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CANADA
MEDICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Valedictory Address to the Graduates in Medicine, on behalf of the Medical Faculty of McGill University, delivered at the Annual Convocation, held in the William Molson Hall of the University, on the 3rd of May, 1865. By WILLIAM SUTHERLAND, M.D., Professor of Chemistry.

A new chapter in the drama of your life opens to-day, of which the four preceding years have been the prelude and the rehearsal. The privileges and the franchise of your profession just conferred on you imply certain qualifications; of these your studies and your successful examination are at once the warranty and the test. It is thus with these surroundings that your entrance upon your career is inaugurated, attended with customary ceremonies and accompanied by general good wishes.

Your medical studies have extended over four years of continuous uninterrupted labour, and they have been systematically imparted—practically and clinically enforced and applied. In a word the whole domain of your profession has been investigated, examined and explored. Your final examination has satisfied your teachers that you are in every way competent to undertake the management of cases for yourselves. This examination furnishes trustworthy testimony that your time has been well spent and applied; but while this is unquestionably true, such proficiency as an examination establishes is not the only, perhaps not the chief, condition of success in life. It cannot establish what any one is capable of doing on an emergency, or how he will act under difficult or trying circumstances; neither can it make known moral qualities, sense of honour, or even temper. You will soon discover that with the best intentions and disposition you will be valued, not by feeling nor by deference to your profession as such, for this age is marked by the decay of respect and reverence, and to day, as in the time of Pyrrho, it is easy to coin a new word likewise borrowed from a name ending with O, significative of uncertainty and doubt. You will be valued by the conduct

which you pursue, the good which you effect, and the position which you maintain. Society expects every one of its members to do his duty—and even when performed, awards often scant praise therefor. And not to be purely temporary and transient, you will soon learn in your career that your success must be unequivocal and frequent; that you will have by your life to contradict or outlive much censoriousness and disparaging criticism, before you attain a fair position among your confrères, and perhaps that may only be reached with declining years and decaying mental energy. But inasmuch as there is seldom genius without that real strength of mind and capacity of endurance which can afford to bide its time, and in the end carry the day—the fruits for which you may have toiled may be reaped, and reputation, perhaps fame, may be achieved at a relatively early age. Work therefore, be patient, be hopeful, trust in your abilities, natural and acquired, feel “that all as in some piece of art is toil, co-operant to an end;” and if success should reward your efforts, regard it not as being evidence of personal merit,—nor be exalted thereby—or at the most be tranquil and humble in your exultation; it will not last long: soon you will have to give place to others, and quickly drop aside and be no more seen.

From the public in general your studies receive little attention and interest, inasmuch as they offer no attractions, other than those in some obscure way, connected with ancient errors and modern charlatanism. But the medical man must be cold indeed who rises from a review of the subjects which form the basis of your study, without enthusiasm bordering on almost extravagance. Of created things is there one equal to man, or even like unto him in conception or execution of design or effect of purpose? Does not his organisation surpass that of all others, and a knowledge of it in its multiplied relations far transcend all other phenomena? Who or what ranks higher in the scale of creation? In whom and in what are embraced and compressed as it were such marvellous adaptations, such moral interests, such psychological mysteries? wherein else do we so clearly distinguish “direction which we cannot see,” even as by refraction we see the sun before it has risen above the horizon? Are the demonstrations of anatomy then, as has been said, “mute and frigid,” because made on the inanimate body—the tenement of clay? mute! are not all its parts vocal to you, have they not significance—frigid! do they not always excite and kindle even in the dullest, the disposition to prosecute them even by running counter to law, and incurring the odium which society unjustly expresses. And what are these demonstrations and revelations? The frame-work of the bones—to which and round which clings the mechanism of the muscles and tendons, the distribution and arrangement of the nerves from foot

to crown, the two clearly, closely connected and related,—the organs of movement and sensation. If from a mechanical glance we pass to the contemplation of this same fabric moved and actuated incessantly by the powers of life—working by and through it, and showing how all its parts are ends and means—causes and effects—for the accomplishment of its purposes—all must acknowledge that herein is a subject with which none can be brought in comparison. The apparatus of the senses presiding over perception, the avenues to knowledge; the mutual inter-dependence of the various organs, so related by proximity and by function, that if one be ill the others feelingly are made to participate. The network of blood vessels penetrating everywhere, carrying in their tide the rich materials wherefrom the system is developed, nourished and maintained—a perpetual addition compensating for a perpetual abstraction of particles, so that an absolute equilibrium is secured. The individual is the same, but its parts come and go—are created and destroyed. While this matter is a portion of the body, it is subject to certain laws; but after it is let loose it may circulate about the universe in any other form. The poet's dream, then,—

“ There's not one atom of yon earth
But once was living man,”

is not an exaggeration but the expression of a philosophical fact. Concurrently with these chemical formations and evolutions, an amount of heat is uniformly generated throughout the body, and so regulated that whether in polar or tropical climate, temperature is at the same degree:—meantime those spongy tenements of the breath, the lungs, from the first wail to the expiring moan, incessantly pour into the air the vitiated, the poisonous, final product of oxidation, and restore by each inhalation an unadulterated equivalent of a gas instinct with vital properties, charged with superhuman powers; and thus it is that life in its varied relations is a permanent influence over a perpetually changing set of particles.

But all this is well known to you,—it is like a thrice told tale,—the faint echo of what has been forcibly proclaimed elsewhere. I am open to the criticism, and incur its consequences, because it is advisedly that I thus venture to recal in broad and comprehensive, but I fear feeble outline the fact that by an intimate acquaintance with the normal of healthy life you will best understand that life when its normal shall have been deranged, and best apply the means calculated to arrest, defer, or avert the threatened danger. It is moreover this assurance of your ability to meet and cope with that danger which removes anxiety from the minds of your teachers on your entering upon your independent manhood, uninfluenced and untrammelled by dogma, or special doc-

trine as meaning servile subjection to authority—but simply directed by the principles and education which make you masters of your subject, and which guiding individual judgment will find their most successful application in the exercise of thought and action, in the avoidance of indifference and listless routine, in evoking that independence, not of manner, but of character, which stands firm in difficulty without leaning on other men's shoulders, and which, properly regulated, is the opposite of that self assurance which leads to and essentially is presumption, arrogance, and obstinacy.

In your professional as well as in all other relations there will be much to cause anxious, harassing, even tormenting thought; much, too, on the other hand to produce pleasant, cheerful, and self-gratulatory feelings; fortunately by far the greater number of your cases in ordinary circumstances will afford no matter for grave consideration, but even then never permit your perceptions to be thrown off their guard, for danger may lurk where least expected: and in occasions of this kind you will now and then be made to smile when you see reproduced identity of feeling and temper even after the lapse of thirty centuries; some patients, like Naaman, will turn and go away in a rage because you may not have said or prescribed "some great thing." Indeed you will meet humanity when ill, in its feeblest and in its noblest and most heroic manifestations. Now, there will be timidity, ingeniously self-tormenting, with remote and improbable contingencies; now, there will be hopefulness, endurance, fortitude, cheerfulness even under suffering and in the midst of very danger, and resignation on the approach of death; and in some fortunately rare cases it occurs that the opinions and the words of the medical man exercising his matured judgment, are painful to those who are by affection or otherwise related to the suffering one—when his accuracy shocks—when his candor seems pitiless, and his truth causes a dread, and produces an almost abhorrence to the afflicted. To the first of these you can give every support,—they require it,—and it will effect its good ends; the second scarcely ask for, but nevertheless always receive, sympathy in large measure; to the last,—for you have here to do with relatives and connections, no form of words or set phrase can bring consolation in the presence of the woe which your art has been unable to avert; the faculties are stunned—attention and perception are in chaos—mechanically and listlessly grief listens and moves; despairingly and almost rebelliously utter oblivion is deemed the only refuge; words however toned and expressed, would fall on deaf ears and be simply impertinent; to these humble acquiescence and resignation must come from other sources than yours.

I have far exceeded the limits which I prescribed to myself when I began this address. I hasten to a close. In your relations with each

other as medical men, remember that you are not rivals, but co-labourers; that you act in harmony, not in opposition; that you are influenced by principle, not by narrow views; that your duty ought to lead to one single constant purpose, before which all considerations even of justifiable ambition and love of praise and thirst of reputation should sink in significance,—that purpose the good of your patients. Though common and perhaps natural, it is nevertheless disingenuous, and on a lower moral ground it is a blunder and impolitic to refuse to perceive, or recognise, or admit intellectual strength wheresoever it may exist.

To disparage is easy enough; and to attempt to reduce another to one's level by such means may be tempting, and perhaps brings with it some consolation for one's littleness; but surely, to raise one's self to the equality of our superiors, and even try to excel them, is a better and more worthy competition: to persist in the opposite course is to be actuated by what I must be pardoned for calling a principle from the code of prigs and snobs and the evangel of knaves. Is there not higher authority than mine for "Sirs, ye are brethren; why do yet wrong one another?" *Λαμπαδια εχοντες διαδωσουσιν αλληλοις*—the light shines everywhere, yet clouds occasionally lower upon us—let us hold the lamp the one to the other in the dark places.

Remember, too, that it is quite possible, nay common, for one's abilities to be rendered useless, talent barren, and even contemptible, without that rectitude which, more than man's capacity, talent, or genius, is his greatest virtue,—his victory over his prejudices, his propensities, appetites, passions, vices,—his character.

And these honours now conferred on you, as you have earned them well and faithfully, may you wear them long. So shall Alma Mater send out her sons skilled and worthy into places now under familiar, now under strange skies, to spread abroad the science and manhood and character, which she has endeavoured to teach and educate; and with the increase of years, and after a life's long vigil, may those honours still be unsullied—manhood be irreproachable, and character unimpeachable.

False Anchylosis of the Lower Jaw, of some twenty-four years standing; relieved by free internal incision, and subsequent continued motion, active and passive. By William Canniffe, M.D., M.R.C.S., England; formerly A. A. Surgeon to Her Majesty's Forces; late Prof. Surgery Univ. Vict. College, Toronto.

Immobility of the lower jaw is said to be an affection peculiar to America; and has been attributed to the free use of mercury, which was

so fashionable some years ago. The profuse salivation, ending in ulceration of the cheek internally, finally resulted in rigidity of the parts, especially the masseter muscle, whereby the jaw was permanently closed. That the disease is not known in Europe, seems to be substantiated by the fact that no mention is made of it by English writers at least. That it is due to salivation, seems to be corroborated by the case we purpose to relate. Dr. Mott of New York was the first writer to treat particularly of the disease; and to perform an operation for its relief. His first case is recorded in the American Journal for Nov., 1829. When a student in New York in 1853, I saw Dr. Mott perform the operation by introducing a narrow bistoury by the mouth, and dividing the masseter muscle, and then with a screw and lever, he forcibly opened the mouth. The result was satisfactory.

The case I am about to give, it will be seen, was something more than simply a rigidity of the masseter muscle.

Miss P. consulted me last fall respecting her face, which was to her a source of great annoyance and pain. The account given by herself was as follows: When about two and a half years old, she chanced to get hold of a box of mercury pills, a number of which she ate. The same day she accidentally fell into a drain, getting herself quite wet; the following morning her face was swollen and sore. In a few days ulceration commenced on the inner surface of the left cheek. This gradually extended, until the whole thickness of the cheek was involved, and finally, in about ten weeks from the time she swallowed the pills, a large portion of the cheek fell off (no doubt a gangrenous portion which had just become detached), leaving a space the size of a penny piece. The mouth remained intact. The healing rapidly progressed, and soon closed up the space in the cheek, but at the same time completely locked the jaw. From that time to the present, some twenty-four years, the mouth has been firmly shut; so closely indeed that once she got a pin between the teeth into the mouth, and had great difficulty to get it out. And she has a horrid remembrance of Christmas day, when twelve years, having two of her teeth come out in the mouth, which she held there all day, and which she only at night determined to swallow, lest they might choke her while asleep. When nearly five years old an operation was attempted to secure mobility of the jaw. She says the soft parts were thoroughly divided from the jaw bones, but the object was not accomplished. Again, when about fifteen the operation was repeated by another surgeon, which also failed. Five years ago the face became swollen, and an abscess formed in the left cheek, anterior to the cicatrix. This opened inside the lip at the left corner of the mouth; the part again healed. Last August

an abscess again formed in the cheek, which opened upon the surface in the site of the original cicatrix. Since that time the cheek has never been quite free from swelling; also there has been an occasional collection of pus. It is this continued discharge which has led her to consult me.

Upon examination I find the left cheek somewhat swollen, and very considerably widened, so that the mouth is turned to the right side to the extent of nearly an inch. The formation and healing of the abscesses, has no doubt contributed to produce this. The jaws are most firmly closed; she says, however, that there is a very limited lateral motion of the jaw on the right side. The upper front teeth are somewhat projecting. Thereby it was that a certain quantity of solid food could be introduced to the mouth. The cavity of the left cheek is entirely obliterated up to the very corner of the mouth. Notwithstanding the immobility of the jaw, she could articulate with perfect distinctness.

I recommended another effort to divide the parts as offering the most probable permanent relief. After some days' consideration she determined to submit again to the use of the knife. The operation was performed on the 24th October, 1864. I was ably assisted by Dr. Burdett and Dr. Relyea, dentist, whose advice had mainly caused her to undergo the operation. Chloroform was administered. It would be more agreeable to relate that the operation was completed at this time. But unexpected difficulties were encountered. The fact that she could even slightly move the jaw laterally had led me to think that the knife could readily divide all the structures holding the parts together. But, after thoroughly separating the parts, including the masseter muscle, no available force could be found to part the jaws. The reason soon became apparent. They were firmly united by fibro-cartilaginous bands which gave thickness to the periosteum, and fitted closely around the teeth. And, in growing, they had assumed a very irregular position in the jaws. At the posterior part there was also a quantity of calcareous matter. The operation, therefore, had so far again failed. But we were not discouraged. A week after, the patient willingly allowed us to continue the operation. During this time union had been prevented by the introduction of a tent supplied by Mr. Relyea; with a good assortment of instruments for working around teeth, and a fine metacarpal saw, and the patient placed under chloroform, the operation was resumed. A strong scalpel was first used to divide as much as possible of the strong bands; then the somewhat pointed instruments were employed to sever the substance around and among the teeth. Finally, the saw was made to traverse the space between the jaws; while, at the same time, leverage

was used to separate them. The saw completed the work and the jaw then readily opened to the extent of nearly an inch. On both occasions the hemorrhage had been considerable, but no important vessel was divided.

The operation had proved troublesome, but it was a small thing in comparison with the treatment which subsequently had to be pursued. In undertaking the operation it was fully understood that subsequent to dividing the cheek from the bones it would be necessary to interpose something for a long time, until the fresh surface had gradually become skinned over by a membrane; and that if this were not done the parts would re-unite and the undertaking prove futile. In addition, it was found necessary to have the jaw opened frequently by mechanical means; at the same time to cause the patient to strive often to open it by muscular action, thereby to call into action certain functions of the muscles which had been so long a time dormant. It was necessary to have something placed between the cheek and the jaws that would be cleanly and unirritating. Having mentioned this to Dr. Relyea he suggested a plate of vulcanized rubber. So, having prepared a model for him, he supplied me with what proved to be a valuable agent. It was an oval concave-convex plate of a quarter of an inch thickness. The introduction of this caused considerable pain; but it was far more comfortable than the tents previously in use. After a few weeks this could be taken out and replaced without any great trouble or discomfort. To maintain and, if possible, increase the motion of the jaw, the patient was instructed to insert wedges of wood daily, and to gradually increase their thickness; to occasionally use a lever; and incessantly, in her waking hours, to exercise the muscles in opening the jaw. The inflammation from the first was controlled by the application of cold water. The discharge was, for some time, considerable, and consisted of pus; the *débris* of the cartilaginous structure and calcareous matter. After a few weeks some of the alveolar process came away and even a small portion of the lower jaw. For five months the use of the plate was continued, but its form and size had occasionally to be modified. Gradually the cavity assumed the appearance like unto nature. The tendency to heal by adhesion was strong, and the contractions would, to a great extent, force out the plate. During the last month, indeed, it could hardly be resisted. The ultimate object kept in view was to secure a space in the cheek sufficiently extensive to allow the jaw to be opened to the fullest extent. But the work was cut short by an attack of erysipelas commencing in the part and extending over the face and to the scalp. The plate had to be removed; and when the inflammation had subsided, and the interior of the cheek could be

examined, it was found that where a covering had not yet formed, union had taken place. Fortunately, however, a sufficient cavity had been secured to allow the jaw to be opened rather more than an inch. During the past fortnight the mobility has somewhat increased. The *result* now is a complete removal of external deformity, the mouth being no longer turned to one side, and the cheek presenting a natural appearance. The patient can eat with comfort; and, what she prizes very highly, can clean her teeth within the mouth, a luxury to her before unknown. Also, she can speak far more fluently.

Belleville, 14th April, 1865.

REVIEWS AND NOTICES OF BOOKS.

Answers to the Various Objections against Acupressure, or the Temporary Metallic Compression of Arteries, adduced by Professors Miller, Erichsen, Neudörfer, Spence, Fergusson, and Syme. From Dr. Simpson's work on Acupressure, pamphlet pp. 34, from the author.

We have to thank Professor Simpson, Edinburgh, for a copy of this reprint from his work on acupressure. In his prefatory note he says:

"The following two chapters were originally written in answer to the chief objections urged against acupressure by various surgical authorities. They are reprinted in the present form merely in self-defence against the reiteration of some of these objections. I have retained the enumeration of the chapters and cases, the references to pages, etc., as they exist in my volume on acupressure; and have only altered a few of the paragraphs, and added two or three footnotes, to fulfil better the objects of this reprint."

This, we believe, is the objectionable pamphlet which led to the undignified conduct of Professor Syme in his class-room on a recent occasion. It is to be regretted that a man of such acknowledged surgical skill as is Mr. Syme, and who occupies such a prominent and eminent position in his profession at the Scottish capital, should have so far forgotten what was due to himself as a gentleman.

Mr. Syme is certainly handled without gloves, and may probably, with justice, have felt somewhat irritated at being compared to the ancient surgeon Gourmelen, who so factiously opposed the introduction of the then novel method of ligation by Paré, to the exclusion of hot irons and cauteries. This pamphlet is an extract from Dr. Simpson's work on

acupressure, and contains abundant evidence of the success of his method of securing bleeding vessels. The objections to acupressure urged by high surgical authority are answered in a clear, lucid, and masterly style, and many of the British journals bear testimony to the success of acupressure where it has been tried. It certainly appears to us to be preferable to the ligature, and we should imagine will eventually become the rule in practice, ligation the exception, to be used only in cases and positions where acupressure is inaccessible.

As some of our readers may not be aware of the method of applying acupressure, we will endeavour to illustrate. A strong steel needle is introduced from the outside of the stump (in amputation) embraces the artery, and again is passed through the skin at a short distance from its point of entrance; if necessary the two ends of the needle are bound together with wire in the same way as in operations for hare-lip. This is not always necessary; but in the larger vessels would be only a precautionary step. Several bleeding points can be secured with one needle where they are contiguous. These needles can be removed at any time, at the option of the operator, twenty-four hours being usually sufficient to ensure adhesive inflammation of the coats of the vessel, and preclude the probability of secondary hemorrhage, or they can, without detriment to the patient, be allowed to remain in for weeks, their presence being unattended with suppuration or any uneasiness. Their removal is simple, and the practice, where employed, has given general satisfaction.

To Dr. Simpson is certainly due the thanks not only of the profession but of the public for this suggestion, one of many, his brain, ever fertile in improvements, has given to the profession the results of careful thought which in this instance may and we trust will change the present statistical features of operations connected with the blood-vessels. All operative surgeons are aware of the trouble which occasionally succeeds amputation and ligation of vessels, such as sinuses, tedious union from extensive suppuration, and a host of other evils, not overlooking the constant dread of pyæmic poisoning.

Dr. Simpson claims for acupressure the following advantages over the ligature.

It does not require the vessel to be removed from its vital organic connections.

It does not produce direct mechanical injury to the vessel, bruising and lacerating the two internal coats, strangulating the external coat, which leads to destruction of the constricted part, the injury often extending higher up than the point ligated.

It does not produce death of the end of the vessel, beyond the point compressed—as is the case with the ligature,—leading to the formation of as many decomposing sloughs as there are ligatures employed.

The needle does not imbibe animal fluids as is the case with hemp or silk, which speedily decompose, occasioning much irritation to the surrounding structures.

Its presence does not occasion the formation of pus, and therefore does not retard primary union.

It is removable always at the will of the operator.

It closes both artery and vein, and a single needle may close two or more smaller arteries.

It requires only one person for its application.

It is not followed by secondary hemorrhage as a result of ulceration or sloughing, as it produces none.

It is much less likely to be followed by secondary fever, as the wound is placed in a far greater hygienic condition,—there being no septic matter presented to the fresh absorbing surface of the wound.

And lastly, “for these reasons it makes complete primary union more frequent—healing quicker—and septic or surgical fever less common.”

On the Diagnosis and Treatment of Cancer and the Tumours analogous to it. Illustrated by sixteen coloured plates and seventeen woodcuts. By MAURICE HENRY COLLIS, M.B., Univ. Dublin, F.R.C.S.I., &c., &c., 8vo. pp. 317. John Churchill & Sons, New Burlington Street, London, 1864. From the Author.

To arrive at safe conclusions in the diagnosis of disease, the physician requires to be well grounded in pathology—and before seeking to know the condition of organs in a diseased state, it is requisite to possess a perfect knowledge of their minute structure in health. Physiology and pathology, then, are kindred sciences, requisite, actually essential the one to the other; and the practitioner, who is anxious to fulfil his duties with credit to himself and advantage to those placed under his charge, should possess an intimate acquaintance with these sciences. The microscope has opened a new sphere to the observer; and diseases which were formerly described under a common head, are now recognised as possessing many distinctive features. Nevertheless, the microscope is apt to lead into error, as minute differences observed in objects, submitted to investigation, of apparent similarity in appearance to the unaided eye, may result in a mystification of the observer, or the setting forth of

new theories which are not practically beneficial. There is no question, however, of the advance made in clinical study aided by microscopical investigation. Much that a few years ago was obscure and unintelligible has been cleared up; and results can now be predicted with certainty, which before could only have been asserted at the hazard of the practitioner's reputation. Clinical study is the chief source of instruction; the microscope a most efficient and necessary aid. The author has enjoyed rare advantages in being attached to an institution like the Meath Hospital, and is likely to worthily fill the place once held by such great names as Crampton and Graves, whose connection with that institution created a new era in clinical observation.

The work before us consists of eighteen chapters on cancer and the tumours analogous to it. The author in his preface does not claim for it perfection. Much is necessarily omitted; other facts have been left out through circumstances beyond his control, but which we trust he will be spared to record in a further edition.

The first chapter is on the various forms of cell growth.

“The cancer-cell, first insisted on as a special element of cancer by Lébert, and by him considered as a cell *sui generis*, is now to be regarded as a modified lymph-cell. Monstrously altered in size, it would be difficult to recognise its origin were it not that in other infiltrating growths we find cells as a medium type between it and the cell of healthy tissue. Thus in the simple fibroid tumour, the constituent cells are but little removed in size and shape from the healthy type; their peculiarity takes the direction of an arrested development. Again, in the fibrinous tumour we find cells of a similar character, with an imperfect tendency to development; in the fibrous tumour the cells acquire a complete development into fibres; in those forms of tumour known as fibro-plastic, which, in fact, are fibrous or fibroid tumours, with a tendency to destructive action like cancer, but less intense, the cells are larger and caudate, stopping short of cancer as to size, and of fibre-cell proper as to development. Then again, in acute cancer, the cells are small compared with those of scirrhous or chronic cancer; while in the latter there is, as a rule, more attempt at caudate development. Now, though the extremes of this chain may be very unlike, yet the resemblance can be traced up from one link to another, and the points of difference can be satisfactorily associated with differences in the rate and power of development. These, again, have a practical connection with the clinical features of each case; and, combined with a proper study of the latter, lead to an accuracy and certainty of practice formerly not attainable without a life-long and empirically-founded experience. As a general expression of these facts, I have

ventured to enunciate a formula which seems to satisfy the requirements of our present knowledge of the subject. It is, that the nearer the constituent cells of a tumour approach to the healthy lymph-cell in form and power of development, the more clinically benign is the tumour; the farther they are removed in these two particulars from the healthy type, the more destructive or malignant is the growth. To this I would add the further observation, that tumours of rapid growth, and with a tendency to recur, have round or oval cells, which are rapidly reproduced, and have small powers of development in the direction of fibres, while the more chronic tumours, as a rule, are composed of cells which have more or less tendency to form fibre. By a combined use of these formulæ or laws, a correct conclusion may generally be deduced as to the rate of growth of any given tumour, and its tendency to return, even when its clinical history and features are unknown to us. It is not, however, expedient to get the habit of examining tumours microscopically, without as accurate an acquaintance as possible with their clinical aspect."

The author differs with Virchow and Beale as to the true meaning of the multiple nucleus of the pus cell. He says:

"Pus affords another example of the low vitality of the lymph-cell. Pus-cells are only lymph-cells which have perished, and which in parting with most of their nitrogenous elements exhibit a superabundance of oily granules in their interior. This is the true reading of the multiple nucleus of the pus-cell; it is not, as Virchow and Lionel Beale would have it, a spontaneous and vital division of the nucleus preparatory to a multiplication of the cell by division; it is only a step towards the disintegration of the cell, and an evidence of the loss of its life in its very centre and most vital part."

In the chapter on the clinical aspect of tumours, Mr. Collis refers to and reproduces at length the tabular view of cancer or carcinoma given by Walsh now quite out of date as an authority on the structure of cancer. He differs from Mr Paget in his arrangement or classification of tumours into "Benign and Malignant." On this point he says:

"To the general arrangement into malignant and benign or innocent there is one great objection, namely, that many tumours are malignant or destructive to life, if allowed to run on to a natural conclusion, which would be undoubtedly benign if duly and timely treated. Mr. Paget cuts this difficulty short by making the terms malignant and cancerous identical; but the public and the profession do not accept this exclusively, and confusion is the result. It is, I think, much better to use these terms in their natural sense, as implying clinical features. If a tumour is destructive to life or tissue, it is malignant; if not, it is innocent or

benign. Many cancers are not malignant; many non-cancerous growths are eminently destructive to life. On another point I think that Mr. Paget's classification or nomenclature is bad, namely, on the subject of epithelial disease. I do not believe its analogies to cancer, to be so marked as to justify us in calling it cancer. It possesses marked differences in its mode of origin, in its progress, and in its destructive qualities. It more nearly resembles pure and simple hypertrophies in its early stages; while in its destructive properties, more especially in its secondary developments, it bears no greater resemblance to cancer than many tumours classed by Mr. Paget as innocent. No doubt in its last stage it is an infiltrating growth, as cancer is; but so are all the recurrent tumours—so are fibro-plastic growths. All secondary tumours have a strong family likeness, and it would be often (but not always) impossible to say what primary growth gave rise to a given secondary. However, I prefer the name epithelioma, as free from objection; it leaves the question an open one of the cancerous or non-cancerous nature of the disease."

We give *in extenso* the classification of our author, as it appears to us to possess many advantages over those of other writers.

"A. Tumours which are mainly composed of cells of various forms and powers of development.

1. Cancer or carcinoma;—*a.* Acute or encephaloid cancer; *Variety*—Fungus hæmatodes; *b.* Chronic or scirrhus cancer; *Varieties*—Atrophic scirrhus; Lardaceous scirrhus.

Canceroid.—2. Fibro plastic tumours; *Variety*—Myeloid tumours;
3. Fibroid or recurrent tumours; *Varieties*—Fibrinous or hemorrhagic tumours; Colloid tumours.

4. Fibrous tumours; *Varieties*—Fibro-cellular tumours; Some polypi; Erectile tumours; Neuromata.

5. Epithelioma.

B. Tumours in which the cellular element is not the one of primary importance.

1. Cystic tumours; *Varieties*—Serous cysts; *a.* Simple; Proliferous; Sebaceous cysts.

Accidental condition common to many of the foregoing.

Melanosis.

a Cancerous; *b* Fibrinous; *c* Cystic.

2. Fatty tumours.

3. Enchondromata.

4. Bony tumours.

The remainder of the work consists of a description of each variety.

following the above table, and contains throughout valuable practical hints. The author is evidently a most careful observer, and has seized every opportunity with avidity to improve his knowledge of this obscure department of our science. To such minds the science of medicine is indebted for the rapid advances made during the past few years. We have endeavoured to give our readers a slight sketch of this truly valuable addition to our literature; and we feel certain that in a future edition Mr. Collis will give to the profession the continued results of his observations, in the same spirit of truthfulness, and simple minded honesty, of which each line of this work bears evidence. The book is got out in John Churchill's best style, the colored lithographs are most beautifully executed, and the wood-cuts are worthy of commendation for their accuracy and finish. The illustrations were done in Dublin under the immediate supervision of the author.

The Dublin Quarterly Journal of Medical Science for February, 1865.
Dublin: Fannin & Co.

This valuable quarterly reached us just as our last number went to press. It is, as is its wont, filled with matter of great interest to the profession. The first article is on excision of the knee-joint, by John K. Barton, M.D., F.R.C.S.I., lecturer on surgery at the Ludwich School of Medicine, Dublin, illustrated by a case in which the operation was successfully performed. Dr. Barton, while advocating the operation in special cases, seems to consider its general adoption, as recommended by Ferguson and others, as a thing not to be desired; and states that its thoroughgoing partisans do more to hinder the progress of the operation, than those who condemn it altogether. With regard to the success of the various cases recorded, he says: "Heyfelder gives the result in 183. Of these, 73, or about 38 per cent., were acknowledged failures, either from death or subsequent amputation. Mr. Butcher gives a statistical report of 82 cases, amongst which 26 per cent. were failures; and Mr. Humphreys, of Cambridge, out of 13 cases, has 5 failures, or 35 per cent. Mr. Jones, of Jersey, reports 14 cases, all successful but one. Taken altogether, these figures show a very high rate of non-success (34 per cent. of the whole number); and although a great number of successful cases have been reported since then, yet it seems probable that if all cases which have been operated upon were recorded, we would not have if at all a more favourable record." We cannot agree with Dr. Barton in the deductions he draws in the extract we have quoted. The more

favourable *per centage*, which is now given to the operation, he infers—in fact all but actually states—is due to the non-recording of all the fatal and unsuccessful cases of late. What right has he to assume that the profession are less honest now than they were a few years ago? Is it not rather due to the practical experience which surgeons have received from witnessing and reading of the failure of others,—thus tending to induce greater caution in the selection of the class of patients upon which to perform the operation, and a greater skill in its performance and subsequent treatment? But even admitting that the result of the operations upon the knee-joint still show as high a mortality as in amputation of the thigh, is that a valid reason why we should accept that of amputation in preference to excision: Can any artificial leg at all compare with that of the natural one—with a stiff joint and two inches or so shorter. Dr. Barton believes, that before the question of excision can be entertained at all, all hope of a firm ankylosis—the result of perfect rest—must be passed. With regard to the age of the patient, he would prefer amputation to excision, if the patient had reached forty years, because a great amount of reparative power is necessary to render the limb perfectly firm. Perhaps in some instances this opinion may be correct to act upon; yet we feel certain that there are many persons suffering from diseased knee-joints—over forty years of age—upon whom it would be decidedly wrong to perform amputation—all things being equal—in preference to excision. Dr. Barton condemns the operation in young persons, unless their growth is very near complete, on the ground that the epiphysal line being destroyed, the growth of the bone ceases, and shortening to extent of five, and even nine, inches, ensues. On this head let us see what Mr. Ferguson—certainly no mean authority—says, and with his remarks we most cordially agree.

“ Inequality in the length of the upper extremities is of little moment, but it is awkward, to say the least of it, in the lower, as we frequently observe after fractures and after disease of the hip or knee in early life. Such inequality may, in some instances, be attributed to bad treatment, but it often occurs despite the best skill in surgery. Yet who would in such a result say that the patient would have been better with the limb away by amputation? Who does not think that when a person gets well of a diseased knee or hip, with shortening even to the extent of five or nine inches,—no uncommon result,—he is yet somewhat fortunate,—fortunate in not having had amputation performed on his thigh? We do see occasionally cases of great distortion of the lower limb after disease of the knee, but even these patients sometimes congratulate themselves on

having the leg and foot. In some few such cases amputation in the thigh has actually been performed years after the so-called cure. Yet in such cases it is not our custom to lay blame on the treatment which may have been adopted, although I believe that it has often been highly defective. Whatever the amount of distortion after the cessation of disease in the knee-joint, I hold that excepting very special cases, amputation is unjustifiable, as resection of the distorted knee is both safer and better. But I shall not press this point at present; let me rather again draw attention to the fact, that we never cry out against either nature or the surgeon in cases of shortening and distortion of limbs after disease. Yet such defects are common. Whilst meditating these remarks, I have rarely known a day that I have not observed persons walking in the streets with shortened and distorted limbs after disease of the knee. Most of them have moved more nimbly, and with greater apparent security and comfort than if on the artificial limb after amputation of the thigh. Yet shortening has in a manner become the bugbear of excision of the knee. I admit that it is a defect, but abstraction or excision and arrest of development are evils elsewhere as well as here. Again, I admit that in this locality disparity of size, particularly in length, is an awkward circumstance. Let us see, however, in what this consists. A difference of three, five, or nine inches! What is the contrast which has been drawn with this defective limb? It is with its neighbour! And here I imagine we hit upon the weakest of all the objections hitherto made to excision of the knee. The risk of loss of life, distortion, uselessness of that which is preserved, are all serious objections or blemishes to this proceeding. A short leg to a long one is, I again admit, a defect; but in this respect surgery no more fails than nature does after disease. What, I ask, is the alternative for excision of the knee proposed by those who object to this operation? Is it amputation in the thigh? I cannot allow that which might be an easy answer to the question,—Why perform an operation at all? Why not cure the disease, and thereby avoid amputation? That is a question of a totally different kind. I am not now discussing the question of amputation, or continued, and possibly other treatment to save the limb. It is the question between excision and amputation as regards the future condition of the limb. In ordinary amputation under such circumstances, half the thigh, or possibly two-thirds, may be left. The body is mutilated to nearly the entire extent of one extremity. Say what you may as to the quality of the stump, there is left a shortened femur, a shrivelled thigh; emphatically a stump. Even Samuel Johnson's explanation of the term gives an exalted idea of the noun substantive which scarcely holds good with us: 'The part of any solid body remain-

ing after the rest is taken away,' is a flattering description of one of our stumps of the thigh. It is in reality with us barely more than a peg whereon to hang an artificial limb. In youth, in middle age, in advanced years, it never improves. It never can be more than a shortened bone, with shortened and shrivelled materials around; and this even with the perfection of a stump. The defective results of excision I am disposed, in accordance with what I have said before, to class with defective stumps. In justice to the subject I now deal with, I take a fairly perfect result of excision. Whatever the shortness, that may readily be made up by a high-soled boot or shoe. There are left the lower end of the thigh, nearly the whole of the leg, the ankle and foot; the former two slightly damaged, the latter unscathed. The foot, leg, and thigh do as much as in the cases of distortion or shortening after disease; and who under such circumstances, would compare an artificial substitute to the limb of life? A well-healed stump never in reality improves, unless, possibly, it gets somewhat more callous, whilst often it gets more tender and irritable; but the seeming perfect result of excision at the end of six or twelve months (just when stumps are generally at the best) is no criterion of true perfection. If the limb is properly managed afterwards, it goes on improving for months—aye, for years."

With regard to constitution, Dr. Barton strongly asserts the operation should never be performed upon a scrofulous patient, but believes that amputation may, owing to the amount of adhesive inflammation, set up in the latter being comparatively small. Dr. B. says: "Should the patient present the symptoms of constitutional syphilis, I think we ought first to treat him for this disease. * * * The existence of scurvy or purpura would altogether forbid the operation until these symptoms were entirely removed. * * * Turning now to the local conditions which indicate or contra-indicate excision of the knee, it is evident that any disease of the joint which has produced suppuration, is just to the extent to which it has gone—unfavourable to excision. * * * When we have evidence of the ends of the bone being extensively diseased, I believe amputation the only operation advisable; first, because excision would most likely fail to produce a sound or useful limb; secondly, if solid union was obtained between the bones, the amount of shortening would be so great, that the limb would be of little use—being five or six inches shorter than the other—by no means compensating for the six months' additional time spent in recovery."

So far as the additional time passed in recovery is concerned, we think the patient would willingly submit to save his limb. Again, in amputation we must consider that though in many cases the patient may be

able to be dismissed from the hospital in about six weeks, there are cases where sinuses and irritable ulcers keep up a source of constant irritation upon the constitution, needing perhaps, it may be the removal of a portion of necrosed bone, or even a re-amputation for an ill condition stump. Dr. Barton thus closes his remarks: "The cases suitable for operation of excision of the knee are rare. They require, first, youth or vigorous age; second, no constitutional disease or sign of deteriorated blood; third, the disease of the joint to be non-suppurating and confined, or nearly so, to the articular surfaces. * * * In the few cases in which the operation is called for, the operation well merits the encomiums bestowed upon it." Then follows Dr. Barton's case—it is well recorded, and calls for no special remarks. It was a case of pure ulceration of the cartilages, and the patient a young girl of about seventeen years of age. She did well, eight months after the operation being able to walk well without either stick or crutch. The paper is ably written, and contains many good remarks; but we consider its author's views too limited as to the kind of cases in which excision of the knee should be performed.

The second article is "Remarks on Scarlatina," by Dr. Cummins of Cork, and is a very able treatise. We will endeavour to give an idea of what he intends to convey. Cork, in 1861-2, was subjected to a very severe epidemic of scarlatina,—and had been for several years previously,—each epidemic being more and more severe, although often in the same family cases both mild and severe occurred. He states his inability to arrange the cases that came under his care in 1861-2 under the ordinary divisions of simplex, anginosa, and maligna, and gives the following division: 1, epidemic sore throat; 2, typical scarlatina fever; 3, typhoid scarlatina; 4, congestive scarlatina; 5, malignant scarlatina. The first, or epidemic sore throat, is sometimes the pioneer of an epidemic of scarlatina,—sometimes treads on its receding footsteps,—but is most frequently seen in adults who are exposed to the contagion. It is generally characterised by inflammation and ulceration, with patchy deposits on one or both tonsils; sometimes by vivid redness of the soft and hard palate and pharynx. The mouth is hot, moistened with viscid saliva, and the tongue of a light grey colour. A variable amount of fever is present. The disease runs a short course, and requires little treatment beyond rest, saline aperients, and emollient gargles. He also strongly urges the inhalation of the steam of hot water; and from a considerable use of the latter in ordinary and severe cases of tonsillitis and aphonia, we can strongly recommend its employment. The second, or typical scarlatina, represents what he believes to be the ordinary phenomena of the disease,

when an average dose of the poison is received by a healthy person. It commences with nausea, vomiting, and the usual febrile symptoms. The eruption appears on the first or second day, in the shape of bright scarlet spots, about the size of a pin's head, appearing simultaneously all over the body. About the fourth day the eruption becomes more raised, giving to the finger a sensation of roughness, and on the fifth or sixth day it begins to decline. The tongue "strawberry," and the throat irregularly covered with thin white patches of exudation or superficially ulcerated. The convalescence in this form is very rapid, but great caution must be exercised. The vomiting is a constant and early symptom, and is all but pathognomonic of the invasion of the disease. The typhoid form commences in much the same manner as the previous one, but is early marked by prostration, great heat of skin, and an exceedingly rapid pulse—one impulse, as it were, flowing into each other,—early delirium, twitchings of the voluntary muscles, and rapid respiration, with a characteristic sigh or moan. These gradually increase, and are not relieved by the appearance of the eruption, which is dark, confluent, and irregular in its distribution. Partial or total suppression of urine often occurs, and is a dangerous complication. The tongue, though dry, is not rough and tremulous, but appears shining and tense, as if the epithelium had been scraped off, and a coat of varnish applied. Its surface is sometimes cracked. The throat symptoms are not urgent; if examined, it has a dusky appearance, with enlarged tonsils and uvula. The symptoms commence to decline about the tenth or twelfth day, when the disease often lapses into a condition similar to rheumatic fever, without its diaphoresis. Sometimes the heart is seized upon, and the patient's life placed in danger. Many sudden deaths from this complication occurred in Cork in 1861-2; and one such case occurred in our own practice here about a year ago. It was a young girl about nine years of age. She complained of pain, not so much referable to the heart, as to the sub-clavicular region. On examining the cardiac region a distinct friction sound was heard. She died suddenly within forty-eight hours. This occurrence of pericarditis in scarlatina is not new. Dr. West, in his work on diseases of children, makes mention of it. The next form is the congestive, and of this variety Dr. Cummins gives several cases, from which we gather the following as the principal diagnostic symptoms. In children the disease is often ushered in, by convulsions, often by stupor, followed by convulsions—many of them terminating in death previous to the appearance of the eruption. In older patients there is great stupor without convulsions, much tendency to sleep, with a tendency for the rash to come and go,

feeble pulse, vomiting and constant purging, the secretions from the bowels being dark green; when reaction takes place, it is usually excessive. In this form of the disease, the poison, instead of being directed to the skin and throat, seems to turn inwards towards the brain, lungs, and other organs. The poisoned blood, exercising a depressing effect upon the nervous centres, and through them on the entire capillary system, permitting the blood to accumulate in the small vessels of every part, thus implicating nutrition, secretion, excretion, and all the vital processes dependant upon active capillary circulation. The last division our author gives is malignant scarlatina. Here the throat symptoms are by far the most prominent and urgent. He thus describes the symptoms, and we consider them so important that we give them entire:—"The throat, which had been early complained of, becomes rapidly of a dusky hue, then covered with a yellowish white exudation, and deep irregular ulcerations appear on the tonsils. Sometimes apparent convalescence occurs about the sixth day, but with a renewal of the fever, the throat symptoms become intensified, and a quantity of viscid phlegm is secreted, which soon changes into acrid, semi-purulent matter, which runs from the nose, and gurgles into the throat with each inspiration; the breath is very foetid, and sometimes of a gangrenous odour; at times ash gray sloughs form on the tonsils, soft palate, uvula, and pharynx, or a membranous exudation, similar to that of diphtheria, covers these parts. In a short time the infra-maxillary glands rapidly enlarge, and these, by impeding respiration and pressing upon the vessels of the neck, are generally the cause of death. * * * They sometimes soften, and are formed into large abscesses. * * * As the throat affection progresses, the patient becomes more feeble, the rash disappears, the face assumes a deadly, earthy pallor, the teeth become covered with sordes, respiration is hurried and anxious, the power of speech is quite lost, although swallowing may be wonderfully free; patches of inflammation sometimes appear on the skin, and rapidly become gangrenous. I have seen a large portion of the anterior surface of the chest slough away."

We feel sure that our city readers will at once recognize in the above brief description the symptoms attending upon many of the fatal cases of scarlatina which occurred in Montreal, during an epidemic of that disease a year ago. We remember a case of our own, in which Dr. Hingston of this city, was called in consultation, when the sub-maxillary glands having suppurated, (the rash having disappeared, and the malignant symptoms subsiding), where the incision made to relieve the matter and prevent burrowing, was attacked by erysipelalous inflammation, extending from ear to ear, followed by gangrene and sloughing of the entire parts, leaving

the unfortunate little patient almost unable to sustain her head in an upright position. It extended to the muscles of the neck, and in spite of all treatment, was extending down the anterior surface of the chest, when death relieved her sufferings. The description of this form of the disease, though brief, is, we believe, superior to that in the majority of text books. The fatality of scarlet fever, within two or three years, has attracted attention to it, and various remedies have been recommended; but we are not aware that any have as yet achieved more than the usual amount of success. Dr. Cummins has, of course, his remedy to suggest, and claims for it, if not all the success he hoped for, yet sufficient to lead him to believe that a valuable agent in the treatment of scarlatina has been discovered. His attention appears to have been drawn to this remedy from the experiments of Prof. Polli of Milan, who has repeatedly arrested in the living organism the catalytic action of putrefying organic matter, injected into the circulation by injecting at the same time one of those substances which are known to arrest the ordinary fermenting process, such as the bi-sulphite of soda, magnesia, or lime. Dr. Cummins determined to try the effect of it on the first zymotic case which came under his care; but before he had an opportunity, Dr. De Ricci published a paper detailing several cases of catalytic disease which had been successfully treated by the bi-sulphite of soda; and Dr. Mayne, who saw one of the cases, mentioned his determination to try it in scarlatina. Accordingly, when the epidemic broke out in Cork in 1861-2, Dr. Cummins gave the remedy a fair trial, and thus states his conviction of its great use: "I place it first in the list, not only because in theory it ought to be the most valuable, but because in practice I have found it so." The dose prescribed was ten grains, in a little water, every one, two, or three hours, according to the severity of the cases. It does not cut short the disease—for the fermenting process in the blood is doubtless complete before the symptoms really shew themselves,—but it tends to prevent secondary inoculation of the blood, by means of the sulphurous acid set free when the bi-sulphite of soda is decomposed by the acid of the stomach. The results of the bi-sulphite theory are given by Dr. C. in the following table:

Taking the medicine late in the disease, by cases at the point of death
(in one only for a few hours), 2; died, 2.

Without the medicine.			Taking the medicine early prescribed in the attack.		
Families.	Attacked.	Died.	Families.	Attacked.	Died.
4.	13.	3.	14.	15.	0.
Besides one death indirectly caused by scarlatina, a month after attack.			One death occurred indirectly from scarlatina a month after attack.		

Under the medicine as a prophylactic by persons exposed to contagion
in their own houses.

	Individuals.	Attacked.	
	37.	6.	
Result {	Cut Short.	Modified.	Escaped Entirely.
	3.	3.	31.
	No Death.		

Dr. Cummins has also this year prescribed it as a prophylactic in families exposed to the contagion of typhus fever, and so far with success. He also speaks favourably of chlorate of potash, given in doses of from five to fifteen grains, and then reviews at length the more general treatment of the different varieties. We have not room to follow him, but will merely add that his observations prove him to be a thorough practical physician. His remarks noticed above, regarding the sulphite of soda, should cause it to have a fair trial.

The remaining articles and reviews in the quarterly are all important and interesting, and we regret that our space prevents their being noticed at length. Those who may wish to subscribe for it may order it through Dawson Brothers.

Diphtheria, its Nature and Treatment, with an Account of its History and Prevalence in Various Countries. By DANIEL D. SLADE, M.D.
Philadelphia: Blanchard & Lea. Montreal: Dawson Brothers.

A disease confessedly so fatal as is diphtheria, certainly deserves the fullest investigation at the hands of every true follower of Esculapius. Its ravages in our own country—not speaking of the mother country or the neighbouring republic—have been such as to spread amazement and horror among many of the population, until now the very word “Diphtheria” is mentioned with awe. Hence, any light which can be thrown upon this much-dreaded disease, must be welcome to us all. Dr. Slade’s work consists of about one hundred and seventy pages, and was first written for the Fisk Fund Prize, Rhode Island, in 1860. To it was awarded the prize, and it was published soon after. The present volume is a second edition,—considerably revised and corrected,—all the latest views being given. We have read the volume through with considerable care, and must admit having derived a good deal of information from its perusal. The work however seems more a compilation, than the original ideas and experience of its author. Fully one-half of its pages are devoted to a history of the disease; and Dr. Slade deserves commendation

for his researches, which have evidently been very extensive. He proves unquestionably that diphtheria has existed for many centuries under various appellations of "sore throat," "malignant sore throat," &c.,—its distinguishing features being the appearance of the characteristic exudation on the fauces, as early pointed out by Bretonneau. He, however, was incorrect in denying the presence of all constitutional disturbance. With regard to the propagation of the disease, our author quotes from Dr. Ranking's lectures, showing that it is infectious to a limited degree; and that the neglect of sanitary precautions powerfully increases its liability to propagation; but that it is not infectious, like erysipelas and scarlatina, which spread in spite of all hygienic means. Its extension through a whole family is believed to be due to the same cause which led to the first case. What that cause is, it is difficult to determine. The presence of albumen in the urine is noticed, but further research is required before any diagnostic value can be attributed to it. The latter portion of the book is devoted to the treatment of the disease, Dr. Slade, regarding it (as it certainly is) an asthenic disease, recommends supporting measures, such as tonics, stimulants, and nourishing diet; and he speaks very favourably of the tinct. ferri mu., and of chlorate of potash. He also alludes to the employment of escharotics to the throat, and apparently attaches more value to a solution of the strength of forty grains of nitrate of silver to an ounce of water, than to the solid stick. He speaks encouragingly of the performance of tracheotomy when remedies have no apparent effect over the disease, but believes it should not be too long delayed. The size of the canula used should be sufficiently large to allow a large quantity of air to enter the lungs. Dr. Slade agrees with M. Trousseau, who believes many cases, which apparently do well at first, after the operation terminate fatally, for want of due supply of air, and that particular attention should be paid to this fact. Altogether, we consider Dr. Slade's work one well worthy of the attention of the profession, and we cannot too strongly urge it upon them. Though but little that is new is given, the compilation is so complete, that the reader rises from its perusal better qualified to battle with a case of this formidable affection, should unfortunately one or more demand the exercise of his skill; and unfortunately the disease has made sad havoc in many a family in every section of the Province.

PERISCOPIC DEPARTMENT.

Surgery.

CASE OF ENCHONDROMA OF THE FOREARM.

Under the care of Mr. W. COLLES, one of the Surgeons of Steven's Hospital.

R. S., aged 22, was admitted into hospital on the 24th of April, 1862. The left forearm was the seat of an enormous enchondromatous tumour fully the size of an adult's head. The growth commenced about two inches below the elbow, where it sprang abruptly from the bones. It was situated on the anterior aspect and involved the radius principally, although the ulna also was engaged; it terminated below at the wrist as abruptly as it commenced above. The hand had been removed in this hospital ten years previously for enchondroma of the fingers by Mr. Colles, but at that time there was no appearance of the disease in the forearm. The lower end of the ulna protruded beyond the tumour to the extent of three quarters of an inch. In the absence of the hand the whole limb presented a very singular appearance, and resembled very much that of a person using a boxing-glove, especially as the patient generally kept it covered with chamois leather. The tumour was most globular. In one or two points it seemed softer to the touch than over the rest of the growth. Some large veins ramified over the surface, producing indentations in its substance marking out their course. Although the patient was a small man and of slight build, he was very healthy. He suffered no pain, but merely complained of the inconvenience of the weight. The affected limb was remarkably attenuated, being much shorter and thinner than the other. This afforded abundant food for speculation. Whether was the condition of the limb to be attributed to the loss of the hand at an early period of life or to the useless inactivity enjoyed by the different tissues; or did the nutritious materials which were intended for the normal textures find their way into the abnormal growth and there become assimilated, in this way causing the increment to its size? The movements of the elbow and shoulder-joints were perfect.

The forearm was amputated immediately below the elbow, a portion of the anterior flap being formed from the integument covering the tumour. The patient recovered rapidly.

When the tumour was cut into, the surface presented an appearance closely resembling a shape of boiled rice. It was composed altogether of cartilaginous material; but in some situations several small spiculæ of

bone could be detected by passing the finger lightly over the cut surface; and at a few points on the outside there was an attempt at the formation of a bony case. In one spot in the interior softening had commenced.

Medicine.

CASES OF CHOREA, WITH CLINICAL REMARKS.

Chorea shows well the danger there is in thinking of a disease as one of a nosological division. Although in one sense a disease of the nervous system, its frequent association with rheumatism shows that it would be a great error to work at it as a nervous affection only. What its precise association with rheumatism may be is a question very much disputed. Some think that the rheumatic "poison," be it what it may, produces chorea by its direct effect on the nervous centres; others, as the late Dr. Kirkes, that the association is indirect—with organic disease of the valves of the heart. There is certainly very frequently a mitral murmur in chorea, but as to the interpretation of this murmur, there are various and contradictory opinions. Dr. Walshe thinks it is frequently due to irregular action of the muscular apparatus of the valves. Other physicians think that it is frequently due to organic disease of the valves themselves. According to the late Dr. Kirkes, vegetations are invariably found on the valves at *post-mortem* examinations of patients who have died of chorea. We have frequently heard Dr. Wilkes and Dr. Andrew make the same remark. But admitting that the connection is, as Dr. Kirkes believed, between valvular disease and chorea, and not directly between rheumatism and chorea, we have difficulties in explaining the manner of the connection. The association of some other diseases of the nervous system—hemiplegia, for instance—with valvular diseases is, as Dr. Kirkes first pointed out, by embolism. It is possible that a similar explanation may hold good as regards chorea. Yet chorea, even when strictly unilateral, cannot be due to plugging of any main trunk, like the middle cerebral, or there would be actual paralysis. Dr. Kirkes believed that the direct causes of the motor phenomena of chorea were partly the circulation of morbid blood in the brain, and partly the temporary obstruction of the minute capillaries by fibrinous particles. Dr. Hughlings Jackson has suggested that the cause may be obliteration of the small branches supplying convolutions near the corpus striatum. It seems certain that there are convolutions in this region which have to

do with guiding the muscles of articulation; and it may be reasonably supposed that there are others for corresponding actions of the muscles of the limbs.

The following cases of chorea, with remarks, by Dr. Russell, are valuable additions to the clinical history of chorea. It is most important to complete the clinical history of this disease, as it has a wide bearing on the pathology of the nervous system:—

The first case is of interest by showing in a typical manner the presence of two factors, both of which are frequently in combined operation in producing the disease, viz., a depressed (paretic) condition of the nervous centres and remote irritation in the shape of valvular or other disease of the heart. This union of causes was especially insisted upon by Dr. Kirkes (*Medical Times and Gazette*, June 20, 1863), as very influential in producing chorea.

In this patient the cardiac affection, which was undoubtedly in part, if not wholly, connected with the preceding rheumatic fever, was closely connected with the outbreak of the chorea. On the other hand, the occupation of the patient, the protracted exposure to muscular effort day by day in a young and growing boy, and the obvious evidence of fatigue which his history affords, conjoined with his attenuated frame, afforded ample testimony to the existence of great exhaustion of cerebral and spinal power. To such exhaustion the highly emotional character of the boy fitly answered, and probably his sudden death must be in great part attributed to the same cause. In the post-mortem examination, although the pale softening of the nervous centres—noticed by Dr. Kirkes, as observed in all the fatal cases of chorea examined by himself, and in a large number of those recorded by others—was not present; yet the emaciated condition of the brain, as shown by its separated convolutions and by the increase in the subarachnoid fluid, and also the empty state of the minute arterics of the brain and cord, fully answer to the same description of disease.

Chorea—Recent Peri and Endo-carditis—Death by Fainting.—J. B., aged 14, a messenger of the Electric Telegraph Company. He was sometimes occupied for twelve hours, as a day's work, and suffered much from fatigue. He would come home quite fagged. He had, besides, a poor appetite for meat. He has been very much exposed to wet and cold, not only in his occupation, but also in consequence of very defective accommodation provided for the boys at head-quarters. His father is very rheumatic, and when a boy had chorea.

The patient had his first attack of rheumatic fever, after exposure, in September last. During the fever his side was blistered, and his doctor

said that his heart was inflamed. He was confined to bed for a fortnight, and three days after he got up the chorea commenced. The movement at first affected the left side of the body; but whilst in the hospital each side of the body seemed affected to an equal degree. He was much emaciated, exceedingly emotional, but very quick and intelligent.

The choreic movements at his admission, four days after the commencement of the attack, were very severe and general, implicating the muscles of the face and eyeballs, and at times rendering articulation unintelligible. In the chest the physical signs indicated the disease in the heart discovered after death, though Dr. Russell was not then aware of its full extent.

His amendment after his admission was very rapid, and for the first week was effected without the aid of medicine, the treatment being confined to rest in bed and nutritious diet; subsequently he took zinc, and then steel and cod liver oil.

Unfortunately, he was sent too early to the Convalescent Institution, whence he returned with effusion into his chest and increase of the movements. He was confined to bed; but one evening he got up to go to the water-closet, and in returning fell forwards on his face, and was taken up dead.

Autopsy Sixty Hours after Death.—Considerable emaciation; general fluidity of the blood. The large veins of the pia mater were full of blood; a spot of ecchymosis, about the size of a sixpenny piece, existed on the left hemisphere. A considerable quantity of sub-arachnoid fluid lay over the surface of the brain, and the sulci between the cerebral convolutions were much increased in width. The vessels at the base of the brain were perfectly healthy, their branches quite pervious. The grey matter of the convolutions, Dr. Russell thought, was rather pale. Every part of the brain was beautifully healthy in structure; the edges of the sections were sharp, and not a particle of cerebral tissue adhered to the scalpel.

The tissue of the cord was equally firm and healthy. Dr. Russell examined by the microscope the spinal cord and one corpus striatum, and says: "So far as my means of investigation extended, these organs were perfectly healthy, with one exception; that in each there was marked deficiency of blood in the minute vessels; the contrast in this particular between them and the corpus striatum of an old hemiplegic patient which I had examined the night before was most striking."

The heart presented the remains of recent pericarditis, in an universally adherent pericardium. The left ventricle was, besides, greatly dilated and hypertrophied to a corresponding degree. A thin layer of lymph lay upon the lining of the left auricle, and the mitral valve was

thickened and puckered at the edge. The pulmonary artery was perfectly free. The other organs were healthy.

A portion of the history of another case of chorea is added by way of contrast to the preceding, as it illustrates the operation of a cause which acted directly and solely upon the brain. Severe mental emotion, in the shape of fright, induced in a child constitutionally feeble, sufficed to bring on the disease almost immediately; the rheumatic and cardiac element being entirely wanting.

Chorea from Fright—Heart Healthy.—A. W., aged 7, a feeble child of a family apparently consumptive, but quite free from rheumatic tendency, has never suffered from rheumatism, unless some pain in his joints, which is relieved by rubbing, is to be referred to that disease. Ten months ago the child was taken to see his dead mother; he was impressed by the sight, but not mischievously. Two days after, he was locked up in a dark room by a servant girl from noon till eight in the evening. His screams at last aroused the neighbours, and he was taken out through the window. Next morning at breakfast, the boy looked ill; he shook in every limb, and was not able to hold his cup. This was the commencement of the chorea, from which he had never fairly recovered. His sleep was disturbed after the fright; he was afraid to go to bed in the dark, and screamed in his sleep. At the same time he lost his appetite, and his spirits were depressed. His memory also became impaired; "he seemed to lose his recollection of his learning," and "he gets very forgetful," and learns with difficulty. In all these particulars he has undergone a complete change.

The choreic movements have been confined to the right side. His articulation has never been affected. He is a very small made child, with dark hair and eyes, thin, and delicate. Repeated examination fails in discovering any abnormality connected with the heart, save feebleness of impulse according with the general weakness of his body.

It may, however, happen that mental influence and cardiac disease may co-exist in the same subject. Of this the following case is an example. There can, however, be no hesitation in assigning the alarm as the immediate cause of the chorea. The disease of the heart may not improbably date from the attack of scarlet fever in childhood, and doubtless co-operated with the other unfavorable influences noticed in the history to depress the power of the nervous centres.

Chorea after Fright—Mitral Disease of the Heart.—A. P., aged 17. Her family history and her own are quite free from rheumatic tendency, but her father was insane. She had scarlet fever when very young, but has never suffered from short breath until quite lately. She has been

much confined at a very sedentary occupation, and has lived very badly: she looks dirty and ill cared for. Six months before Dr. Russell saw her, she was on the water with a pleasure party, when the boat filled, and she was in danger of drowning.

The alarm effected an entire change in her mental condition; she became extremely nervous and timid; at times she has been hysterical and "awfully passionate." Her nights have been unquiet, she dreamt vividly, and was deeply impressed by her dreams; one night she became persuaded that her sister's child was dead, and was with difficulty persuaded of the groundlessness of her fears. She has even been quite "wild." In all these respects her character has become quite unlike what it was before the accident. Her intellectual faculties, however, have remained entire.

Her aunt cannot fix the exact date of the commencement of the chorea; she never worked after one week from the date of the fright, but it was a month before she had medical attendance: she was then declared to be suffering from St. Vitus's dance. On closer questioning, however, it was ascertained that a week after the fright she was obliged to leave off work because she could neither thread nor use her needle; she drew out the thread as fast as she put it in, or twisted it about.

The left side of the body was chiefly affected, the lips and tongue inclusive, so that articulation was impaired.

On examining her chest, a soft systolic bellows sound was heard at the apex of the heart; no bruit was present in the course of the aorta.

She perfectly recovered in seven weeks under morphia, tonics, and cod-liver oil; her sleep also became sound. It is to be particularly observed that the bellows sound underwent no change after the cessation of the chorea.—*Med. Times and Gaz.*, Jan. 28, 1865.

Midwifery.

EXTRA-UTERINE PREGNANCY IN A WOMAN WHO HAD UNDERGONE CÆSAREAN SECTION.

In 1863, Dr. Hillmann of Bonn performed the Cæsarean section on Frau K., who had all the symptoms of progressive mollities ossium. In February, 1864, being in the eighth month of her pregnancy, she fell against a hard article of furniture; after which the foetal movements were no longer felt. In the night of February 12, labour pains set in, with

discharge from the vagina. On attempting to make a digital examination, Dr. Hillmann found that, on account of the narrowness of the space between the rami of the pubic bones, he could introduce his finger no further than the vaginal entrance; the os uteri could not be reached. He thought it possible that rupture of the uterus might have occurred, with escape of the child into the abdominal cavity; but the general symptoms which should denote such an occurrence were absent, and the labour-pains continued, although feebly. The fetal heart-sounds and movements could not be perceived. The labour-pains gradually ceased; and Dr. Hillmann waited but in vain, for their reappearance as an indication for further operative proceedings. In eight days, the external enlargement of the abdomen, especially in the ileo-cæcal region, assumed an erythematous appearance; the part was tender to the touch, and felt as if there were œdema of the subcutaneous areolar tissue. At the same time, febrile symptoms appeared; and, as the epidermis desquamated, the patient had occasional sanguineous discharges from the bowels, which required the use of strong injections of acetate of lead to arrest them. On February 27th, an abscess appeared between the umbilicus and symphysis pubis. It broke, and discharged a quantity of foetid liquor amnii. On introducing the finger, Dr. Hillmann felt the body of the fœtus immediately behind the abdominal wall. Subsequently, the right hip of the child, denuded of its epidermis, presented at the opening, and was removed by Dr. Hillmann. Fearing that the continued pressure on the abdominal walls might lead to their laceration, he, after the bladder had been spontaneously emptied, extended the abscess-opening upwards and downwards for about six inches. The child was found entwined by the umbilical cord; it was a male, of about a month less than full term, and was dead and putrid. The placenta was found attached in a space between the abdominal wall and the anterior part of the uterus; it was removed with some difficulty, but without hemorrhage. There were no fetal membranes attached to the placenta, and none had been discharged from the vagina; Dr. Hillmann puts it as a physiological question whether the serous membrane of the abdomen may not have discharged the duty of the membranes. The wound was closed, and dressed with infusion of chamomile. The progress of the patient was satisfactory; on March 8, she was able to leave her room for the first time, and in six weeks the catamenia appeared, and afterwards returned at regular intervals of three weeks. On examination of the abdomen in September, the cicatrices of the two incisions were seen crossing each other at a very acute angle. In that left by the first Cæsarean section, the tissue had given way, so as to produce a hernia. On making a vaginal examination in the middle

of October, and gently pressing on the hypogastric region, the anterior lip of the uterus could be felt. The patient was in as good health as could be expected in the circumstances.—*Berliner Klinische Wochenschr.*

CONTINUANCE OF LIFE OF THE FŒTUS AFTER THE MOTHER'S DEATH.

Professor Breslau has attempted to solve the question, how long can the fœtus live after the mother's death? by means of experiments on the lower animals. He details and tabulates twenty experiments, the great number being performed upon Guinea-pigs. The following conclusions are drawn:—1. The life of the fœtus always endures with a certain independence after the mother's death. 2. The life of the fœtus in the dead mother is very quickly in great danger, which reveals itself in strong convulsive movements. 3. "Apparent death," into which the fœtus commonly falls in the first minute after the mother's death, may be continued in the uterus in extreme cases as long as eight minutes, but mostly death occurs much earlier. 4. The fœtuses removed, "apparently dead," from the body of the dead mother, are nearer to death than to life, for they do not recover by themselves, but quickly, almost without exception, perish. 5. Only seldom, and in the most favourable case, will the young be removed alive within five minutes after the mother's death. Even in the third minute the probability of extracting a live fœtus is very small. 6. If we operate later than five minutes, we cannot extract a living fœtus; if we operate later than eight minutes after the mother's death, not even an "apparently dead" fœtus can be extracted; the young are by that time dead. 7. The mode of death of the mother seems to be without influence upon the life and death of the fœtus. Death by asphyxia is unfavourable to the fœtus; death by hemorrhage more favourable, so also death by chloroform, and by paralysis of the nerve-centres. 8. It appears to be of consequence for the persistence of life whether the fœtus be mature or immature, but the experiments could not determine this matter. With regard to the applications to the human fœtus and to practical obstetrics, Dr. Breslau submits that:—1. There is no doubt that the human fœtus, like the brute, always survives its mother when the mode of death is rapid and violent, as from bleeding, blows on the head, apoplexy, etc. 2. Daily experience shows that the power of resistance of the human fœtus is greater than that of the brute. 3. The duty of every physician is, after the ascertained death of the mother, to perform the Cæsarean section as quickly

as possible, in order to save the child's life. The Cæsarean section may however, be avoided when the previous death of the fœtus is certain, or when the fœtus may more readily be delivered by the natural passages.

4. The Cæsarean section will give no prospect of a living or of an "apparently dead" child, if not performed within the first fifteen or twenty minutes after the mother's death. 5. If the mother have died from disease, as from cholera, typhus, puerperal fever either during pregnancy or labour, scarlatina, smallpox, etc., there is no hope of saving the child's life. The same will be the case in those poisonings of the mother which effect a rapid decomposition of the blood, and which affect the child, as by hydrocyanic acid. Chloroform-death appears to be an exception, since chloroform, as such, does not pass into the fœtal circulation, of which one may be convinced by any labour completed under chloroform, narcosis. In the discussion of the memoir in the Berlin Obstetrical Society, Professor Martin observed that in none of the four cases in which he had performed Cæsarean section after the mother's death was a living child extracted. In one the operation was completed within ten minutes; in one it was done "very soon;" in the remaining two it was done within half an hour. Dr. Boehr referred to a collection of cases in *Cuspar's Wochenschrift*, in which out of 147 cases only three instances of living children occurred.—*British and Foreign Medico-Chir. Review*, January, 1865.

COLD INJECTIONS INTO THE UTERUS.

By A. G. ROSEN, Esq., Croydon.

The following case of *post partum* hemorrhage testifies to the success of cold water injected into the uterus in this serious disaster. This proceeding I have adopted for some years, with the same unvarying result of the immediate check of the flooding and the permanent contraction of the uterus. I have also found cold injection either into the vagina or uterus, of much service in these troublesome hemorrhages which accompany or succeed abortions.

CASE I. Mrs. M. was confined May 20th, 1863, with her first child. The labour was natural. Two hours after the birth of the child, I received a message, stating that Mrs. M. was in great pain, and was faint; but that there was no hemorrhage. Suspecting the nature of the case, I took my elastic syringe with me. My patient was faint, pallid, with cold extremities, and nearly pulseless. There was no external hemorrhage; but the uterus approached in size to the full term. I injected cold water. Many clots were expelled; the hemorrhage ceased; and the uterus remained permanently contracted.—*British Med. Jour.*

Canada Medical Journal.

MONTREAL, MAY, 1865.

PUBLIC HEALTH.

“To be forewarned, is to be forearmed” is a proverb in common use, and yet how seldom is it acted upon in matters regarding our public health. Sanitary measures—which should occupy the highest attention of our city authorities—are invariably allotted not a second but a fifth rate position; and our Health Committee, which should be one of the most useful as well as most important, has invariably been the most indolent and neglectful. Seldom indeed (we speak of previous committees, for we know not how the present one will act) has the chairman been able to get a quorum, and adjournment after adjournment has taken place, but with a repetition of the previous non-success. Why this apathy on a subject which is as personal and important to every member of such a committee, as it is to every member of the community? They cannot plead want of work—a short promenade into almost every quarter of our city would assuredly convince them, what ample scope there is for their benevolent labours, and how great is their responsibility if they neglect it. Year after year our large summer infantile mortality has attracted marked attention, not only among ourselves, but throughout various portions of Canada; and yet when a notice of motion was made in our City Council to appoint a committee of medical men to inquire into the cause of this large infantile mortality, we find it was thrown aside—(for a somewhat singular reason) till the effect of the completion of the system of drainage, now in progress, is seen. Why this delaying, why this trifling with the vital interests of this city? Our drainage was certainly abominable—and we admit it is being much remedied, which will be of great use, we trust, in a sanitary point: but so long as the abominable filth is allowed to collect in the yards and lanes of our crowded suburbs, as we witness it in our daily professional visits, just so long will disease and death play sad havoc with the little ones during our intense heat of July and August. It is true, we believe, that two policemen have been specially appointed to look after this matter: but what can two men do in a city of a hundred and twenty thousand

inhabitants, on such a mission? Year after year these two men have done their best, but their labours from obvious causes have produced no visible effect. What is wanted is a competent officer of health, who in a measure, aided by the chief of police, would have the police force under his control; this officer to be responsible to the Health Committee for a proper discharge of his duties. Other cities, not exceeding our own in population, have felt the great benefits which have been derived from the creation of such an office; and assuredly the indifference and apathy with which sanitary matters are viewed in our city by those competent to move in the matter, is no small argument, why the superintendence of the Health Department should be under a properly qualified, and experienced medical practitioner. Until this is done, we fear we can hardly look for any permanent diminution in our large summer mortality. We feel and daily see the need of such a city officer, and therefore strongly draw the attention of the Council to the matter. But aside from the large number of deaths which always mark our warm months, there are reasons present this year which do not always exist, which call for especial care being taken, to have not only our city but every city in Canada, in a thoroughly clean condition. For about eight months past, typhus fever has been raging in almost every town of importance in Scotland and Ireland, especially at Glasgow, Greenock, Dublin, and Cork, carrying off hundreds of victims. By the time these lines reach our readers, our spring ships will be arriving, bringing emigrants who for days before starting have been closely huddled together in portions of the sea coast cities above named, most pregnant with the disease. Would it be at all astonishing to find that on the voyage typhus fever in its worst form had broken out on board? If such should unfortunately be the case, and they be neglected to be detained at Quarantine, the landing of emigrants from such vessels in our midst, would be an act so insane, that we fail to find words to characterize it. The disease would certainly be engendered, and once started, God alone can foresee the issue. This is one reason then why we advocate a thorough cleansing of all our cities. Let us mention another. Russia is at this moment the scene of an epidemic which has been carrying death and desolation into thousands of families, almost entirely among the lower classes, and which it is said is gradually marching into lands not primarily affected, thus imitating Asiatic cholera, in its course in 1832. Its appearance is attributed by some to a want of meat diet, and the use of diseased grain, especially spurred rye; certain it is that the majority of its victims are among the poor, and therefore badly fed. We do not give the symptoms as detailed in the daily journals—for the simple reason we have not been able to put our

hands upon anything authentic from a medical eye witness; and those given vary so much, as to show at a glance their complete unworthiness. The opinion of the *London Medical Circular* of the 12th of April is that the disease is nothing more than malignant typhus, aggravated by peculiar circumstances injuriously affecting the Scythian population. As it has appeared in Prussia and Germany, we have reason to fear that by some chance, emigration might introduce it amongst us. We think we have clearly shown that it is the duty of our Health Committee to act, and that promptly, in the work of thoroughly cleaning the lanes, yards, drains, sinks, &c., of accumulated filth; yet we have but faint hopes, we must confess, that the matter will be taken up; for on reference to files of the medical journals in existence at the two last visitations of cholera, we find that their editors wrote in much the same strain as we are now doing, no attention was given to the warning voice, and the fell destroyer came—then it was work, work, work, but it was too late—and many fell who might have been spared had those, whose business it was, simply done their duty. Let us hope and pray we may be spared the visitation of any epidemic, but by all means let us be prepared for it, if it does come. Prevention is better than cure any day.

Our profession has certainly but few safeguards whereby its practitioners are guarded against annoyance caused by men totally unqualified, who proclaim themselves able and willing, for a consideration, to relieve humanity of all the ills flesh is heir to. Year after year as our country increases in population, and our cities grow larger, we find these gentry making their appearance in greater numbers, and with unblushing impudence proclaiming to the world their wonderful power to cure. In Lower Canada, the profession have turned to the College of Physicians and Surgeons as their natural protector, and have expected that body to prosecute and obtain convictions against those who are not properly qualified to practice. For various reasons, year after year passed away, and no action was taken in the matter, but a year ago, when the College met in Montreal, the Secretaries were authorized to prosecute the delinquents. In Montreal, Dr. Peltier, the Secretary for this district, took no little trouble to obtain a conviction of these against whom actions were taken, but owing to some strange flaw in the drawing up of the indictments, all were discharged, putting the College in for pretty heavy expenses, without any corresponding advantage to the profession.

Believing thoroughly, as we do, that it is our duty, not only to ourselves, but to the public, to guard them against the machinations of those

whose main intention is but to fleece them, we observe with much pleasure that an amendment to the by-laws of the College was proposed (among others) at the semi-annual meeting held at Quebec last fall, which we hope will render it an easier matter in the future to obtain convictions. This by-law will be submitted at the semi-annual meeting of the members, which will be held at Three Rivers on the 12th July next, when we hope to see a large gathering of the profession. It provides that within three months after the passage of this by-law, every person now practising Medicine, Surgery, Midwifery, or Pharmacy, shall enregister on the books of the College, his or her name, age, place of residence, nativity, the date of his or her license, and the place where he or she obtained it. Also that all licentiates shall so enregister on taking out their license. This, we believe, is a good move, and one in the right direction; and we suppose, after a certain time, it will be quite competent for the College to treat as unlicensed or unregistered practitioners all whose names do not appear on the register of the College. This will, of course, tend much to facilitate any prosecutions in which the College may in future be engaged. In Great Britain, such is the law: indeed before any appointment can be obtained, the candidate has to produce his certificate of registration.

Let us hope that this amendment, when finally adopted, will mark a new era in the history of our profession in Canada; and by placing the College in a position to uphold its licentiates, who, as we have said before, look to it for that protection which we believe it is bound to give. It certainly is annoying, for any one who has passed years in properly qualifying himself for his profession, to find himself opposed in practice by one whose qualifications are *nil*,—who, notwithstanding all this, pursues his way without let or hindrance. Other amendments to the by-laws of the College will be brought up at the triennial meeting; and these, with the one we have alluded to, will be found in our last three numbers, and on the cover of the present one.

INSTITUTION FOR DISEASES OF WOMEN AND CHILDREN.

We understand from good authority that a new special charity is about being opened in Pimlico, London. The name, we believe, will be "The Institute for Diseases peculiar to Women and Children." The object is to afford relief—at present as a dispensary—and afterwards, as the funds increase, to extend the usefulness of the "institute," by providing a number of beds for women and children. We wish the charity every success, and the more so because it is so very much required in the

large and densely populated district in which it will be placed.—*Dublin Medical Press.*

We have copied the above from the Dublin Medical Press with a view of showing the advisability of establishing amongst large and densely populated localities, charities having the double object of affording relief to women and young children; not that these diseases as a class are in any way associated, except so far as to form the subject of study under a common heading. Many diseases of the female generative system are induced during the period of parturition, and as a consequence come under the observation of the accoucheur. They are usually included in the course of lectures on obstetrics delivered at Medical schools and Colleges. Independent of other considerations it is but reasonable that Physicians—those especially who are engaged in tuition—should desire to afford their pupils every facility of studying at the bed-side disease in its various phases.

The public fully recognize the value of Hospital practice; and the Physician who has the opportunity of walking the Hospitals, and of having under his charge large numbers of the sick poor annually, is regarded with greater favour than one who does not enjoy these advantages.

The advantage to the Physician is unquestionable, and to the Public equally so, as he becomes better able to cope with disease when met in private practice, if his experience is commensurate with his years.

Is there then a necessity of establishing in Montreal an Hospital for sick children and for the relief of diseases peculiar to the female generative system? To this we would reply, unquestionably there is. Our City Hospitals are not devoted to the relief of this class; they do not admit children under the age of seven years. In view of the immense annual infant mortality of our city, we regard the establishment of a children's Hospital as a conservative measure—one which, if adopted, would have a most salutary influence on our mortuary returns. We have no hesitation in asserting that many most valuable lives would be saved were the proper management of children in infant life more thoroughly studied, and rules for the guidance of mothers disseminated among the people.

The object of combining with a children's Hospital, one for the treatment of diseases peculiar to women, is, that in very many instances the mothers of such children as would be admitted into such an institution, are suffering from some uterine affection, and thus relief can be afforded to both mother and child. If we suppose another case, that a female is admitted suffering from some affection of the generative organs, for the

benefits received, she would always gladly afford help as nurse to other inmates, whose tender years and helplessness require constant attention.

We write in all earnestness, hoping that our views may be endorsed by other more influential citizens, who are proverbially benevolent, and who require but to have the matter brought home to their hearts, when we feel certain of a ready and willing response. We write furthermore in the interest of an institution with which we have been connected for the last fifteen years, and whose usefulness we have endeavoured to augment, by the establishment of an Hospital in connection therewith having the above objects. We refer to the Montreal Dispensary. We need but a helping hand not alone of a pecuniary character; we would gladly see the management of that institution in the hands of a committee of earnest hardworking and benevolent men, and we feel certain that it would soon become one of the most noble charities in Canada.

Our fellow citizens should not regard it as in any way clashing in interest with the Montreal General Hospital. There is room for both charities, as their objects are distinct, separate, each in their way useful, and most urgently necessary.

MCGILL UNIVERSITY.

THE HOLMES GOLD MEDAL, MEDICAL FACULTY PRIZE.

Since the last convocation the Medical Faculty in this University determined to establish a gold medal prize to be awarded for superior excellence to a member of the graduating class only. The competitors to be selected from those men whose inaugural dissertation is deemed worthy of receiving one hundred marks, the highest number of marks given for any thesis being two hundred.

The medal is in value about fifty dollars, the dies having been prepared and medal struck in England by Mr. F. Carter, Birmingham. It is to perpetuate the memory of one of the original founders of the school, the late Dr. Holmes, a man who in his walk through life commanded the love and esteem of all who knew him, from his many excellent qualities as a scholar and Christian gentleman. On one side of the medal is seen in bold relief the head of Hippocrates, with the name in Greek characters; and on the obverse is the coat-of-arms of the College, beneath which is the following, *Facultas Medicinæ Donavit.*" This is surrounded with a wreath of laurel, outside of which are the words, "*In memoriam Andræ F. Holmes, M.D., LL.D.*" On the rim of the medal is engraved the name of the successful candidate, with the date.

The medal is given by the Faculty to him who proves himself the best man after special examination by answering, in writing, three questions proposed by each member of the Faculty. We publish below the questions given this year, the value of each being attached. The successful candidate was Mr. Edward P. Hurd, of Eaton, C. E.

Chemistry.

PROFESSOR SUTHERLAND.

1. In what conditions is chlorine found in nature: to what class of elements does it belong, how is it obtained and what are its properties. Value 15 marks.

2. In what conditions is oxygen found in nature, how is it obtained, what are its properties, and its relations to animal life in respiration. Value 15 marks.

3. Describe the chemical process whereby alcohol is obtained, what are its chief properties and what products are derivable from its decomposition. Value 20 marks.

Materia Medica.

PROFESSOR WRIGHT.

1. State what you know of the characters of sulphate of iron under different conditions; and assuming it to be oxysulphion of iron, express its formula as such. Value 16 marks.

2. Detail the actions of ippecacuanha and of its chief constituents separately. Value 17 marks.

3. Give the doses of iodine, of the iodides of potassium, mercury, quinine, starch, arsenic, and iron, and of the officinal preparations into which they enter. Value 17 marks.

Institutes of Medicine.

PROFESSOR FRASER.

1. Enumerate the sources of the *Salivary Gastric* and *Intestinal secretions*, and explain the part which each performs in the process of digestion. Value 18 marks.

2. Explain excito motor, sensori motor, ideo motor, and emotional reflex actions. Value 16 marks.

3. What are the pathological causes of general anæmia and hyperæmia, sthenic and asthenic. Value 16 marks.

Anatomy.

PROFESSOR SCOTT.

1. To what class of articulations does the knee joint belong, and what are its ligaments? Value 10 marks.

2. Describe the diaphragm, its origin, insertion, relations and what passes through its different openings.

Value 20 marks.

3. Name the relations and branches of the internal iliac artery, with the course and distribution of the internal pudic. Value 20 marks.

Theory and Practice of Medicine.

PROFESSOR HOWARD.

1. Describe the several modes in which a lesion of the brain may induce paralyzes; explain the nature of epileptic, reflex, and diphtheritic paralyzes; and give the pathology and symptoms of tabes dorsales, and hæmiplegia from embolism. Value 20 marks.

2. State Virchow's definitions of pyrexia; the arguments in proof of it; the indications for treatment supplied by it, and the means of fulfilling these indications. Value 20 marks.

3. Mention the two chief views respecting the *nature* of tubercle, and describe the symptoms and signs of the early stage of phthisis, and the treatment appropriate to that stage. Value 10 marks.

Midwifery.

PROFESSOR HALL.

1. Mention the different positions which the head of the child undergoes in passing through the brim, cavity and outlet of the pelvis, and specify their causes? Value 20 marks.

2. What is uterine phlebitis and what are the secondary affections to which it gives rise, specifying the treatment of the former. Value 15 marks.

3. What injurious consequences are apt to follow the employment of antimonials in very young children, and what is the preferable medicine? Value 15 marks.

Surgery.

PROFESSOR CAMPBELL.

1. Describe the symptoms and diagnosis of popliteal aneurism, and the different methods of treatment. If the operation by ligature is selected, where is the best site for its application, what are the dangers during and after the operation, and how should they be met if they occur? Value 18 marks.

2. Describe the symptoms of calculus vesicæ, the method of performing the ordinary lateral operation of lithotomy, with the parts that must be divided, and the accidents that should be avoided during the operation. Value 12 marks.

Clinical Surgery.

PROFESSOR CRAIK.

3. State the distinctive characters respectively of malignant and non-malignant tumours of the female breast, the surgical treatment and the results. Value 20 marks.

Clinical Medicine and Medical Jurisprudence.

PROFESSOR MACCALLUM.

1. Mention the varieties of morbid pulmonary percussion note, in which there exists special *change of quality*—the characters of each variety, and the physical conditions indicated by it. Value 20 marks.

2. How do you distinguish blood stains from stains produced by other substances? Value 15 marks.

3. Give the points of distinction between tetanus, the result of disease and that arising from the poisonous effects of strychnia,—also the general differences in the effects of opium and prussic acid. Value 15 marks.

ANNUAL CONVOCATION OF MCGILL UNIVERSITY.

The Annual Convocation of the McGill University was held in the William Molson Hall of the University, on Tuesday the 2nd May, for the conferring of degrees in Arts; and on Wednesday, May 3, for the conferring of degrees in Medicine and Law. Both meetings were graced by a number of ladies. Dr. George W. Campbell, M.A., M.D., Dean of the Faculty of Medicine, announced that the number of students in attendance during the past session was 177, as follows:—From Lower Canada, 90; Upper Canada, 72; Nova Scotia, 3; New Brunswick, 1; Prince Edward Island, 4; Newfoundland, 1; United States, 6. The following list of students, who passed their primary examination, consisting of Anatomy, Chemistry, Materia Medica, and the Institutes of Medicine, and Botany or Zoology, was then read:—

Jonas J. Harvey, Brockville, C. W.; James B. Hall, Montreal; Alexander Falkner, Lancaster, C. W.; Robert C. Blair, Ha Ha Bay, C. E.; George Duncan, Montreal; John R. Mackie, Melbourne, C. E.; George Ross, Montreal; Thos. D. Lang, Owen Sound, C. W.; John G. Cullen, Ottawa, C. W.; Benj. F. Burch, Fort Covington, N. Y., United States; James Hayes, Simcoe, C. W.; Julius Leavitt, Melbourne, C. E.; Edmond Longley, Waterloo, C. W.; Charles S. Parke, Quebec; William Wakeham, Quebec;

Alexander C. Savage, Gloucester, C. W.; Edmund C. Walsh, Dunham, C. E.; Samuel Campbell, Williamstown, C. W.; Chas. H. Cooke, Mount Pleasant, C. W.; Alexander Anderson, Georgiana, C. W.; John Burgess, Belleville, C. W.; Phillip Burrows, Ottawa, C. W.; Pat. Robertson, St. Andrews, C. E.; William Gardiner, Beauharnois, C. E.; James A. Knowles, Cookstown, C. W.; James C. Irvine, Montreal; Frank Cox, Charlottetown, Prince Edward Island; Cornelius J. P. R. Phelan, St. Columbia, C. E.; Charles E. Hickey, East Williamsburg, C. W.; Thomas Gendron, Quebec; Alexander Ferguson, Williamstown, C. W.; Rufus S. Parker, Newport, Nova Scotia; William Fuller, London, C. W.; John McCurdy, Chatham, New Brunswick; John Corson, Milwaukie, United States.

The graduates in Medicine were then brought forward; and having had the oath administered to them by Professor Rev. William Wright, M.D., were severally "capped" by Principal Dawson. The following list, comprises the names of the graduates, places of residence, and the subjects of their thesis:—

NAME.	RESIDENCE.	THESIS.
Robert C. Blair.....	Ha! Ha! Bay.....	Acute Pleurisy.
Edward P. Hurd	Eaton, C. E.....	Bright's Disease.
Jonathan C. Jones.....	Maitland, C. W.....	Scabies.
Malcolm D. Meigs	Bedford, C. E.....	Delirium Tremens.
Silas J. Bower	Kemptville, C. W.....	Acute Pleurisy.
Stuart Crichton.....	Prescott, C. W.....	Typhus Fever.
James Robertson.....	Georgetown, P. Ed. Is.	Morbus Coxarius.
James B. Christie.....	Oxford, C. W.....	Acute Pneumonia.
John M. McVean.....	Montague, C. W.....	Stricture of Urethra.
Charles E. Graham.....	Ottawa, C. W.....	Acute Rheumatism,
George C. Butler	Brighton, C. W.....	Diabetes Mellitus.
Alfred Codd.....	Ottawa, C. W.....	Acute Bronchitis.
Hanibal W. Wood	Durham, C. E.....	Injuries by Cold.
James Fitzgerald	Trenton Falls, C. W....	Acute Peritonitis.
James T. Halliday.....	Vernonville, C. W.....	Circulation of the blood in the adult.
Richard T. Langrell....	Ottawa, C. W.....	The respiration of plants and animals.
Abraham C. Godfrey...	Montreal, C. E.....	Diphtheria.
Walter J. McInnis.....	Vittoria, C. W.....	Diphtheria.
Henry L. Vircoe.....	Sparta, C. W.....	Jaundice.
Alfred Beaudet.....	Coteau du Lac	Syphilitic Orchitis.

Napoleon Magenais.....	Rigaud, C. E.....	Lobular Pneumonia in the adult.
Thadric Dufort.....	St. Mark, C. E.....	Observations on Fractures.
George Sherk,.....	Selkirk, C. W.....	Carcinoma Uteri.
John E. R. Switzer....	Earnestown, C. W.....	Pulmonary Tubercle.
John F. Cassidy.....	Goderich, C. W.....	Chemistry, its applicability to medicine.
Henry C. Rugg	Compton, C. E	Inflammation.
John R. Mackie	Melbourne, C. E.....	Valvular Dis. of Heart.
John W. Bligh.....	Quebec, C. E.....	Digitalis Purpura.
John C. Anderson	Sorel, C. E	Rabies & Hydrophobia.
Cor. J. P. R. Phelan....	St. Colombia, C. E.....	Continued Fear.
Gilbert P. Girdwood....	Montreal, C. E	Testing for Arsenic.
James A. Temple.....	Quebec, C. E	Uterine Hemorrhage.
John Richardson	“ “	Tobacco.
Prosper Bender.....	“ “	Aconitum Napellus.
George Goldstone.....	“ “	—————

The Holmes gold medal, as announced elsewhere, was awarded to Mr. E. P. Hurd, of Eaton, C. E. The prize for the best examination in the final branches was awarded to H. L. Vircoe, Sparta, C. W.; and in the primary branches, was divided between George Ross, of Montreal, C. E., and William Gardner, Beauharnois, C. E.

The Professor's Prize in Clinical Medicine, to George C. Butler, Brighton, C. W.

The prizes in Natural History were awarded as follows:—

T. G. Roddick, Harbour Grace, Newfoundland, 1st prize in Botany; C. W. Kelly, Louisville, Kentucky, 1st prize in Botany; Edwin C. Ault, 2nd prize in Botany; D. McDiarmid, prize in Zoology; and C. E. Gahan, prize for the Best Collection of Canadian Plants.

IN PRACTICAL ANATOMY—DEMONSTRATORS' PRIZES.

Senior Class—For general excellence as a Practical Anatomist, for punctuality of attendance at the class. Prize awarded to William Fuller, London, C. W. Students of the second and third year's course, who deserve honourable mention as good practical anatomists—Mr. George Ross, Mr. James Hayes, and Mr. Patrick Robertson.

Junior Class—Prize awarded to Thomas G. Roddick, Harbour Grace, Newfoundland. Students of the first year who gave satisfaction for diligence and attention—Messrs. Quarry, Hagarty, and Reid.

Dr. Stuart Crichton then read the valedictory address on behalf of the graduating class.

Professor Sutherland addressed the graduates on behalf of the Faculty of Medicine. This address will be found among our original communications.

After the proceedings of the Law Faculty, and an address from Principal Dawson, the benediction was pronounced by Professor Cornish, and the Convocation adjourned.

COLLEGE OF PHYSICIANS AND SURGEONS FOR LOWER CANADA.

At a meeting of the College of Physicians and Surgeons of Lower Canada, held in May last, a Committee was appointed to draw up a report on the subject of establishing an Honour Class, or Fellows, in connection with the College. We should think it advisable for the College to seek a Royal Charter, which, under present circumstances, could be obtained with facility. The following has been handed us for publication:

The Committee appointed at the Semi-annual Meeting of the College of 10th May last, to report upon the subject of the expediency of establishing a class of Fellows in the College, and fixing the titles and qualifications thereof, beg to recommend :

1. That, with the view of encouraging men of distinguished attainments and industry, the College confer upon persons possessing certain qualifications, the title of "*Fellow* of the College of Physicians and Surgeons of Lower Canada."

2. That, *two* modes of admission to the Fellowship be recognised, to wit:—by *Examination*, and by *Election*, under the following conditions:—

3. That all persons proposing to become Fellows by *Examination*, must have been members of the College six years, and have been in the practice of their profession, in private or in public, all the time; a fact to be certified by two Members or Licentiates of the College; that they submit to a written examination in General Pathology, Practice of Physic, and Surgery, and present Clinical reports, with observations of three or more surgical cases, and three or more medical cases, with sufficient evidence that such reports and observations have been made by themselves; and that they forward the Clinical reports and the necessary certificates of qualification to the Secretary of the College, seven weeks before the Regular Meeting of the College at which they intend to appear for Examination.

4. That *Fellows* by *Election* must be Members of the College of nine years standing; be persons who have distinguished themselves in the

cultivation and pursuit of Medical or General Science or Literature, or as Teachers of some department of Medical Science, or as Practitioners;—must be proposed by two Members of the College, at a Regular Meeting of the College, at least six months before their election, who shall furnish satisfactory evidence of the qualifications of the candidates they propose.

5. That *Honorary Fellows*, not exceeding twelve in number, may be elected in the same manner as ordinary elected Fellows, from persons *not* members of the College who have distinguished themselves in any of the above mentioned ways, and no fee shall be required from them.

6. That, at the first Regular Meeting of Governors succeeding the Triennial Meeting of the College of Physicians and Surgeons of L. C., the Governors present shall elect by ballot, from amongst the Fellows of the College, who are at the same time Governors, *nine* persons as a "Court of Examiners for the Fellowship;" *three* of whom shall be appointed to examine in General Pathology, three in Medicine, and three in Surgery.

7. That three Members only of such Court, however, shall act as Examiners at each Semi-annual Meeting; viz : one Examiner in General Pathology, one in Medicine, and one in Surgery; and a different three at each successive meeting, unless when the absence of one or more Members of the Court renders that impracticable; under such circumstances, the President, or acting Vice-President of the College, as the case may be, shall nominate a member, or more, as may be required, of the Court of Examiners, to perform the duty of the absent Member or Members.

8. That the Examiners, for each Semi-annual Meeting after the first, shall be named by the President, at the Semi-annual Meeting immediately preceding it; and should any Examiner be unable to attend the meeting for which he has been nominated, he must forward to the Secretary, three days before the said meeting, his report upon such Clinical reports belonging to the Candidates for the Fellowship as may have been transmitted to him by the Secretary for examination.

9. That at the first Regular Meeting of Governors succeeding the Triennial Meeting of the College, the Members presents shall elect by ballot, from amongst the Governors of the College, five persons, three of whom must be *Fellows*, as a "Committee to report upon the qualifications of persons proposed as 'Elected' or as 'Honorary' Fellows;" three of whom shall form a quorum for the transaction of business. If a majority of the Committee report favourably of the Candidate, the Governors shall proceed to elect by ballot the said Candidate, who shall be declared duly elected on obtaining a majority of votes.

10. That, the examination and election of persons for the Fellowships shall form part of the business of the Regular and stated Semi-annual Meetings of the Governors, appointed to be held in May and October, of each year.

11. That the examination of Candidates for the Fellowship be conducted in the following manner :—

To each candidate presenting himself for examination, shall be given a written or printed copy of such questions as shall have been previously determined upon by the Examiners, to which questions he shall give written answers, and which answers shall be considered by the Examiners.

The Examiners may, however, at their option, interrogate any candidate on any matters connected with the questions or answers, or with the Clinical reports furnished by him. These Clinical reports shall be forwarded by the Secretary, to the persons appointed " Examiners of the Fellowship," six weeks before the Semi-Annual Meeting at which the candidate intends to appear, that time may be afforded for their careful perusal and examination.

12. The Examiners shall report, in writing, to the Board of Governors, the names of such persons as they shall have found, upon examination, to be qualified for the Fellowship.

13. Candidates whose qualifications shall be found insufficient, shall not be allowed to present themselves a second time, until after the expiration of year from their first examination.

14. The Fee, £ to be deposited with the Secretary before the examination or election.

15. That, as no Members of the College have the title of " Fellow" now, and as it appears objectionable in some respects that mere " Members " should confer a title higher than they themselves possess, the Members of the College shall at the next Triennial Meeting elect by ballot twelve Members of the College possessing the qualifications required of " Fellows by Election " in the Section on that subject, and shall immediately thereafter, through the proper officers, request His Excellency the Governor General to confer the title of " Fellow of the College of Physicians and Surgeons of Lower Canada" upon the twelve Members so elected ; and from them the *first* " Court of Examiners for the Fellowship ; " consisting of not less than three nor more than nine " Fellows," shall be subsequently elected at the time and in the manner directed in the Section regulating the appointment of a " Court of Examiners for the Fellowship." All of which is respectfully submitted,

R. P. HOWARD, M.D.

HECTOR PELTIER, M.D.

P. ROBILLARD, M.D.

Montreal, Oct. 11th, 1864.

MEDICAL NEWS.

Kenneth Reid, M.D., of McGill College, passed the primary examination of the Royal College of Surgeons of England, on the 11th of April.—Dr. Pritchard, an eminent physician of Glasgow, Scotland, has been arrested on a charge of poisoning his wife and mother-in-law. The case is undergoing investigation.—Miss Mulock, the authoress, is to be married shortly to a young man, a good many years her junior, whom she nursed most carefully after a railway accident.

Dr. Andrew B. Buchanan, the only son of the aged and talented Professor of Physiology in the University of Glasgow, Professor Andrew Buchanan, died on the 8th of April, of typhus fever, contracted in the fever ward of the Royal Infirmary, to which he was physician. He was 31 years of age. He was engaged by Professor Kolliker, the eminent Histologist, to translate and edit, with Dr. Allan Thompson, Professor of Anatomy in Glasgow University, a very elaborate and profound work on Cellular Pathology and Embryology which the learned German Professor intends publishing simultaneously in England and Germany. At the time of his death, Dr. Buchanan had just finished the translation of the work.

We find in the *British Medical Journal* an account of a discussion in Germany on the merits of a new mode for amputation of the thigh at the knee, in which the femur is sawn through the condyles, or at the epiphysis, and the patella retained in the flap, that it may unite with and upon the sawn end of the bone. It is designated as Gritte's operation. Dr. Lucke details four cases in which he operated. The first died in the second week of purulent discharges; patella ununited. In the second case, the patella became firmly united with the end of the femur, forming an excellent stump. The third and fourth cases ended fatally. He communicated another case of perfect union of the patella to the end of the femur, occurring in Rotterdam. Professor Wagner, of Koninsberg, related the result of dissection in a successful case, in which "the patella was riding upon the anterior edge of the cut surface of the femur, was thickened and bent, and united to the femur by connective tissues only.

Of twelve cases of Gritte's operation collated by Dr. Heine, only two were successful, one of which was Dr. Lucke's related above; the other died of pyæmia.