

Technical and Bibliographic Notes / Notes techniques et bibliographiques

Canadiana.org has attempted to obtain the best copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

Canadiana.org a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- Coloured covers /
Couverture de couleur
- Covers damaged /
Couverture endommagée
- Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée
- Cover title missing /
Le titre de couverture manque
- Coloured maps /
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur
- Bound with other material /
Relié avec d'autres documents
- Only edition available /
Seule édition disponible
- Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure.
- Additional comments /
Commentaires supplémentaires:

Continuous pagination.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated /
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies /
Qualité inégale de l'impression
- Includes supplementary materials /
Comprend du matériel supplémentaire
- Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées.

THE CANADA LANCET,

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE,
CRITICISM AND NEWS.

VOL. XVI. TORONTO, OCT., 1883. No. 2.

Original Communications.

REMINISCENCES OF ASIATIC CHOLERA IN CANADA.

BY JOSEPH WORKMAN, M.D., TORONTO.

The following details of the visitations of Asiatic cholera from its first appearance on this continent in 1832, up to its last arrival in 1866, have been hurriedly brought together, with the intention of presenting them to the Medical Association of Canada, during its session in September, at Kingston. Owing, however, to the too great length of the paper, despite my desire to compress the facts into more limited space, and to my present equivocal state of health, I have, with much reluctance, been constrained to deny myself the pleasure of taking part in the proceedings of the Association, and I cannot think of trespassing on the kindness of any professional friend to read the paper, as my representative, nor indeed am I free from the apprehension that it might exhaust the patience of the audience.

The parts relating to the cholera of 1832 and 1834, are drawn chiefly from the inaugural thesis presented by me to the Medical Faculty of McGill College, on the occasion of my graduation in the year 1835. I have no hesitation in pledging myself for the perfect accuracy of my notes, as they were written by me, from day to day, as the events occurred; I have also every reason to consider the subsequent details as quite truthful.

It is not the unanimous opinion of medical writers that the disease now known under the various names of Asiatic Cholera, Spasmodic Cholera, Malignant Cholera, and Cholera Asphyxia is a new disease. Hippocrates, Aritæus, Sydenham and Huxham, are said to have distinctly treated of this malady. We are told that in 1669 and 1676

it prevailed in London, and in 1730 and 1750 in Paris. In 1762 we are informed it raged extensively in Hindostan, and that in each successive season an epidemic, showing the principal characters of Asiatic Cholera, prevailed more or less epidemically throughout India. But we have no reliable records of its extensive prevalence before the year 1817. It is true, many have been inclined to believe that the terrible pestilences which the Indian historians have recorded as having made extensive devastations in that part of the world, at various periods, were no other than the disease in question; yet when we consider the vague and unscientific manner in which both historians in general, and some early medical writers were accustomed to describe diseases, we may feel inclined to question the identity of the disease now known as Asiatic Cholera with any of those recorded by writers of past times.

Asiatic Cholera presented itself in the year 1817, at Jessore, a large and populous town, about 80 miles north east of Calcutta, in that part of the province of Bengal, which is called the Sunderbunds or Lowlands, which constitute the extensive district lying between the numerous mouths of the river Ganges. It is stated to have appeared simultaneously at several other places in this part, and to have radiated into the surrounding districts. In July it reached Patna, on the Ganges, 300 miles north west of Calcutta. In the middle of August it appeared in Calcutta. In the month of November it carried off 5000 victims in the camp of the Indian army. During December it abated in every part of India; but in February 1818 it sprang up with renewed virulence, and assumed the dread character which it has ever since retained. Stretching towards the south it attained the southern extremity of Hindostan, and passed over to the adjacent island of Ceylon in December. In November of the following year, (1819) it was carried to Mauritius, and thence in January 1820 to the Isle of Bourbon. To the eastward we have it advancing with persistent pace, and devastating the populous countries in that direction, between the Altaian mountains on the north and New Holland on the south. It appeared in Arracan in 1818, in Java in 1819, Canton 1820, Pekin 1821, and in the island of Timor, which lies about 450 miles from the most north-western point of New Holland. To the west and northward we trace it

to Bombay in 1818; to Muscat, near the mouth of the Persian gulf, 1821. Passing up the gulf it visited the towns on each side. It reached the city of Bagdad in 1821, and before the end of 1823 it had reached Antioch and Diarbekir. During the winter it did not advance further westward; but from the north of Persia it passed to the borders of the Caspian sea; and in September 1823 it had reached Astrachan, near the mouth of the river Wolga. The cold of a northern winter seemed, at this time, to prove uncongenial to its existence, and the western nations were relieved from their apprehensions of its further progress. From this time till 1829, we know little of its movements; but it had never ceased to exist in Persia, where it prevailed yearly with more or less violence. In the summer of this year it raged with increased fury in the eastern provinces of Persia, and passing down the river Jihun (Oxus), and across the steppes of the Kirghis Kassaks, it reached the province of Ohrenburg, on the frontiers of Tartary in the month of August. It continued here until the following February, (1830), when it gradually subsided.

In the summer of 1830 it passed out of Persia in another direction; and skirting the western coast of the Caspian sea, we find it once more in Astrachan on 19th of July. From Astrachan it now passed up the Wolga, and by the middle of September it had reached the city of Moscow. In April 1831 it reached Warsaw, and in May it entered Riga and Dantzic on the Baltic. In June it reached St. Petersburg. We then trace it southward to Berlin in August, and to Vienna in September. In October it appeared in Hamburg, and near midwinter it crossed the German ocean to England, appearing first in Sunderland. From this starting point, despite the opposition of winter cold, it spread in various directions, and before the spring it had shown itself in all the principal towns of Great Britain; by the end of March it had crossed over to Ireland, and prevailed in Dublin. Early in April a vessel, named the "Carricks," sailed from Dublin, with 167 emigrants. Ten days after her departure one death took place, and during the succeeding fifteen days thirty-nine more were added. From this time up to the arrival of the vessel at Grosse Isle quarantine station, only five more deaths occurred. The captain reported to the boarding officer "forty-four deaths, by some

unknown disease." The real nature of this "unknown disease" no sane person now calls in question, nor indeed perhaps even then did any disinterested parties decline to admit it. The Carricks arrived at Grosse Isle on the 3rd of June (1832), and while anchored there a female passenger died after a three hours illness. On 7th of June a sailor died of cholera in a boarding house in Quebec; and on that evening the steamboat *Voyageur*, (not the *Swiftsure*, as stated recently by a writer in the *Mail*, for this steamer had then passed out of existence,) left Quebec for Montreal; but in consequence of being *overloaded* with emigrants, the captain was obliged to put back, and to disembark a number of them. Several of the disembarked were very soon after seized with cholera. The steamer proceeded on her way to Montreal; but before arriving at Three Rivers, an emigrant named Carr was taken ill, and he died before the vessel came into the port of Montreal. (Note.) Within the last four years I learned from the late John Carr, Harbour Master of Toronto, and for many years an alderman of the city, that the man Carr, here mentioned, was his brother. He came from the same Parish as myself, near to Belfast.) Another emigrant named McKee had been seized in the afternoon of the same day (June 9th); he was carried from the steamer into a tavern on the wharf. The dead body of Carr was exposed to public gaze during the next day (Sunday 10th), and, as I well know, was visited by many persons, from mere curiosity. Numbers also went into the tavern to see McKee—among others a soldier of the 15th Regiment, then stationed in Montreal. Cholera appeared in the barracks that night, and this soldier was its first victim.

On the night of Sunday, or the early morning of Monday, several cases appeared in various parts of the city. It was then for the first time I saw the disease, and it was impossible to avoid the conviction that it was new to Canada, though some physicians, for reasons best understood by them—

NOTE.—It was strenuously denied by the medical and other officers of the regiment, that this soldier had been near the dead, or the sick, emigrant, and my statement was questioned. It is, however, wonderful how tenacious of vitality fact sometimes is. Nearly 40 years after the death of this soldier, I was assured by Dr. Dewson of Windsor, who was son of an officer of the 15th, that the first cases of cholera in the Montreal barracks in 1832, were those of two soldiers who entered the tavern into which McKee was carried, and they assisted in rubbing him to ease the cramps. Dr. Dewson was then the pupil of the surgeon of the regiment.

selves, alleged that it was not new to them ; but we all have met with wise men whose brains are too densely packed with wondrous facts to leave any vacant space for the entrance of new ones. On the 11th several other cases occurred, and a continued increase took place until the 19th, when the pestilence seemed to have attained its acme. From Montreal I traced the disease along the travelling routes westward and southward. It appeared at Lachine on the 11th of June, among emigrants on their way to Upper Canada ; on 13th it was at the Cascades—the first case being that of a person newly arrived from Montreal. On the same day a boatman, direct from Montreal, died of cholera at Cornwall. On 16th it was at Prescott—the first cases were among persons just arrived from Montreal. On 19th a boatman from Montreal died of cholera at Brockville. On 20th it was at Kingston. On 21st the first decided cases occurred in York, (now Toronto.) On the 22nd a vessel from Kingston, called the “Massassauga Chief,” loaded with emigrants, arrived in the river below Niagara, but as there were several cases of cholera on board, the vessel was not permitted to come into port. Cholera did not at that time shew itself in Niagara.

Having thus followed the disease far enough westward, we may next endeavour to trace it towards the south. But on account of the obstacles offered to emigrants on the American frontiers, the progress of the disease in this direction was neither so regular nor so rapid as it was in passing up the St. Lawrence. We find it in Laprairie on 12th June, and in St. Johns on 14th. Straggling cases occurred in several places on the frontier ; but whether from the difficulty of ascertaining, or of writing, truth, the accounts of its appearance published were so confused and contradictory as to render it impossible to follow it with any degree of satisfaction. The disease was reported in New York on July 4th ; but some cases were said to have been observed previously—a very usual sort of afterthought with the *nil admirari* variety of observers. The first case in Philadelphia was by some stated to have occurred on 5th July ; but as a second one was not reported until the 14th, we may doubt the reality of that reported on the 5th ; for it would be an anomaly, perhaps never observed in the progress of cholera, that nine days should elapse from its arrival, in a large and populous city,

in the heat of July, without a second case soon following. From New York and Philadelphia the disease passed into various surrounding States, and before the close of the year it had traversed almost the entire face of the northern continent. In Montreal it continued to rage with terrifying virulence till the end of June. I remember one day on which the deaths exceeded 150. In the beginning of July it remitted in violence, but the scene of devastation was truly woful. Hundreds had been left without parents and without sustenance ; death had been in almost every house. No wonder that a beam of hope gladdened our sorrowing hearts, as we flattered ourselves that the fury of the storm was past. But we were doomed to sad disappointment, for before the middle of July the disease seemed to reawake with augmented vigour. Hitherto its victims had been principally from among the poor, and the upper ranks had flattered themselves on a happy exemption from its ravages ; by many of them the disease was spoken of as “*plebeian* in its habits.” They were mistaken—death’s carnival was not yet complete—his devastations now passed beyond the habitations of the poor and the houseless.

A remarkable instance of the transmission of the disease to the northward of Montreal, took place about this time. The settlement of New Glasgow, about 30 miles north west of the city, had imposed upon itself a sanitary cordon, and none of its residents ventured from home, until about the close of July, when a man named Young made the venture. On returning to his home he had much to tell of his city observances, and among his details he related the fact, that in the inn in which he lodged, he saw and rubbed a patient who was dying of the cholera, and he “was not a bit afraid of it.” Next day this brave man himself died of the disease. Two or three neighbours buried him quietly in his own garden. No other case in the settlement followed,—so much for prompt isolation.

After the beginning of September but few cases occurred in Montreal, yet one or two appeared so late as the end of October, and it was a somewhat strange fact that among the latest deaths was that of the undertaker who had coined and conveyed to the graveyard nearly all the victims belonging to the protestant denominations. The apothecary and the matron of the General Hospital were both

carried off shortly after the casual admission of some cases into that institution,—on one of which the process of venous injection of a solution of muriate of soda was effected, with wondrous apparent benefit. The man seemed to revive as if by magic. Heat of body returned; the pulse resumed its normal force and rhythm; the husky voice gave place to distinct articulation, and all seemed to promise escape; but the illusion was soon dispelled,—the poor fellow died not many hours after.

It was in the midst of the July horrors that a very strange personage presented himself on the streets of Montreal, calling himself the "*Cholera Doctor*," and asserting his curative potency over the disease. His name was Stephen Ayres. He was attired in the grandeur of a scare-crow; his outer garment had once been a great coat; but it now seemed to be the relics of a dozen, the lacerated tails of which he had knotted into distinct hanks. He said he had come from the far west, expressly to do battle with the pestilence. To give prestige to his advent he was followed by an old brood mare, and she had a train of two colts of the respective ages of one and two years. Stephen went fearlessly into every part of the city, and he had many more followers than his three quadrupeds. I saw him, in rather a clouded aspect, at the bedside of the Hospital matron an hour or so before her death. He had administered to her his cure—all mixture of hog's lard and charcoal; but it did not save poor Mrs. Stevenson. Of course Stephen, like many another knight of the mortar, said he was not "called in time." He disappeared, but not as did the majority of his patients, for he was afterwards visible in other parts.

The total number of deaths in Montreal, from the incursion of the disease till its cessation, was upwards of 3,000. Of these, 2,000 were ascribed to the cholera, but as this calculation would assign 1,000 to all other diseases, for a period of, say, one-fourth of a year, and the whole population was then about 30,000, it is manifest that the proportion given to cholera was much too low. I feel satisfied that 2,500 to cholera, and 500 to all other diseases, would have been much nearer to the right mark. During the winter of 1832-33, cholera was followed by a very fatal form of typhus fever. Among its victims was Dr. Caldwell, and, I think, Dr. Vallee, and some medical students, as

well as two or three matrons of the General Hospital.

The second invasion of Canada by Asiatic cholera, took place in June, 1834, which was a month earlier in the season than the arrival of its predecessor. This disease was unquestionably introduced by emigrant vessels, and its movements were in complete accord with those of 1832. It was quite as virulent as the first pestilence, but it did not attack so large a number of persons. Perhaps this comparative immunity was explicable on the ground that the former so-called epidemic had cut off so many of the weakly and intemperate classes, and had thus deprived it of its favorite *pabulum*. It was, however, my belief, that much was due to the general entertainment of more rational views of the primary cause of the disease, as well as of its secondary or predisposing causes, to which countervailing agencies may, without doubt, be added the observance of wiser hygienic rules. In 1834 we saw none of the tom-foolery that was inculcated by the *savans* at the seat of government, such as burning of tar barrels and firing of cannon in the public streets. One hot Saturday afternoon, in 1832, St. Paul and Notre Dame streets were treated to a series of explosions of artificial thunder, whether with the view of driving away one fear by the substitution of another, must be best known to the instructing wiseacres. It certainly did no harm to the glaziers. One of the city physicians, in reply to the question from the seat of wisdom, "What result did you observe from the firing of cannon on the streets?" briefly and most truly answered, "much broken glass."

The total number of reported deaths from cholera in Montreal in 1834, was 1,200. The highest number in one day was 70.

Canada remained exempt from cholera from 1834 till 1849, a period of 17 years. This intervening period when compared with that between 1832 and 1834, is a pretty clear illustration of the absurdity of the doctrine which teaches us to expect recurrences of the malady at certain definite periods. The next invasion in 1854, was an additional proof of the fallacy; and if we add to these the fact of the possible existence of the disease in Ontario in 1866, which will be noticed further on, and its too probable future visitation in 1883 or '84, surely but very slight foundation can remain on which the cholera prophets may base

their predictions. It will come to us only when it is carried to us, and it is my belief that even then its progress may be stayed, or completely arrested, by prompt isolation of the first presenting case or cases. The converse of this was wofully demonstrated in Toronto in 1849. In that year I chanced to be chairman of the City Board of Health. During the spring, cholera was threading its way up the Mississippi. I felt assured it would in due course reach us, and I urged on my colleagues the necessity of preparing some edifice for the reception and isolation of the first cases. We were permitted to erect a wooden shed on the then totally vacant lot on which St. Andrew's market now stands. We flattered ourselves that we had done well, but a quarter of a dozen of lofty magnates residing in that region, thought otherwise, and they accordingly turned out one night and demolished our receiving-house. I appealed to my colleagues of the council, begging for the re-erection and future protection of our edifice. To my great chagrin I found that their sympathies were with the demolishers, whilst I came off with their contempt. I could see but one course open to me, and I took it. I resigned my seat as an alderman, and with that, of course, my place in the Board of Health.

The cholera reached Toronto early in June. The first reported case was in a house on Scott street, in the person of a man just arrived from Buffalo or Cincinnati. There was no place of isolation to which to remove the patient. The consequence was exactly what should have been anticipated. The disease spread, and in the course of three months it carried off more than 500 citizens, of whom several were of the respectable classes. The three demolishers however escaped, and no doubt they flattered themselves they had performed a very praiseworthy act; but many a bereaved wife and husband, and many a weeping orphan might have had just cause for ascribing their calamities to the selfish apathy of the west end demolishers. Poor things! they are all gone, but their evil deed should not be buried in their graves.

In 1851, the cholera, as appears from a report in the French language, written I presume by Dr. Tache in 1866, visited Quebec, having been brought in from the United States. It would appear to have lasted only five weeks, in September and October; but 206 deaths were ascribed to it. It did not reach Upper Canada at this time.

In November, 1852, a very formidable and fatal disease broke out in the Toronto Lunatic Asylum, which had some of the characteristics of Asiatic cholera. I understood however that Dr. Widmer regarded this disease as essentially different from Asiatic cholera, though not much less fatal. If Asiatic cholera be produced by filth, irrespective of specific infection, I might readily admit the possibility of its existence at that time in the Toronto Asylum. I had shortly afterwards the odoriferous task of cleansing the augean-stable-eclipsing mass of underlying abomination. Let any one try to imagine what must have been the hygienic condition of that edifice, nearly 600 feet in length, sitting over the accumulated dirty suds and kitchen dirtied water of four years contribution. Such was the fact, for the drains of the basement had never been connected with the main sewer running from the house to the lake. Fortunately the water-closets had independent connections of their own, else who will say how much worse the condition of the patients would have been? Will it be believed that a grand jury, presided over by a very magniloquent citizen, made a presentment within two months after the outbreak of the disease mentioned, in which they informed his lordship, the judge, and the public, that they had examined the water beneath the basement, and had found it clear and scentless. In the winter of 1853-54 I caused to be removed from this same basement some 200 cartloads of very rich manure. The directors of the asylum had, in the end of 1852, sent some samples of the air of various compartments to a distinguished chemist, who did not succeed in finding anything amiss in it. This may show how very undetectable dangerous gases may be, for during the cleansing process I had not less than 50 cases of erysipelas to fight against, and I cannot but believe the dirty state of the foundation had much to do with their causation. At all events I had no more of this trouble after the place was cleansed out, and proper attention to ventilation was given.

The cholera of 1854 was introduced into Canada by way of Quebec. It was brought by a ship from Liverpool, which reached the port on 17th of June. It appeared among emigrants at Montreal on the 22nd; at Kingston on the 25th, and on the same day, as reported, at Toronto. It continued till the middle of September. In my journal under date

11th August, I find the following entry:—"Up to the present time the health of the asylum has been excellent, though cholera has been prevailing in the city for at least seven weeks, and has carried off probably four or five hundred victims." That this exemption from the disease was largely attributable to the sanitary improvements previously effected, and to the hygienic regulations enforced under my direction, I would not dispute; but at the time I placed my chief reliance on a stringent system of prohibition of city visitation by the servants of the establishment. An addition to the monthly wages was given to all who obeyed the instruction, and any one discovered to have disobeyed was forthwith discharged; it was however very creditable to the service, that only in one instance was it necessary to enforce this penalty. The asylum continued free from the disease throughout the whole period of its prevalence in the city. The cholera shed was within a short distance of the boundary wall.

Toronto was exposed to another visitation of this disease in August, 1866, when a man arriving by rail from the United States, was found suffering under it. He was promptly removed to the General Hospital, where no doubt all proper precautions of isolation and disinfection were carried into effect. He had all the characteristic symptoms of Asiatic cholera, and he died within a few hours. It was reported that his nurse died of the disease a day or two after, but of this I had no certain information. A travelling companion of this man was stated to have died next day of cholera at Port Hope. Had the first case in 1854 been as promptly isolated as this was, who will assert that hundreds of valuable lives might not have been saved?

It seems to me a logical impossibility to study dispassionately the history of cholera visitations in Canada, and to reach any conclusion save one as to its mode of transmission from place to place, and its communication from person to person. The most strenuous advocate of the theory of contagion cannot however deny that the disease is discriminative in the selection of its victims, nor will he assert that its virulence and epidemic pervasion are not intensely aggravated by the disregard of sanitary and hygienic precautions; but what have we ever learned, in the annals of the pestilence, that proves its transmission from coun-

try to country and town to town, without the intervention of human travel or traffic?

It has kept pace with the march of armies, the advance of caravans, and the trail of Mahomedan pilgrimages; it has threaded its way along the coasts of oceans and of inland seas, up or down the valleys of rivers, and along the lines of railways; it has crossed oceans and high mountain chains, with winds abaft or ahead. It is a disease of man, and it follows man, or rather it keeps pace with him, go whither he may, when bearing with him its specific seed, dare I not now say, its special germ? Who knows? Let us await with becoming patience the result of the practical enquiries and personal observances of the pupils of that prince of etiological scrutinizers, the world-famed Pasteurs who are now pursuing their searches in the Delta of the Nile.

In the *Popular Science Monthly* for the present September, I have read, with much interest, a lecture on "*The Germ theory of Disease*," by Prof. H. Gradle, M.D., of Chicago, from which I quote the following passage:

"Thus exposed from all quarters to the attacks of these merciless invaders (bacteria, etc., etc.,) it seems almost strange that we can resist their attacks to the extent that we do. In fact, one of the arguments used against the germ theory—a weak one it is true—is, that while it explains why some fall victims to the germs, it does not explain why all others do not share their fate. If all of us are threatened alike by the invisible enemies in the air we breathe, how is it that so many escape? If we expose a hundred flasks of meat-broth to the same atmosphere, they will all become tainted alike, and in the same time. But the animal body is not a dead soil in which bacteria can vegetate without disturbance. Though our blood and juices are the most perfect food the parasites require, and though the animal temperature gives them the best conditions of life, they must still struggle for their existence with the cells of the animal body. We do not yet know in what way our tissues defend themselves, but that they do resist, and often successfully, is an inevitable conclusion. We can show this resistance experimentally in some cases. The ordinary putrefaction—bacteria can thrive excellently in dead blood, but if injected into the living blood-vessels they speedily perish."

In the above lines there is much in small space

for sober reflection. We are at present only on the threshold of medical philosophy. Our greatest want is an accumulation of reliable facts, and our greatest evil in the past has been rapid and rash generalization from a too limited number of facts, and these too often of unreliable character.

PROGRESS IN OPHTHALMOLOGY.*

BY W. TOBIN, F.R.C.S., M.R.C.P.I., ETC., HALIFAX, N. S.
[Surgeon (retired) Army Medical Department].

GENTLEMEN,—Great as has been the progress in various branches of Medicine within the past half century, in none has it been more marked than in Ophthalmology, which bids fairly to be classed amongst the exact Sciences. Three great names are associated with this advance. That of Helmholtz, who by his marvellous invention, the Ophthalmoscope, has opened up the hidden depths of the eye for our inspection; that of Donders, whose great work on Refraction has reconstructed physiological optics on a mathematical basis; and that of Von Graefé, who has done for ocular surgery what the others have accomplished in less practical branches of the art.

Previous to the invention of the ophthalmoscope, under the mystifying names Amblyopia and Amaurosis, which my friend Landolt defines thus—"Amblyopia, where the patient sees nothing and the surgeon sees something; Amaurosis, where neither surgeon nor patient sees anything"—lay hidden diseases, which are now as patent to us as the noonday sun. The various affections of the lens, vitreous, choroid, retina and optic disk, have been recognized, classified and traced to their sources; some as purely local affections, others as manifestations of constitutional taints—such as syphilis, tubercle, rachitis, albuminuria and various affections of the brain or spinal cord. Since its invention, the instrument has undergone many changes. What a difference between the plane mirror of Coccius and the perfected ophthalmoscope in our hands to-day! The number of new patterns is simply infinite. Those of Loring and Cooper, Landolt and De Wecker are considered the best. I prefer one made by Ferriere, of Camberwell, a cheaper modification of which has been brought out by Mr. Jeuler, of St. Mary's Hospital. All,

in addition to the perforated, concave mirror, possess a set of refracting lenses (plus and minus) enclosed in a revolving disk. These lenses serve a double purpose. They enable us to examine the fundus, by the *direct* method, securing thereby a clearer and more highly magnified image than by the indirect; and at the same time, by their help, we can estimate the patient's refraction—thus abolishing the tedious test-type examination—which is found often, more especially in the case of children, misleading, if not impracticable. To estimate refraction by means of the ophthalmoscope, it is necessary to have the accommodation of both patient and surgeon in abeyance. This may be secured by atropine, or the use of a thoroughly darkened room on the one hand, but can be gained only by practice on the other. All errors, whether myopic, hypermetropic or astigmatic, may be noted and their amount estimated in this manner. I regret that I cannot go more into detail.

A new application of the mirror has been found in Keratotomy, a process of testing refraction, through the production of retinal shadows on the cornea. Light is reflected into the patient's eye, from the surgeon's perforated mirror, at a distance of one to three feet. The appearance and movements of the shadows produced, as they traverse the cornea, indicate the patient's refraction. Provided with a spectacle frame and a set of test lenses, we may correct, whilst in situ, any ametropic condition discovered. This process originated in the clinique of Dr. Galezowski, in Paris, and is now being extensively tested in the great ophthalmic hospital at Moorfields.

The use of the Perimeter has greatly assisted the ophthalmoscope in the physiological and clinical study of the human eye. By it we are enabled to map out the visual field and so determine any morbid changes in the retina. By visual field we mean all the space which vision embraces when directed towards one central object. The instrument consists essentially of an arc of a circle, of the value of a semi-circumference, is made of metal, and revolves upon a pivot. In turning, its apex describes a hemisphere, at the centre of which is found the eye under observation. The limits of the visual field are determined by moving white or colored disks, along the arc, adjusted to different meridians, till the object is perceived by

* Read before the N. S. Medical Society, June, 1883.

the patient. In this way we test the sensibility of the retina from periphery to centre. The result is a chart of the field of vision, which may be projected upon paper, and in which any deviations from the normal may be noted from day to day. The practical uses of the instrument are—to detect blind spots, technically called scotomata, in the retina. These may be due to hemorrhages, to syphilitic gummata, or other tumors; to detached retina, local nerve lesions and to various forms of choroidal and retinal disease. More especially is it useful in estimating functional changes originating either in the optic nerve or more remote nerve centres. In obscure cases of glaucoma, one of whose prodromata consists in a gradual narrowing of the visual field, its diagnostic assistance is invaluable.

But it is in the substitution of the metrical or dioptric system for the obsolete inch measurement, that Ophthalmology has had one of its greatest triumphs in the present day. So universal has this system now become, since its first suggestion to the profession, at the Heidelberg Ophthalmological Congress in 1875, that I can now only remember one oculist of eminence on the large staff at Moorfields who continues to work in inches. According to the old system, lenses were numbered by their focal length in inches. "Their refractive power being the reverse of their focal length was represented by a fraction, of which the numerator was 1, and the denominator was the focal length in inches. Thus, a lens of 6 inches focus, had a refracting power of $\frac{1}{6}$ th; that is to say, $\frac{1}{6}$ th the refracting power of a lens whose focal length was one inch." The latter was taken as the unit of measurement. Now the length of the inch varies in different countries, and all calculations by such a system had to be made in fractions; two difficulties, which were got over by substituting the diopter for the inch and the metrical system for the fractions. Nagel and Javal first proposed, at Heidelberg, the use of the metrical system in notation, and took as unit of measurement a lens having one metre focus. This unit is called a diopter, and becomes No. 1 in the new system. No. 2 is 2 diopters, is double the strength of No. 1, and has its focus at half a metre (50 centimetres). No. 10 is 10 diopters, has a strength ten times that of No. 1, and has its focus at one-tenth of a metre (10 centimetres) and so on.

We have now the advantage of making our calculations in whole numbers, and of being able to estimate without trouble the focal lengths of the lenses we employ. As all refraction ophthalmoscopes, test glasses and spectacles made in the old country are numbered according to the new system, it becomes imperative for the specialist and most useful for the general practitioner, to form an acquaintance with it.

No less important have been our gains of late years in the departments of Ocular Surgery and Therapeutics. Allow me, briefly, to allude to some of them. First, let me mention the modern treatment of Glaucoma, long looked upon as an incurable affection; now, thanks to the discovery of the prophylactic action of iridectomy in these cases, by Von Graefe, and to the equally if not more efficacious operation, termed Sclerotomy, by my master, De Wecker, brought within the range of practical surgery. The advantages and disadvantages of either operation were well discussed at the last meeting of the International Medical Congress in London. Further experience alone may decide which is to carry the palm.

While both equally reduce tension and relieve pain, iridectomy is objectionable on account of the deformity it occasions. Again, it is an operation which cannot be indefinitely repeated—in certain disorganized conditions of the iris it is impossible. Sclerotomy on the other hand (which consist essentially in an incision of the sclerotic involving the iridian angle, in the neighborhood of Schlem's canal, leaving behind a cicatrix, which is supposed to act as a permanent drain to the globe—Filtration Cicatrix, DeWecker terms it) may be repeated as required, produces no deformity, is applicable to more cases of the disease, and in exercised hands requires no greater skill for its performance. I have seen the operation repeatedly done by De Wecker, and have never witnessed the ill effects with which it is credited by certain English ophthalmologists.

The different methods of extracting senile cataract might form another interesting subject for discussion. I shall mention the one most in favor, as illustrating our progress in this direction. Such operations as couching, reclinacion and needling hard cataracts are now matters of history. The modified linear operation, combined with an iridectomy, done upwards so as to secure protection

from the upper lid, is most in vogue both in Paris and London. Surgeons no longer seek "the maximum of linearity" insisted on by Von Graefé, and have transferred the incision from the sclerotic to confine it altogether to the corneal region. Though cosmetically not so perfect as the simple extraction (without iridectomy), if we look only to practical results, it is found to give the greater number of cures. What we are taught to seek in every modern extraction, are cleanliness of the wound, perfect adaptation of the flap, a corneal incision large enough to allow easy escape of the lens, and thorough evacuation of cortical matter. This is facilitated by the iridectomy, which lessens the danger of glaucomatous complications, and should always be insisted on in cases where the eye to be operated upon is hard to the touch. The use of antiseptic precautions in cataract extraction I have usually seen confined to a preliminary disinfection of hands, instruments and the ocular surface itself. Boracic and salicylic acids in combination, form the solution which De Wecker employs. He discards altogether the use of sponges in eye surgery, using absorbent, antiseptic cotton instead, which may be thrown aside as it is used. I have seen only one oculist operate under the spray; it is not used at Moorfields.

Amongst interesting eye operations, I have seen Mr. MacNamara extract the whole lens in its capsule at the Westminster Ophthalmic Hospital; and, whilst serving in the Indian Medical Department, he had, he tells me, many opportunities of performing the operation, with success, upon natives. The dangers of the operation, from the unavoidable loss of vitreous, are such that it has not become a favorite with specialists. To extract by this method, a broad keratome and a scoop are all that are required. The pupil should be first fully dilated with atropine. A broad incision is made with the keratome at the sclero-corneal border. Through this a scoop or cataract spoon is passed forward into the anterior chamber, till it rests on the margin of the lens. Rupturing by downward pressure the ciliary attachment of the capsule, the scoop is passed transversely behind the lens and withdraws it entire from the eye, enclosed in its capsule. The after results, when the operator succeeds, are very brilliant.

The use of Eserine in eye surgery should not be passed over without remark. This drug, sulphate

of eseria, the alkaloid of the Calabar bean, empirically introduced to the profession by Lagureur, has been found most useful in cases of acute and hæmorrhagic glaucoma, through its well-known effect in diminishing the calibre of blood-vessels, and diminishing secretion. In some cases it does away with any necessity for operation. In sclerotomy it is instilled before and after the operation; in cataract extractions it is usefully employed, to restore the iris to the proper position and prevent it becoming fixed in the angles of the wound. One or two drops suffice to produce myosis. Its action is not so permanent as that of its antagonist, (atropine). It is useful also in ulcers of the cornea.

Of all the apparently hopeless cases we meet with in eye practice, none seem more beyond our skill than cases of detached retina. Such detachments may be due to injury, myopic changes, increased fluidity of vitreous, or may be mechanically produced by effusion of fluid between the choroid and retinal coats. These detachments are easily recognized by the ophthalmoscope, and their extent may be mapped out with the perimeter. It is in the cases where the detachment has been mechanically brought about by effusion, that means have been taken for its relief.

Mackenzie, I believe, first recommended puncturing the sclerotic below the seat of detachment. Bowman followed, advising laceration of the detached retina, with two needles, as in the operation for secondary cataract, to allow the escape of the effused fluid into the vitreous. De Wecker endeavored to draw it off with a trocar and canula, and subsequently attempted to form a permanent drain, by inserting a gold wire through the sclerotic and allowing it to remain for some time in the eye. Finding none of these plans successful, he had returned to the simple puncture till lately, when I have seen him substitute the galvano-cautery needle for the knife, and with this puncture the sclerotic at the point of the detachment.

The operation is done thus: The patient being prepared as for cataract extraction, the operator seizes the conjunctiva and subconjunctival tissues with the forceps, near the inferior border of the cornea, and draws the globe forcibly upwards and inwards as far as it will go. A point is then selected free from vessels, and the needle heated to a white heat, is plunged between the external and inferior recti (or should the seat of detachment

indicate it, between the internal and inferior recti) through the sclerotic into the eye. It is not allowed to pass more than 4 or 5 millimetres. On its withdrawal, eserine is instilled and a compress and bandage applied. The patient is kept on his back in a darkened room for some days, the eresine being daily repeated. I have seen benefit result from this operation.

Amongst other novelties in modern eye surgery, I may mention the disguising of indelible leucomata of the cornea by tattooing the surface with Indian ink, an operation very easily performed, and producing the most wonderful change in the appearance of the patient. A very perfect imitation of the pupil may be produced in this way. It is also useful in diminishing the dazzling produced by an iridectomy done for prophylactic purposes elsewhere than under cover of the upper lid.

What bids fair to be another step in progress consists in the substitution of "ablation of the ciliary nerves" for enucleation in certain cases of sympathetic ophthalmia. Given a case where the sympathizing eye is going through all the distinctive phases of an Irido-choroiditis, and where the irritating eye still possesses a certain amount of vision, what is to be done? In the old days they would say enucleate, now we endeavour to preserve the irritating eye, but to put an end to the irritation by dividing the ciliary nerves in that section of the globe, where most irritation and tenderness exist. A section of the rectus tendon on that side will expose the posterior segment of the globe and the nerves which surround the optic may be snipped with a blunt-pointed scissors, care being taken to avoid damaging the great nerve itself. I regret that I have not been able to follow up the cases in which I have seen this operation performed.

Other matters which might be interesting, crop up as I go on, but time does not permit my dwelling upon them now; such as the various operations for conjunctival transplantation, the new treatment of that opprobrium of surgery, granular lids, by De Wecker, etc., etc.

It suffices if I have shown that, since its great revival 30 years ago, ophthalmology has not relapsed into slumber, and that the great names of Helmholtz, Donders and Von Graefe, will not be the only ones to live in the memory of those who interest themselves in this branch of surgery.

IRREDUCIBLE FEMORAL HERNIA.

BY A. B. ATHERTON, M.D., L.R.C.P.&S., EDIN., FRED-ERICSON, N. B.

E. M., æt. 44, female. Generally fairly healthy; has had some trouble with varicose veins and ulcers on leg. Femoral hernia appeared on right side six or seven years ago. During the last year she has had four or five attacks of strangulation, which were relieved after the return of a portion of hernia, chloroform being required more than once to assist in its reduction. There always remains a lump nearly as large as the fist, which is irreducible. Finally, she has become entirely incapacitated to do housework, as going about on foot gives rise to symptoms of strangulation. I may mention also, that just previous to menstruation and during the first day or so after it begins, she suffers a good deal of pain and soreness in the tumor, the pain running down the thigh. As she had become so unfit to do her ordinary duties as a housemaid, I advised an operation, and after some delay her consent was given.

Dec. 7, '81—Operation.—Chloroform given and assistance rendered by Drs. Coburn and Coulthard. A fold of skin was pinched up over the swelling and a bistoury run through it, making a vertical incision $2\frac{1}{2}$ or 3 inches in length. After getting through subcutaneous fat, the hernial sac was soon reached; this being opened, its contents were found to be omentum, with something firmly adhering to it, which proved on subsequent examination to be a diminutive ovary with Fallopian tube attached. After separating adhesions to sac, these could not be returned and were therefore excised, their neck being ligatured with catgut. Catgut being scarce, I then tied the neck of the sac with silk and cut away the portion outside of ligature. Finally, a wire suture was put through borders of saphenous opening and neck of sac and the wound in the skin brought together with wire also, a small drainage tube being inserted at its lower part. Operation was performed with Listerian precautions and dressing of carbolized gauze applied. One quarter of a grain of morphine was given hypodermically. Ordered bits of ice to suck and milk in small quantities; also a suppository, containing half a grain each of morphine and ext. belladonna, to be used *pro re nata*.

Dec. 8—9 a.m.—Passed a pretty comfortable night. Did not use suppository; vomited a little, and had some eructations of wind; pulse 84, temp. 100° F. As there was some blood stain on dressing, I changed it under carbolic spray, removing the drainage tube.

Dec. 9—9 a.m.—Two suppositories used since yesterday morning, for pain and soreness. Slept well most of the night; vomited once this morning; pulse 68, temp. 99.5° F.

Dec. 10—9 a.m.—Rested well, one suppository being used at bedtime. Not much vomiting and less eructation of wind. Takes very little nourishment and desires but little; pulse 72, temp. 99.4°.

Dec. 11—10 a.m.—One suppository last night. Rested well; pulse 76, temp. 100.2°. Complains of dressing feeling stiff and uncomfortable. I therefore changed it under spray; wound looks well; only slight stain on inside gauze.

Dec. 12.—Took a drachm and a half of paregoric last night instead of using suppository. No vomiting for the last two days; pulse 88, temp. 99.6°.

Dec. 14.—One and a half suppositories used since the 12th; pulse 88, temp. 100°.

Dec. 15—9 a.m.—Some pain in back last night; also a chocolate-colored discharge, amounting to about 3ss, came from vagina this morning; pulse 96, temp. 99.6°. 3.30 p.m.—pulse 96, temp. 101.4°. Not much pain complained of. Wound dressed; no discharge; no redness of skin, nor marked tenderness on palpation; an induration of deep tissues, about three inches in diameter, however, was felt in the region of the wound. Sutures removed. On examination per vaginam, I felt no marked induration of roof of vagina, nor was there noticed any want of mobility of the uterus. I did not however push my examination, but touched the parts cautiously, and some slight change from the normal condition of the parts may have been present without my observing it. On withdrawing fingers, I found them covered with a thick purulent fluid, which the nurse stated was exactly like what had been discharged previously. Ordered hot vaginal douches of carbolized water three or four times in twenty-four hours.

Dec. 16—9 a.m.—Rested fairly without opiate. Had a dejection this morning, being the first since operation; pulse 96, temp. 99.6°.

Dec. 18—9 a.m.—Not much discharge for last day or two from vagina; pulse 72, temp. normal.

Considerable discharge found on dressing, which was changed. Probe entered an inch in centre of wound. Discharge was of a thin dirty character, and the odor somewhat fecal. A small drainage tube put in.

Dec. 21.—Discharge from wound is growing much less; none from vagina. Bowels moved yesterday; appetite improving; temp. normal. Has been taking a quinine mixture for a few days.

Dec. 25.—A sinus still keeps open, at the bottom of which is felt the wire suture. I therefore with some difficulty removed it.

Dec. 30.—Still slight discharge; pulse 80, temp. 98.8°.

Jan. 15.—Doing well; has sat up more or less for a week. Only a superficial sore now, the sinus having closed.

Jan. 28.—Wound soundly healed. No impulse felt by me on coughing, though patient herself feels something "give" at the point of hernial opening. A soft, easy truss applied.

April 20, '83.—Patient has been doing general housework as a servant for the last year or more. Rupture gives her no trouble, though truss is still worn. On examination, I find a distinct impulse on coughing, but no protrusion of consequence occurs. She is very subject to coughs and colds, and has suffered several times pretty severely from them during the year.

REMARKS.—There are two or three points in the above case worthy of notice. First, the rather uncommon presence of an ovary in the hernial sac, and its removal along with the omentum. Secondly, the occurrence of suppuration in the deep parts of the wound and the discharge of pus through, I believe, the stump of the Fallopian tube into the uterus and hence into the vagina. Suppuration in this situation would probably much more likely occur on account of air entering through the uterus to that part of the wound, especially as three or four inches of Fallopian tube were removed with the ovary. I believe that, under the antiseptic precautions used, there would have otherwise been no suppuration at all.

Thirdly, we have the return of the hernia to a certain degree after its apparent cure. This is a result only too apt to follow some time after any operation for its radical cure. Many patients after Wood's operation, who have seemed thoroughly cured at the time, subsequently suffer from a re-

lapse. This has been told me by Mr. Wood himself, as well as by others who have frequently performed his operation. Besides, it is probable that the removal of the wire suture in my case helped to admit of the formation of another hernia. I had intended to leave the wire in the parts permanently, but suppuration having occurred, I feared lest it might not remain there quietly and therefore I removed it. It is very probable, also, that this operation of sewing up the hernial opening will prove more successful in obtaining a radical cure in cases of *inguinal* hernia, as the sides of the inguinal ring afford a better hold to the suture; and furthermore, there is more cellular tissue about it to aid by its thickening in closing the aperture. For these reasons Wood's operation proves more satisfactory in inguinal than in femoral hernia.

The other most fashionable operation at the present day for the radical cure, is the injection of a decoction of oak bark into and about the neck of the sac, so as to produce more or less inflammation and consequent deposit and organization of lymph, and thus close the opening. Which of the various operative procedures will prove best suited to fulfil its purpose, time must determine. In irreducible hernia, however, and in cases of strangulation in which a radical cure is attempted, there is of necessity none so suitable as that of suturing the sides of the ring, at the same time including the neck of the sac, and perhaps a stump of the omentum to assist in blocking up the hernial aperture.

REMARKABLE CASE OF OBSTETRICS— ABORTION AT TWO MONTHS AND QUADRUPLETS AT FULL TERM.

BY DRs. EDWARDS AND MCTAGGART, LONDON. ONT.

On the 21st of July of the present year we were called to see Mrs. S., of this city. Patient of small stature; English by birth; æt. 38; average weight, 100 lbs.; height, 5 feet, 1 inch. She is the mother of four living children, two boys and two girls—aged 12, 10, 8 and 7 years. There was nothing unusual at any of her previous confinements—never had an abortion before. On abdominal examination, we found the abdomen extremely enlarged and pendulous. We advised support

from the shoulders. She told us that she was but five months *eniente*; but from her history and condition we assured her that she was seven months pregnant. Patient always enjoyed good health; menses always regular. She last menstruated on Dec 4th, '82. About seven weeks from this time she commenced to flow, which lasted for some three weeks; this was accompanied with pain. With a pain somewhat resembling a labor pain, something was expelled, which she described "as a lump of flesh with bloodvessels in it." To this "lump" was attached a short "string." At this she became alarmed and consulted a medical man, who assured her that she had had a miscarriage. He prescribed some medicine, which he said would check the flow and remove anything that might remain. From her account, the flow increased for a few days, but finally stopped.

From this time until Friday, Sept. 14th, '83, she has been, comparatively speaking, quite well, although distressed by the immense size and weight of the abdomen. On the above mentioned date she was delivered of four living children—two boys and two girls, the time elapsing between the birth of the first and birth of the last child being one hour and forty-five minutes. The weight of the male children exceeded that of the females by a few ounces, the weight of the males being 4 lbs. 9¼ oz. and 4 lbs. 3 oz., and that of the females 4 lbs. 6 oz. and 3 lbs. 13¾ oz. Labor terminated favorably, there being no hæmorrhage to speak of. There was but one placenta, and each cord was inserted at different places on its surface.

The quartette are now six days old, all healthy and able to nurse, and all bid fair to live. The mother is doing exceedingly well, having suffered no more exhaustion than if she had had but one child. We might here say that the father, Mr. C. S., is English by birth, æt. 41, height 5 feet 5 inches, and average weight 169 lbs., is a strong, healthy and robust man.

Correspondence.

To the Editor of the CANADA LANCET.

SIR,—As the accompanying communication, addressed by me to the editor of the *Medical Times and Gazette*, may be regarded as an "open letter," may I ask the favour of its presentation in your

pages. It is very improbable that the *Medical Times and Gazette* will award to it the requisite space for its appearance uncurtailed, if at all. I am not however anxious as to the impression made by the criticism of the *Medical Times and Gazette* on the other side of the Atlantic, but as many of your subscribers no doubt read this British journal, I deem it but just to them, and due to myself, to afford them the means of judging fairly of the grounds on which its editor rested his criticism of my translation of Professor Golgis' very important work.

Respectfully yours, &c.,

JOSEPH WORKMAN.

Toronto, Sept. 15, 1883.

To the Editor of the *Medical Times and Gazette*.

SIR,—A professional friend has placed in my hands your number for July 14th, in which, at page 54, in your notice of the April number of the "Alienist and Neurologist," you have alluded in rather severe terms to my translation of Professor Golgis' memoir on the minute anatomy of the central nervous system. I am hardly surprised that my rendering of Prof. Golgis' excellent work has evoked your displeasure, because of my too close adherence to the text of the author, for in truth I have, since the appearance of my translation in print, been myself dissatisfied with it, and I feel grateful to you that you have been so merciful as to ascribe its defects to my "ignorance," rather than to my ignorance of "the structure of the English language."

Presuming, as from your allusion to my "anxiety to produce a literal transcript of the author's words," (an impeachment whose justice I most frankly admit, for I think that in works of science this is always the safest and most just rule), I am warranted in doing, that your knowledge of the Italian language enables you to speak authoritatively in this matter, I may with fair expectation of some mitigation of your censure, appeal to your candour as to the great difficulty, or indeed, in numerous instances, the extreme perplexity encountered by English scholars, in reducing into decent English verbal order, long and complex, and sometimes even simple Italian sentences, for as you must well know, our greatest embarrassment is not in lighting upon the equivalent English words, (though even this is sometimes unattainable), but in arranging them in that order of relation and sequence, which best accords with that of our own less systematic idiom. I freely admit my defects in this relation, but I trust you will not be so harsh as to disregard my appeal to your English manliness, when I tell you that the state of my constitutional powers, now that I am on the verge of four

score years, did not permit of my writing out a second or revised copy of my version, which went to the printer just as it had been thrown off, *currente calamo*, and you must well know that nothing less than a patient and studious revision could have enabled me to turn out my work in passable English garb; indeed, I hesitate not to confess that I might have failed in pleasing even myself with only this amount of emendation, and how much more certainly must I have failed in securing your eminent approval! I must, however, with all becoming deference to your conceded high authority, demur to your charge of unintelligibility, especially as illustrated by your citation of the Alienist's outlandish phrase, "complicate nervous anastomose." Might you not, without any perilous overstretch of charity towards me, or risk of injustice to the printer, have reasonably added this blunder to the others which you have justly attributed to him, or his proof-reader? To have so done would really have been giving the devil his due. I cannot better convince you of this than by enclosing in this letter the veritable lines of my M.S. in which the true words occur. You will thus see that I never wrote either *complicate* or *anastomose*, and you will further see that the printer has split up my sentence and made two where I had only one,—nay, even worse, he has commenced a distinct *paragraph* with the unwarrantable doubling of the word *anastomoses*, which you will see was plainly written both at the bottom of my page 22, (as has, for additional security of proper sequence, been my invariable rule), and at the top of page 23, with a small *a*, and was followed by a very plain comma.

The following is a transcription of the lines above mentioned, enclosed in my letter to the editor of the *Medical Times and Gazette*:—"Above all, for the reflex phenomena, it appeared to be a quasi absolute necessity to admit complicate nervous anastomoses

23

anastomoses, which, indeed, had been already admitted, before histologists, by means of particular minute researches, engaged in the work of verifying their real existence."

Now, when you had under your eyes such a crowd of blunders palpably ascribable to the printer, might not the very apposition here apparent in the repetition of the word, in its true form, have averted the causticity of your criticism, as well as have delivered you from the temptation of indulging in that ill-disguised sneer at "good American"?

I "must protest" against this unbecoming national haughtiness, for though not, either by birth or residence an American, I have learned to hold in high esteem both the nation and its literature. I can now still less reluctantly than before admit the pertinence of the following distich, which I

recently found in a very clever poem by an English writer, who had travelled much, and had resided long abroad :

"All that's not English in *our* eyes
Is something to sneer at, and jeer and despise."

But now that I have said so much in self-vindication, both honour and honesty prescribe to me the duty of relieving the printer from blame with regard to the word "dicotomically." You very properly supply the correct word "dichotomously." If you will be so good as to turn to Golgis' article in the Rivista Sperimentale, you will see that on page 178, anno viii, the Italian word used by him is "*dicotomicamente*." Whether my transformation of Golgis' last four syllables into my three—mi-cally—was the result of ignorance, haste, or unconscious cerebration, I cannot now venture to say. We are all liable to be led by the nose, and perhaps some still more by the eyes. You move along docilely in Grecian fealty; I have fallen into Italian servilism; still my deviation from classic propriety has not, I believe, resulted in obscuring the sense of the author. We have a goodly assortment of English adverbs terminating similarly, and as I believe, without violence to etymological propriety. Besides, I had not to fear that I was writing for a people who require the aid of a cold chisel to get a thing into their heads. Americans are wonderfully shrewd *guessers*. Most truthfully I can say I never dreamed that the editor of the *Medical Times and Gazette* would condescend to notice anything coming from a rude Canadian.

But, you will ask me, what of that omitted h? Do not be too exactive. My paternal forebearers were English, and you, I doubt not, are so far a Darwinite as to believe in *atavism*, consequently you will admit that I may sometimes be oblivious as to the claims of this sadly maltreated aspirate; your cockney brethren take all sorts of liberties with it, killing it where it should be allowed to breathe, and dragging it from its slumber to the front, where not only should its absence be excused, but its presence sternly prohibited. You must, as an Italian scholar, admit that the people of the old peninsula have been ten thousand times more merciful than your brethren, for, as a living *sound* they utterly repudiate it; and so in truth do you in "dichotomous"; I bet you do not pronounce that ch, (which in truth should be gh), as the Greeks did their x; or if you do sound it as they did, then I shall know where to locate your nativity. The Italians do not, however, as you know, repudiate the character. They make a very good use of its preserved bones, as a stiffening to their c and g, when these letters might otherwise fall into a limpsness out of accord with their radical vocal identity. In this they very closely resemble your War Department, which, on certain occasions, when some nobodies "blundered," called on Hibernian generals to give firmness, pluck and dash

to your armies; witness Arthur Wellesley and Garnet Wolsley.

I must now entreat your pardon for so long a trespass on your valuable time, and so trying an exercise of your patience. Pray do not for a moment suppose that I shall look for any *amende*. Forgiveness is the Christian duty of the injured; the injurer cannot forgive.

I have the honor to be,

Your instructed reader,

JOSEPH WORKMAN, M.D.

P.S.—If you have chanced to see in the July issue of the *Alienist and Neurologist*, a translation (so called) of certain "conclusions" of Binachi, pray heap not Ossa upon Pelion, by deeming me the perpetrator.

J. W.

(To the Editor of the CANADA LANCET.)

SIR,—In the announcement of the Toronto School of Medicine for 1883-84 the following statement appears: "The students of the Toronto School of Medicine have always taken a high standing at the various examinations they have been called on to undergo; and at the examinations in 1883 of the Toronto University, where they met in friendly competition the students from all affiliated institutions, they succeeded in obtaining five scholarships out of six, all the medals, and one hundred and twenty honors, out of a total of one hundred and fifty-six which appeared on the class lists."

This is a most unfair and unwarranted representation, for before such a statement of comparative merits as the foregoing can be made the conditions must be the same, *first*, with respect to the number of candidates from each of the affiliated schools; *second*, with regard to the number of competitors from the affiliated schools in each of the examinations included in the result stated, and, *third*, with regard to the relation each of the schools stands to the examiners.

With respect to the first point, instead of there being an equal number of candidates from each of the schools taking the first, second, third and fourth year's examinations, three-fourths of the total number were from the Toronto School of Medicine and only one-fourth from "all other affiliated institutions." Hence it follows that the Toronto School must win three-fourths of the honors before they could claim anything more than equality. They however leave the reader to

infer that what their students won in excess of "all other affiliated institutions," was due to superior training.

2nd. In the fourth year's examination there were no candidates except from the Toronto School of Medicine, and as only fourth year candidates are eligible for medals, it is therefore not true, as implied in the statement, that the Toronto School students met in friendly competition the students from "all affiliated institutions" and obtained all the medals. In 1822, the students of the Toronto School did meet in friendly competition students of another school in the fourth year's examination, with the result that the Toronto School students did not obtain either of the two gold medals.

3rd. In the first and second year's examination, the examiner on Anatomy was a lecturer on that subject in the Toronto School of Medicine; and in the first year, the examiner on Biology and Comparative Anatomy was also the teacher of those branches in the same school; so that the students of the Toronto School of Medicine had the advantage over all others, of being examined by two of their teachers on the subjects they teach, and the students of other affiliated institutions labored under the disadvantage of being examined in these branches by the teachers in a rival school. This is not to be understood as a charge of partiality against these examiners, for the candidates are not known by name; but it is a fact well known to those who have experience in teaching, that pupils will make a higher percentage on any subject when examined by their teacher than when examined by a stranger.

Enough has been stated to prove the unfairness and untruthfulness of the statement referred to. There is, however, another feature of this "college announcement" which I wish to allude to, as it appears to me to be a very striking instance of "professional advertising." By way of contrast, compare the following examples of the "puff direct."

1. Dr. M. Souvielle, of Paris, founder of the celebrated International Throat and Lung Institute, during his late visit to London, Paris and Berlin, secured the services of a number of eminent specialists, to assist in his present great work. Thousands of cases even in advanced stages of catarrh, bronchitis, asthma and consumption are

being cured yearly by these specialists, etc. *Case.* F. C., consulted several well-known physicians, but received no benefit. He finally came to the above Institution and was cured in three weeks. (*Adv.*)

II. Ontario Pulmonary Institute, M. Hilton Williams, M.D., M. C. P. & S. O., Proprietor. "Permanently established for the cure of all diseases of the head, throat and chest, including catarrh, bronchitis, asthma, consumption, etc., etc. During the past eighteen years we have treated over 40,000 cases of head, throat and lung troubles." (*Adv.*)

III. "The students of the Toronto School of Medicine have always taken a high standing at the various examinations they have been called on to undergo; and at the examinations in 1883, of the Toronto University, where they met in friendly competition the students from all affiliated institutions, they succeeded in obtaining five scholarships out of six, all the medals, and one hundred and twenty honors out of one hundred and fifty-six which appeared on the class lists." (Announcement of the Toronto School of Medicine.)

Of the three examples the last one is the most glaring, coming as it does from the Faculty of the oldest Medical School in the Province. If those who have the training of medical men can set such an example with impunity, why ostracize individual members of the profession for vaunting their skill and cures in the press or in circulars.

Yours, etc., PRACTITIONER.

LONDON, Sept. 15th, 1883.

To the Editor of the Canada Lancet.

SIR,—No doubt your subscribers are aware of the action-at-law for \$10,000 damages which the Spirometer men contemplate against two of the most valuable and energetic members of the Medical Council, for language used while discussing one of the various subjects coming under their jurisdiction as our medico-legal councillors. I venture to express the hope that, inasmuch as these gentlemen give their time and services gratuitously year by year, for the benefit of the general profession; and as it is clearly the "free advertising" the concern is after by such a move, their defence will be provided for from the funds contributed by the general profession to the Council.

It is also to be hoped that, when one or two of their brethren are attacked, the other councillors, whose sentiments and opinions these gentlemen so plainly and emphatically uttered, will have the manliness to stand up and support them, as is their duty, and not raise up earthworks of trifling technicalities behind which to entrench themselves. We can assure such gentlemen that their actions will be very easily given their proper value by their supporters in the profession. I write this latter part, having to my surprise heard of a "weak brother" to-day.

Yours, etc.,

CONC. CRESC.

Toronto, Sept. 7th, '83.

Reports of Societies.

CANADA MEDICAL ASSOCIATION.

(Held in Kingston, Sept. 5th, 6th and 7th, '83).

The sixteenth annual meeting of the Canada Medical Association took place in Kingston on the 5th, 6th and 7th ult., under the presidency of Dr. Mullin, of Hamilton. In the absence of the Treasurer, Dr. Sheard was appointed in his stead. The Association was welcomed by the Mayor of Kingston on behalf of the city, Prof. Williamson on behalf of Queen's College, and Dr. Sullivan on behalf of the profession. The following delegates and visitors were invited to the platform: Dr. Hunt, Pontiac, Mich.; Dr. Walker, Detroit; Dr. McLean, Ann Arbor, Mich., and Dr. Dorland, Milwaukee; also ex-presidents and vice-presidents of the Association. After routine, the reports of committees were called for.

Dr. Canniff, chairman of the committee on "Sanitation and Vital Statistics," reported that the committee had not met because, as chairman, he had been frustrated in continuing the efforts by which the Medical Association had succeeded in inducing the Government to grant a sum of money for the purpose named. While he was kept in ignorance of the steps that were being made to confer with the Government, other Toronto men were appointed, and, only on explaining the relationship of Dr. Canniff in attempting to secure a Government grant was he placed on the deputation.

Explanations were made by Dr. Playter and Dr.

Larocque. They said there had been no intention to ignore the committee. The report was adopted.

Dr. Larocque, of Montreal, presented the report of the committee on "Climatology and Public Health." The report exhaustively discussed the best means of protecting the public health. The report was received and a vote of thanks accorded to Dr. Larocque.

Drs. Botsford, Fenwick, Grant, Graham, Rodger, Bray, Worthington, Malloch, Oliver, Tye, Sweetland, Canniff, Oldright, Yeomans and the President were appointed the Nominating Committee.

Dr. Metcalf invited the Association to visit the Asylum, at their convenience.

In the afternoon session the President delivered his address, of which the following is an abstract. He thanked the members for electing him to the high position. The honor might have justly passed to others, but as he had been elected he would do all in his power to discharge the duties. He referred in feeling terms to the demise of Dr. David, of Montreal, Dr. Campbell, of Montreal, and Dr. Thomas Watson. Some had thought the itinerancy system was opposed to the Association's usefulness, but he held that advantages had been derived from every place where they had met. They met now in this old city, the very cradle of civilization of the Western section. Every member recognizes that the institutions of this city remain worthy of Eastern Ontario and exercise their influences over the youth of the present with increased vigor corresponding to the growth of the country. He then alluded to some of the investigations recently made respecting the influence of minute organisms in causing disease. Lister stands foremost in advancing this branch of professional knowledge. His antiseptic method of treatment may not be, and indeed is not considered by himself an ultimate result beyond which it is impossible to pass, but the great merit of his work is, he first called attention to the agencies which effect the decomposition of organic substances. The modern treatment of wounds shows the pressing importance not only of preventing decomposition, but of recognizing what are its causes. Many successful practitioners agree with Dr. Gamgee, who says, "That he has never been troubled with the idea that infection is always floating in the atmosphere, ready to settle in the shape of impalpable and implacable germs into any breach which may be made in the surface of a living body, and that he believes life to be the great antiseptic."

As regards the practice of medicine, it is an important though difficult question to determine to what extent vegetable forms operate in the production of ordinary fevers. Dr. Murchison, in '75, at

the Pathological Society, pointed out a chemical process having resemblances to the multiplication of contagion. Several fermentations are recognized to be due to the growth of distinct vegetable forms. May not decayed or changed albuminous compounds act as similar ferments when introduced into the fluids of the body? Fever producing agents, it is now well recognized, find a ready vehicle in water, but the separation of the active agent from the liquid is difficult, though recent experiments seem to show not impossible. Dr. Burdon Sanderson, by precipitating with alcohol and then extracting with water, obtained an extract which caused fever. He has ascertained that no animal poison is really soluble, and adopts a plan of filtering through porcelain, by which a filtrate is obtained that does not produce fever. The first filtrate has no bacteria, but particles are seen in it. An hour after, bacteria are found in considerable numbers. The filtrate through porcelain shows no bacteria, and twenty-four hours afterwards remains barren. Now here the natural inference is, that the fever producing agents are to be found in particles, and yet it is possible that an animal fluid in passing through the fine cells of porcelain may be chemically changed and that the absence of fever-producing energy is due to this change. It is well understood that all bacteria found in diseased tissues are not to be regarded as causes of disease. When an animal fluid begins to decompose bacteria are seen, and the forms of vegetable life which appear depend upon the composition of the fluid. One specimen of urine will show the bacterium termo; if sugar be present, the torula cerevisiæ also appear. In other specimens small round cells appear, sometimes isolated, at other times in chains. So also it is probable that, according to the tissue decomposing, different forms of bacteria are present, each form as it were choosing that tissue most suitable for its growth. Hence, even if after death bacteria are found in any tissue, they cannot at once be regarded as causes of disease. It may be that in the dying body, the bacteria infesting the surface of the body and mucous-lining of the intestines in innumerable multitudes, may pass inwards to lay hold of the elements that are dead before the life of the whole body has ceased. This may serve to explain how it is that in different diseases similar forms of bacteria appear. It has been suggested that after all the diversity which is seen in fevers, several may depend upon the same bacteria, modified in the course of time with the circumstances of its growth. Dr. Ogston has unquestionably shown that in cases of acute suppuration attended with fever, certain forms of micrococci are invariably present. He found that micrococci taken from an acute abscess and carefully transferred to the albumen of an ordinary fresh egg reproduced themselves in myriads. He also found that if the minutest portion

of this albumen were injected under the skin of a healthy animal, similar abscesses resulted, abounding with micrococci. Ogston's experiments prepare us to receive the recent teaching regarding the cause of tubercular disease. This disease brings with it conditions favorable to the growth of bacteria, for parasitic growths are known to flourish in weak organisms. The breaking up of tissues incident to this disease also furnishes most fertile soil for the growth of bacteria. It may be true, as affirmed, that the bacillus is invariably present in cases of tubercle. This the above considerations would lead us to expect, without looking to it as the sole cause of the disease.

Many questions respecting these minute organisms and their influence in life and disease are still to be settled, but their study has unquestionably led to much improvement in the practice of the healing art. Our efforts to combat disease must to a very great extent depend upon our success in teaching the public to rely less upon antidotes and more upon those means which tend to build up strong bodies capable of resisting the agencies causing disease.

Dr. Tye, of Chatham, was appointed chairman of the surgical section, Dr. Gardner, of Montreal, secretary; and Dr. Graham, of Toronto, chairman of the medical section, and Dr. McDonald, of Montreal, secretary. The meeting then divided into sections.

MEDICAL SECTION.

Dr. Graham in the chair.

Dr. Playter read a paper on "Diet as a Therapeutic Agent." He thought a very large proportion of the cases of sickness which engage the attention of physicians is caused by errors in diet; especially were diseases of the digestive organs, liver, and kidneys and also the gouty and rheumatic diathesis thus caused. Such diseases, though, enrich the quack more than the regular physician. He would enquire very closely into the usual diet of all such patients and often a radical change in diet is a sufficient remedy.

Dr. Reeve, of Toronto, said he believed many cases of phlyctenular ophthalmia in children were caused by overeating of fresh fruit.

Dr. Graham referred to the influence of food in skin affections, acute attacks depending frequently upon peculiar sorts of food, and chronic cases upon either a defective or excessive diet.

Dr. Grant, of Ottawa, urged the importance of combining massage with regulation of diet.

Dr. Sheard, of Toronto, exhibited a specimen of "Invaginated and Gangrenous Bowel." The patient, a man aged 37, had a right inguinal hernia, with symptoms of obstruction. Hernia was reduced without much difficulty, but the symptoms of obstruction continuing and becoming urgent, Dr. Burns opened the abdomen, and found the tumor to be an invagination of the ileum into the

large bowel, which could not be reduced. On opening the cæcum, about seven inches of gangrenous bowel was found. The hernia was entirely omental, and not in any way connected with the obstruction. The gangrenous bowel was drawn through the opening in the abdomen and secured there. Patient died of shock in a few hours. Dr. Sheard considered this a suitable case for excision of the strangulated portion of bowel.

Dr. Osler said recovery sometimes took place by the sloughing of the piece of small bowel in-gingated.

Dr. Mullin said that in cases of obstruction from any cause, he would treat the acute symptoms in preference to operating.

Dr. Botsford, of St. John, N.B., read a short paper on "Inflation of the Lungs by Abdominal and Thoracic Traction." His method was to draw the abdominal walls forwards, by means of pieces of plaster 4x4, thus leaving a vacuum which would be filled by air entering the lungs. Had not tried it practically, but thought it would be useful in chloroform accidents, drowning etc.

Dr. Mullin thought valuable time might be lost, and preferred the old methods of artificial respiration.

Dr. Burnham, of Toronto, had given anæsthetics in the Royal Ophthalmic Hospital in a great many cases and never saw a death. In cases of accident always relied on artificial respiration, with inhalation of nitrite of amyl.

Dr. Grant said that in a recent case he lowered the head with good results.

Dr. Dorland, of Milwaukee, read a paper on "Successive Dropsies of Amnion always Specific." He gave the history of six women he had attended who had suffered from this affection. In all, evidence of syphilis could be obtained. In some of the cases specific treatment succeeded in preventing this condition in subsequent pregnancies. He had some of the patients under his observation for years.

Dr. Mullin narrated a case in which, with a syphilitic child, the amount of liquor amnii was very large. Dr. Yeomans and others mentioned instances in which there was no suspicion of syphilis.

Dr. Dupuis, of Kingston, read a paper on the "Relation of Medical Men to each other, and to each other's Patients," which was largely a plea for no code in medicine. He did not approve of the new comer calling on those already settled in the place, and favored holding the consultation in presence of the patient and his friends. He considered it proper to give an opinion concerning the patient of another practitioner without consulting with him. He would take all the cases he could get without reference to previous attendant. To report cases of operation or extraordinary cures

in the papers was, he thought, quite justifiable, as he considered it different from advertising. Medical men should report their cases as well as the lawyer his speeches, or the clergyman his sermons.

Dr. Harrison, of Selkirk, Dr. Canniff, of Toronto, and Drs. McCammon and Oliver, of Kingston, disapproved of the opinions expressed by Dr. Dupuis.

Dr. Metcalf read a paper on "Hyoscyamine in the Treatment of Mental Diseases." He gave the results of six years' experience with the drug in the Kingston Asylum. He used Merck's crystalline preparation hypodermically in from one-twelfth to one-eighth of a grain. It was prompt and efficacious, and no ill-effects had followed its use in sixty cases. It was especially advantageous in all forms of maniacal excitement. If after a few doses no benefit followed, the drug was discontinued.

Dr. Hurd, of Pontiac, corroborated Dr. Metcalf's opinions.

Dr. Daniel Clarke, of the Toronto Asylum, recommended the drug in cases of delirium tremens, acute mania, and melancholia with suicidal tendency. He used Merck's preparation, and also the tincture (B. P.), as much as one and a half ounces. He had found the greatest benefit in acute mania.

Dr. Thorburn, of Toronto, suggested caution in the use of large doses.

Dr. Troutman, of New York, placed great reliance on the drug, but thought it was contra-indicated in acute delirium with dryness of tongue and muscular tremors; also in general paresis.

Dr. Graham, of Toronto, read a paper on "Leprosy in New Brunswick." The inhabitants in this region, chiefly French-Canadians, are very poor, live on small farms, and engage in fishing and hunting. The diet is mainly fish, potatoes and bread, with but little meat. The disease first appeared in 1820, among a family that came from Caraquet. At present there are only twenty-four patients in the Lazaretto, and the average length of residence is five years. A few cases are at large, and it is chiefly through the influence of the priests that they are detected and secluded. His conclusions are as follows:

1. Although it has been shown in other countries that the disease can be propagated purely by hereditary influences, no case has yet been recorded in Tracadie, so far as he could learn, which would prove that theory.

2. That the disease was imported from without, and, finding favorable surroundings, it spread from one to another by contagion. In order to contract the disease, certain conditions appear necessary: (a) low state of the system; (b) to belong to a certain race or family; (c) prolonged contact with leprous persons.

SURGICAL SECTION.

Dr. Tye, of Chatham, Ont., in the chair.

Dr. Fenwick, of Montreal, read a paper on "Imperforate Anus with Fœcal Fistula." He first alluded to the various forms of this anomaly, and then described a case upon which he had operated successfully. There was a small opening at the site of the anus, and another in front of the scrotum at the root of the penis. The former was the result of an operation for imperforate anus, shortly after birth. He enlarged the opening, completely divided what appeared to be the continuation of the bowel forward to the scrotum, and stitched the bowel to the edges of the wound. The result was most satisfactory.

Drs. McLean, Holmes, Bethune, Campbell, and Walker took part in the discussion.

Dr. Worthington, of Clinton, Ont., then read a paper on "Retroversion and Retroflexion of the Uterus." He alluded to the general condition briefly, and then gave the notes of four interesting cases. In the third case, immediately on commencing a vaginal injection of hot water, the patient was seized with violent pelvic pain and symptoms of collapse, followed by a severe attack of peritonitis, and lasting for several days, but ending in recovery. The cases were treated by the Hodge-Smith pessary.

Dr. Gardner, of Montreal, alluded to the difficulty in treating such cases. In certain cases he thought it might be justifiable to adopt Lawson Tait's plan of suturing the fundus of the uterus to the abdominal wall. In regard to the collapse in one of the cases, he thought it was due to the contact of water, a foreign element, with the endometrium. The nozzle of the syringe should not have an opening at the end.

Dr. Holmes recommended a fountain syringe, the nozzle of which has no central aperture. He never uses the sound to replace the uterus, but places the patient in the knee-elbow position and makes pressure upon the fundus with two fingers in the vagina.

Dr. Fulton recommended mild medicated solutions in preference to plain water, for vaginal douches, as being less irritating. He also endorsed the plan of replacing the uterus by position and the fingers in the vagina or rectum.

Dr. Hingston, while agreeing in the main, deprecated such heroic measures as those alluded to by Dr. Gardner. He thought it was not justifiable unless in the most extreme cases.

Dr. Tye alluded to two cases where fatal results followed the use of vaginal injections.

Dr. Campbell, of Seaforth, next read a paper on "An Anomalous Case of Strangulated Femoral Hernia." The patient was not operated on for three and a half days after the onset of the symptoms because of certain peculiarities in the case.

Taxis was tried, but without success; but owing to the midness of the symptoms, the operation was postponed, after due consultation and deliberation, for the time mentioned.

Dr. Roddick thought surgeons were too timid in regard to the amount of force to be used in taxis, and recommended much more than is usually applied.

Dr. Fenwick stated that Prof. Lister operates by cutting off the sac and suturing the edges of the incisions, with good results, by way of radical cure.

Dr. Saunders, of Kingston, thought Dr. Roddick's advice might lead to serious consequences in some cases.

Dr. McLean, of Ann Arbor, believed a new era was dawning in the treatment of hernia, and that operations for the radical cure would soon be more frequent than they were now.

Dr. Sullivan thought it inadvisable to wait in all cases for urgent symptoms.

Dr. Bethune instanced a case of radical cure of hernia after a kick on the truss which the person was wearing.

Dr. Sloan found it necessary, in some cases, to use considerable force in the taxis.

Dr. Hingston emphasized the importance of operating early. First use taxis under chloroform, and if it fail, operate at once.

Dr. McDonald, of Londonderry, N.S., read a paper on "Paracentesis Pericardii." He aspirated near the site of the apex of the heart, in the 5th intercostal space, and removed 32 ounces of slightly turbid serum. The patient made a good recovery. (This paper will appear in a future issue.)

Dr. James Bell, of Montreal, next read a paper on "Resection of Intestine." The paper consisted of the reports of fourteen cases of experimental resections of portions of the intestine of dogs. Of the 14 dogs operated upon, four died from preventable causes, one escaped on the fifth day after the operation, and nine recovered. From three to thirteen inches of different regions of the bowel were removed, including in one case the cæcum and portions of the gut on either side. The ends of the gut were united in some cases by catgut, and in others by silk sutures, and no attempt was made to remove the mucous membrane so as to bring the cut surfaces of the outer coat into accurate contact. The portions of bowel which had been thus united were exhibited and showed perfect union. The writer considered the operation an easy and a safe one, and predicted that in the near future it would be generally recognized as such, and many lives would be saved by it.

Dr. Bell was complimented by several speakers on the originality of his paper.

Dr. Sheard, of Toronto, exhibited a specimen of intussusception of the bowel, and said that, in his opinion, the patient might have been saved by an

operation of the kind performed by Dr. Bell in his experiments on the dogs.

The section then adjourned.

SECOND DAY.

The Association met at 10.30 a.m., the President in the chair. Minutes of the last meeting read and confirmed.

Dr. Fulton, of Toronto, read the report of the Committee on Necrology. A large number of members had died since the last meeting. Some of those who had passed away were comparatively young, others well advanced in years, but the majority of them were between the ages of 40 and 60 years. Two or three were painful instances of self-destruction by alcohol and drugs. The list contained 38 names.

Dr. Thorburn, of Toronto, presented the report on education. He referred to the establishment of schools for women in Toronto and Kingston. He also congratulated the profession of New Brunswick on the steps to advance medical education, by establishing a medical council and examining board.

MEDICAL SECTION.

Dr. Graham in the chair.

Dr. Tobin, of Halifax, N.S., read a paper on "Pigmentary Degeneration of the Retina." He gave a case of four deaf-mutes in one family, all of whom presented characteristic symmetrical changes in the eyes in the form of scattered pigment masses on the retinae, often in stellate forms. The parents were cousins, and he was inclined to believe that a considerable portion of cases occur as the result of consanguineous marriages.

Dr. Buller, of Montreal, had seen very many instances of the kind, and had never succeeded in tracing any connection between consanguinity and pigmentary degeneration; nor had he been more fortunate in trying to associate such cases with hereditary syphilis.

Dr. Fife Fowler, of Kingston, showed a child with enlargement of the smaller joints, wrists, ankles, and phalanges, due apparently to effusion. There had been enlargement of the spleen and the child had been ailing for many months.

Dr. Burnham, of Toronto, showed Dr. Mortimer Granville's percuteur, and explained its mechanism. He had brought it from London for a lady affected with persistent tic, which had resisted all modes of treatment, but had been greatly relieved by the use of the percuteur. About one hundred and fifty percussions were made in the second. Dr. Granville had found it very efficient in neuralgias and the lightning pains of tabes.

Dr. Osler read a paper on "Some Features in Chronic Bright's Disease." He referred to its latency at the outset, often simulating other diseases, to the peculiarities in the mode of onset of the uræmic

symptoms, and to the fact that patients frequently die with profound uræmic symptoms, highly albuminous urine, and numerous casts, yet, on *post mortem* examination, no coarse changes can be made out. He gave cases in illustration of each.

Dr. Graham spoke of the use of the sphygmograph in the detection of the disease. He referred to a case in which there was very little albumen, no diminution in the amount of urea, yet the patient died in five weeks.

SURGICAL SECTION.

Dr. Tye, of Chatham, in the chair.

Dr. Holmes, of Chatham, read an interesting paper on "Erosions of the Female Urethra." He had tried various plans of treatment, such as division of the urethra, stretching, etc., but found most benefit from injections of nitrate of silver. He asked for information regarding the etiology of such cases.

The paper was discussed by Drs. Fulton, Hingston and Sheard.

Dr. Hingston, of Montreal, showed to the Section a *note-book* which he had prepared for *ovarian and abdominal tumors*, and which he thought might be of some service.

Dr. Major, of Montreal, read a paper on "Naso-Pharyngeal Growths," and the modes of removal. Several interesting specimens were shown.

Dr. Oldright, of Toronto, read the notes of a case of "Fibro-Myxoma," and showed the specimen.

Dr. Proudfoot, of Montreal read an exhaustive paper on "Color Blindness," and exhibited Thomson's instrument.

The following papers were read by title: "Common Errors in Ophthalmic Practice," by Dr. Buller, Montreal; "Notes on Intra-Uterine Growths," by Dr. Gardner, Montreal; "Spindle-Celled Sarcoma," by Dr. Sheard, Toronto.

The afternoon and evening were spent in an excursion among the Thousand Islands.

PUBLIC HEALTH SECTION.

Dr. Sweetland, of Ottawa, was appointed chairman. Dr. Campbell, of Seaforth, secretary.

Mr. Boxer, C. E., of Montreal, was asked to address the Section and state what steps had been taken by way of organization.

On motion of Dr. Oldright, seconded by Dr. Robillard, of Ottawa, it was decided to organize a Canadian Sanitary Association, and Mr. Boxer presented a scheme for its establishment. The meeting then adjourned.

After assembling Dr. Playter read an address, and was followed by Mr. Boxer, who gave a report of the provisional conference held in Ottawa in December last.

Dr. McDonald, of Londonderry, N.S., moved the inauguration of the Society, seconded by Dr.

Oldright. The following officers were elected :— President, Dr. Sweetland, Ottawa. Secretary-Treasurer, F. N. Boxer, Montreal. Vice-Presidents, Ontario, Dr. Covernton, Toronto; Quebec, Dr. Roy, Quebec; New Brunswick, Dr. Botsford, St. John; Nova Scotia, Dr. Macdonald, Londonderry; Prince Edward Island, Dr. Conroy, Charlottetown; Manitoba, Dr. Lynch, Winnipeg. Executive Committee for Ontario, Prof. Galbraith, Toronto; Prof. Harris, Kingston; Dr. McCammon, Kingston; Dr. Oldright, Toronto. For Quebec, Dr. Larocque, Montreal; Dr. Rinfret, Quebec; Ald. Fairburn and Mr. Hughes, Montreal. For Nova Scotia, Hon. Dr. Parker, Halifax; T. Slewens, C. E., Antigonish. For New Brunswick, Dr. Harding.

MILITARY SURGEONS.

A number of the militia surgeons present held a meeting to consider the position of medical men in the force. Dr. Fenwick, of Montreal, surgeon of the Montreal Garrison Artillery, occupied the chair, and Dr. Neilson, of "B" Battery, acted as Secretary. It was pointed out that medical officers had no status, no positive rank, their presence amongst the officers being by courtesy. Some recommended that in the Militia Department there should be officers holding rank equal to Deputy Adjutant-General. Instead of the colonel of the regiment appointing the medical officer it should lie with the Deputy Adjutant-General. There should also be medical officers attached to each military district in charge of the stores, with instructions to issue them to the regimental officers, these to be responsible to the Deputy Adjutant-General. Their rank ought to be the same as in the United States army. Touching camp equipments, they were considered very meagre and unfitted for the service. There were practically no appliances for a doctor to work with. The pay, it was felt, should be better. A committee, composed of Drs. Bristol, Napanee; Thornburn, Toronto; Neilson, Kingston; Gardner, Montreal; and Ruttan, Napanee, was appointed to prepare resolutions embodying the views which had been expressed, which were adopted and ordered to be sent to the Minister of Militia. The resolutions also urge the advisability of changing the titles and designations of Canadian medical officers so that they will correspond with those held by the medical officers of the British service, thus: Surgeon, instead of Assistant-Surgeon, Surgeon-Major instead of Surgeon, Brigade-Surgeon instead of Surgeon-Major, Deputy Surgeon-General, etc.

Interesting exhibits of elegant pharmaceutical preparations were made by Wyeth Bros., of Philadelphia; Maltine Manufacturing Co., Reed & Carnrick, New York; New York Pharmacal Association; also of surgical instruments by Stevens & Son, and E. A. Smith & Co., Toronto.

THIRD DAY.

The Association met at 10.30 a.m., Dr. Mullin in the chair.

A number of papers were taken as read, and handed to the secretary.

Dr. Saunders, of Kingston, called the attention of the members to a remarkable case of tumor of bones of the skull in a child in one of the ante-rooms. The Nominating Committee reported the following list of officers for the ensuing year:

President—Dr. Sullivan, of Kingston, Ont. *Vice Presidents*—Ontario, Dr. Thorburn, of Toronto; Quebec, Dr. Robillard, of Montreal; New Brunswick, Dr. J. Christie, of St. John; Nova Scotia, Dr. McDonald, of Londonderry; Manitoba, Dr. Lynch, of Winnipeg. *General Secretary*—Dr. Osler, of Montreal. *Treasurer*—Dr. Sheard, of Toronto. *Local Secretaries*—Ontario, Dr. Bray, Chatham; Quebec, Dr. Bell, Montreal; New Brunswick, Dr. Coleman, St. John; Nova Scotia, Dr. Black, jr., Halifax; Manitoba, Dr. Betts, Winnipeg. *Auditors*—Drs. Walker, Dundas; and Yeomans, Mount Forest. *Committee of Arrangements*—Drs. Hingston, F. W. Campbell, Ross, Roddick, Lachapelle, Gardner, and Rodger, with power to add to their number. *Publication Committee*—Drs. Ross, Cameron, Fulton, and Sheard; *Medicine Committee*—Drs. Graham, Ross, Oliver. *Surgery Committee*—Drs. Roddick, Atherton, Tye; *Obstetrics Committee*—Drs. Lavell, sr., Holmes, Lawson. *Therapeutics Committee*—Drs. G. Wright, Stewart, Small. *Necrology Committee*—Drs. Fulton, A. Wright, J. C. Cameron. *Education Committee*—Drs. C. Cameron, Bray, Yeomans, Bayard, Parker, Whiteford, Wilkins. *Public Health Committee*—Drs. Canniff, Oldright, Robillard, Yeomans, Harding, Larocque, Playter, Botsford, Worthington, Wickwire, Covernton, and Bryce. *Ethics Committee*—Drs. Mullin, Harrison, M. Cameron, Bray, Prevost, Grant, Osler, Almon, Coleman. Delegates to the American Medical Association—Dr. Grant, Ottawa; Drs. Gardner, and Hingston, Montreal. Delegates to the American Public Health Association, to meet in Detroit in December—Drs. Larocque, Tye, Bray, Holmes, Sweetland, and Covernton.

Montreal was selected as the next place of meeting, the date being left to the President and Secretary, in order to place it a few days before the meeting of the British Science Association, which meets in Montreal on the 27th of August, 1884.

After votes of thanks to the President, railway and steamboat lines, etc., the Association adjourned.

A correspondent of the *British Medical Journal* states that he has found the application of a strong solution of chromic acid three or four times, by means of a camel's hair pencil, to be the most efficient and easy method of removing warts. They become black and soon fall off.

Selected Articles.

TREATMENT OF FRACTURES IN BRITISH HOSPITALS.

There is, perhaps, no other province in the wide domain of surgery, in which similar and equally satisfactory results are so commonly brought about by a variety of means than in the treatment of simple fractures of the limbs. And this is the case, not because any great diversity of opinion exists as to the end that is to be desired, for that cannot be alleged in this particular instance, but rather because the result sought for is in all cases identical, though capable of being accomplished by very many forms of treatment, which differ in their detail, and allow scope for the ingenuity, and dexterity of the individual surgeon.

Fractures of the limbs are so common, that it is not a matter of surprise that we find at each institution some recognized method, which is sanctioned by custom and hallowed by time, for meeting all the more common forms of each injury, whilst any complication that may be found needs generally but a very slight modification of the apparatus. And this is rendered all the more necessary seeing that such injuries, except when complicated by some serious addition, such as severe injury to a joint or rupture of an artery, are treated in the first instance by the house surgeon, and the surgeon on his visit is rarely called upon to do more than approve, or at most to suggest some slight alteration in the apparatus.

Except there be some other injury, or on account of the feebleness of the patient, or in event of some serious complication to a joint or artery, cases of fractures of the upper extremity are usually treated as out-patients, thus coming entirely under the care of the house surgeon and his dressers, and this renders it necessary that a convenient and portable apparatus shall be applied to keep the ends of the injured bone in good apposition. It would be impossible to enumerate the many ways in which fracture of the clavicle is dealt with, or the many ingenious appliances which have been invented by surgeons and instrument makers; but speaking only of hospital practice, the result obtained by a simple bandage with or without a pad in the axilla, and applied so as to throw back the shoulder upon the injured side, to raise and keep steady the humerus, and to take off the weight of the arm, are as satisfactory as could be wished for. Sometimes the figure-of-eight bandage, with a sling for the arm, produces the desired effect, whilst in other cases where it is difficult to overcome the deformity, the surgeon must rely upon his skill in using and applying a bandage, with a pad secured in the axilla by a strap passing over the opposite shoulder.

Fractures of the scapula do not commonly occur without either severe bruising of the surrounding parts or some other more serious complication, of which fractured rib is by far the most frequent. When they do occur without any serious complication, the treatment consists only of a sling or bandage to steady the arm and take off the weight of the limb, and this is all that can be done if the acromion or coracoid process be broken.

Before speaking of the mode of treating the long bones in detail, it may be well to mention some of the materials which are in use in London at the present time for securing the position of fractures, after the application of splints has been dispensed with, as these means are not uncommonly found available in the first instance, and can be applied in many instances where there is no bruising, and where only one of two bones is broken, as happens particularly in the case of a fracture of the fibula or radius. The principal of these are, the starch or glue bandage, the plaster-of-Paris bandage, and one made stiff with dextrine, gum, and chalk, etc. A very useful material for this purpose has long been in use at St. George's Hospital, and can be applied in the first instance in treating fracture of the fibula without bruising, and is almost invariably employed to put up fractures of the thigh or leg as soon as union has taken place and the splints can be laid aside. A piece of ordinary stout mill-board is cut to about the size necessary to embrace the limb; it is then soaked in hot water, which renders it pliant and is shaped roughly to the limb, the edges being torn carefully so, as to form a bevelled margin. A piece of flannel is then placed round the limb, or a simple roller is applied, and then a bandage is neatly and firmly carried from the toes to a distance above the joints between which the fracture is situated, and closely embracing the mill-board. This, on drying, makes a very convenient apparatus, light and strong, and in order to increase its strength and to keep the bandage from becoming unravelled, a thick coating of clarified gum is pasted over the bandage. The starched bandage which is in use at University College is applied in much the same manner, coarse pasteboard soaked in starch being used, and the limb being surrounded by an even layer of cotton-wool before this is applied. This being elastic, avoids the danger of compression which might ensue when this treatment is followed, as it often is, in the case of recent fractures; and the apparatus has the advantage, when thus applied, that it can, if necessary, be split up by a strong pair of pliers, and its width curtailed, while its efficacy for support can be re-established by the application of tapes or a fresh bandage. With one of these forms of permanent apparatus it is almost invariably the custom to treat fractures after union has taken place, and in many instances where the displacement is not great and the extravasation slight, recent fractures are also treated in the same way.

In the case of the bones of the leg, a junk is sometimes slung in a "Salter's Swing" and the limb placed in it for a few days, until all swelling and bruising have disappeared. A solution of silicate of potash is sometimes preferred to either of the above-named materials.

To return, then, to the consideration of the fractures of the various bones and the usual plans for their treatment. In London hospitals the general method adopted in cases of fracture of the shaft of the humerus is to put the arm up in four well-padded wooden splints tied together by two pieces of bandage which are made to encircle them, one above and one below, and the forearm, being supported by a sling round the neck, gives sufficient extension to ensure a good position of the broken ends. The fingers and forearm may be left unbandaged, unless there is a tendency for these parts to become swollen, and this treatment is usually continued until union has taken place, but the plaster-of-Paris bandage can be applied as soon as all swelling has subsided. This form of treatment can be used in all cases of fracture of the shaft, except those of the condyles or of the lower end of the bone, for which a rectangular wooden splint is almost always resorted to, with or without three additional flat splints to encircle the humerus, the one arm of the right angle being placed along the front of the forearm, and the other along the anterior aspect of the humerus. Any immovable apparatus is disapproved of in this locality on account of the desirability of making early movement in the elbow joint, which generally is more or less injured when the accident takes place, and is therefore liable to become stiff if passive motion is not commenced at an early stage.

The old plan of treatment of fracture of the olecranon was to put a long straight splint on the anterior aspect of the arm and thus keeps it fully extended, whilst the fragments were brought as nearly as possible into apposition by a figure-of-eight bandage. But when, by the action of the triceps the upper portion of the ulna was drawn a long way up the arm, this plan was not found to give very good results, which answered, however, sufficiently well when the fibrous covering of the bone held sufficiently together to prevent any great separation of the parts. Accordingly, the plan which has been successfully carried out in the case of patella has been tried for the ulna, and the parts brought closely together by a silver wire passed through holes drilled obliquely down from the surface of each fragment. Under the antiseptic system this mode of proceeding has been attended with remarkable success in the few cases which have been reported, but it remains to be seen whether it is capable of being more generally followed.

A couple of well-padded, straight, and flat wooden splints are generally all that is required to keep the bones of the forearm in position when fracture

takes place in the shaft of one or both, but many plans are in use for correcting the deformity in the injury which goes by the name of "Colles's fracture." Some surgeons use these same splints, and by a turn of the bandage which keeps them in position, passed over the hand, maintain it at an angle downward to the side of the ulna, and obtain satisfactory results. Another very useful apparatus, by which the deformity is more easily corrected, is that invented by Dr. Gordon, of Belfast, who denies that impaction of the broken ends of the radius is of common occurrence, and corrects the deformity "by traction on the hand or pressure on the fragments, placing the hand in the prone position, then applying to the anterior surface of the forearm a splint to which a wooden conical or triangular piece is so attached that the external border of the splint projects beyond it; and on the back of the forearm a straight splint more thickly padded over the wrist than over the forearm," the whole to be fixed by two straps of webbing, and not by bandage. A more convenient and less complicated method in common use is a pistol-shaped splint applied to the back of the hand, with or without a short straight splint to the front of the forearm, and not extending beyond the wrist; the two being kept in position by a bandage.

Passing to the lower limbs, and to the fractures which occur in the femur, the plan of treatment usually followed in London hospitals is by one of the two forms of long splint reaching from the axilla down to the foot, and applied with or without shorter splints surrounding the thigh. When these are applied the foot is fixed by bandages to the lower end of the splint, and to an iron foot-piece which runs out at right angles to it, the form of splint known by the name of the French surgeon Desault, and this is secured to the body by a band passing round the waist, and runs up on the outer side of the body to the axilla, having a fork cut in its upper extremity for the purpose of giving a secure *point d'appui* for the perineal band, as it is called, by which traction is made. On this band are threaded three short flat splints, the upper ends of which are cut obliquely so as to fit the line of the groin, and these, with the long splint, surround the whole thigh, and are kept in position by one or more pieces of webbing. The whole having been properly adjusted, traction is made by tightening the perineal band, which, by passing over the upper end of the long splint round the groin and behind the nates, causes extension of the whole limb, and brings the fractured surfaces into close and accurate apposition. The shorter splints are, however, very frequently dispensed with, and then extension is affected by means of a weight applied with strapping to the leg and passing over the end of the bed, where an apparatus is fixed with a rest, over which the cord attaching the weight of seven to nine pounds is passed; and to further the effect of ex-

tension the lower end of the bed is slightly raised by blocks, so that the weight of the body may act in a manner to extend from the opposite direction. A patient thus treated is usually kept in bed for from four to seven weeks, and then one of the forms of immovable apparatus is generally applied, plaster-of-Paris being less frequently used in the case of the thigh on account of the great weight which a splint made with this material necessarily involves. With very young children the best results are often obtained by using a weight to the leg as above described, while to secure the limb from movements during sleep, and to keep the fragments in good position, a sand-bag is placed on either side of the thigh, and to another laid across the seat of the fracture; and further to prevent the patient from slipping down, and so nullifying the influence of the weight, a band is passed behind the back, from which two loops pass over the shoulders, and this is tied beneath the bed or secured to its upper end. One of these forms of treatment suffices in almost all fractures of the thigh bone, but there are some in which the broken ends cannot be kept in position by any such means, and this happens particularly when the break occurs a short way below the trochanters, and the upper fragment is drawn upward and inward by the action of the psoas. For these cases the most frequent apparatus used is Earle's bedstead, which allows the patient to lie flat on his back, but the foot being secured on the injured side to a footpiece, the knees are bent over the raised portion of the bed, which thus forms a double inclined plane, the traction is kept up by the weight of the body, the knee thus becoming practically a fixed point. Many other ingenious modes of effecting the same results have been invented and are occasionally used, but they are not in general use, and are only required in exceptional cases; such, for instance, are the methods of placing the limb in a wire support, without splints, and making extension by a weight attached to the foot and passing over a pulley, which is placed at some height and distance from the end of the bed, or the splint known by the name of "Thomas," which consists mainly of a couple of parallel iron rods united at both ends, the upper being secured round the pelvis and the lower to the foot, whilst a bandage passes round the whole apparatus and gives support to the lower part of the limb.

The treatment of fracture of the patella varies in detail at almost every institution, but the main points are to reduce the effusion into the synovial membrane of the knee joint, by which the primary separation of the fragments is mainly produced and maintained, and then to bring the two surfaces as nearly as possible in apposition. The first object is attained by raising the limb to an angle with the trunk on pillows, junks, or other apparatus, and applying evaporating lotions to the joint, and the second, by the use of bandages applied in various

fashions, strapping, to which is sometimes attached a weight, which passing over the foot is intended to drag down the upper fragment and to act counter to the retraction of the quadriceps extensor. Some surgeons still use Malgaigne's hooks, but they are objectionable on account of the risk of inducing erysipelas. The operation of wiring together the fragments has already been alluded to, and has now been performed in a considerable number of instances, but the danger, even with the utmost aseptic precautions, is sufficient to deter surgeons from recommending the operation, especially when the accident occurs, as it most frequently does, in persons past the healthiest period of life, and also considering the very useful limb which is obtained by patients who are willing to submit to a prolonged course of treatment by simple means. Where the separation of fragments has taken place after fibrous union between the two ends of bone, the operation has been resorted to in several cases with more or less satisfactory results. Where splints are used for the treatment of fractures of the bones of the leg, those which bear the name of Cline are, perhaps, most frequently had recourse to. They consist of two pieces of light pine wood, roughly hollowed out and shaped to embrace the outer and inner surfaces of the calf, ankle and foot, a round hole being cut for the malleolus in each. These are padded with tow or cotton-wool, and are fixed to the foot by pads and bandages, whilst they are secured round the leg by two pieces of broad webbing. Other surgeons prefer to support the back of the limb, and for this purpose use three flat deal splints to which a foot-piece is applied, and these are kept in position by webbing and strapping or bandages. Whatever form of splint is used, the custom is almost invariable of swinging or raising the limb, either by junks or by the use of "Salter's swing," which allows the patient to exercise more movement of the body without disturbing the injured extremity. In some cases where the swelling is not great, the limb is placed in plaster-of-Paris, by laying strips of blanket soaked in the plaster on either side of the leg, and bandaging with muslin into which the dry plaster has been rubbed, cotton-wool being used, or, as some prefer, a flannel bandage, to guard against the risk of subsequent swelling. For Pott's fracture, where ecchymosis forbids its immediate treatment by some immovable apparatus, the practice recommended by the Dublin surgeon is usually adopted, namely, to place a single flat wooded splint upon the inner side, with a thick pad over the inner malleolus, and to secure to this the foot below and the leg above by a light bandage.

The same apparatus suffices in the treatment of compound as in simple fractures, the more so as the wound is almost invariably treated on antiseptic principles, more or less strictly carried out in the manner of Professor Lister. Some surgeons, however, still adhere to the use of "Assalini's fracture-

box," a weighty and somewhat cumbrous machine, whilst others prefer MacIntyre's splint, which has the advantage of being more easily cleaned, and is thus less likely to become a medium of conveying or retaining the germs of contagious diseases.—*W. Lancet.*

ON THE USE OF ANÆSTHETICS DURING LABOUR.

—In a paper recently read before the East Surrey District of the South-Eastern Branch of the British Medical Association, Dr. Savill indicates what he believes to be the main precautions, the observations of which would render the use of chloroform perfectly justifiable. 1.—There are certain women who have a tendency to flood at every confinement, and others in whom there seems an already too great relaxation of fibre—weak anæmic females in their eight or tenth confinement; and to these it would be unadvisable to give chloroform, except for necessity. Happily, it is not these women who suffer the most pain, but rather those strong healthy primiparæ whose pelves and general build approximate to the masculine type. 2.—We should not give it when labour is complicated with severe vomiting, or with acute heart or lung-disease, unless there be imperative call for it. 3.—It should not be given to the full extent, except for operation, convulsions, or spasm of the cervix; and then it is most necessary that one person should devote his entire attention to it. 4.—The inhalation should be stopped directly we find the pulse becoming very weak, or respiration irregular. 5.—Anything which makes us suspect a fatty or enfeebled cardiac wall should make us cautious in the use of chloroform. Here, as in cases other than those of labour, it is not the most extensive valvular disease (so long as it is not attended by compensating hypertrophy), but the atrophied or degenerate wall that constitutes the source of danger. Unfortunately, the signs of these conditions are subtle and uncertain. Fatty heart may be suspected by an exceedingly feeble cardiac impulse, combined with an almost inaudible first sound; or valvular lesion; or copious deposit of fat in other parts of the body, and the occurrence of dropsy without adequate cause. A dilated heart may be suspected by increased area of præcordial dulness, combined with epigastric and venous pulsation, and a want of correspondence between the violence of the cardiac impulse and the strength of the pulse. Pericardial adhesions also form a great source of danger. They may be suspected when the heart's apex is fixed above its normal position, and does not shift with respiration; or when there is depression instead of protusion of intercostal spaces over the position or the apex, giving a wavy character to the cardiac impulse. 6.—In all cases, we should take extra care to prevent the occurrence of hemorrhage after birth; by giving a full dose of ergot when the head reaches the perinæum; by

ceasing the chloroform immediately it is born; and by rousing the patient from the lethargy as soon as possible.—*British Medical Journal.*

MANGANESE IN THE TREATMENT OF AMENORRHOEA.—Dr. S. Ringer and Dr. W. Murrell (*"Lancet,"* Jan. 6, 1883) have been using permanganate of potash extensively, in hospital practice, for amenorrhœa, with good results. They have used it both in the pharmacopœal (B. P.) solution and in the form of one or two-grain pills. One grain three times a day is given to begin with, and this is increased to two grains four times a day, the larger doses giving the best results. Its administration should be begun three or four days before the period is due, and if it is not successful in bringing on the flow, its use should be continued for some time, even until the next period is due, if necessary. It should be discontinued as soon as the flow appears, as its use will facilitate that process. Its action is not so certain in the case of girls who have never menstruated, though, after having been tried unsuccessfully, it may be successful if tried at a subsequent period. It is also recommended in the case of women who have reached middle life, having passed through numerous pregnancies, and have become irregular. It is necessary to avoid giving it during pregnancy for any cause, though it is not known that it will produce abortion. In the amenorrhœa of phthisis it is not thought to be of value. The pills will usually be found to be more acceptable to the patient, as to any disagreeable after-effect, than the solution. Manganate of sodium and binoxide of manganese are equally effective with the permanganate of potash. Manganese does not seem to improve the condition of the blood in anæmia and chlorosis, but acts equally well with the plethoric and the anæmic.—*N. Y. Med. Jour.*

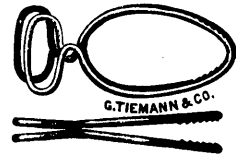
WHO WOULD NOT BE A DOCTOR?—Quite a number of our young men are studying for the medical profession. We do not wish to deter them from this laudable pursuit, for a physician's calling is one of the most honorable, ennobling, humanizing, and useful in the world. But all is not gold that glitters, and the following are some of the sweets of a doctor's life: If he does not write a prescription for every trifling ailment, he is careless; if he does, "he deluges one with medicine." If his horse is fat, it is because he has nothing to do; if he is lean, it is because it isn't taken care of. If he drives fast, it is to make people believe somebody is very sick; if he drives slowly, he has no interest in the welfare of his patients. If the patient recovers, it is owing to the good nursing he received; if he dies, "the doctor did not understand his sickness." If he talks much, "we don't like a doctor to tell everything he knows," or, "he is altogether too familiar"; if he don't talk, "we

like to see a doctor sociable." If he says anything about politics, "he had better let it alone"; if he don't say anything about it, "we like to see a man show his colors." If he does not come immediately when sent for, "he takes things too easy"; if he sends in his bill, "he is in a terrible hurry for his money." If he visits his patients every day, it is to run up a bill; if he don't, it is unjustifiable negligence. If he orders the same medicine, it does no good; if he changes the prescription, he is in league with the druggist. If he uses any of the popular remedies of the day, it is to cater to the whims and prejudices of the people, to fill his pockets; if he does not use them, it is from professional selfishness. If he is in the habit of having frequent consultations, it is because he knows nothing; if he objects to having them, on the ground that he understands his own business, "he is afraid of exposing his ignorance to his superiors." If he gets pay for one-half his services he deserves to be canonized. Who wouldn't be an M.D.?

TO STOP HICCOUGH.—Dr. Martin Burke, of New York city, sends the following item to the *New York Medical Review*: "Perhaps the narrative of these two cases may prove of interest. John C.—was suddenly seized about a year ago with an attack of hiccough. The cause was unknown. All the usual remedies were tried in vain. Dr. John Burke, my father, was then called upon. Noticing the convulsive heaving of the patient's ribs, more particularly upon the left side, he firmly compressed the side between his two hands, and in a short time the hiccough ceased for the first time in days. The second case was that of a Mr. C—, a young man of thirty. He also was attacked, first with vomiting and then with hiccough, most violent and convulsive. Morphine suppositories would produce sleep, but even in sleep the hiccough was distressingly severe. As his vomiting had now ceased, almost every remedy known was called to our aid, but it was not until we had again, by my father's advice, compressed his heaving ribs, that the hiccough almost instantly ceased. It returned indeed within twenty-four hours, but compression again arrested it. The patient is now convalescing, and as hiccough very often proves fatal, perhaps the record of these two cases may prove of service."

THE KEY-RING ARTERY-CLAMP.—In the *London Medical Record* for July, '83, Dr. Brewer Mattocks, of Faribault, Minn., describes the following useful contrivance: "In a country of long distances, one must betake himself to many short contrivances. A professional neighbour of mine, his assistants failing him, performed lately his first ovariectomy successfully alone. With us, every farm has from two to an indefinite number of horse-power agri-

cultural implements, and every town its railway and manufactories; consequently we see much of *accidental* surgery. Of necessity, then, our surgical instruments must to a great extent be both automatic and labor-saving. The artery-clamp, of which I send an illustration, explains itself; but



the advantages claimed for it I will number consecutively. 1. The operator is by the use of the clamp enabled to tie the arteries himself and at his leisure. 2. It is self-holding, and its lightness will prevent its tearing loose, while its shape enables the ligature to slip to its place. 3. It is small, compact, and, if necessary, may be left in position for several days; for instance, after one has searched for an artery at the bottom of a wound. 4. It is especially adapted for cases of emergency, and, as its name suggests, several of them may form a part of one's key-ring furniture. 5. Its simplicity enables one to use it without a commentary, and its cheapness to buy a set of them." I am indebted to Messrs. Tiemann & Co., of New York, for perfecting my suggestions.

HYDRATED OXIDE OF IRON.—Dr. Squibb recommends the following as a simple method of preparing hydrated oxide of iron, the antidote for arsenic, one of its chief advantages being that the ingredients are always easily obtained. Take of

R—Tinct. ferri chloridi, ℥iv.
Aquæ font., ℥iv.
Mix in a vessel of ℥xij capacity,
And add aqua ammon. ℥ij.

Shake well, pour it on a large wet muslin drainer, wring out the water and alcohol and wash with fresh water. The stomach having been evacuated by emetics while the antidote was being prepared, give ℥iv. at once, to be followed by an emetic. Then give ℥ij. every ten minutes.

PROPER METHOD OF TREPHINING.—In trephining for depressed fractures of the skull, always select the *smallest* trephine, since the only object of its use is to make such an opening as will permit the introduction of an elevator. If you desire to elevate and remove comminuted pieces, apply the crown of the trephine upon uninjured bone adjoining and overlapping the *least* depressed portion of the depressed fragments. It is much easier to remove the fragments when the opening is thus made, than when the trephine is applied at the side of the *most* depressed portion of the fracture. —*Polyclinic.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MARLBOROUGH, 23 Rue Richer, Paris.

TORONTO, OCTOBER, 1883.

The LANCET has the largest circulation of any Medical Journal in Canada.

DIPHTHERIA.

Although medicine as a whole may now be regarded as an exact science, yet very much remains that is speculative and inexact. Diagnosis and pathology have reached a marvellous degree of perfection. So have physiology and chemistry, although these latter are still fruitful in new discoveries and fresh surprises, and are marching forward at a pace unknown in any other department of science. Considering the difficulties in the way, the wonder is, not how little, but how much we know about the nature and treatment of disease. We must not however on this account shut our eyes to the fact that much yet remains to be learned, and that gross darkness prevails in many places where light would be no less a boon to humanity than a joy to the physician. One of the many dark spaces needing lighting up is the space covered by diphtheria.

As cold weather approaches diphtheria may be expected to break out with greater or less severity in many localities, and it is appalling to contemplate our therapeutic armor when brought to face with this terrible scourge. Every intelligent practitioner of experience must confess that all the vaunted remedies fail to meet the necessities of the worst cases. If this be not true, why this fearful slaughter of the innocents from year to year? In this disease, perhaps more than in any other, the profession has been in search of a specific, and there is reason to believe that life has been sacrificed at the shrine of this one dominant idea. Treatment,

based on general principles, is much safer than that based on doubtful theory, and in the long run will give better results. That physician who thinks least of specifics and antiseptics, and most of how best to sustain the vital forces, is to be commended, and is certain of his reward. Much of the belief in specific treatment takes its origin in false diagnosis. Of all the reported cases of diphtheria, not a fourth, perhaps, is diphtheria at all. Ulcerative tonsillitis and pharyngitis have materially enhanced the value of certain remedies, and have greatly swelled the number of reported recoveries. For these affections nothing could be more suitable than the routine treatment commonly followed in diphtheria. The patients, of course, all recover, and until the, as yet inexperienced practitioner, meets the genuine disease a few times, he considers his remedies infallible. A medical man was called upon to treat diphtheria occurring in a certain family. Two members of the family residing a few miles from home were taken down, one after the other, with a severe type of the disease. After a protracted illness both recovered. They were nursed by the mother. After a time the disease broke out in the family home, presumably from the infection being carried there by the mother. The first taken down was a lad ten years of age. The same physician was called in, but the patient died on the third day. The father and a grown-up son were attacked almost simultaneously with the fatal disease, but they soon recovered. The next attacked was a child, eighteen months old. At this stage a neighboring physician was called in. This gentleman objected to much of the treatment in force, and declared that he "never failed to cure the disease with Tr. ferri mur. and pot. chlor., internally, and turpentine externally." Everything else he regarded as superfluous. In their perplexity and deep distress, the family took the gentleman at his own estimate of himself, and so expressed themselves to the medical man in attendance, who at once withdrew. Within a few days following, three more of the family died, notwithstanding the attendance of a third physician. At this stage the presumptuous and confident man who had supplanted another and better physician, very properly received his discharge, and the original attendant was recalled to attend the last critical case and close up the sad history. The gentleman who invariably cured with iron and

potash had probably never before treated diphtheria, and there is good reason for believing that the fatality which followed, at least in part, was due to his neglect of other and more important points lying within the range of general and systematic treatment.

The local lesion is a fruitful source of error in treatment. It too often happens that this is regarded as the disease itself, open and exposed to view, rather than the manifestation of a grave constitutional malady. If this be not so, what means the torture of frightened and struggling infants with tongue-depressors, swabs and brushes? Almost every writer on the subject directs us to pencil or brush the throat with various substances, not with a view of disinfecting merely, but also to aid in the "removal of the false membrane," and otherwise exercise a beneficial influence. In view of the fact that the disease is constitutional, general treatment cannot be subordinated to local treatment, not even if the benefits claimed for the latter were true, which they are not. The removal of the "membrane," if accomplished before the disease had spent itself, would most certainly be followed by a new formation. But pathologists now tell us that the so-called membrane is not a membrane at all; that what appears to be such is nothing more nor less than tissue, which has been congested, presumably by micrococci, swollen by inflammatory products, and dead from being cut off from all nutrition. This discovery is very disconcerting to those who have laid undue stress on local treatment.

If we have much yet to learn about this disease—as indeed we have about all zymotic diseases, yet we know pretty well what it does. We know that it gives rise to certain grave constitutional disturbances, and chief amongst these, a tendency to weakened heart action. We know also that it gives rise to local lesions, marked by a tendency to necrosis of tissue. How best to meet these indications, may form the basis of some future remarks.

CANADA MEDICAL ASSOCIATION.

The meeting of the Canada Medical Association this year in Kingston, under the presidency of Dr. Mullin, was, upon the whole, a most interesting and successful one. The number in attendance,

though not so large as on many occasions of the kind, was considerably above the average of former years. With one exception, namely, the hotel accommodation, Kingston was a most desirable place for the meeting of the Association. The new buildings of Queen's College were admirably adapted for the meetings of the various sections, and the local committee spared no pains to make the visit of the members agreeable. The excursion among the Thousand Islands was the social event of the meeting and was highly appreciated. Indeed nothing was left undone by the Committee of Arrangements to render the meeting pleasant and agreeable, and one long to be remembered.

In the sections on medicine and surgery many interesting and valuable papers were read and discussed, and much good work accomplished. We were pleased to note an improvement in the character of the papers generally, and special mention should be made of two or three papers which were almost wholly the result of original work, in medicine and surgery. We hope at future meetings to see an increase in the number of papers of this character. The papers alluded to were much appreciated by the Association, and this of itself should be a stimulus to others to follow in the same direction.

It might not be out of place here to give a brief sketch of the history of the Association. It was organized in Oct., 1867. Dr. Marsden, of Quebec, one of the governors of the College of Physicians and Surgeons, of Quebec, took an active interest in its formation. In May, 1867, he introduced a resolution recommending that action be taken by the college of which he was a governor towards the formation of a Canadian Medical Association, which should consist of all members of the profession in the Dominion in good standing. No action was taken, however, by the college, but the Quebec Medical Society held a meeting, appointed a committee to draft resolutions regarding the formation of an association, which were adopted, and circulars were issued to the medical men in Canada, calling a meeting in Quebec on the 9th of Oct., 1867, when the association was inaugurated. There was a large number present and the meeting was a most enthusiastic one. Hon. Dr. Tupper was elected first president and delivered a most interesting and eloquent address. He continued president until 1870, when he was succeeded by Hon.

Dr. Parker, of Halifax, N. S. The subsequent presidents were Drs. James A. Sewell, Quebec; J. A. Grant, Ottawa; W. Marsden, Quebec; LeBaron Botsford, St. John, N. B.; E. M. Hodder, Toronto; W. H. Hingston, Montreal; Joseph Workman, Toronto; R. P. Howard, Montreal; Canniff, Toronto; Fenwick, Montreal; Mullin, Hamilton, and Sullivan, Kingston.

The association meets next year in Montreal, a few days before the meeting of the British Association for the Advancement of Science, so that members may have an opportunity of remaining over to take part in that gathering, at which will be present many of the leading men and scientific lights of England. It is confidently expected that this meeting of the association in 1884 will be one of the most interesting and important in the history of the association. A pressing invitation was received from our brethren in the far West to hold the next meeting in Winnipeg, but for the reasons above mentioned Montreal was chosen. The President and Secretary will arrange the date of the meeting, which will have timely announcement through the columns of the LANCET and other journals.

THE NATURE AND TREATMENT OF DIPHTHERIA.

—The following is a brief summary of the conclusions from replies to a series of questions recently issued on the subject by the *Therapeutic Gazette*:

1. Diphtheria may be either local or constitutional in its origin.
2. It may continue as a purely local or as a purely constitutional disease, or the local disease may be followed by constitutional infection, or *vice versa*—the disease in the vast majority of instances manifesting itself in both the constitutional disturbance and the local affection.
3. The comparative value of local and constitutional remedies is dependent upon the nature of the affection in individual cases.
4. Diphtheria is a contagious disease, but not liable to attack a healthy mucous membrane or to find an entrance through it into the circulation.
5. The contagium of diphtheria is not a micrococcus, nor is it visible under the most powerful microscope yet manufactured.
6. The contagium of diphtheria is of a gaseous nature (the result of decomposing fæcal and other organic matter), and can be neutralized only by a true disinfectant and not by an antiseptic.

7. The best local application is the tincture of the chloride of iron. It may be supplemented by other applications according to the indications in individual cases.

8. In a typical case of sthenic diphtheria, administer large (10 grains) and frequently repeated (hourly) doses of calomel until the characteristic stools are secured. Following this give large doses of the tincture of the chloride of iron every two hours, and administer alcohol within the limits of intoxication. In asthenic cases the calomel should be omitted, and the main reliance placed on the iron and alcohol.

THE GILCHRIST SCHOLARSHIP.—We are pleased to announce that Mr. H. G. Creelman, B.A., of Dalhousie College, N. S., has won the Gilchrist Scholarship. Mr. Creelman is, we understand, a near relative of Dr. Creelman, of Maitland, N. S., and nephew of the Hon. Samuel Creelman. The scholarship is of the value of £100 a year for three years, the condition being that the winner must pursue his studies either at the University of Edinburgh, or University College, London, prior to proceeding to the degree at the University of London. Mr. Creelman has chosen University College, and intends to make a special study of physics. This is the third time this scholarship has been won by a Nova Scotian, and a graduate of Dalhousie College.

PERSONAL.—Dr. James Stewart has returned from Vienna, and has taken up his residence in Montreal. He will deliver his first course of lectures on materia medica in McGill Medical School this winter.—Sir Wm. McCormack, surgeon to St. Thomas Hospital, London, and Prof. A. P. Simpson, of Glasgow University, are at present making a tour of the United States and Canada.—Dr. D. McLeod (Trinity), formerly adjunct Professor of Institutes of Medicine, Materia Medica and Therapeutics in the Michigan College of Medicine, delivered the spring course of lectures so acceptably that the trustees of that institution have promoted him to the vacancy caused by the withdrawal from the school of Dr. J. J. Mulheron.

SUBSCRIBE TO MEDICAL JOURNALS—Dr. Cathell says in his work "The Physician Himself," subscribe to as many medical journals as you can read, and can afford to pay for. Read them care-

fully so as to keep abreast of the times, but neither swear at, nor by all you see in them; be especially careful of such as exist for the purpose of advertising either their owner or his goods. Note all remarkable cases, but never report any that are not unique or at least that do not present some curious or unusual feature, or militate against accepted theories, otherwise you will merely swell without adding anything valuable to existing records.

BRITISH DIPLOMAS.—Dr. J. P. Brown, of Galt, double gold medalist Toronto University (1868) has recently passed the examination for the L.R.C.P. Edin. Dr. Brown spent the past summer in the Royal Infirmary, Edin., and the London and Samaritan Hospitals, London. Dr. G. S. Beck (Toronto), Drs. W. H. McDonald, and W. Nattress (Trin. College) have been admitted to the M.R.C.S., Eng. Dr. S. A. Metherell has taken the L.R.C.P. Edin. and L.F.P. & S. Glasgow. F. G. Finley, M.D., (McGill), has passed the intermediate examination for M.B. in the University of London, and D. G. Bennet of New Brunswick has taken the degree of M.B., C.M. in the University of Edinburgh.

Drs. J. Johnston, A. Hawke and J. H. McCullough (Trinity), have taken the L.R.C.P. Edin. Dr. J. C. Urquhart (Trinity), has taken the double qualification L.R.C.P. & S. Edin.

CORRECTIONS.—In our notice of Dr. D. Tod Gilliam's work on pathology, we inadvertently stated he was a professor in the Columbus Medical College. It should have been the Starling Medical College, Ohio.

The summary of the article on iron-dyed silk ligatures, by Prof. Pancoast, of Philadelphia, in our last issue, was accidentally omitted by the printer, together with the name of the journal, *Medical Bulletin*, from which the article was taken.

THE BRITISH MEDICAL BILL.—Although it was confidently expected that the Bill would be passed during the recent session of the British Parliament, it has been shelved for another year. Opposition was offered by the Irish and Scotch authorities interested at the last moment, and in consequence the Bill was withdrawn for the present. It is a good measure and will no doubt ultimately become law. A year's delay will only strengthen the hands of its friends and weaken the opposition of its enemies.

EUCALYPTUS GLOBULUS IN DIPHTHERIA.—A writer in the London *Lancet*, Sept. 1, '83, gives a list of 37 cases of diphtheria successfully treated by the use of steam saturated with eucalyptus globulus. He claims that the remedy contains properties which are antagonistic to the germs of diphtheria. He directs boiling water to be poured on the dry leaves and the steam to be inhaled constantly.

ACUTE RHEUMATISM.—The following will be found a most elegant mode of administering salicylic acid in the treatment of the above-named disease:

R. Sodæ salicyl..... ʒss.
Syr. limonis..... ʒj.
Aquæ cinnan..... ʒviij.—M.

Sig.—A tablespoonful every four hours.

SANITARY ARRANGEMENTS ON ATLANTIC STEAMERS.—The British Medical Association are moving for a Parliamentary Committee to enquire into the inadequate medical and sanitary arrangements on the Atlantic steamers. Mr. Chamberlain, President of the Board of Trade, intends introducing into Parliament a bill dealing with the subject next year.

APPOINTMENTS.—Dr. M. A. B. Smith has been appointed House Surgeon to the Provincial and City Hospital, Halifax, N. S.

Dr. Sutherland, of Calgary, N. W. T., has been appointed physician to the Canada Pacific Railway, western section.

REMOVALS.—Dr. Stalker of Ripley has removed to Walkerton, Ont. Dr. Hurlburt, of Brucefield, has removed to Mitchell, Ont. Dr. J. S. Smiley, of Rawdon, Que., has removed to Portsmouth, Iowa.

The *Canadian Pharmaceutical Journal* for September, 1883, comes to us in an enlarged and very much improved form. We congratulate our city contemporary upon its improved appearance.

SCHOLARSHIP FOR WOMEN.—Mrs. Alex. Cameron of this city, has presented a scholarship of \$60 per annum to the Women's Medical College, Toronto.

Dr. Oliver, surgeon (retired) Army Med. Dept., has commenced practice in this city.

Reports of Societies.

BRANT COUNTY MEDICAL ASSOCIATION.

The above Society convened in Brantford on the 4th ult., Dr. Harris in the chair. After routine the Society proceeded with the election of officers for the ensuing year with the following result :

Dr. Wm. T. Harris, President ; Dr. Robert H. Dee, Vice-President ; Dr. Wm. E. Winskel, Secretary-Treasurer.

Dr. Griffin showed a specimen of cancer of the bowel at the ileo-cæcal valve, and gave a very interesting history of the case. Drs. Winskel, Dee, and Harris each furnished notes of cases from practice.

Dr. Fairchild, of Burford, was elected a member of the Association. After some further business, the society adjourned to meet in Brantford on the 4th of December.

Books and Pamphlets.

THE PHYSICIAN HIMSELF, AND WHAT HE SHOULD ADD TO HIS SCIENTIFIC ACQUIREMENTS. By D. W. Cathell, M.D., Baltimore, Md. Baltimore: Cushings & Bailey. Toronto: Willing & Williamson. \$1.25.

This unpretentious little book has already, within a very short time, passed through three editions. The aim of the work is to inculcate professional tact and business sagacity, which, the author states, are "as necessary to the physician as the mariner's compass is to the navigator." It contains much good sound sense, and in a business-like manner informs the medical practitioner what he must add to his professional attainments to make his success in life more certain, rapid and complete. We are very much pleased with a perusal of the book, and would cordially recommend it to our readers, and especially to the younger members of the profession.

MEDICAL ESSAYS. By Oliver Wendell Holmes. Houghton, Mifflin & Co., Boston, Mass., 1883.

This volume contains a series of papers on various subjects which have been previously published separately, at various times, between 1842 and 1882. In the form in which they now appear they will be read with interest by all who like well-

written essays by an author whose fame as the "autocrat of the breakfast table" is simply world-wide. His Essay on Homœopathy—and, indeed, every one of the nine subjects treated of in the volume, is well worthy of perusal as the work of a gifted and most pleasing writer.

A PRACTICAL TREATISE ON IMPOTENCE, STERILITY, AND ALLIED DISORDERS OF THE MALE SEXUAL ORGANS. By Samuel W. Gross, M.D., Prof. Surgery, etc., Jefferson Med. College, etc., etc. Second edition, thoroughly revised, with sixteen illustrations. Philadelphia: Henry C. Lea's Son & Co. Toronto: Willing & Williamson. 1883. Pp. 176.

A work of this kind is most desirable, as in all parts of the continent the disorders referred to abound, sometimes through the vicious practices of patients, often through the mischievous influence of the quack advertisements which pollute the columns of the newspapers. The author has greatly improved on the former edition in the present issue. The work is one that can be cordially recommended.

HOW TO DRAW A SIMPLE WILL; WITH SPECIAL INFORMATION FOR CLERGYMEN AND DOCTORS, AND INSTRUCTIONS FOR EXECUTORS IN ORDINARY CASES. By D. A. O'Sullivan, M.A., LL.B., author of Practical Conveyancing, including Wills; Government in Canada; etc. Toronto: Moore & Co.

The above-mentioned brochure by Dr. Sullivan will be found exceedingly useful to all classes of the community. Every person should know something about wills and the proper method of drawing them. It is the design of this work to supply just such information as is required in this respect, and the author is to be complimented on the skill with which he has accomplished the object in view. We cordially commend the work to our readers.

ELECTRICITY IN MEDICINE AND SURGERY. By Geo. C. Pitzer, M.D., St. Louis. Second edition.

The present edition of this work has been revised throughout and considerably enlarged by the addition of chapters on the use of electricity in diagnosis, its use in asphyxia, chloroform poisoning, opium poisoning, cauterization, and the like. It contains full directions for using batteries, the object being to furnish the beginner with the principal facts embraced in the subjects of electricity and

electro-therapeutics. It is very concise, and will no doubt be found useful by those who have yet to learn the first principles of electro-therapeutics.

THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA. Sixth Decennial revision. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

The present edition is very much improved in many respects, not the least of which is the bold clear type in which it is printed. The committee of revision have done their work well. The defects, which are not numerous nor important, may be accounted for from the difficulty of the task before them. The revision of nomenclature will commend itself to all students of pharmacy. The titles of compound medicines are made to express their constituents, rather than their properties. There are a few exceptions, as for example, *Pil Cath. Co. &c.*, &c. The Latin names of alkaloids have been made to terminate in *-ina*, and the corresponding English names in *-ine* in preference to *-in*. A number of special alterations have been made after due consideration, as for instance: *alumen* for sulphate of aluminium, *chirata* for chiretta, *asafetida* for assafoetida, *cambozia* for gambogia, etc., etc.

THE PRINCIPLES AND PRACTICE OF SURGERY, by D. Hayes Agnew, M.D., L.L.D., Prof. of Surgery University of Pennsylvania. Profusely illustrated. Vol. III. Philadelphia: J. B. Lippincott & Co. Toronto: Willing & Williamson.

This is the concluding volume of this excellent work on Surgery. The present volume fully bears out the high character of those that preceded it, and which have been previously noticed in these columns. The learned and accomplished author is to be congratulated upon the production of a work on Surgery which has not been surpassed on this continent. As a work of reference it is of inestimable value to every practical surgeon. We cannot too highly commend the work to our professional brethren.

EARLY AID IN INJURIES AND ACCIDENTS, by Dr. Friedrich Esmarch, Prof. of Surgery, University of Kiel. Translated from the German by H. R. H. Princess Christian. Philadelphia: H. C. Lea's, Son & Co.

This work consists of a series of five popular lectures delivered in the so-called "Samaritan School," on this subject. The instruction in these lectures will be found of great value to the public, and the work should meet with a ready sale.

AN INDEX OF THE PRACTICE OF MEDICINE, by Wesley M. Carpenter, M.D., Pathologist to Bellevue Hospital. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

This work is gotten up very elegantly, in wallet form, and adapted for carrying in the pocket. The information is given in a concise form, namely, symptoms, diagnosis and treatment, and the pages are interleaved to facilitate note-taking in important cases. The work will undoubtedly serve a useful purpose in general practice.

GOUT IN ITS PROTEAN ASPECTS. By J. Milner Fothergill, M.D., M.R.C.P., London. Detroit: George S. Davis, 1883.

This is an eminently practical book, like all Dr. Fothergill's works; and any one who wishes, in small compass, to make himself familiar with the latest views regarding gout in all its forms, cannot do better than read its thirteen well-written chapters carefully.

WHAT TO DO FIRST IN ACCIDENTS AND EMERGENCIES, by Chas. H. Dulles, M.D., second edition. Revised and enlarged, with new illustrations. Philadelphia: P. Blakiston, Son & Co.

Births, Marriages and Deaths.

At Cobourg, on the 5th ult., Dr. G. W. Mac-Namara, of Tara, to Lilla, daughter of the late Angus Crawford, Esq., Cobourg.

At South March, Ont., on the 12th ult., Geo. H. Groves, M.D., of Carp, Ont., to Fanny, eldest daughter of G. W. Monk, Esq., M.P.P.

On the 19th ult., Geo. A. Kennedy, M.D., Surgeon Mounted Police, Fort Calgary, N. W. T., to Alice Maude, only daughter of Dr. Allen, of Cornwall, Ont.

At Kentville, August 30th, of cirrhosis of the liver, Henry Shaw, M.D., aged 52 years.

In Forest, Ont., on the 10th ult., Cornelius East, M.D. (Trinity), aged 35 years.

On the 23rd of August, Dr. J. B. Campbell, of Westfield, N. Y., formerly of Ontario, aged 38 years.

* * * The charge for notices of Births, Marriages and Deaths is Fifty Cents, which should be forwarded in postage stamps with the communication.