a dispensing clerk, came with both tonsils very much enlarged. I painted the right gland and its environs with cocaïne (4 per cent.), but to the left I made no application; of this the patient was not aware. He characterized the pain as more acute on the left or unprotected side, but was sensible of the cutting of the right gland. Cocaïne, however, when applied to the wounded surfaces stopped the bleeding and relieved the pain very satisfactorily. Its næmostatic property is much superior to that of the Gallic and Tannic acid mixture of the Throat Hospital Formulary, and it is neither so disagreeable nor so likely to produce gagging as the latter.

In the case of A. E. T., a chemist's apprentice (not recorded above), a very delicate lad, with enormous tonsillar hypertrophies, I removed the right gland after applying cocaïne (he says) painlessly. Some days later I operated on the left side without cocaïne, and, if I may judge from appearances, his suffering was severe. It is but fair to state that on the second occasion the tonsil was in a state of acute inflammation.

The cases (Nos. 32 and 51) of angular lateral deviation of the septum reported are two in number. Both boys had undergone treatment by galvano-cautery, etc., for destruction of hypertrophic soft tissues of the nasal passages impeding healthy respiration; one of these (No. 32) had both tonsils removed early in the course of treatment. The angle of cartilage and mucous membrane was removed to a sufficient depth to allow of

the free passage of air. In both instances no pain was suffered, and the bleeding was decidedly less than would have occurred under ordinary circumstances.

In the cases (Nos. 76, 79 and 80) of cicatricial adhesion, though pain was felt when using the shears it was comparatively trifling, and was more the result of the lateral pressure exerted by the blades on the septum and lower turbinated bones than from the wound itself.

In eradicating myxomatous and other nasal tumours by whatsoever means, cocaïne is of material assistance. Its power of contracting the soft tissues on their bones affords an enlarged field for vision and, at the same time, allows of the proper adjustment of the instrument selected. The painless nature of the proceeding also aids accurate manipulation and admits of the active cöoperation of the patient. The tendency to bleed is diminished, as is also the flow of nasal mucus. Sneezing is also well under control.

Of the cases referred to, but one need be mentioned.

W. C. (No. 36), past middle life, had suffered from bronchitis and nasal catarrh for 25 years. Anterior rhinoscopy developed the fact that both nostrils were blocked by myxomata. At the first sitting the cold wire snare engaged a large growth in the left nostril, and, despite the gentleman's struggles and protests, I suceeeded in removing the great bulk of the tumor; the pedicle, however, remained. Two days later the patient returned, when I carefully applied cocaïne to the surrounding tissue of the left nostril and removed the pedicle with the snare close to its attachment, which I then destroyed by the galvano-cautery. I then proceeded, under cocaïne, with snare and forceps to clear the right side, and succeeded in doing so. The patient, who was, at the time of his visits to me, in very delicate and feeble health, assured me that the second sitting was quite free from pain.

In the case (No. 22) of a prominent clergyman, who was suffering from an inflamed and painful throat, which rendered articulation difficult, a single application of a 4 per cent. solution conferred such immunity from pain that on the same even-

ing he was enabled to keep an appointment to deliver a public lecture. He afterwards assured me that he was never in better voice, and spoke with ease.

Of the cases (Nos. 11, 47, 48, 53, 55, 68, 74, 75, 84 and 90) in which laryngeal sprays of cocaïne had been employed, I would like to say a few words relative to those of most importance.

N. W. (Case 11), a case of prolapse of the laryngeal ventricles, has been under my care for over a year. Under the local use of cocaïne great improvement followed. The ventricles contracted much more rapidly than they had done under any previous application, though improvement all along had been evident. The left vocal cord was for the first time visible under the use of cocaïne, and the voice was better maintained and clearer. All these good effects I attribute to the astringent and sedative action of the alkaloid.

In this case a 4 per cent. solution was not strong enough to produce anæsthesia and tolerance, and I required to use a 10 per cent. to have any satisfactory result. I found in this case that the brush would produce violent glottic spasm, and substituted therefor the use of a weak spray, after which the brush, with a strong solution, was tolerated very nicely. A probe now could be borne in the larynx for several seconds without distress.

In whooping-cough the results of sprays of cocaïne are given in two cases only.

In the cases of Mrs. C. (No. 47) and A. C. (No. 84), 2 per cent. sprays afforded great relief. I do not hesitate to say that the cocaïne solutions, if properly applied under high pressures to the larynx and trachea, would soon overcome many of the difficulties presented by this disease.

Case No. 89, a lady far advanced in pregnancy, suffering from a short, jerking cough, threatening, from its violent and incessant nature, to induce a premature delivery, was instantly relieved by 2 per cent. sprays of cocaïne. About 20 or 30 minims were directed to be employed as a spray every four hours. In this case morphia, counter-irritation and many

well-known and generally reliable remedies had failed to afford any relief.

In laryngeal tuberculosis, with incessant cough and difficult deglutition it is of great service (Cases 53 and 55).

It checks the cough, facilitates expectoration, allays the tickling feeling so often complained of, and by lowering sensibility makes the swallowing of nourishment, which before has been difficult or even impossible, easy of accomplishment.

In endo-laryngeal operations for the extirpation of growths, I have but three cases to offer, only two of which have been tabulated.

Laryngeal Papillomata.—M. McB. (No. 48) presented herself with papillomatous growths of the larynx. A spray of cocaïne of gradually increasing strength was used until 8 per cent. had been reached, when the larynx became quite tolerant of handling. At the request of the patient, no attempt was made at removing the growths. Five years ago I operated on this patient for removal of growths below the cords, by opening the larynx through the crico-thyroid membrane and cricoid cartilage. They have this time, however, returned above the cords.

E. M. (No. 74), aged 7.—Four years ago I did a tracheotomy on this child for extensive laryngeal papillomata, endangering life. The size of the child's larynx did not fairly admit of any attempt at removal by the natural passages. She has worn a tube constantly since, and with the assistance of sprays *of absolute alcohol*, has succeeded in keeping the growths well under control. I have at three sittings used cocaïne by spray and brush, and have succeeded in removing, by evulsion, all trace of growths. No pain was complained of during these operations, and the larynx (an abnormally small one by the way) tolerated handling fairly.

Fibro-Cellular Cyst of Left Vocal Band.—(Not recorded on table.)—C. C., civil engineer consulted me Dec. 10, '84, for a modified aphonia, or, more correctly, dysphonia. On laryngoscopic examination, a small bi-lobular tumor was observed springing from the border and under surface of the left vocal

band at its middle. The introduction of forceps produced an alarming spasm of the glottis. After applying a solution of cocaïne (10 per cent.), the larynx became tolerant of interference, and locating the growth by the aid of the mirror, I removed it with antero-posterior cutting forceps at the first passage of the instrument. Some pain was complained of at a point below the glottis inaccessible to the application, which was made with a laryngeal brush. The tumor was of the size of a very small field pea, consisted of two lobes, and was attached to the edge and under surface of the left vocal band. Dr. Wyatt Johnston, resident physician of the Montreal General Hospital, to whom it was submitted for microscopical examination (and to whom I am indebted for a report of its character), declared it to be a "Fibro-cellular cyst undergoing mucoid degeneration." This form of growth is, I believe, of rare occurrence in the larynx.

In conclusion, I desire to express my confidence in the value of cocaïne hydrochlorate when used as a local anæsthetic in the air passages. In every case in which I have used it to allay the pain attending surgical measures in these regions, it has accomplished its purpose. In order to attain success, let me repeat that not only must the region to be operated upon be protected, but also the surfaces immediately adjoining; that the application must be made in a thorough manner, and that it must be of sufficient strength and used freely. Many of the reported cases of partial failure with cocaïne in the larynx are directly the result of leaving areas unprotected. The substitution of proper atomization for the method of application by the brush would, I am sure, render success more certain. I feel that it is unnecessary to refer to the many advantages the use of cocaïne possesses over chloroform, ether, and other anæsthetics in the minor surgery of the nose and throat. Nor need the cost of applying it be as great, as the market value of the drug would at first suggest, if the few directions I have briefly laid down be carefully followed.

Correspondence.

BERLIN, March 18, 1885.

To the Editor of the CANADA MEDICAL & SURGICAL JOURNAL.

Berlin, from a medical standpoint, has recently been so ably described in the pages of your JOURNAL that it is with no small degree of diffidence that I venture upon sending you a communication from here. I derive, however, some encouragement from the feature of forgetfulness so common to mankind, and which I hope will prevent a too close comparison between the letters in your journal from Berlin this year and those of last year.

You probably will have heard, before this reaches you, of the death of the renowned Prof. Frerichs. He breathed his last on the 14th inst. The funeral was largely attended, and all classes from royalty downwards were well represented. The Crown Prince sent flowers, and the Emperor manifested his respect for the departed man of science by sending his state carriage—the next greatest honor to his being present in person. With our democratic tendencies, we cannot fully understand the significance of *such* a mark of honor.

It is an open secret that Prof. Leyden will succeed to the chair made vacant by this recent death. But the successor to Prof. Leyden is not yet known. It is thought there will be considerable difficulty in making the appointment. Last week I attended a meeting of the Berlin Medical Society. The chair was taken a few minutes after the appointed hour (7.30 p.m.) by the President, Prof. Virchow. The large hall was well filled, and the number of gray heads contrasted very markedly with that of similar gatherings on the other side of the ocean.

The Virchow of Berlin, like his representative in Montreal (until lately), set the ball rolling by exhibiting a number of very interesting pathological specimens, among which was an enormous spleen, weighing over seven pounds, from a case of leukæmia. The specimen was sent from one of the provinces, and Prof. Virchow was unable to say whether the leukæmia

was of a malarial origin. Prof. Kücher showed two breasts affected by that rare affection, carcinomatous mastitis, that he removed from a woman a few days before. The disease had set in a few weeks before, and made very rapid strides. As there was evidence that the left pleura and lung were involved, he did not expect his patient to live more than a few days. Then came an exceedingly interesting discussion by Prof. Waldeyer on the development of connective tissue. He spoke for fully an hour without a note of any kind, keeping the large audience spellbound. Anyone that has attended a meeting of German physicians will know what a difficult task that is on most occasions.

The arbitrariness of Bismarck has lately made itself felt in a quarter most vulnerable to the pride of Germans. The honor of their famous university has been touched. It would seem the man of "blood and iron" began to accumulate within his tissues a less warlike material—adipose tissue. To reduce this accumulation he had tried several means and sought the advice of several physicians, but all in vain until he came across Dr. Schweininger, who succeeded in reducing the corpulent body by several pounds and in maintaining it in that condition. For this, Prince Bismarck awarded him the chair of Dermatology in his University. This Dr. Schweininger has no claims for such a position on scientific grounds, and is decidedly objectionable on moral ones. While practising in Munich he committed a grave offence against public decency, for which he was sentenced to a considerable term in imprisonment. None of the physicians here of any standing will recognise him, and they all keenly feel the disgrace of the appointment.

A few days ago Prof. Virchow, in his place in the House of Parliament, drew attention to the appointment in most scathing terms, denouncing it as an arbitrary act, degrading the University and corrupting public conscience.

The regular lectures ceased on the 1st of March, and will not begin again until the end of April. On the 16th of this month began what is known as the "Frener Courses" for practising physicians. These continue for about six weeks, and

comprise several courses in almost every branch of medicine. A stranger on coming here experiences "embarras de richesses," and does not know which to select. Though they are all given by able and zealous men, they are not all of equal merit.

In gynæcology, of course, Prof. August Martin stands at the head of the list. His private hospital provides him with abundance of interesting material, and he performs from one to two operations daily. From 11 to 12 he operates, then he lectures on general gynæcology for another hour, and from 1 to 3 is taken up with examinations of patients. The class for the latter purpose is divided up into sections of eight; there are three sections, and each section has two days weekly.

Dr. Guttman's course on internal medicine and physical diagnosis, at the Moabist Hospital, is excellent. This hospital is built on the pavilion plan, comprising twenty-four isolated buildings, each of which has from twenty-four to twenty-eight beds. The more severe and interesting cases are sent to it from all parts of the city. Dr. Guttmann gives an hour-and-a-half four times a week. During the first half hour each member of the class is assigned a patient, which he is to examine and make a diagnosis. Then during the remaining hour the class is taken round the wards, where Dr. Guttmann makes clinical remarks. Where there is so much material to select from, the same disease can be exhibited in different stages and of different types in different patients. For example, to-day we were shown two cases of hæmoptysis—one at the outset of phthisis, the other in advanced phthisis—and another case of slight hæmoptysis in an acute case of pneumonia. In a future letter I may say something more about the practical courses.

The approaching meeting of the German Medical Association on the 8th of April is looked forward to with great interest. That vexed but interesting subject, "Tuberculosis," is to be discussed, and several papers of importance are on the lists.

H. N. V.

Reviews and Notices of Books.

The International Encyclopædia of Surgery: A Systematic Treatise on the Theory and Practice of Surgery.—By authors of various nations. Edited by JOHN ASHURST, Jr., M.D., Professor of Clinical Surgery in the University of Pennsylvania. Illustrated with chromolithographs and woodcuts. In six volumes. Vol. V. New York: Wm. Wood & Co.

The fifth volume now issued leads on towards the completion of this monument of American enterprise. The authors have been selected with great judgment, and the various articles (of which we append below a list) contain each a complete exposition of the subject from the pen of one who is recognized as specially competent to deal with it. It is only therefore necessary for us to repeat the favorable criticism which we have made upon the preceding volumes of the series. When complete, the Encyclopædia will present a thorough and exhaustive resumé of all the modern teachings of surgery and the most approved plans for carrying these into effect. The following is a list of the articles in the present volume: Injuries of the Head, by Charles B. Nancrede, M.D.; Malformations and Diseases of the Head, by Frederick Treves, F.R.C.S.; Injuries and Diseases of the Eyes and their Appendages, by E. Williams, M.D.; Injuries and Diseases of the Ear, by Albert H. Buck, M.D.; Injuries and Diseases of the Nose and its accessory sinuses, by George M. Lefferts, A.M., M.D.; Injuries and Diseases of the Face, Cheeks and Lips, by Alfred C. Post, M.D., LL.D.; Injuries and Diseases of the Mouth, Fauces, Tongue, Palate and Jaws, by Christopher Heath, F.R.C.S.; Surgery of the Teeth and adjacent parts, by Norman W. Kingsley, D.D.S.; Injuries and Diseases of the Neck, by Geo. H. B. McLeod, M.D.; Injuries and Diseases of the Air Passages, by Solis-Cohen, M.D.; Injuries of the Chest, by Edward H. Bennett, M.D., F.R.C.S.I.; Diseases of the Breast, by Thomas Annandale, F.R.C.S.E.; Injuries and Diseases of the Abdomen, by Henry Morris, M.A., M.B., Lond.; Hernia, by John Wood, F.R.S., F.R.C.S.

Intestinal Obstruction; its Varieties, with their Pathology, Diagnosis and Treatment.—By FRED. TREVES, F.R.C.S., Surgeon to and Lecturer on Anatomy at the London Hospital, Hunterian Professor of Anatomy at the Royal College of Surgeons of England. With 60 illustrations. Philadelphia: Henry C. Lea's Son & Co.

This book has been issued as one of the series of clinical manuals. It is the Jacksonian Prize Essay of the Royal College of Surgeons of England for 1883. The various forms of ileus, both acute and chronic, are here classified and described with the greatest care and minuteness, all the principal varieties being illustrated by cases and by excellent woodcuts. The various questions of diagnosis are elaborated and studied with care and judgment. The chapters upon treatment are conceived in a proper scientific spirit, the modern surgical methods receiving all due consideration, but proper caution and reserve being enjoined before resorting to the somewhat serious procedure of laparotomy or resection of an intestine. There are no cases more calculated to call forth one's skill in diagnosis and energy in treatment than those of obstructions in the bowels. The knowledge that these disorders nearly always involve more or less danger to life, and that, as they are better understood, so more and more success is being met with in their management, should lead every one to study the subject anew in the light of modern scientific knowledge. To assist him in this undertaking we know of no book so well adapted as that recently presented to us by Mr. Treves. The illustrations are numerous, nearly all from original cases, and of much value.

The Ear; its Anatomy, Physiology, and Diseases—a Practical Treatise for the Use of Medical Students and Practitioners.—By CHARLES H. BURNETT, A.M., M.D., Professor of Otology in the Philadelphia Polyclinic and College for Graduates in Medicine, etc., etc. With 107 illustrations. Second edition. Revised and rewritten. Philadelphia: Henry C. Lea's Son & Co.

This manual of otology is large enough to contain all the

essentials concerning the normal ear and the ear diseased, and still not so diffuse that it is beyond the scope of the practitioner who would be well-informed or the student who desires a fair knowledge of this important subject. A great many general practitioners hardly realize how frequently disorders of the hearing apparatus give rise to cerebral and other symptoms of various origin, which they have failed to account for. Nor do they appreciate clearly the truly grave importance of paying careful attention to acute inflammatory affections and chronic purulent diseases of the outer parts of the ear. As regards the latter, most hospital physicians and those of considerable experience have met with cases where meningeal inflammations have been set up from these causes; and in some of these instances which have proved fatal there can be little doubt that active, early treatment or surgical interference might have saved life. These ear diseases are certainly even at this day too much neglected, and no doubt any specialist in this department must meet with many cases of hearing impaired or lost through delay in seeking suitable advice. General practitioners cannot be expert aurists, but they can, and should, know enough about these cases to treat the simple ones with judgment and to refer more difficult ones to higher skill whilst good may yet be done. We have pleasure in recommending Dr. Burnett's work as a thorough and careful exposition of our present knowledge on the subject.

Pyuria; or Pus in the Urine, and its Treatment.—By D. Robert Ultzmann, Professor of Genito-Urinary Diseases in the Vienna Polyclinic. Translated (by permission) by Dr. Walter B. Platt, F.R.C.S. (Eng.), Demonstrator of Surgery in the University of Maryland, &c. New York; D. Appleton & Co.

The substance of this little book consists of clinical lectures given by Prof. Ultzmann in the Vienna Allgem. Policlinic, Winter Semester 1882-83. They comprise the diagnosis and treatment of acute and chronic urethritis, prostatitis, cystitis and pyelitis, with especial reference to their local treatment.

The sections upon diagnosis are most interesting in connection with pyelitis or pyelo-nephritis, the treatment, however, of the latter being viewed solely from a medical point of view, for the questions of the modern surgical operations for the advanced conditions of this kind are not discussed. The lectures can be read with much profit by every one interested in attaining proficiency in the management of these common and painful disorders.

Human Osteology.—By LUTHER HOLDEN, F.R.C.S., assisted by JAMES SHUTER, F.R.C.S., M.A., M.B., Cantab. With numerous illustrations. Sixth edition. New York: Wm. Wood & Co.

This is the January (1885) volume of Wood's Library, and is a reprint of the English edition with electrotype copies of the original illustrations much reduced in size. Of course it can bear no comparison with the original English edition as to type or illustrations, but, considering the price (about $1.50), it is a remarkably cheap book. It is useless to say anything in praise of this work, as its excellence has been established and acknowledged for many years. It is the best book on osteology which has been issued up to the present time, and Holden's Osteology is familiar to every student of anatomy. The value of this edition is much increased by the valuable notes on comparative osteology which follow the description of each bone. We can heartily recommend this volume of Wood's Library to all those who do not wish to incur the expense of the larger English edition.

A Handbook of Diseases of the Eye and their Treatment.—By H. R. SWANZY, A.M., M.D., F.R.C.S.I., Surgeon to the National Eye and Ear Infirmary, Ophthalmic Surgeon to the Adelaide Hospital, Dublin, &c. With illustrations. New York: D. Appleton & Co.

The above is a handy manual, intended specially for students about to undertake the study of the eye, and it has been arranged specially with the view of being useful to them in carrying out

such studies systematically. Subjects which to beginners are found particularly embarrassing or difficult are thus given prominence, and receive careful attention. It contains the essentials without redundant matter, and seems admirably suited to the end in view.

A Manual of Organic Materia Medica.—By JOHN M. MAISCH, Ph.D. Philadelphia: Lea Brothers & Co.

This work, which has now reached a second edition, is taken up with a description of the physical properties and chemical constituents of the crude preparations of the organic materia medica. Why it should be recommended to medical students and physicians as a work they should study we are at a loss to see. Surely the day is past for burdening the student's memory with the dry, uninteresting, and, for the most part, useless details of the materia medica. As a work, however, for druggists, we should judge it to be very useful.

Books and Pamphlets Received.

THE INHALATION TREATMENT OF DISEASES OF THE ORGANS OF RESPIRATION, INCLUDING CONSUMPTION. By Arthur Hill Hassall, M.D., Lond. With numerous illustrations. London: Longmans, Green & Co.

TRANSACTIONS OF THE AMERICAN SURGICAL ASSOCIATION. Vol. II. Edited by J. Ewing Mears, M.D. Philadelphia: P. Blakiston, Son & Co.

THE PHYSICIAN HIMSELF AND WHAT HE SHOULD ADD TO HIS SCIENTIFIC REQUIREMENTS IN ORDER TO SECURE SUCCESS. By D. W. Cathell, M.D. Fourth edition. Baltimore: Cushings & Bailey.

LECTURES ON DISEASES OF THE NERVOUS SYSTEM, ESPECIALLY IN WOMEN. By S. Weir Mitchell, M.D. Second edition, revised and enlarged. With five plates. Philadelphia: Lea Brothers & Co.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Feb. 6th, 1885.

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

Sarcomatous Disease of the Femur and Acetabulum.—DR. RODDICK exhibited the specimen and related the case. The patient, a young man, sprained his hip five years ago by falling through a trap in a hayloft. He appeared to recover completely, but in a few months became lame, and had pain, at times getting better. A year ago he had to take to crutches. Last June Dr. R. found roughness of the bones of the joint, and indistinct fluctuation in Scarpa's space. Nothing was done at that time. He was sent to the country, where he remained for two months, returning to hospital last October. The abscess was now opened. He had hectic fever and lost flesh. He went away, but returned again in January, with suppuration about the joint. Becoming worse, it was decided to amputate at the hip-joint, which was done. There was no hemorrhage of any consequence, but the patient never rallied, and died twelve hours later.

DR. SUTHERLAND exhibited the following specimens:—

1. *A Gall-bladder containing thirty-two stones.* This was removed from a subject (female) in the dissecting-room of McGill College. Three or four of the stones were very large, measuring an inch square.

2. *Bladder and Kidneys of a man*, from whom two months previous to death Dr. Roddick had removed a vesical polypus by median cystotomy. The bladder was much dilated and extensively hypertrophied. The ureters also were seen to be dilated. The kidneys were in a state of suppurative interstitial nephritis, or typical surgical kidneys.

3. *Malignant Disease of the Stomach, showing obstruction at the pyloric orifice.* A portion of the liver, the gall-bladder, ducts, duodenum and pancreas were also shown. Secondary deposits were seen in the latter and in the glands. The bile ducts were pervious. At the autopsy the following was noted;

Emaciation and jaundice; 160 ounces of bile-stained fluid was removed. The liver appeared small and the stomach very large, extending seven inches below the ensiform cartilage. On raising the left lobe of the liver, a large hard mass was felt, which involved the pylorus and apparently part of the duodenum. On slitting up the stomach after its removal, the mucous membrane was seen to be pale and anæmic. At the pylorus was a thick ulcerated ring, studded with little red granular ulcerations, and occluding the entrance into the duodenum, preventing the passage of the little finger. A mass about the size of an egg was situated in the pancreas, near its head—probably a secondary deposit, as it was not actually ulcerating. Jaundice was produced by small masses in the gastro-hepatic omentum pressing on the hepatic duct.

Dr. Geo. Ross said there were several points of interest in the clinical history of this case. The gentleman came to him a year ago complaining of dyspepsia; his general health was not good; he said he had been failing. Improvement followed upon treatment. He saw him again in the spring, when he complained of vomiting at intervals of some length. There was no pain after meals, or ever. At intervals of one, two or three days he would have heartburn and an uneasy feeling; he then would get over a basin and empty his stomach. He would have no nausea, or pain, or retching. On examination, the stomach was found dilated, extending below the umbilicus. Its movements were plainly visible, and splashings could be heard. The patient was anæmic, and becoming thinner. Malignant disease of the pylorus, with dilated stomach, was diagnosed. No tumor could be felt. He was advised to enter hospital in order to have the stomach regularly washed out. Coming to hospital some weeks later, no dilatation of the stomach could be made out; it was not subsequently present. He had occasional vomiting of frothy material containing *sarcinæ ventriculi*. He became more comfortable under treatment, though he lost flesh. There was never any pain. He remained in hospital about a month. After this he gradually became jaundiced, and continued to lose weight. At no time were there symptoms of gastric trouble, except the

occasional vomiting. There never had been any hæmorrhage. A short time before death, an indistinct fulness could be made out at the pyloric end of the stomach. It proved to be scirrhus, as was shown by slides exhibited under the microscope by Dr. Johnston. Dr. Ross said the pylorus would not admit the little finger, and why there was a dilated stomach at first, and not later, was not easy to explain.

DR. KENNEDY said that perhaps the circular muscles at the pylorus, from irritation, were spasmodically contracted, but when the disease advanced they might have been destroyed, and so relieved the spasmodic closure of the orifice.

DR. ROBT. BELL (Ottawa) then read a paper by Dr. Percy W. Mathews, on "*Notes on the Diseases among the Indians of York Factory, Hudson's Bay.*" (*See March No., page* 449.)

DR. O. C. EDWARDS, late secretary of this Society, and now in medical charge of Treaty No. 4 Indians, Indian Head, North-West Territory, being present, made a few remarks on some of the diseases among the five thousand Indians on his reserve. Syphilis was very prevalent, and one of the most powerful agents in weakening the Indians. Years ago they led a wandering life, had plenty of food, and were well housed in huts made of buffalo hide. Now, having entered into treaty, they are placed on reserves, making themselves practically prisoners of war. Coming in contact with the whites, they have become infected with syphilis, and as they very seldom apply for treatment, it has spread. The Indians attribute their present condition to the extermination of the buffalo. The Government has tried to make them agriculturists, with but very little success. Phthisis is a most fatal disease, and is usually accompanied with hemorrhages. They apply for assistance, but it is almost impossible to help them, owing to their being badly housed, and they will mix what one gives with their own medicines. Along with this is the noisy "tom-tom" constantly going on outside of any sick man's house or tent. Prolonged lactation is common. A squaw often nurses her child till it is three or four years old. An Indian has as many wives as he can keep, often five or six. They appear to be exempt from toothache,

They are great tea drinkers, and often mix tobacco with the tea. They smoke a great part of their time, swallowing the smoke, which they let out again by the nostrils. They never have inflammatory rheumatism. He has only seen one case of epilepsy, and that was in a half-breed. Measles comes as an epidemic, and is almost as bad as smallpox. For snow-blindness, they apply tea leaves. In the month of March, one must protect their eyes against this. Dr. Edwards said that prior to meeting with the whites, they were very moral and honest; now they don't know what these virtues are. He has visited Indians who still live by hunting, and far away, whom he found honest and moral.

Dr. Hy. Howard remarked that Butler, in his "Great Lone Land," said there was no such thing as impurity or dishonesty when he travelled among them.

Dr. Robt. Bell's experience was that the civilized are immoral. Squaws think they are benefiting their race by having a child to a white man. Labor is effected while on the knees, and is of short duration. He knew of one squaw who was drawing a load of wood, and who, after a halt of half-an-hour to have her baby, proceeded on with her load. Menstruation comes on when about 12 or 13 years old. They are not very regular, often skipping three or four months, caused by hardships and bad food. As a rule, they lose very little.

Dr. Proudfoot said he had been a good deal among the Indians up by Lake Huron, and found phthisis to be very fatal with them.

Dr. F. W. Campbell had noticed that phthisis had killed a good many of the Micmac Indians of the Bay of Chaleurs.

Dr. Trenholme said he knew of a French-Canadian woman in Montreal who was a grandmother at 25 years of age.

Stated Meeting, Feb. 20th, 1885.

T. G. Roddick, M.D., President, in the Chair.

Abnormal Muscular Slip.—Dr. Trenholme exhibited a man, aged 45, having an elevated congested-looking mark about 15 inches long, running obliquely from under the clavicle to the ensiform cartilage.

DR. SHEPHERD believed it to be an abnormal muscular slip from the external oblique muscle to the pectoral.

Ulcer of the Stomach; adhesion to the liver; abscess between.—DR. BELL exhibited the specimen and DR. RODDICK related the following history of the case: Mrs. J. sent for him three years ago for a profuse hemorrhage from the stomach. Ulcer was then diagnosed. One year later she had a second bad hemorrhage. A few months after recovery from this last attack she broke her radius, which united well. After a time she failed in health, became blanched, and felt as if she lost blood, though no more ever came by the mouth. On being sent for again, Dr. R. P. Howard was asked to see her in consultation. At this examination, they found the stomach dilated. Dr. Howard concurred in the diagnosis of ulcer of the stomach. The patient would eat, and, after a day or two, would vomit apparently all the food taken the couple of days previous. Washing out the stomach was suggested, and the case was handed over to Dr. Bell to carry this treatment out. Dr. Bell said that for a time his patient stood the treatment, but afterward she declined to have anything further done. She only lived six weeks longer. He got permission from her friends to allow him him to go to the vault and open her to examine the stomach. On the posterior wall of the stomach, midway between the œsophageal and pyloric openings, is an old ulcer; at this point the stomach is also adherent to the liver, and between the two is a sac containing pus, with an opening into the stomach.

In answer to questions, DR. RODDICK said the stools never showed signs of blood. He fed her at one time for a month per rectum on peptonized foods.

The Single Suture.—DR. ALLOWAY gave the following particulars;—Of the last thirty cases of parturition I have attended in primiparæ, eight have suffered from laceration of the perineal body sufficiently extensive to warrant the application of the *single suture.* In one of these cases, the suture was not applied until six hours had elapsed since the delivery. Union in all of these cases has been complete and permanent. In all of them I have employed the most perfect antiseptic course of post-partum treat-

ment, to which I attribnte a large share of the success in obtaining primary union. The application of the single suture was suggested and practised by me two years ago for the first time. In the *American Obstetrical Journal* of February, 1884, I have given a detailed description of the operation, a short epitomé of which is all that is necessary here. A straight perineal needle three inches long should be used. I have had these needles for this operation made by Messrs. Codman & Shurtliff, of Boston, and they can be obtained at Messrs. Lyman & Sons, Montreal. No other needle can be used with the same satisfaction. I use, absolutely, Snowdon's iron-dyed silk, No. 13. A strong needle holder completes the outfit necessary. During the examination of the wound, sponge it well of all blood-clots with a solution of bichloride. Then pass the needle through the skin about half an inch from the edge, and at a level with the very beginning of the tear. With two fingers of left hand in the rectum, force up the recto-vaginal cellular tissue and make the needle glide rapidly, though steadily, beneath this cellular tissue, as close to the wall of the rectum as possible to make its exit at a corresponding point on the opposite side of the tear. Now sponge the wound carefully again, and bring the edges of the wound together by tying the suture fairly tight. It will be noticed now that there will be some bulging or gaping of the part of the wound between the suture and sphincter ani, and will be very tempting to apply another superficial suture; but my advice is—*don't*, it will be frustrating the very object of the operation,—avoid all *unnecessary* sutures as you would other foreign bodies between the edges of the affixed surfaces. This gaping fissure will shrink away by the third day, and the two edges will come together in close union. I will now speak of one or two cardinal points which are *absolutely* necessary in doing this operation. First, Be sure that the needle, in no part of its course, appears in the vaginal wound. The corners of the laceration at the entrance and exit of the needle, where the wound is sometimes deeply fissured and jagged, require especial care on this point. To guard against this, the thumb of the left hand should be kept always in the wound over the course of

the needle, constantly feeling for it; and should you detect the needle in the surface of the wound in ever so small a part of its course, it should be withdrawn and deeper tissue taken up. After the needle has made its exit on the right side, it should not be completely drawn through until the operator has again examined its track and become satisfied that the suture will be completely buried in all its course. If this care is not specially taken, and a part of the suture should gain entrance to the wound, a pus pocket will be very likely to form, and the operation will fail. A suture passing through the cavity of a wound is a foreign body, but passing around outside of the wound, it cannot interfere with union. The certainty of success of this operation hinges largely on this simple fact, and it should be well borne in mind. The suture is removed on the eighth day by dividing it with a scissors, and it will be found to give a loop of about three-quarters to one inch in length if the divided ends are reunited. The second point of importance lies in the after antiseptic treatment; and I will certainly not hold the principle of the operation responsible for failure unless this point is carried out as advised. I hold this position on the same grounds as a surgeon of the present day who would not feel inclined to hold himself responsible for the successful issue of an amputation or severe lacerated wound, the after-treatment of which had been taken out of his hands and handed over to the tender mercies of an ignorant nurse and a few well economized soiled rags. I cannot conceive why there is so much opposition to the dressing of puerperal wounds.

The main part of the post-partum antiseptic treatment consists in irrigating the wounded passage with a $\frac{1}{2000}$ mercuric solution *once* daily. The first irrigation is performed the day following the delivery, and again at each morning visit until the eighth day, when the suture is removed and union found complete. In carrying out this procedure, the patient is gently lifted, while lying on her left side, to the edge of the bed, the nates hanging just over the bedboard. A small rubber apron (a quarter of a yard square) is slipped under the hips and tied over the crest of the ilium. In this way a gutter is formed which carries the

fluid as it runs from the vaginal passage into a receiving basin on the floor. The reservoir of the irrigator is then filled with the mercuric solution previously prepared. The nurse holds the reservoir in her hand at the proper level, and the physician introduces the glass tube into the vagina after he has first allowed some fluid to run into the basin to drive out the air. As soon as the nurse notices that the fluid has become exhausted to about an inch from the bottom of the reservoir, she informs the physician, and he withdraws the glass tube from the vagina and allows the remaining fluid to run on and cleanse the external parts. A napkin is then applied, and the patient gently lifted back in the bed and allowed to remain on her back for a short time. I never allow the nurse to touch the parts under any pretence whatever. Her duty consists in giving the patient her prescribed diet and attending to the infant. A saline is administered every morning, and the bowels gently moved over a bed-pan adjusted by the patient herself.

I will now illustrate by these diagrams on the board that directly after a bad laceration takes place, and before the suture is passed, the vaginal passage is much elongated and the uterus slightly anteflexed. The uterus can now hardly be reached by the fingers without introducing the whole hand. We will now pass the sutures and draw somewhat upon the posterior wall, through which it passes, and you will find that the vagina shortens, the uterus comes nearer to the introitus, and as the cervix is drawn slightly forward, the fundus leans backwards. Draw the suture still more and fix it with a firm knot, and on now passing your index finger you will easily meet the cervix at its tip, and the fundus will have been thrown still a little further backward into what we would call a normal position. This series of facts I have demonstrated to myself on the living subject, and it serves to establish the ease with which a uterus may become prolapsed and afterwards retroverted, as it sinks in the pelvis where the perineum and vaginal wall have not been repaired, and the patient soon assumes the erect posture. I will now, by this wooden model, show how the suture is passed, and illustrate that it thoroughly controls the muscles in the

perineum (the transversus perinei, bulbo-cavernosus, &c.) which exert any traction power on the laceration. This is independent altogether of the fact that as the child becomes evolved, dilatation is so extreme that there is such calibre to spare between this extreme dilatation and complete involution, that there can be practically no side traction upon the wound till the eighth or tenth day, when union will have become fairly strong. So that really all we want are two fixed points—one at each extremity of the wound—and that the cavity of the wound be cut completely off from the vagina (the drain-pipe to the uterus). Draw the suture tight and tie the vent, pass your forefinger down along the posterior wall of the vagina, and you will find no wound, not even a fissure. The whole laceration is compressed like the mouth of a bag by a running string. The wound below is a *cul-de-sac*. The sides are in perfect contact, and as no discharges from the vagina can possibly enter it, primary union must ensue.

Dr. Kennedy said slight tears were very common, and seldom could be avoided. These tears appear more at the time, and almost always do well without interference. In an instrumental case, there is much less danger of a bad tear if the forceps be removed when the head is well down against the perineum, allowing the natural efforts to complete delivery. He advocated stitching if there be much of a tear. Unless there were special danger of septic poisoning, he would not use injections.

Dr. Blackader dissented from Dr. Kennedy in leaving even a very moderate tear alone. He always mends such a rent for two reasons. It lessens the chance to prolapse, and it closes an open wound, thereby guarding against septic infection. Heretofore he has put in two or three stitches; lately he has tried the single stitch, as employed by Dr. Alloway, and with good results.

Dr. Trenholme believed a common darning needle would answer in this operation. He said that after a day or so the stitch got loose from the tissues being swollen when applied; to obviate this, Dr. Carson of Detroit employed the shotted suture —that is, a wire suture held on each side of the rent by a small

bullet which could be pushed up the wire when it became loose. He (Dr. T.) uses the catgut sutures, and gets perfect satisfaction. He thought Dr. Alloway's purse-string suture would shorten the posterior wall of the vagina, and so favor prolapse and retroversion.

DR. RODDICK said that Dr. Alloway's operation had this in its favor—it was easily done. He believed it to be an admirable method.

DR. GARDNER had not yet tried the single stitch. He employs two or three stitches of silk. He intended trying the single ligature.

DR. ALLOWAY, in reply, said that Dr. Kennedy's cases, where left alone, had to heal by granulation, not by first intention, as is the case when stitched properly. In reply to Dr. Trenholme, he said that a common darning needle would be very apt to break in the forceps. As to Dr. Carson's shotted suture, he thought it very objectionable to be interfering with the wound every day. Catgut sutures are difficult to tie, and they may become absorbed too soon.

DR. KENNEDY asked what length of tear Dr. Alloway would consider necessary to stitch.

DR. ALLOWAY said anything over a quarter of an inch.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

Malignant Endocarditis.—The following is an abstract of the first of the Gulstonian lectures on "Malignant Endocarditis," delivered by Prof. Osler. One of the first points to settle is the nomenclature. "In discussing the subject of endocarditis we are met at the outset by difficulties of nomenclature and classification. The designation *acute* may be used to indicate those forms which are accompanied by proliferation of, and exudation upon, the endocardial surface, with or without loss of substance, as opposed to *chronic*, in which there are sclerotic changes without vegetations. Subdivisions of the acute form have been arranged on an anatomical basis as the

terms *plastic*, *papillary*, *verrucose*, *fungous*, *ulcerative*, indicate. On the other hand, from an etiological point of view, the forms of endocarditis are as numerous as the diseases in which it occurs, and we constantly hear the expressions *puerperal*, *rheumatic*, *scarlatinal*, etc. Some speak of primary and secondary forms, while from a clinical standpoint they are arranged in two classes—simple and grave. Anatomically, there appear to be no very essential differences in the various forms of acute endocarditis. Between the small papillary excrescence and the huge fungating vegetation with destructive changes all gradations can be traced, and the last may be the direct outcome of the first; the two extremes indeed may be present in the same valve. They represent different degrees of intensity of one and the same process. A classification of cases based on the ordinary macroscopic characters of the inflammatory products into warty or verrucose and ulcerative will in many instances group together cases widely different in their clinical aspects, and, contrariwise, a clinical subdivision into cases of simple and cases of malignant endocarditis by no means of necessity implies that the lesions in the former case are all of the plastic or warty variety, and in the latter of the ulcerative or destructive. The term *ulcerative* has come into very general use to describe the grave form, and it expresses well an anatomical feature present in a large proportion of cases; but in others it is very inapplicable, as there may be no actual loss of substance, and no more destruction than occurs in the verrucose form; and, on the other hand, there may be great destruction and ulceration from causes of an entirely different nature. The numerous other terms employed, *septic*, *infectious*, *diphtheritic*, *mycosis endocardii*, *arterial pyæmia*, while each expressing some special feature, and so far suitable, have never come into very general use. On the whole, it seems to me that the names *simple* and *malignant*, which we use so often to separate the milder and severe forms of many diseases, might appropriately be employed in describing the cases of acute endocarditis; the *simple* being those with few or slight symptoms, and which run a favourable course; the *malignant* the cases with severe constitutional dis-

turbances and extensive valve lesions, whether ulcerative or vegetative, the term being more clinical than anatomical. The lesions of malignant endocarditis are by no means uniform, and may be vegetative, ulcerative or suppurative; and these various forms may occur alone or in combination. The belief that there is always ulceration has led to some confusion; and we must recognise that there are cases with the clinical history of the malignant form in which, post mortem, the valvular condition has been that of a severe vegetative or verrucose endocarditis. More commonly with or without vegetations there is ulceration, the frequency of the occurrence of which has given the name most often attached to this form of endocarditis. The loss of substance may be superficial, involving only the endocardium, or it may be deep and destructive, leading to perforation of a valve, of the septum, or of the heart itself. On the valves extensive outgrowths usually accompany the process, and may conceal the ulcer or project as fungating masses from its edge, as is well illustrated by this coloured drawing. In many instances the process appears simply ulcerative, without any vegetations to speak of. In the slightest form only a superficial abrasion exists, perhaps scarcely recognisable, in others a process of erosion may go on by which half a valve may be destroyed, or there may be (as shown in this drawing) a deep excavation extending beyond the valves and destroying the muscle substance of the heart, leading to perforation of the septum or of the wall of the ventricle. These are well-known features, however, upon which I need not dwell. In two instances I have seen superficial necrotic changes without ulceration or vegetation, circumscribed patches, the size of a sixpence, opaque yellow-white in colour, resembling the necrotic pleura over a pyæmic infarct of the lung or portion of dead peritoneum at the base of a deep typhoid ulcer. Doubtless these would in time have formed ulcers. I find this condition noted by one or two observers. Lastly, the process may be suppurative, in which case the deeper tissues of the valve appear first involved and the endocardium only implicated by contiguity. The occurrence of small abscesses at the base of extensive vegeta-

tions is not uncommon, but there are also instances in which the suppuration seems the initial step. The combination of ulcerative and fungating outgrowths is perhaps the most common condition."

The variations in the anatomical characters of the vegetations are then described, showing how fibroid and calcareous changes are likely to take place in them. A word of caution is given not to mistake for the special changes under consideration either spots of atheromatous degeneration or altered and adherent blood-coagula. The histological character of endocardial outgrowths is minutely traced, and special attention is drawn to the occurrence of an abundance of the so-called Schultze's granular masses in the fibrinous layer which covers the warty growth proper. "The larger vegetations, more characteristic of malignant endocarditis, consist of a granular material composed of altered and dead tissue elements, fibrinous exudation, and colonies of micrococci; the deeper parts present the appearance of a granulation tissue, while at the attachment in the valve there is always more or less infiltration and increase of the cell elements. The granular substance is structureless, and resembles diphtheritic exudation, the resemblance at times being so close that one can readily understand the application of the term 'diphtheritic' to the inflammation. It may be distinctly laminated, and with a high power fine filaments can be seen, though usually the granules conceal all appearance of structure. Strands of translucent material may occur throughout the mass, as if portions had undergone a sort of hyaline transformation. In some instances this is very marked. Pale spheres filled with granules also occur, and may be very abundant. They have been described as colonies of micrococci, but some regard them as altered endothelial elements. I have seen them too numerous to be explained on this view. At the attachment of the vegetation there is a zone of tissue deeply infiltrated with leucocytes, and deeper still the tissue elements of the valve present an increase of nuclei and cells. The destruction of tissue appears to result in two ways: first, a gradual extension inwards of the necrotic process, doubtless induced by the

micrococci; secondly, the softening and separation of valve tissue caused by the rapid development of leucocytes at the base of the vegetation. The micrococci are constant elements in the vegetations. All granules of a uniform size met with in the sections are not micro-organisms, nor, indeed, are all which stain by some methods recommended for the detection of these bodies. By far the most satisfactory method is that of Gramm, in which the section, after staining in gentian violet, is transferred for a few minutes to a dilute solution of iodine and iodide of potassium, and then to the alcohol, when it is found that the colour has been extracted from all tissue elements and nuclei, leaving only the micro-organisms stained. They vary a good deal in number and arrangement, and may be scattered singly in the granular substance or arranged in groups. They are usually very numerous at the deeper part of the vegetations, just where the structureless material joins the granulated tissue, and they may penetrate deeply into the substance of the valve. Sometimes the smaller vegetations seem made up exclusively of them. Several of my specimens appear to confirm the view of Klebs, that the micrococci lodge first on the endocardium and penetrate into the substance, often as distinct columns. In their immediate vicinity there is a zone of necrosis, and beyond this an accumulation of leucocytes and signs of reactive inflammation. The micro-organisms found in connexion with the malignant endocarditis are not all of the same kind. Klebs distinguishes two forms—one met with in septic and the other in rheumatic cases. In some instances the micrococci are all arranged in zoogloea-like masses; in others, particularly the septic cases, they are in chaplets. Some present distinct capsules. Small elongated bacilli have also been found; I have seen them in one instance—short, stout rods often joined in pairs. Delafield and Prudden have recently noted the presence of bacilli in the vegetations of a very acute case of malignant endocarditis. Cornil, in a recent lecture, stated that the bacillus tuberculosis had been found in the vegetation on the valves in cases of phthisis, and expressed the opinion that before long we should have accurate knowledge of a variety of

micro-organisms in endocarditis depending upon the nature of the primary disease. By culture experiments alone can we hope to have the question settled.

"The local effects of the ulcerative changes are important. Perforation of a valve segment is extremely common, sometimes there is a clean-cut punched-out hole with scarcely any irregularity of the edges; more frequently, however, there are great fungous vegetations which completely close and conceal the perforation. Erosion of the chordæ tendineæ is frequently met with, and an entire group passing to the papilla may be destroyed, the ends curled and encrusted with vegetations. Ulceration of the heart muscle leading to perforation of the septum or of the wall of a chamber is a much less frequent occurrence. I have collected notes of eleven instances; three of the septum close to the aortic ring. Ulcers at the aortic ring perforated the left auricle in three instances, the right auricle in one and the right ventricle in one. In a remarkable case of Dr. S. Mackenzie, the left ventricle was perforated by an ulcer at the apex. In a case of Dr. Curnow the ulceration extended between the coats of the aorta, and then perforated into the lumen of the vessel; and in one of the Montreal cases there was perforation of an aneurysm of the aorta by ulceration, an instance of extensive ulcerative endarteritis with the production of multiple aneurysms. Another common result of ulceration is the production of valvular aneurysm. The anterior flap of the mitral is most frequently affected, and then the aortic cusps. In the records of the cases which I have reviewed I was surprised not to find this condition noted oftener, only in about 12 per cent. of the cases; but in very many cases the record of the anatomical condition was meagre. It was Sir James Paget, I think, who first referred to the frequency with which sclerotic and malformed valves are attacked by acute disease. Chronic valvulitis is met with in a large number of cases of malignant endocarditis. The records which I have examined give only a percentage of about twenty-five, but the condition of the valves, except as regards ulceration, was often omitted, and this represents a very much smaller percentage than actually occurs. In more

than three-fourths of the Montreal cases sclerotic changes were present, and Dr. Goodhart found in a series of sixty-nine cases that sixty-one presented old thickening of the valves. In very many of the cases the condition of fusion of two of the aortic cusps was present. This abnormality is almost invariably accompanied by sclerotic changes, and to the existence of these is probably due the frequency with which they are attacked by ulceration. In seventeen instances of fusion of two of the aortic cusps of which I have notes there were ulcerative changes in eight, in two or three of an atheromatous nature.

"The cases may be divided into those without any embolic processes, cases in which the infarcts are simple, not suppurative, those in which there are innumerable suppurative infarcts, and cases in which some of the infarcts are simple and some suppurative. It is remarkable how variable these embolic features are. They may be entirely absent in well-marked malignant cases. They are not necessarily associated with suppuration; indeed, in a very considerable number of cases they present the characters of ordinary hæmorrhagic infarcts, but in the traumatic and puerperal cases the infarcts are invariably septic. They may be few in number, only one or two perhaps in the spleen or kidney, or they may be in thousands throughout the various organs of the body. When suppurative, micrococci, in my experience, are always present; but the micrococci may exist in the vessels without inducing this change. In severe forms of the disease hæmorrhages are very frequent upon the skin, serous and mucous surfaces. The cutaneous ones will be referred to again in connexion with the symptomatology. They appear, in many instances, to be due to the effect of the poison, just as in other infectious diseases; in others they are undoubtedly embolic, and a minute necrotic or suppurative centre can sometimes be seen. In the membranes of the brain I have twice met with extensive superficial extravasation. Litten has called attention to the frequency of retinal hæmorrhages, particularly in the endocarditis of puerperal sepsis. In some instances, there are innumerable miliary abscesses, more particularly in the heart and kidneys. They are often associated

with hæmorrhage, and the smaller ones look like little extravasations, but the presence of micrococci and suppuration can be easily determined in stained sections. The spleen is most often the seat of infarction, and next in order the kidneys. The lungs are usually affected when the endocarditis is on the right side, and there may be suppuration or even extensive gangrene, but even with destructive lesions of the pulmonary valves there may be no suppurative infarcts in the lungs, as in a case of Dr. Church. Or again, as in a case of Dr. Moxon's, there may be with aortic valvulitis suppurative infarcts in the lungs, and simple ones in the other organs. The gastro-intestinal canal may present very remarkable changes, due to the presence of numerous infarctions, from the size of a pin's head to a split pea. They are slightly elevated, greyish-yellow in colour, often surrounded by a zone of deep congestion or extravasation, and on section may show a suppurative centre. Micrococci are present as in other miliary abscesses, and in several instances I was able to find small embolic plugs in the arteries of the submucosa. The abscesses may discharge and leave a small ulcerated surface. In the stomach there may be similar minute infarcts, and occasionally larger ones. Carrington has described a remarkable case in which there was a gastric ulcer, apparently due to embolic process, in a case of severe endocarditis; and Magill, a case in which the stomach was intensely inflamed, the mucous membrane at the greater curvature being black, almost gangrenous. The liver may present minute abscesses, and in a number of cases in which there has been jaundice degeneration of the cells has been observed. The serous surfaces are often inflamed, pleurisy and pericarditis being not uncommon complications. The pericardium is most frequently affected in rheumatic cases in which endocarditis and pericarditis may occur simultaneously. Pleurisy is met with chiefly in connexion with the traumatic and puerperal cases, and also with pneumonia, which, as I shall show, plays such an important part in the history of this form of endocarditis. The cerebral lesions are of the substance and of the membranes. Embolic softening, simple or suppurative, is ex-

tremely common, and in very many cases head symptoms supervene and there is paralysis of one side or the other. There may be a single embolus, producing extensive suppuration or red softening, or there may be multiple infarcts in various regions. The meningeal complications of endocarditis have not received much attention. Considering the frequency with which it has occurred in the Montreal cases, five instances out of twenty-three, I was quite prepared to find such a large number as twenty-five cases—*i.e.*, in somewhat over 12 p. ct. In the majority of these cases it occurred in connexion with pneumonia. It is almost always cortical, but many extend to the base and involve the nerves, leading in one case, which I saw with Dr. Ross at the Montreal Hospital, to strabismus, and also to ulceration of the cornea from involvement of the fifth nerve. In rare instances the spinal meninges are involved, and the clinical picture may be that of an acute cerebro-spinal meningitis. Acute suppurative parotitis was noted in three cases."

Malignant Disease of the Kidney, with Autopsy.—The specimen under consideration was removed from a man æt. 60, an inmate of the Philadelphia Hospital. The first symptom of his malady was noticed about six weeks before death. When admitted to my wards he complained of passing pure blood from the penis, otherwise the urine was physiological. He never suffered the least pain; no dullness could be detected in the lumbar region or in the right flank. There was moderate cachexia, indicating the possibility of malignant disease, but little loss of flesh. The hæmaturia continued uninterruptedly until death, prior to which malignant disease was confidently anticipated. The right kidney was found to be enlarged, weighing twelve ounces—about one-half its bulk was filled with malignant new formation situated on the anterior portion of the organ. Microscopic examination by the microscopist of the hospital determined it to be an alveolar sarcoma. The tumor was rich in blood-channels, and part of the bulk of the tumor was entirely made up of clotted blood in a semi-organized condition. According to Zenker, Schroeder

and others, tumors of the kidney frequently do not arise from the epithelial tissues of that organ. The connective-tissue origin and character of these growths, and their richness in blood-vessels, would assign many so-called carcinomata of the kidney to the group of sarcomata.

The prominent symptom during life was hæmaturia, yet in similar cases the condition of the urine is frequently absolutely negative. Ebstein (Ziemssen Cycl.) states that hæmaturia occurred only twenty-four times in fifty cases. Again, authorities unite that long intervals may elapse between the periods of hæmorhage. We can easily understand this since the cavities of the tumor which contain the blood may not communicate with the collecting tubules even in cases of extensive disease, or secretion of urine may be vicariously assumed by the other kidney. I have even met with cases of abscess of the kidney with only an intermittent discharge of pus. We may assume, however, that causeless and painless hæmorrhage from the genito-urinary tract is a very suspicious symptom, indicating malignant disease. Paroxysms of pain may attend the passage of clots of blood through the ureter; quite resembling those of renal calculus. The rule ordinarily given in hæmaturia is, that blood escaping from the neck of the bladder or urethra precedes the stream of urine, and whenever the blood has accumulated in the bladder in considerable quantity blood-clots will be passed, but the urine first voided will be clear. In the case reported in this paper, pure blood was frequently passed almost unmixed with urine, so that the previously stated rules differentiating the cause of hæmaturia are of relative importance. Paroxysmal hæmaturia can be recognized not only by its intermittent character, but by the abundance of the blood-pigment, combined with the rarity of blood corpuscles. The color of the urine in this affection is said to be due to hæmoglobin. The hæmaturia of renal calculus can be recognized by exclusion only, unless renal colic with unilateral localized pain, or some characteristic sediment, be present; the total amount of urine may be diminished very decidedly, but not otherwise altered. Statements have been made by Heller, Moore and others that

discharges of "flocculi of cancer tissue" may be found in the urine in this class of cases. The altered epithelium of the renal pelvis and ureters has, doubtless, been mistaken for cancer cells, because although certain combinations of cellular material may excite suspicion in connection with other symptoms, nothing definite can be asserted from an examination of the urine. Recently Dr. Julius Wolf (*Deut. Med. Wochenschaft*, Sept. 25,) has stated that iodide of potassium is much less readily eliminated by the kidney during Bright's disease than in health, and recommends the use of four or five grains daily for diagnostic purposes. Some observations by a student of the University of Pennsylvania, Mr. Gregory Guiteras, have confirmed the view—the iodine being absent in the urine in cases of disease of the kidney, but was present in abundance in the saliva. At first sight the test might appear of service in malignant renal disease—but since malignant disease is usually a unilateral process, the test might indicate bilateral disease.

Primary malignant disease of the kidney is not always recognizable by percussion, as was illustrated by the present specimen. The bulk of the growth often projects anteriorly, since the lumbar tissues offer greater resistance. Careful percussion should be made over the lumbar and also the lateral regions; in the latter, percussion should include the space between the lower ribs and the crest of the ileum upward, or forward towards the navel. When tumors of the kidney are very large, and especially when the disease has involved adjacent viscera, the formation may become recognizable anteriorly by palpation, as well as percussion. These growths are usually adherent to the walls of the abdomen or surrounding parts, and thus become immovable. They may be round and smooth, or nodular and lobulated, frequently giving rise to a sense of fluctuation, or elasticity, on palpitation. They are, therefore, liable to be mistaken for hydatid tumors, and may be confounded with tumors of the liver. In case the growth is situated on the right side, the mistake is particularly possible, but the tumor will not rise or fall with the movements of the diaphragm, and the fingers of the hand can usually be introduced under the

ribs on the right side. These growths, when fluctuating, may indicate puncture with an aspirator as a deciding diagnostic measure, which has been practised. In one recorded case a whitish-red mass of tissue was obtained, in which the microscope showed a delicate connective-tissue stroma, in which innumerable nuclei were imbedded, and the operation was followed by no bad results.

In renal tumors pain is a pressure symptom, and therefore may be present or absent in accordance with the size and situation of the growth. In malignant disease of the kidney, the cachexia usually noticed in such cases is a late symptom, and in cases of sarcomatous disease is never prominent. Malignant disease of the kidney is more frequent in the early and late periods of life, and is rare as a primary disease, but when present, the other kidney is usually unaffected, and it is very seldom accompanied by malignant disease of the lower urinary passages, whereas malignant disease of the testicle is often followed by renal carcinoma.—*Ewd. T. Bruen, in Maryland Med. Jour.*

The Treatment of Scarlet Fever by Scalded Oatmeal.—As is very well known, the process of desquamation which follows scarlet fever varies very much in different individuals; sometimes it is accomplished by particles so fine as to be hardly perceptible, and these are a very frequent and certain source of contagion by means of clothes and otherwise, much more so than the scales as ordinarily thrown off. It is evident that this being the fact, it must be much more difficult to prevent contact and consequent contagion with these fine, almost imperceptible scales which are floating in the atmosphere, than where desquamation occurs in large patches of skin. To obviate this danger, Mr. George Smith, of Somerset, England (*Bristol Medico-Chirurgical Journal*, December, 1884), states that he has for several years been in the habit of having his patients well sponged over the surface of their bodies, commencing, as a rule, about a week after the appearance of the eruption, and continuing the process until desquamation is complete, with a mixture of one ounce of oatmeal to a pint of boiling water. The solution to be

made fresh every day, and used tepid, or at such a temperature as may be comfortably borne by the back of a finger. His reason for using this particular combination is that the gluten in it sticks the scales to each other and to the surface of the body, thus allowing of their being removed from one sponging to another without the ordinary risk of infecting either atmosphere or clothes, and thus greatly lessening the risk of spreading the disease. Secondly, the gluten fills up the cracks of the new skin and protects it from cold, as patch after patch of it becomes bare, and it thus, to say the least, greatly lessens the risk of the dropsy which so often follows upon this disease.—*Therapeutic Gazette.*

On the Duration of Contagiousness after Acute Infectious Diseases.—By ALFRED LUDLOW CARROLL, M.D.—The only attempt within my knowledge to formulate experience in respect of the duration of infectiousness is that of Dr. Miller, of Dundee, whose tabulation is as follows:

Small-pox	14 days after termination of scabbing.
Typhus	28 days from inception.
Scarlet fever	7 weeks from inception.
Diphtheria	6 weeks from inception.
Whooping-cough	8 weeks from inception.
Measles	6 weeks from inception.

Small-pox.—As to small-pox, there is pratically unanimity in regarding the danger as existing until all crusts are removed; but a few incline to prolong even further the period of isolation.

Typhus Fever.—In relation to typhus, there is less accord. One deems fomites the most important factor in the dissemination of the malady, while the rest lay stress on personal contagion. One regards it as "not contagious after a short interval;" a second advises segregation until repeated baths have followed the complete disappearance of the cutaneous exanthem; a third, somewhat indefinitely, would permit return to school "after complete recovery and disinfection."

Typhoid Fever.—Those who believe in the direct personal contagiousness of enteric fever are few in number, and I fancy that nearly all of us will agree that the intestinal discharges are

all with which preventive medicine has concern. Whether these retain their infectious properties during the whole process of the malady is a question still in uncertainty, and rendered more obscure by the apparent demonstration that the disorder may, under certain undetermined circumstances, be generated *de novo* from ordinary sources of filth-poisoning. At all events, isolation of the person seems unnecessary as soon as the convalescence is complete.

The same considerations will apply, I believe to cholera, with the further remark that, if Koch's recent observations are correct, the germs of this disease appear to be shorter-lived than any other known species, being destroyed, not only by desiccation, but by the "scavenger-bacteria," which conquer them in the struggle for existence in the products of common decomposition.

Diphtheria.—Diphtheria affords a wider debatable ground. To begin with, there are many, (among whom my own experience forces me to class myself) who assign the first place in the pathogeny of diphtheria to the filth-poisoning, and doubt its exceeding contagiousness. Of a number of persons exposed to the same pathogenic conditions, it is not surprising that several should succumb; but this is not convincing evidence of transmission from one to the other, and I have seen repeated instances where, despite intimate contact, the disease failed to extend after its introduction into places in proper sanitary condition. One of my correspondents, who has long had charge of a large hospital for children, believes this malady to be "feebly, if at all, contagious," and finds it quite safe to remit quarantine "after the disappearance of membranes;" a practical sanitarian, of national reputation, excluding fomites and filth in air or water, does not believe in personal contagion; a distinguished teacher in one of our metropolitan colleges doubts "its communicability, except by contact;" another, equally eminent, declares that contagiousness endures until the last trace of inflammation or infiltration secondary to the diphtheric process has disappeared; a fourth would protract the duration of quarantine for a month, or, at least, three weeks,

after all symptoms have abated, and would forbid return to school while any redness of the fauces or any coryza lingers. The discrepancy of opinion in this respect among the leaders of professional thought suffices to show the need of more definite data to guide our deliberations.

Whooping-Cough.—In pertussis, all opinions agree, save one, that contagiousness ends when the cough loses its spasmodic character, the single doubtful view being that, as the danger is wholly from the breath of the patient, it can not be determined how long the cough may convey infection. It should be remembered, however, that a few writers have expressed doubts of the contagiousness of pertussis in any stage.

Measles.—With regard to measles I find equal diversity of views. One regards its contagium as very volatile, not long adhering to person or clothing, and permits the return of the patient to school two weeks after convalescence; a second would defer liberation from quarantine until a week, at least, after desquamation; a third releases the patient when desquamation has ceased, or, in cases where no desquamation occurs, after twenty-one days; a fourth fixes eighteen days; a fifth believes the danger past when the febrile stage and eruption are gone. The majority measure the time of isolation by the process of epidermal exfoliation.

Scarlatina.—In scarlatina, also, we have opposing opinions, ranging from that which considers it as a pythogenic disease, slightly, if at all, contagious from the person, to that which holds the infection to be communicable by the pulmonary exhalations, the blood, the naso-pharyngeal secretions, even the urine, as well as by the epithelial scales. One of my correspondents thinks the infection remains so long attached to the person that quarantine should endure for eight weeks; another cites an example of transmission after six weeks of isolation followed by a change of clothing; the rest concur in releasing the patient after desquamation has ceased and the surface been thoroughly cleansed. Most of us, I dare say, have adopted this "rule of thumb."—*N. Y. Med. Jour.*

Intubation of the Larynx.—In the New York *Medical Record*, of February 21, Dr. E. F. Brush thus describes a case of intubation of the larynx by Dr. O'Dwyer, which he witnessed at the New York Foundling Asylum, in a child three and a half years old suffering from pneumonia and inflammatory croup:—"The boy was placed in the nurse's lap, an assistant held the head; a gag was put into his mouth. Dr. O'Dwyer passed the index finger of his left hand back into the child's pharynx, while his right held an instrument shaped like a small steel sound of the Van Buren pattern, on its distal end a gold-plated oval tube four-sixteenths of an inch in its long diameter and two-sixteenths in its shorter diameter, and one and a half inches in length, collared around the upper extremity except at the anterior curve of the oval. In this uncollared portion was a small eyelet armed with a long silk thread. This tube was carried along the doctor's finger into the pharynx. There was a spasmodic coughing, a reddening of the face, the sound-like instrument was immediately withdrawn without the tube, the boy gave a long, deep inspiration, the thread was quickly withdrawn, and a marvelous change was instantly produced in the patient's whole condition. The intense redness caused by the first irritation gradually faded, a copious perspiration broke out over the forehead, the respirations became easy and quiet. I actually thought the child was dead, as the eyes were fixed in a stare of astonishment, and before the little sufferer had recovered from his amazement, he was sleeping soundly." Having mentioned other similar cases which he saw at the Foundling Asylum, Dr. Brush gives a sketch of the history of intubation of the larynx, and concludes that Dr. O'Dwyer's procedure is not a revival of the old methods. From his own observation of the cases seen by him he states that he is fully convinced that intubation of the larynx is a more simple operation than that of tracheotomy; that the laryngeal tube is worn with greater ease to the patient; that the air which reaches the lungs is heated and moist, which is not the case with the tracheal tube; that coughing and expectoration are carried on with greater ease and more effectually than is possible with the

tracheal tube, and that the absolute care and vigilant watching, which form such an element of strength in tracheotomy, are not called for in Dr. O'Dwyer's method of procedure. He adds that the most striking feature in this method, and one which must be of the greatest comfort to the physician and to the parents, is the entire absence of mutilation or disfigurement. In the laryngeal diseases of infancy, which so often prove fatal under the very best conditions, parents and friends not infrequently imagine that it was the operation of tracheotomy that was the cause of death. The unsightliness of a dry, cracked mouth; the repulsive spectacle of a tube protruding from the trachea, often lined with, and having hanging from its orifice, expectorant matter; the necessity of informing the parents of the hopelessness of their child's recovery, and of requesting their consent to a desperate surgical operation as a kind of forlorn hope—all these painful elements are spared in the method adopted by Dr. O'Dwyer.

Palatable Prescribing.—Cough mixtures can be to a certain extent rendered palatable by a selection of proper vehicles. The citrate of potassium can be largely masked by the free use of lemon juice. Muriate of ammonia is largely covered by liquorice, provided the latter be added in such quantity that there will be ten to fifteen grains of it for every ten grains of the muriate. The addition of glycerine to a mixture containing an ammoniacal or other irritant salt, often has the most happy effect in obtunding the acridity. It must not be forgotten, however, that glycerine throws out of solution most alkaloidal salts. This is essentially important in connection with the fact that the addition of glycerine to the tincture of the chloride of iron is most advantageous from the æsthetic point of view. We are very apt to combine tincture of chloride of iron with salts of quinine, strychnine, or other alkaloids. Even when such solution is very strongly acid, glycerine precipitates the organic principle. Syrup of squills, syrup of ipecac, and most other sweet expectorants, can readily be masked by the syrup of wild cherry bark, provided cyanide of

potassium (at least 1-20th of a grain to a dose) be added to intensify the prussic acid taste. The excessive sweetness of these mixtures is disagreeable to some individuals; this, of course, can readily be obviated by the addition of lemon juice or other acid. There are certain very valuable remedies whose nauseousness in solution cannot be overcome by any combination. Under these circumstances the endeavor of the practitioner should be to give a dose so small and in such form that it can be enveloped in a mechanical coating of some sort. Whenever the material is a solid, this is readily managed by giving it in the form of a silver-, gelatin-, or sugar-coated pill; for, whatever may be said in regard to the solubility of these preparations, they are dissolved in the stomach with sufficient rapidity for all practical purposes, provided the pharmacist has done his work properly and the pills are at all fresh. It seems to be a tradition of the profession, that all cough remedies should be given in liquid form. We hear continually of cough mixtures, but who ever heard of a cough pill? Now, there is little reason in this. Squill, ipecacuanha, tartar emetic, all the ordinary expectorants except ammoniacal salts, can be given in a coated pill as well as in a nauseous mixture. When the drug is of such character that it cannot be readily given in pill unless the dose be very large, it is readily administered in capsules. Oil of eucalyptus should never be given except in capsules. Oil of copaiba has for decades been habitually given in capsules for other than pulmonary purposes; why not also for chronic bronchitis? The ammoniacal salts can be given in capsules as well as in mixture. It may be objected by some, that their local irritant effects would be increased by such method of administration, This does not seem to be a valid objection; but if it is considered so, let the patient drink a half a tumbler of milk directly after ingesting the supposed irritant remedy, and the stomach will be protected much more effectually than if the nauseous drug were given in a teaspoonful of water.—*Therapeutic Gazette.*

CANADA

Medical and Surgical Journal.

MONTREAL, APRIL, 1885.

THE ADVENT OF SMALLPOX.

For the past four or five years the city of Montreal has been entirely free from smallpox, after having been for a long time a prey to that dreaded epidemic disease. This is a fact upon which we have had good reason to congratulate ourselves. But the history of smallpox shows that it comes and goes in waves. It comes, it spreads, becomes widely epidemic, lasts thus for a variable period, and, when it has exhausted all the available material, gradually subsides. Then follows an intermission during which nothing is heard of it, and gradually a sense of security is established and people begin to hope that the terrible experiences of former visitations will never be rëenacted. It is during these temporary lulls that the material upon which smallpox feeds is developed. That is to say, vaccination of children is neglected, and by the time an outbreak occurs many are ready to receive the poison and propagate it to any extent. As we are certainly threatened with the recurrence of smallpox in Montreal, it becomes the duty of the hour to urge the importance of immediate vaccination upon all physicians within the limits of their own *clientele* and upon the Board of Health to redouble their exertions in this direction. On this occasion the disease has been imported from Chicago, where it has greatly prevailed during the winter. About four weeks ago two railway employés from that city arrived here, within a few days of each other, affected with smallpox. One of these was received at the Hôtel-Dieu Hospital, the other was treated by his own physician at his private house. Both cases communicated the disease to others. From the hospital case, two

nurses took it and died; a medical student took it at his boarding-house, and also died. Twelve other persons have likewise been prostrated from the same source, and are now ill. From the home case four persons contracted it. One of these had gone to her friends in the country, and was there taken down. The others continued in the infected house, and were there treated. It will thus be seen that between 15 and 20 cases were rapidly propagated from the original foci, and it is quite possible there may be other cases of which we have not heard. There has been here a grand opportunity for the Board of Health to stamp out the disease at the very outset, and it is but right to say that if smallpox does not now spread in Montreal, the thanks of the citizens will be due to the prompt and energetic measures instituted by the chairman of the Board the moment the facts were officially reported to him. As soon as possible after the facts were brought to his notice, the Civic Smallpox Hospital was reopened, and now contains all the cases which are known to exist (15). The patients in private houses were strongly urged to be removed to the same place, but refused, and there is no power to compel their removal. Under these circumstances, everything possible was done in the most careful and thorough manner to secure isolation and disinfection. A guardian was placed upon each to warn all persons against entering, the necessary attendants alone being permitted within the building; abundant disinfectants were supplied and the nurses instructed in their proper employment for all clothing, etc.; and finally, when the case had terminated, effectual fumigation with sulphur was performed by the sanitary police. The Medical Health officer visited and inspected the entire neighbourhood, and saw that the inhabitants were properly vaccinated. These measures were adopted promptly and carried out with system and energy, and we trust will have proved effectual.

In the absence of any information, we do not know what measures, if any, were taken to isolate the patient first admitted to the Hôtel Dieu. At any rate, that these were eminently imperfect is quite plain from the large number of cases that immediately occurred. The Board of Health consider that once the

case was received into a hospital provided with the usual medical staff, they confided it entirely to them, and could not interfere except upon being requested to do so. This may be quite true, but it is to be regretted that the Smallpox Hospital had not been kept in readiness for the admission of patients. The existence of smallpox in localities in constant railway communication with this city was a standing threat of an invasion sooner or later. Had the Civic Hospital been open, this serious outbreak need never have occurred.

There is a law in force calling upon all medical men to report cases of contagious diseases (which are specified) to the Health Department. This has always remained a dead letter and, we think, is likely to remain so. Physicians will not act the part of informers concerning the families they are attending, and still the Board ought to get the information. In our opinion, the proper persons to give such information are the householders; and we submit that here, as elsewhere, every householder should be bound to at once inform the Board of Health when, to his knowledge, there exists a case of (specified) contagious disorder within his dwelling. In the present emergency, however, we believe that if the chairman of the Board of Health were to address a circular to all our physicians, requesting their cöoperation in this matter, they would get an immediate response, and would receive early notice of any case of smallpox which might occur.

In connection with this matter, it is with pleasure we notice that two regular public vaccinators have been appointed for the city, who will at once see that this important measure is enforced in every ward, and will assist the medical officer in other important sanitary arrangements.

FIELD HOSPITALS AND AMBULANCES.

Fortunately for this Canada of ours, the Field Hospital and the ambulance have been hitherto things unknown amongst us, except in theory. The rebellion of the half-breeds in the North-West, and the fact that bands of Indians have already joined the insurrectionary movement, promises however, now

to render them a stern reality. As soon as the Government began sending a considerable number of our volunteers to these districts, it became necessary for them to organize a staff of Medical Officers to undertake the important duty of providing the best possible surgical assistance in the best possible hospital that circumstances would permit, for the sick and wounded.

Dr. Bergin, M.P., of Cornwall, was appointed Surgeon-General, to remain at Ottawa, control the Medical branch of the service, and advise the Minister of Militia. Dr. Roddick, of this city, was made Deputy Surgeon-General, to proceed at once to the Qu'Appelle district and locate base hospitals in such localities as the General in command might designate. Dr. Douglass, V.C., was made Surgeon-Major and director of the ambulance corps; Hon. Dr. Sullivan, Purveyor General; Dr. Jas. Bell to have the rank of Surgeon, and probably take charge of one of the hospitals; and six Assistant-Surgeons were to complete the regular staff for the present. A number of medical students from this city and Toronto were enrolled as dressers, and have proceeded westward. The whole party left for Winnipeg and the North-West on the 7th inst., and are now on the site of their operations. These appointments are excellent, and will commend themselves to the profession at large; and we have every confidence that no effort will be spared to render the hospital and ambulance service as complete and efficient as possible.

McGILL UNIVERSITY—ANNUAL CONVOCATION.

The annual convocation of the Medical Faculty of McGill University took place on Monday afternoon, March 30, in the William Molson Hall.

PROF. HOWARD, Dean of the Faculty, read the report as follows:—

The total number of students enregistered in this Faculty during the past year was 234, of whom there were from Ontario, 126; Quebec, 58; New Brunswick, 20; Nova Scotia, 11; United States, 8; P. E. Island, 3; Newfoundland, 3; West Indies, 2; British Columbia, 1; Manitoba, 1; Ireland, 1.

The following gentlemen, 46 in number, have passed their

Primary Examination on the following subjects: Anatomy, Practical Anatomy, Chemistry, Practical Chemistry, Materia Medica and Therapeutics, Physiology, Histology and Botany:

Aylen, P., Aylmer, Q.
Blackader, E. H. P., Montreal, Q.
Boggs, C. W., Wolfville, N.S.
Boone, S. W., Fredericton, N.B.
Campbell, A. W., Ingersoll, O.
Carter, L. H., Picton, O.
Cattanach, W., Glen Water, O.
Cowie, Alex. MacD., Montreal, Q.
DeCow, D. McG., Dresden, O.
Dazé, Henri, Montreal, Q.
Dickson, J. A., Trenholmville, Q.
Earl, E. H., Port Hope, O.
Ellis, W. E., St. Catharines, O.
Evans, E. J., Seaforth, O.
Ferguson, W. D., Cumberland, O.
Fillmore, E. W., Baie Verte, N.B.
Flagg, J. D., Morrisburg, O.
Fraser, J. M., Hawkesbury, O.
Gardner, A. W., Cornwall, O.
Haentschell, W. C., Pembroke, O.
Hall, Wm., Walkerton, O.
Hamer, A. L., Bradford, O.
Haythorne, T. J., Charlottet'n, P.E.I.
Johnson, J. W., Vankleek, O.
Kelly, J. A. A., Durham, O.
Kennedy, R. A., Ottawa, O.
Kirkpatrick, R. C., Montreal, Q.
Lafleur, H. A., Montreal, Q.
Leslie, A. C., Watson's Corners, O.
Loucks, W. F., Stirling, O.
McDonald, D. D., N. Lancaster, O.
McMillan, G. A, Dundee Centre, Q.
Morgan, V. H., Aultsville, O.
Norman, T. J., Schomberg, O.
Pomeroy, L. E. M., Tweed, O.
Poole, A., Wakefield, O.
Reavely, E.
Richardson, G. C., South March, O.
Ross, D. L., Winthrop, O.
Ross, L. F., Montreal, Q.
Scully, D. J., Lindsay, O.
Sinclair, D., Guildes, O.
Stephen, G. C., Montreal, Q.
Warneford, P. H., Norton, N.B.
Williams, E. P., Ottawa, O.
Williams, J. F., Barrie, O.
Young, A. A., Barton, Vt.

The following gentlemen, 34 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 Women and Children, Medical Jurisprudence, Pathology and Hygiene, and also Clinical Examinations in Medicine and Surgery conducted at the bedside in the Hospital:

Arthur, R. H., Brighton, O.
Allan, J. H. B., Mentreal, Q.
Baird, T. A., Chesterfield, O.
Burrows, F. N., Drayton, O.
Cassidy, Geo. O., Goldstone, O.
Daly, Walter S., Ogdensburg, U.S.
Corson, Douglass, Woodstock, O.
Darey, J. H., Montreal, Q.
Dazé, Henri, Montreal, Q.
Doherty, W. W., Kingston, N.B.
Elder, John, Huntingdon, Q.
Eberts, D. W., Chatham, O.
Finlay, F. G., Montreal, Q.
Harkin, F. McD., Vankleek Hill, O.
Hallett, E. O., Truro, N.S.
Hurdman, H. T., Aylmer, Q.
Gustin, Smith, London, O.
Hanna, A. E., Harlem, O.
Hawkins, A. C., Halifax, N.S.
Irvine, R. T., Carp, O.
Johnson, H. D., Charlottet'n, P.E.I.
Klock, W. H., Aylmer, Q.
McMeekin, J. W., St. Catharines, O.
McGannon, M. C., Prescott, O.
McCormack, N., Pembroke, O.
McDonald, H. J., Alexandria, O.
McMillan, D. L., Alexandria, O.
Powell, F. H., Ottawa, O.
Palmer, G. F., Ottawa, O.
Robertson, A. M., Brockville, O.
Shibley, J. L., Yarker, O.
Wishart, D. G., Madoc, O.
Wilson, J. A. K., Manotick, O.
Wood, Edwin Geo., Londesboro', O.

The following have passed in Anatomy and Practical Anatomy:

Easton, C. L. Mackinnon, H.

The following have passed in Chemistry:

Aborn, W. H.
Bradley, W. J.
Berry, J. A.
Bell, J. H.
Boyd, Jay
Bowen, Wm.
Chalmers, W. W.
Christie, Wm.
Davis, A. H.
Edgar, C. J.
Ferguson, J. A.
Fritz, N. W.
Kenny, F. I.
Kincaid, —
Lewis, G. T.
Lafferty, A. M.
McKinnon, H.
McDonald, A. D.
Porthier, C. J.
Porter, J. H.
Parker, W. D.
Quance, S. H.
Woodruff, T. N.
Young, H. E.

The following have passed in Practical Chemistry:

Aborn, W. H.
Berry, J. A.
Boyd, Jay
Bradley, W. J.
Cameron, J. J.
Christie, W.
Davis, A. H.
Fritz, H. D.
Kincaid, R. J.
Kenny, F. L.
Lewis, G. T.
McDonald, A. D.
Parker, W. D.
Pothier, J. C.
Quance, S. H.
Young, H. E.
Woodruff, T. A.

The following have passed in Materia Medica:

Aborn, W. H.
Bowen, Wm.
Boyd, Jay
Brunette, J. T.
Christie, Wm.
Davis, A. H.
Easton, C. L.
Edgar, C. J.
Lafferty, A. M.
Grant, A. S.
McKinnon, H.
McDonald, A. L.
McDonald, A. D.
Porter, J. H.
Parker, W. D.
Porthier, C. J.
Woodruff, T. N.

The following have passed in Physiology:

Aborn, W. H.
Bowen, Wm.
Boyd, Jay
Cameron, K.
Christie, Wm.
Easton, C. L.
Edgar, C. J.
Hall, A. G.
Lafferty, A. M.
McDonald, A. L.
Woodruff, T. N.
McDonald, A. D.
Porter, J. H.
Parker, W. D.
Porthier, C. J.
Wilkins, H. P.

The following have passed in Medical Jurisprudence:

Birkett, H. S.
Clark, J. L.
Craig, M. A.
Crockett, W. C.
DeCow, D. McG.
Duffett, J. L.
Earl, E. M.
Elder, J.
Gairdner, T. M.
Gibson, J. H.
Gladman, G. J.
Graham, J.
Grant, J. H. V.
Hawkins, A. C.
Hughes, P. H.
Kinloch, J. A.
McCallum, E. P.
McCuaig, A. J.
McDiarmid, G. A.
McGannon, T. G.
McKay, J. M.
Morgan, V. H.
Orton, F. H.
Poole, A.
Pringle, W. R.
Raymond, A.
Raymond, G. H.
Robertson, F. D.
Rowat, W. M.
Schmidt, A. F.
Schmidt, A. J.
Seery, F. J.
Turnbull, A.
White, F. J.
White, W. W.
Wilkins, H. P.
Williams, J. F.
Wilson, C. W.
Wishart, D. J.
Worthington, A. H.

The following have passed in Hygiene :

Aylen, P.
Birkett, H. S.
Christie, Wm.
Clarke, J. L.
Cowie, Alex. MacD.
Crockett, W. C.
Cunningham, H. C.
Duffett, J. L.
DeCow, D. McG.
Earl, E. H.
Evans, W. H.
Fillimore, E. W.
Gairdner, T. M.
Gardner, A. W.
Graham, J.
Gibson, J. B.
Gladman, G. J.
Graham, —
Grant, J. H. V.
Hawkins, A. C.
Hamer, A. L.
Haythorne, T. J.
Hughes, P. H.
Kennedy, R. A.
Kinloch, J. A.
Kirkpatrick, R. C.
McQuaig, W. J.
McDiarmid, Geo.
McDonald, A. D.
McDonald, A. L.
McDonald, D. D.
McCollum, E. P.
McGannon, T. G.
McKay, J.
McKay, Eugene
McMillan, G. A.
Morgan, V. H.
Orton, T. A.
Poole, A.
Pringle, W. R.
Raymond, Alf.
Reavely, E.
Rowatt, W. M. L.
Robertson, F. D.
Ross, L. F.
Schmidt, A. J.
Schmidt, A. F.
Seery, F. J.
Turnbull, A.
Williams, J. F.
Wilkins, H. P.
Wilson, C. W.
White, F. J.
White, W. W.
Worthington, A.

The following have passed in Pathology :

Birkett, H. S.
Boggs, G. W.
Clarke, J. L.
Crockett, W. C.
DeCow, D. McG.
Duffett, J. L.
Elder, J.
Earl, E. H.
Gairdner, T. M.
Gibson, J. B.
Gladman, G. J.
Grant, J. H. Y.
Graham, J.
Hawkins, A. C.
Hughes, P. H.
Kennedy, R. A.
Kinloce, J. A.
Kirkpatrick, R. C.
Morgan, V. H.
McCallum, E. P.
McKay, J. M.
McCuaig, W. J.
McGannon, T. G.
McMillan, G. A.
McKay, Eugene
McDiarmid, G. A.
Orton, T. A.
Poole, A.
Pringle, W. R.
Rowatt, W. M.
Ross, L. F.
Raymond, G. H.
Raymond, Alf.
Robertson, F. D.
Schmidt, A. F.
Schmidt, A. J.
Seery, F. J.
Turnbull, A.
Wishart, D. J.
White, F. J.
White, W. W.
Wilson, C. W.
Willioms, J. F.
Wortnington, A.
Wilkins, H. P.

The following have passed in Physics :

Baer, D. E.
Bell, J. H.
Bradley, J. W.
Bowen, W.
Berry, R. P.
Clouston, J. R.
Castleman, L.
Chalmers, W. W.
Conroy, C. P.
Deacon, S. D.
Davis, A. H.
Dickson, A.
Dearden, J. D.
Desmond, F. J.
Evans, W. H.
Fritz, H. D.
Ferguson, J. A.
Gunn, D. T.
Girdwood, G. W. T.
Green, D. T.
Goodwin, W. W.
Hopkins, H. J.
Hubbard, O. H.
Hubert, P. J. H.
Hewitt, J.
Hoare, H. C.
Horner, A. S.
Irwin, W. J.
Kennedy, J. H.
Kenney, F. L.
Kincaid, R. J.
Kincard, R. W.
Kendell, H. E.
Knapy, H. D.
Kirkpatrick, R. J.
Lewis, G. T.
Loucks, F.
Lang, W. M.
Lafferty, A.
McLennan, D.
McFarlane, M.
McDonnell, A. E. J.
McKinnon, H.
McCarthy, J. J.
McKay, H. H.
McKinnon, H.
Metcalfe, F. J.
Miller, J. T.
Morrow, C.
Mowat, M.
Orr, J. E.

Orr, A. E.
Parker, W. D.
Park, P. C.
Pomeroy, L. E. M.
Porter, —
Potts, J.
Pothier, C. J.
Quance, S. H.
Robertson, H. E.
Rowatt, A. R.
Stewart, A. D.
Springle, J. A.
Shepperd, A. A.
Telfer, W. J.
Thompson, J. W.
Vernier, H.
Wilde, H.
Woodruff, T. A.
Wesley, R. A.
Whitmore, F. H.
Young, H. E.

The following have passed in Botany:

Baer, D. C.
Berry, R.
Castleman, L.
Clouston, J. R.
Conroy, C. P.
Deacon, J. D.
Desmond, F. J.
Dyer, R. C.
Girdwood, G. W.
Greene, H. D.
Goodwin, W. W.
Hewitt, J.
Hoare, C. W.
Hopkins, W. J.
Hubbard, O. H.
Irwin, W. T.
Kennedy, J. H.
Kerr, N.
Kincaid, R. M.
Kirkpatrick, E. A.
Lafferty, A. M.
Lang, C. H.
Lewis, G. T.
McFarlane, M.
Mackay, H. H.
Mackinnon, G. W.
McLennan, D.
McMartin, D. R.
Morrow, C.
Orr, A. E.
Orr, J. E.
Park, R. C.
Potts, J. M.
Robertson, A. G.
Shepherd, R. A.
Stewart, A. D.
Springle, J. A.
Thompson, J. H.
Weagan, A. A.
Westley, R. A.
Westmore, F. H.

The following have passed in Histology:

Aborn, W. H.
Boer, D. C.
Berry, A. P.
Bradley, W. J.
Cameron, K.
Castleman, A. L.
Conroy, C. P.
Davis, A. W.
Deacon, J. D.
Dennis, J. T.
Desmond, F. T.
Easton, C. L.
Eleard, J.
Fritz, N. W.
Gunn, N. D.
Goodwin, W. W.
Hopkins, H. T.
Holden, —
Hubert, P. T.
Hamilton, A.
Hawkins, A. C.
Hubbard, O. H.
Hewitt, J.
Irwin, W. T.
Kerr, N.
Kennedy, J. H.
Kendall, H. E.
Kincaid, R. J.
Kincaid, P. M.
Kirkpatrick, E. A.
Kenny, F. L.
Lafferty, A. M.
Lang, Wm. M.
Long, H.
Moffatt, M.
Murray, W. N.
Morrow, C.
McDougall, D. T.
McFarlane, M.
McLennan, D.
McKay, H. H.
McMartin, D. R.
McKinnon, G. W.
McCarthy, J. G.
Orr, A. E.
Orr, J. E.
Park, J. C.
Potts, J.
Pothier, C. J.
Porter, J. A.
Quance, S. H.
Reavely, E.
Robertson, A. G.
Springle, J. A.
Stewart, A. D.
Shepherd, R. A.
Telfer, W. J.
Thompson, J. W.
Vernier, H.
Wylde, C. F.
Wesley, R. A.
Whitmore, F. H.
Young, E.

MEDALS, PRIZES AND HONOURS.

The Holmes Gold Medal for the best Examination in the Primary and Final Branches is awarded to Edwin G. Wood, of Londesborough, Ont.

The Prize for the best Final Examination is awarded to Smith Gustin, London, Ont.

The Prize for the best Primary Examination is awarded to Ed. J. Evans, Seaforth, Ont.

The Sutherland Gold Medal is awarded to H. A. Lafleur, B.A., Montreal.

The following gentlemen, arranged in order of merit, deserve honourable mention:

In Primary Examination—H. A. Lafleur, J. A. A. Kelly, D. L. Ross, E. H. P. Blackader, R. A. Kennedy, L. F. Ross, T. J. Haythorne, R. C. Kirkpatrick, Wm. Hall and J. M. Fraser.

In the Final Examination—F. G. Finlay, H. T. Hurdmann, M. C. McGannon, T. A. D. Baird, John Elder, D. W. Eberts.

PROFESSORS' PRIZES.

Botany—Prize, T. A. Clouston.

Practical Anatomy—Demonstrators' Prizes: 2nd year. H. A. Lafleur, Montreal. 1st year, W. J. Bradley.

Clinical Medicine—Junior Class, H. S. Birkett, Hamilton, Ont.

PROFESSOR VON FRERICHS.—We have this month to lament the loss of the foremost teacher of clinical medicine in all Germany—Prof. Frerichs—who died at Berlin on 17th of March, in the 56th year of his age, and the 26th year of his professoriate. He was Professor of Clinical Medicine successively at Kiel and Breslau, and in 1859 was called to Berlin University. His best known work is his treatise on "Diseases of the Liver," which was translated into English by Murchison.

—It is with great pleasure we learn that the *Index Medicus* is to be continued. This periodical, giving, as it does, complete references to what is published in all parts of the world in every department of medicine, makes it invaluable to all who desire to learn the precise state of knowledge in any subject in which they may be interested. To those attempting original work, such a publication is simply invaluable; and the time and labor necessary, in the absence of such a journal, to form any adequate estimate of the work already done is so great as often to deter from the project altogether. It should be on the bookshelves of every public medical library, and among the journals of all medical societies, if not in the private collections of all progressive medical practitioners.

Medical Items.

AMERICAN MEDICAL ASSOCIATION.—The thirty-sixth annual session will be held in New Orleans, La., on Tuesday, Wednesday, Thursday, and Friday, April, 28th, 29th, 30th, and May 1st, commencing on Tuesday 11 at a.m.

PERSONAL.—Drs. W. J. Johnston and Ruttan, (McGill 84') left New York on Friday last, by the North German Lloyd line, for Berlin via Bremen. While there, Dr. Johnston intends pursuing the study of Pathology, and Dr. Ruttan, that of Chemistry.

—Mr. Lawson Tait says: "The amount of worry which is given him by every case of hysterectomy, even when successful, is such as to be almost beyond the recompense of any fee; and the disappointment inflicted by every death is quite indiscribable."

—Iowa is the illiterate physician's paradise, no requirement being made for the practice of medicine. If a man or woman has the gift of gab, lots of cheek, especially if he or she can dress well and make a good appearance, they will succeed in making a practice. The less education he has the better. Little or no moral character required, either. This is the status of the medical profession in Iowa.—*Iowa State Med. Journal.*

—No nation hankers for the honor of originating venereal disease. The Neapolitans call it the French disease; the French, the disease of Naples: the Poles call it the German disease; Hollanders and Englishmen refer it to Spain; the Orientals lay it to the Franks, the Persians to the Turks; the Portuguese christen it Castelian and the Chinese call it the disease of Canton. Other peoples follow the same rule as those mentioned. Syphilis has no father who is willing to stand responsible for its birth.

—A correspondent of the *Journal of the American Medical Association* is impressed with the number of operations for the amputation of the cervix uteri performed in Berlin. He thinks few women in Berlin can have normally preserved uteri. He says the students have a saying that there is not a woman living on the street with Martin's Hospital who has an entire cervix uteri. The temptation to resort to an operation for the glory of publishing statistics and for achieving renown is a great one, and is inflicting injury upon gynæcology. Indeed, other departments of surgery are not unscathed.