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## Original Communications.

### ON THE BROMIDES IN EPILEPSY.

BY PROF. G. LEE, HOTEL DIEU (*Revista Argentina*).

Translated from the Spanish by J. Workman, M.D.,  
Toronto.

What part of the therapeutic action belongs to the potassium, and what to the bromine? The action of the bromide of potassium on the organism has passed through strange vicissitudes. In the outset all the effects were ascribed to the potassa; after the labors of Traube the effects of the potassic salts became known, particularly of the nitrate on the heart, which, after a short period of excitement, suffered a certain degree of depression, with diminished blood pressure; and it was hence concluded that all the salts of potass, whatever might be the acid or the metalloid, possess true therapeutic properties; but experience soon showed the complete inertia of the chloride, the nitrate and the iodide of potassium in the treatment of epilepsy; it was then proved that potass in general, in whatever dose or combination, did not possess the least therapeutic influence over epilepsy.

This was the second phase of the bromide, diametrically opposite to the first. It is necessary to divide and separate the physiological action into two parts; on the one side, to discover its effects on the brain, the medulla and the skin, which represents its special nature; and, on the other side, its effects on the circulation, the respiration and the temperature, which would be those of its common or alkaline nature.

Here now we have the potass pretty well demonetised; but the physiologist limits himself to a few hours of observation on some animal whose intelligence he cannot penetrate, whilst the clinician sees and follows the cerebro-spinal phenomena for a long time, and does not hesitate to recognize

the pre-eminence of clinical medicine; it is this which teaches the therapeutic properties, and above all the cerebral action, of the bromides in general, and of the bromide of potassium in particular.

The latest investigations by Kroy, on man, show clearly that all the virtue resides in the bromine; yet, on the contrary, on animals, the excessive proportion of 67 per cent. of bromine against 33 of potass in the bromide passes, or may pass, through without producing the least effect.

The third vicissitude undergone by the bromide of potassium, not only despoiled it of its curative property, but transformed its action on the heart into a real intoxication of the organ; in this turn the disadvantages of bromism were imputed to the potass, which was regarded as decidedly lethal; and it was believed that it was merely necessary to replace it by some other alkaline base, in order to get clear of all the dangers of a drug which is prescribed through months and years. This gave birth to the bromide of sodium, the bromide of ammonium, and lastly to the mixture of these two with the inevitable bromide of potassium. The polybromides, perhaps for the very reason that their complex effects are unknown, are to-day much employed, as a consequence of the potassophobia; yet it is enough to know that the habitual dose of six grams of the bromide of potassium introduces into the system only two grams of potass. How has it happened that such a dose, taken into the stomach, has never produced the least inconvenience?

The ashes of alimentive vegetables represent 3 to 4 % of their entire mass; the mineral residues of the potato contain 60 % of potass, that is to say, more than a grain and a half for every 100 grams of the tuber, and yet neither its sedative virtue, nor the danger of its use, has ever been suspected. Lastly, it is easy to prove that in order to obtain the equivalent effects of 5 grams of the bromide of potassium, the dose of the bromide of sodium must be raised to 10 or 15 grams. So, in order to avoid a very uncertain danger, we inevitably, by this excessive dose of the bromine, fall into the grave inconveniences of bromism, as is proved by the convulsions caused by injections of the bromide of sodium, just as by those of the bromide of potassium, into the blood of animals. Rochefonte has demonstrated this by his investigations in my laboratory. The bromide of am-

monium is still more exciting, so that the three united salts do not present any advantage over the potassic bromide, which figures for one-third in the mixture styled the polybromide.

*Absorption and Dose—Effects of the Bromide on the Eliminant Organs—Slight Bromism of the Respiratory Mucous Membrane, and of the Skin.*

The bromide is readily and promptly absorbed by all the mucous membranes; after some minutes it appears in the urine, and is eliminated almost in totality in two or three days; hence the imperious necessity of continuing the treatment without interruption; at the most it may be suspended for a day at a certain time, or the dose may be decreased; but to suppress it is dangerous. I have seen patients who, from having neglected the use of the medicine for a few days, have been attacked with convulsive fits after a quietude of eight months or a year.

The bromide is eliminated by the kidneys in great part, very little by the salivary glands, and still less by the stomach; and these organs are, as we shall show, but little impressed by it. The same fact does not apply to the respiratory mucous linings, which also serve as a means of passage to the bromide; they are profoundly altered in its elimination. The pharyngeal mucous membrane becomes the seat of a pricking, painful sensation, and of a well-pronounced paleness, due to the local ischæmia; after the doses have been raised to five or six grams, the velum palati is anæsthetised more or less completely. Voisin, who has closely studied the effects of the bromide, advises that it be taken to the extent of 10 or 12 grams, that is to the production of insensibility of the isthmus of the fauces, which would be the sign of saturation; but there are such individual differences in this respect that we should run the risk of poisoning the patient before this indication of brominal impregnation might appear, which is, so to say, *en passant*, perfectly useless. Voillez has spoken of directly anæsthetising the fauces with gargles strongly bromidised, with the view of restraining the cough as well as the vomitings that follow the kinks in whooping-cough and phthisis; this mode of extinguishing the impressions of sensibility, which provoke the reflex acts of coughing, has had no good result; it is, in fact, very difficult to prolong the contact of the bromide

with the pharyngeal wall until we effect the loss of sensibility of the mucous membrane. The bromide does not act until after the gastric absorption, and the commencement of elimination of the bromide by the mucous membranes. For the same reasons we do not obtain, unless with difficulty, insensibility of the mucous membrane of the larynx from the mere action of bromidal sprays; in order to extinguish the sensibility of the larynx, as well as of the pharynx, it is necessary to imitate the process of Voisin, and saturate the patient; but to push to this extremity is very dangerous.

The bronchii are frequently the seat of a sharp irritation, which results precisely from the elimination of the bromide by the secretory glands, when it is presented as well as in the bronchial mucosa, in saturated epileptus; this bromic bronchitis, which is introduced by a short, irresistible cough, dry at first, and followed by a slight expectoration, is one of the most grave obstacles to the continuous treatment which epilepsy demands; I had believed it well to quiet this cough, which occurs chiefly in the night, by conjoining atropia with the morphia, but the result of the combination was generally harmful: either the cough did not cease, and it became necessary to interrupt the treatment, and even in three of the most grave cases to give up all medication; or, though the narcotics succeeded in calming the cough, yet they nullified the effects of the bromide; it appeared to me, however, that the tincture of the root of aconite, in doses of one grain per day, presented some advantages over the other narcotics, and above all over the expectorants (such as antimony, sulphur, turpentine), which only aggravate the evil. What, then, after these facts, which are so easily proved, are we to think of the prescription, in obedience to certain precepts, of the bromide in bronchial irritations?

I do not know of any sort of cough, whether of whooping-cough, of hysteria, or still less of tuberculosis, in which relief is derived from the bromide; the very contrary is the result. It must be stated that these prejudicial effects are observed even with the moderate doses of three grams; I have seen a young epileptic girl who could never exceed the dose of a gram and a half. What, then, would have been the result of large doses? In studying the grave bromism we shall find pulmonary inflammations resulting from the abuse of

bromine ; I could cite three unfortunate and convincing examples.

In the skin, as in the bronchii, both a slight and a grave bromism are produced. It is very rare that the bromide, which is eliminated by the integument during life, or, in fatal cases, is found in the sudoriferous glands and likewise in the sebaceous follicles, does not, from the first day, produce a very evident effect on both layers of the skin ; even from the first day, in small doses, it produces acnes, which are seated preferentially on the face or the breasts ; two or three grams suffice to bring this eruption, and it may be generalised and become numerous, so as to prevent the continuation of the treatment. In these cases I have always employed, with good results, arsenic in addition to the bromide ; of late it has been proposed to use the bromide of arsenic, but it offers no advantage over the bromide of potass., with the addition of 10 or 12 drops daily of the solution of Fowler.

The kidneys are not changed either in structure or function in the elimination of the bromide ; they do not secrete a larger quantity of urine than they do in the normal state, consequently the bromide cannot be regarded as a diuretic. Neither does the bromide change the composition of the urine ; we merely know that it contains more chloride of potass, which leads to the supposition that the bromine leaves its base and that it joins with the sodium in the blood, forming the bromide of this substance ; this would be another proof that it is the bromine alone which acts, whatever may be the alkaline base ; we shall see presently whether it acts on the oxidations, and consequently on the quantity of uric acid and urea eliminated in the urine.

The salivary glands eliminate the bromide with less facility than they do the iodide, but if the dose be increased a notable quantity is found mixed in the saliva ; at the same time there is manifested, without doubt from the reflex action produced by the bromine on the maxillary nerves, a salivation which is frequently abundant and dangerous, and contributes not a little to the enfeeblement of the patients.

The gastro-intestinal mucous lining seems to be but little impressed by the bromide ; it causes gastric pains at the moment of its introduction into the stomach, but these may be avoided or calmed by diluting the salt with a sufficient quan-

tity of water ; the majority of patients, especially if they take the medicine in solution in their aliments, experience no change in the gastro-intestinal functions, nor any painful sensation, dyspepsia or constipation. This functional immunity leads us to suppose that the medicine is not eliminated by the digestive mucous linings, as iodine is. The secretory organs most briskly attacked are, as is seen, the respiratory mucous membrane, on the one part, and the integument on the other. This is what constitutes the first degree of bromism, as indicated by Huchard.

*The Bromide is a Vaso-Constrictor-Medicament, that is to say, an Anemiant.*

After having shown the bromine as acting solely by reason of its two constituent elements, and having pointed out the first degree of bromism of the skin and the bronchii, we now come to define the true and useful properties of the bromide. The principal are two ; one proceeds from the vaso-constrictor effects, that is to say, from its anemiant action ; the other consists in its depressing action over the general reflex power, and more still over the excitability of the general cortex (? cerebral).

The faculty possessed by certain energetic medicines, of acting on the vessels through the intervention of the vaso-motor-centre, has long been established ; some provoke contractions of the vascular muscles ; such are the bromide of potassium and the ergot of rye ; others cause active dilatation of the arterioles, as we showed, conjointly with Meuriot, 20 years ago ; others paralyze the vascular tunics, as the nitrates of amyl and soda ; with the last named we may include curare. It is very remarkable that these medicaments are precisely those which have been prized in the treatments of epilepsy, and often for curious reasons ; for example, the bromide to combat the genital excitation ; belladonna to diminish the spasms ; curare to provoke a curative fever, and the nitrates as energetic and rapid sedatives. In reality, if we abandon the false data of empiricism, and seek for the scientific solution of this complex problem, therapeutics and experimentation fall into accord, and we easily comprehend how so important a role is acted by these vascular-medicaments, and why they deserve to be taken into consideration, despite their qualities, most diametrically opposite from the point of view of their vaso-motor action.

The bromide is undoubtedly an anemiant; Sakokoski, Samola, Sezutzki and all the experimenters are unanimous on this point. By exciting, in the vaso-motor centre the constrictor nerves, the field of the circulation becomes restricted, particularly that of the bulb and the encephalon; it is known that anemia of the medulla oblongata is an experimental character of epilepsy. How are we to reconcile with this fact the beneficial action of the bromide? The reply is easy. The epileptic fit begins with anemia, resulting from the excitation of the vaso-constrictor nerves; against this transitory phase the bromide is powerless, but the fit continues and it ends in a hyperæmic process which provokes vaso-dilatation. It is by its antagonistic and vaso-constrictor action that the efficacy of the bromide is explained; but this is not all: it possesses, as we shall show, a strongly depressive power, or as we might say, a destructive one, over the reflex excitability, alike over the brain cortex and the bulb; consequently it impedes the attack and may also restrain the evolution of the disease.

Well now, is there a single vascular medicament that can be compared to it? Not one. The ergot of rye, which is a vaso-constrictor, visibly excites the reflex power of the medulla; belladonna, which is a vaso-dilator, excites the reflex excitability; as to curare it meets no requirement whatever, by paralyzing the vessels it operates lethally; as to the nitrites of amyl and soda, they have but an ephemeral effect on the fit and the vertigo, and they are, so to say, impracticable because of their toxic action. It now remains for us only to prove the depressing property of the bromide on the excito-motor system.

*The Bromide Represses the Exaggerated Excito-motility in Epilepsy.*

Hurette and Rames, in 1850, recognized in the bromide the anti-excito-motor property which readily explains the insensibility of the pharyngo-laryngeal mucous lining, under the influence of large doses. Laborde has studied this special faculty, which acts also on the genital innervations. Since my first investigations in 1858, when my attention as well as that of Brown-Sequard, was given to the hypnotic, or better to say the sedative effects, which in no respect resemble narcotism, and consist above all in a diminution of the impressionability by external influ-

ences, the bromide, taken to the extent of three or four grams nightly, has procured the most tranquil sleep, leaving no vestige of heaviness or pain in the head, such as follow the action of opium. I have utilised this sedative potency of the bromides from the outset of the megrim, which aborts, or is in a certain way shortened.

All these clinical facts ought to leave not the least doubt; an experimentation of late by Albestoni, lauds a physiological proof that seems to me irrefutable, and applies marvellously to epilepsies of cortical origin. By electrising the cerebral cortex, after laying it bare with the trephine, Albestoni produced partial, and often general convulsions; when he previously administered to the animal under experiment two or three grams of the bromide, the electro-excitability of the cortex diminished considerably, and so much the more the longer the action of the bromide was kept up. The medicine, in a certain dose, impedes the electricity in producing convulsions; it appears that resistances are formed in the bromidised encephalon, or this propagation of the excitation to the psycho-motor-centres is prevented. There is then produced a true excito-motor-paralysis, which is all the more curious as the voluntary movements continue unaffected. In proportion to the suppression of the bromide, this state of the encephalon disappears; it recovers its prior excitability, and the electric excitations acquire their convulsive potency.

It is impossible, in this ingenious experiment, to ignore the proof of the depressing power of the bromide over the excitability of the brain. In comparison, Albestoni met with nothing analogous in belladonna or atropia, nor in curare; all these poisons increased or exaggerated the reflex sensibility; nothing further then is to be expected. The bromide is the unique vascular medicine, and at the same time a real anti-excito-motor.

*Grave Bromism.*

It now remains for us to point out the inconveniences, frequently the dangers, of an intense and continued bromidation.

When it is prescribed without the precautions we have indicated, permanently in six grams or more, the patient is exposed to grave alterations in the skin, the mucous membranes—principally the respiratory—failure in the heart's action and

the circulation, and general depression of the encephalic system. I thus summarize the grave bromism: The mouth acquires a foul odor, the gums become pale, and an incorrigible salivation is established, which rapidly saps the powers of the patient. The heart acts slowly and weakly; in doses of 15 grams daily its beats are reduced to half the normal number; by prolonging the administration of these doses, the intra-cardiac nerves and the cardiac muscle itself, may suffer a commencement of paralyzation. At the same time the intravascular pressure is weakened, and the temperature may descend. What is still more grave is the deterioration, or general impairment, produced by a well-marked elimination of phosphoric acid and urea. The peripheral circulation feels this loss of the general forces and of that of the heart; the patient acquires an extreme paleness, with brownish tints, or the extremities even assume a livid hue, which indicates sanguineous extases. The respiration is, in its turn, attacked; besides the cough and the bromidic bronchitis, which are frequent and often severe, I have seen a mortal pneumonia, which I attributed to the bromide, three times produced; one of these cases was followed up by my colleague and friend Peter; it was that of a girl, with deformity of the cranium, who was attacked by epilepsy; the second case was also of a girl who was an idiot; she died of pneumonia with grave alterations of the skin; the third patient was a boy of four years, who took five grams of the bromide prescribed by a physician who treated him by correspondence.

It is, finally, necessary to signalize that excessive debility which amounts even to impossibility to walk, and to hold the trunk erect, a sort of drunkenness, with general insensibility, somnolence, expression of horror, depression of memory, involuntary emission of urine. As soon as any of these manifestations are presented, all treatment should be suspended for a longer or shorter time, and the doses that have provoked the bromism in the skin, the respiratory or the nervous system, must not be renewed.

#### *Physiological Rules of Bromidation.*

It is not enough that we prescribe the bromide even in regular moderate doses, sufficient to obtain a favorable, and above all a definitive, result; it is important to observe all the rules taught by

physiology, for the diminution of reflex excitability. I described these in 1868; they may be found clearly formulated in those valuable annotations which my friend and co-worker, Labadie-Lagrave, has added to the book of Hammond, of which they constitute the complement, and are at the same time an indispensable commentary. I quote textually thus: "The efficacy of the bromide depends almost exclusively on the depressing action which it exhibits over the reflex power of the medulla oblongata and spinalis. Everything that may counterbalance this action, everything that may awaken the morbid excitability of the nervous centres, must be severely proscribed. Epileptics must be forbidden alcoholic drinks, wine, beer, or gaseous waters; alcohol and carboic acid singularly arouse the faculties of the excito-motor and bulbo-medullary systems. Coffee and tea usually have the same result. The patients must abstain from smoking; the nicotine, by exaggerating (?) the vascular action of the bromide, and in a certain way tetanising the arterioles of the nervous centres, seems to extinguish the useful effects of the bromide. Violent gymnastics, the various hydropathic practices, particularly sea baths and douches, have a very fatal action, by provoking return of the fits. The same result follows physical pains, moral emotions, and genesic excitations."

I forbid all active medication, such as purgatives, emetics, revulsives, cauteries, etc., which are capable of producing a great disturbance of the organism; with still greater reason is it necessary strongly to prohibit abstractions of blood.

#### *Auxiliary Means.*

The auxiliary means which I have been enabled to approve of, are iron, especially the tartrate of potass and iron, one gram daily; arsenic under the form of Fowler's solution, 12 drops daily; quinia in extract and the sulphate of quinine; lastly, cod liver oil, and above all oxygenation by permanent residence in the country; such are the strengthening medicaments destined to combat the dangers of bromism and the weakening of the nervous system.

Bodily exercise in the open air, without fatigue, moderate intellectual work, well directed, constitute the most important auxiliaries—let these be attended to above all in controlling the education

of children ; the due functioning of the brain hinders it from atrophying. It is to be kept in mind that functional debilitation of the brain leads to exaltation of the medullo-bulbar system, and therefore tends to exaggeration of the excitomotor power, that is to say, to the return of the epileptic fits.

The bromide, in medium doses of five to six grams, rather exalts than depresses the intellectual powers, which are generally intact between the fits, often indeed much developed, as I have seen in numerous examples ; history records great geniuses of this class, as Cæsar, Mahomet and Petrarch, who were epileptics.

*General Results of Bromidation in the Various Epilepsies, and their Principal Manifestations.*

1st. Of 150 epileptics treated by me in 25 years, 90 of whom have been closely observed, during two years and over, the majority began the treatment in ages between 10 years and 30 ; the commencement of the disease dated back to various epochs ; among those who had not reached ten, or who had passed 30, I cite the following : a boy of two years, who had never been able to take more than 25 centigrams of bromide per day, without falling into a profound prostration ; he remained without treatment during four years ; afterwards he took the bromide, and the fits disappeared. In an analogous case, in a boy of three years, the dose of a gram daily continued for two years, brought about, after some periods of physical depression, a complete cure, and he has continued free for many years. Amongst those over 30 years old, I mention one patient of 52 years, whose mother was an epileptic ; his attacks had lasted over 20 years ; he marvellously recovered, and his children are exempt from the disease.

2nd. Among these 150 epileptics, I count 10 cases due to deformity of the cranium with idiocy ; not one of these was cured ; three died after some alternations of relief ; death in two of the three was due to bromidic pneumonia, and in the third to ulcerations of the skin, with cachexia. In the remaining 140 cases, I have noted three of vertigo without fits ; in one of these the disease has resisted all treatment ; it was that of a well-formed girl, very intelligent, who had 40 vertigos daily ; all the means employed were useless ; the bad result of the bromide is explicable by the cir-

cumstance that it is much less operative in cortical than in vaso-motor epilepsy. (?)

3rd. All the rest of the patients had convulsive seizures, some of which were preceded by asthma (*asma, ? aura*). In the great majority, whatever had been the previous number of the attacks, the disease was ameliorated in this way : the crises disappeared, not to return, unless rarely and far apart, and always so attenuated that the patients did not fall, nor lose consciousness, or have convulsions. Two-thirds of the patients in this category were followed and observed for years ; 12 recovered completely, and were able to leave off all treatment. All those who did not recover had suffered the effects of bromism up to the point of being forced to give up the treatment, for a certain time at least ; three young girls and a boy of four years had bromic disturbances of the bronchii, so persistent that I was obliged to renounce the bromide, or arrest its effects with aconite. In five other instances I had to contend with bromism of the skin, which became the seat of general eruptions that were often confluent ; here the addition of arsenic almost always succeeded in removing this complication. When these difficulties were surmounted, I had nothing to fear, unless errors of hygiene, regimen and drink ; unseasonable or too long bathing, and above all hydrotherapy, which hardly ever failed to produce disastrous effects.

4th. The effects of the treatment on the brain have been almost always favorable. Bennett, who has published a series of statistics in this relation, proves the perfect maintenance of the general and the intellectual powers in at least three-fourths of the cases submitted to bromidation, throughout five years. When the intellect becomes weak, the fact is always attributed to the treatment ; it is easier and less humiliating to the relatives to fall upon this alternative than to admit the real cause, which is the disease, invading and degrading the brain as it progresses.

In fine, the majority of the organs remain intact ; their functioning continues normal, and bromidation, well directed, with observance of the precautions indicated, may produce a definitive cure.

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Luton of Rheims, and Verneuil of Paris recommend strychnia in hepatic affections of alcoholic origin.—*L'Union Medicale*.

## REPORT ON SURGERY\*

BY W. BURT, M.D., PARIS, ONT.

## NERVE-STRETCHING.

The following summary, gleaned from the "Bradshaw" lecture, delivered by John Marshall in December last, gives us the principal information now in our possession in reference to this recent operation. In the operation of nerve-stretching there is a palpable stretching. Nerves nearer to the spinal cord are rather more extensible than those at a distance. This may be owing to the relatively less thickness of the sheath. The distant nerves are smaller, but they are probably better protected. The nerves of the upper limb are more extensible than those of the lower limb, probably for the same reason that the nerves of the lower limb are better protected by sheaths; for we must recognize that it is the sheath that bears the strain when we pull upon a nerve. After a nerve is stretched it recoils. One observer states that after stretching a nerve it recoiled one-fortieth of its length. The safe therapeutic weight varies from about 1 lb. up to 30 lbs. The former, for the smaller nerves, as the mental, the latter for the great sciatic. When nerves are stretched, the epineurium and perineurium lose their wavy appearances and become straightened; the natural segmentation of the medullary sheath gives way to an irregular breaking up. Sometimes the tubuli break, and still more rarely the axis cylinder gives way. After this the nerve degenerates, and after the whole mass of nerve has become disintegrated, restorative changes follow and its function is gradually restored. Sensation and motion are the first to be extinguished, and lastly reflex action.

*Effects on the Cord.*—Practically there is no stretching mechanical effect propagated through the roots of the nerves to the spinal cord. In the sciatic, the stretching effect passes to the sciatic plexus, passes to the roots of the nerves, where it must disturb the spinal ganglia on the posterior roots and it must disturb the dura mater. It may by disturbing the dura mater shake the cord a little through the ligamentum denticulatum on either side, but we find no change of tension in the intra-spinal or intra-meningeal part of the nerve, and no movement in the cord. The effects are

bilateral. The effect of stretching nerves on one side passes over in various degrees to the other side of the nervous system.

*Therapeutics.*—Specially successful in peripheral paralysis and neuralgias of all kinds; less so in tetanus; still less so in epilepsy and tabes. In the case of neuralgias, the presence of *nervi nervorum* is assumed, and that it is through the rupture of these that the pain is got rid of. Nerve-stretching is said to act, not only by rupturing the assumed *nervi nervorum*, but in other cases by partially benumbing or paralyzing the internal tubules, arresting their function for a time, or, further, by indirect effects on nerve centres. In tabes and central neuralgias it is said to act by producing some indirect effect upon central nerve elements through trophic changes, probably induced by the disturbance of vaso-motor action.

The operation is performed, with one exception, by exposing the nerve, lifting it with the thumb and finger until a *palpable* stretching is produced. Sufficient force is to be used until the nerve sensibly yields to your traction—until you feel an internal creeping movement in the particles of the nerve, of the sheath, no doubt; until you feel a certain attrition and vibration going on—and you must educate yourself to that, and then you will be safe. The thumb and finger can stretch with a force equal to a weight of 30 lbs., the amount said to be sufficient for the largest diseased nerve, the sciatic. Stretch both ways for neuralgia. It is of less consequence to stretch from the extremities in tabes; it is essential to stretch from the trunk or body. A continued even force, firm and resolute, is desirable. Without cutting, Sayre reports, a positive improvement in tabes in thirteen out of fifteen cases, from the use of his suspensory apparatus, for ten minutes three times a week, the sciatic can be well stretched by forced flexion of the lower limb. It appears from the above that the cutting operation should not be resorted to for tabes. The dangers are those of chloroform, thrombus, pyæmia, and disease of the spinal cord, set up by the operation.

## NEUROTOMY.

To the above collection of material in reference to nerve-stretching, I might add the result of neurotomy in a recent fatal case of traumatic tetanus. Patient had the last phalanx of the left

\*Read before the Ontario Medical Association.



ring-finger crushed, splitting the bone into lateral halves. As much of the phalanx was removed as was thought would insure ready healing. When the finger was about healed he complained of not feeling well, but kept at work. On the second day of illness, found jaws closed and spasms coming on, causing him to rest on his abdomen and chest. On the third day, temp. 102; neurotomy of the ulnar, median and radial nerves was performed, completely isolating the finger. The joint was removed at the same time. Chloral and potass bromide were used. By evening the mouth could be opened with the greatest freedom, and only during the spasms would it shut violently. The spasms, however, continued; the temperature gradually rose, and on the third day after the operation death ensued. The only direct effect of the operation, in this case, was the relaxation of the muscles of the jaw. The reason of the delay in operating in this case, was the almost total absence of the spasms for a time, under the use of the chloral and bromide mixture. They however returned violently, although the medicine was kept up with the result above stated. There appears no doubt that it is through the medium of the nervous system that the blood changes if any are induced. I have no doubt, however, that the pathological changes take place first in the nervous system, whether the disease be idiopathic or traumatic.

#### ACCIDENTS OF GAMES.

*Foot ball.*—I will simply quote a few paragraphs that should prevent a Canadian adopting the rude and barbarous sport of the United Empire. I refer to the Rugby game. What is said by surgeons in England against foot ball, is aimed chiefly at the Rugby rules. If these rules are entirely done away with, or even modified, I believe it will be because of their unanimous condemnation by the profession. Surely unavoidable accidents happen only too frequently without playing according to rules, the inherent nature of which will lead to serious injuries. A. Williamson, manager of the Northern Accident Insurance Co., states in the *Lancet*, "that he had been compelled to decline renewing all special policies covering foot ball and bicycling accidents only, as our experience went to show that these risks, as a special class, were most unprofitable." The accidents attending other sports cannot be numerous or dangerous, for he states, "all our

general accident policies cover these risks (foot ball and bicycling) without extra premium." The *Lancet* states that our often repeated assertion that accidents arising from foot ball, as at present played, are more numerous than those occasioned by any other athletic exercise. One of the most painful features of foot ball is the fact that so many of the injuries received in playing this game, when not immediately fatal, often incapacitate the player for life, and render him a burden on his relatives. Such phrases as the following appear in the English medical periodicals, referring to the Rugby game: "The uncontrollable brutalities and roughness of the pastime."—"Brutal and dangerous." Without doubt the consensus of opinion of surgeons is that no such game as the Rugby should ever be indulged in. Under modified rules accidents happen only too frequently. During two seasons of short duration your reporter observed in the matches he played in, a broken clavicle, a dislocated elbow, a fractured pelvis, a case of temporary unconsciousness, besides many minor injuries, chiefly bruises to the shins and ankles. Even this much happened under rules which did not permit the carrying of the ball. From the medical literature on the subject, it appears that those who would approve of the Rugby game, and who see in it manly qualities, would approve likewise of a bull or cock fight. The chief danger of the Rugby game appears to be affections of the spine, resulting in muscular paralysis.

*Cricket.*—This pastime is not altogether free from accidents, but I think it may be asserted that if the crease is a good one the accidents will be few. The players who receive most bruises are the wicket-keeper and the batsman. If played, however, according to custom and rules, bruises are very rare. In the past two years while on the cricket field, I noticed a fracture of the zygomatic arch, in a wicket-keeper, and a fracture of the nasal bones in a batsman. Both of these accidents were due, it is altogether likely, to an imperfect crease. No game it appears could be more free from accidents, although it is not uncommon to see a wicket-keeper or a batsman lay sprawling on the ground from the ball occasionally striking the testicle, but the injured one soon recovers and proceeds with the game. Accidents of a more serious nature are very seldom reported from the cricket field.

*Lacrosse.*—Accidents in this game occur undoubtedly, in proportion to the manliness of the

players, whether they play with the ball or play at each other. It will rest mainly with the umpire if accidents are numerous. It is in their power to prevent them. Many a scalp wound and bruise has occurred unnecessarily; but neither in lacrosse nor in cricket is there any special injury which has taken the name of the sport.

*Lawn Tennis.*—It is to lawn tennis that we look for special accidents that have taken the name of the game.

1st. We have lawn tennis arm, a rupture of the pronator radii teres, produced by the back stroke.

2nd. Lawn tennis leg, a rupture of the plantaris, the symptoms of which are quite marked and uniform.

3rd. Lawn tennis knee. This last consists in nearly every conceivable sprain or bruise of the ligaments and cartilages of the knee-joint.

I shall not refer to the various motions which produce these injuries, but will simply state that it is well to know that these injuries are inherent in the game of lawn tennis, which has now become so fashionable. An intelligent knowledge of these minor accidents, as it were, are not beneath the careful study of the surgeon. And here I cannot help referring you to an exceedingly clear report of a case of lawn tennis leg, by Dr. Powell, of Ottawa, in the *London Lancet*, of July 7th, 1883.

*Bicycle.*—As to the bicycle accidents, although their name is legion, there is none which have the name of the game. It is simply alleged that varicose veins of the lower limbs, as well as varicocele, may be caused by it, and that hernia inguinal, if not produced, is at least aggravated by it, but the evidence is as yet conflicting.

*Base-Ball.*—Accidents from this sport are divided chiefly between the pitcher and catcher. A few years ago I observed, in a pitcher, a swelling and tenderness in the region of the attachment of the biceps to the head of the fibula, no doubt due to a sprain of the muscle. The pitcher's movements are such that it is altogether likely this injury may result from it. On advising him to abstain altogether, he got well, but before doing so the trouble was aggravated at every attempt. He can now, however, ride the bicycle without any return of the affection whatever.

The above is simply an imperfect glance at the accidents in connection with the out-door sports which are so much indulged in.

#### GUNSHOT WOUNDS.

And here I wish to quote from a lecture delivered by Sir Wm. MacCormac, of St. Thomas' Hospital, London. He states: "That there is infinitely more danger created by the surgeon who attempts to search for and extract a bullet, than would result from leaving half a dozen bullets to take care of themselves." This has not been my own experience in reference to pistol-shot wounds. I shall refer to only one example. A patient came under my observation, who accidentally shot himself in the wrist. He was kept under ether some three hours, it was alleged, but the bullet was not discovered. Considerable inflammation in and about the wrist, with stiffening and a contracted hand following, which only yielded after prolonged treatment. This may have happened without the prolonged search, but with my present knowledge of the subject if the bullet required a search in order to find out its locality, the search should not be made." Further on he states in regard to gunshot wounds of the abdomen: "Some months ago Marion Sims published, in one of the medical journals, an interesting series of papers in which he said that these injuries should not be left to themselves; but what he proposed was that the abdominal cavity should be opened and searched, the bullet be found and extracted, the peritoneal cavity then be cleansed antiseptically and closed, after which treatment it might be possible for recovery to follow, when death was otherwise almost inevitable." Such it appears has been the action taken in reference to gunshot wounds, which has been attended with the best results. But the change is not general yet, and it is to draw attention to this important subject that the above short report of gunshot wounds is made.

#### MEDICAL NOTES FROM THE NORTH WEST FIELD FORCE.

BY G. STERLING RYERSON, M.D.C.M., L.R.C.S., ED.  
Acting Surgeon, Royal Grenadiers.

It speaks well for the constitutional stamina of the regiment to which I belong and also for the field force generally, to be able to report that there is no serious illness among either officers or men. Diarrhoea has been somewhat prevalent, owing largely to the alkaline character of the water, which only was obtainable. There have been a few cases

of dysentery also. Coughs and colds have been common, as might be expected in men unaccustomed to live in tents. Only one case of pneumonia has occurred in this column and that in a man who had suffered from it before. Rheumatism is also met with, but almost invariably of the muscular variety; four men who had suffered previously from chronic articular rheumatism were sent to the rear from the Grenadiers. The sufferings from cold and exposure on the north shore of Lake Superior were most intense, but the men bore up with a most cheerful uncomplaining spirit and no serious trouble arose from it. The most trying part of the journey was the night march on the honey-combed ice, of ten miles to Red Rock, in a blinding rain storm. The men were so exhausted that some went to sleep standing up.

The supply of food has been ample and of good quality, but there has been a great dearth of vegetables, canned or otherwise. Lime juice ought to have been sent to supply their place if unattainable. Common salt is also scarce. Oatmeal would be a boon to the troops. Milk can be occasionally had at 50 cts. per quart and butter at \$1 a pound. The scouts bring in captured cattle which keeps us supplied with fresh meat. The difficulty in obtaining fresh supplies can be imagined when I mention that we are 230 miles from the nearest railway station and in an enemy's country, where the people are forbidden by the rebels to sell us anything on pain of death. We are obliged therefore to help ourselves whenever the opportunity presents itself.

The medical officers with this column are Dr. Orton, P. M. O., Drs. Codd, Grant, Whiteford and myself. I have also eight trained ambulance men under me, with Hospital Sergt. Hazelton belonging to the Grenadiers. They have proved of great use in the recent troubles, and I should urge on all medical officers the formation of such a corps in their regiments; one or two men per company, with one regulation stretcher to every four men is sufficient. The wounded in the battle of Fish Creek were promptly removed to the rear by the bandsmen of the 90th Battalion. They showed great devotion and courage, and were often under fire, as were also the surgeons in going to the front to arrest hemorrhage. I would particularly mention Drs. Whiteford and Grant.

The case of Lieut. Morrow, who was accidentally shot by Mr. Fox, *Mail* correspondent, at Camp

Desolation, is interesting. The ball entered the thigh at its anterior and inner aspect, ran under the skin for about six inches, there the probe stopped. As I could feel no ball I cut down on the end of the probe and found that the probe then took a direction downwards and backwards towards the buttock. I passed the probe in its full length, seven inches, and as I could feel no ball I determined to leave it, especially as he had to travel 60 miles in an open sleigh to get to Dog Lake Hospital. The first direction of the ball was towards the middle of Poupart's ligament, and it is most curious and providential that it should have taken a turn at an obtuse angle and passed into the back of the thigh. A somewhat similar case is that of Pte. Swan, 90th Batt., who was shot at the battle of Fish Creek, April 24th, in the inner side of the left arm at its middle third just over the brachial artery. The ball passed beneath the skin under the edge of the deltoid and disappeared in the axilla. No irritation had occurred a week after the wound had been received. The wounds in this action were nearly all given by large round balls from smooth-bore shot guns. They caused great bruising and crushing of the tissues. Their course was often circuitous. Pte. Kemp, 90th Battalion, was struck just to the outer side of the femoral artery as it enters the thigh. The missile passed between the muscles of the abdomen, followed around the loin and lodged in the muscles of the back. There was cellulitis but no peritonitis. A curious case was that of Lieut. Swinford, who was shot the same day. The ball struck him at the temporo-frontal suture, about two inches above the zygomatic process. The skull was extensively fractured, and there was hernia cerebri, but he was conscious and rational. In this state he continued with occasional nocturnal delirium for five days when his speech became impaired, and he died on the sixth day with symptoms of pressure. At the *post mortem* the ball, a large round one, was found imbedded in the brain at a depth of about two inches. Some portions of bone were found driven in. The skull was extensively fractured on the injured side.

A son of our esteemed confrère Dr. Canniff, was wounded in the same action by a round ball. The projectile entered the posterior surface of the right forearm about three inches from the olecranon process on the radial side and lodged an inch above it. As the arm was in extension at the time it was

wounded, and as no opening could be found into the joint, it is believed that it escaped.

Three amputations were performed, two through the middle of the arm and one at the surgical neck of the humerus, also one excision of the elbow joint shattered by a shot, but vessels intact. All were doing well when they left for the base hospital at Saskatoon, on May 1st. The total casualties were 31 wounded and 10 killed, including 1 officer killed and 3 wounded. The wounded were transported to the rear in stretchers made of hides slung in waggons. They were all comfortable on starting.

Camp, Fish Creek, N. W. T., May 2nd, 1885.

### Reports of Societies.

#### HAMILTON MEDICAL AND SURGICAL SOCIETY.

May 5th, 1885.

Dr. Stark, Vice-President, in the chair.

Dr. Mullin exhibited a pathological specimen—  
an ovum of two months.

Dr. Leslie then read a paper on "The Germ Theory." The paper went very extensively into the subject from a theoretical point of view, dealing with the researches of different observers as to the nature of cells, and from these proceeding to a description of the various kinds of germs. The subject of spontaneous generation was then taken up and the question of disease germs was considered. After a lengthy description of Lister's views and system, and the various opinions with regard to it, reference was made to Koch's investigations as to the nature of cholera and the discussions that had arisen. Drs. Mullin and Malloch both supported the germ theory, the latter especially speaking with reference to Listerism, which he considered to be increasing in favour and had exerted a beneficial influence. Dr. Rosebrugh gave the particulars of an interview had in Edinburgh with Keith as to the sufferings of the latter when using the carbolic acid spray, and the necessity arising for its discontinuance. Dr. Rosebrugh also spoke of his observations in London and Birmingham, all of which tended to show how much operations now depend on cleanliness. Dr. Leslie, in responding, stated that though at present he thought the evidence was against the germ theory, yet the growth and multiplication of germs in the body was a strong argument in its favour.

May 12th.

The President, Dr. White, in the chair.

Dr. Malloch presented a pathological specimen—carcinoma of the pyloric end of the stomach. Dr. McCargow showed a finger which had been opened for whitlow, but too late, as there was denudation of the cartilage of the articular ends of the first phalanx and the adjoining metacarpal bone of the left fore-finger, while there had been a large abscess formed under the pectoral muscles of the same side extending from the axilla, its original site, to within an inch or two of the sternum, and extending downwards over a space corresponding to three or four ribs.

Dr. Rosebrugh then read a short paper on "Intra-uterine Medication." The paper began by referring to the fact that in the greater number of cases of apparent disease of the inner surface of the organ there is, as a rule, some special cause for the symptoms, such as a flexion or version, which removed, the symptoms will soon disappear under very mild treatment. Consequently in all uterine diseases great pains should be taken to make a correct diagnosis, for experience shows that when the case is thoroughly understood the treatment is simplified and more easily accomplished. As an instance, was given the alarming symptoms presented by a case of chronic retroflexion with laceration of the cervix, so easily relieved if these primary conditions are only remedied. The class of cases requiring intra-uterine medication were summarized as follows: 1st, chronic endometritis with the following characteristics: general enlargement of the body of the organ; considerable dilatation of the corporeal cavity, and the endometrium in a condition of fungoid or cystic degeneration, giving rise to a muco-purulent leucorrhœa and frequently to a profuse menorrhagia. 2nd, uterine catarrh, with an albuminous secretion that persists, despite ordinary treatment. 3rd, habitual abortion, independent of syphilis and ovaritis, and seemingly due to some morbid condition of the endometrium. 4th, membranous dysmenorrhœa. 5th, the flabby uterus frequently associated with subinvolution. Having spoken of the difficulty of separating the treatment of the endometrium from that of the os and cervix, while often if the disease of the latter is removed there is no further trouble with the former, the essayist stated that he no longer used tents to dilate the cervical canal, as he found that the applicator

or curette could be introduced without any previous dilatation. If any was needed, the steel dilator could easily effect it. He stated that he had never used strong caustics in the solid form, though where the endometrium is decidedly diseased it becomes more tolerant of heroic treatment; but in such cases he found the most effective agent to be the fuming nitric acid. This he applies by means of the cotton-wrapped applicator, guarded by a glass tube through the cervix, the lining membrane being pretty well swabbed. Except in obstinate cases, and then only at long intervals, the application has not to be repeated. Never had he seen colic or the other alarming symptoms frequently generated by crayons of strong, solid caustics. Churchill's tincture of iodine has been proven one of the most efficient applications, its action being that of a local stimulant to uterine contraction and a general alterative or nutritive. Nitrate of silver he seldom employs, because of its severity as an astringent to the small blood vessels, and its continued use causing too much contraction of the os and cervix. Its use should be confined to the soft flabby uterus with enlarged patulous os and profuse cervical discharge, its contracting effects being carefully watched. Carbolic acid and glycerine, one part to three, is a favorite mild application, the acid coagulating the albuminous secretion while the glycerine depletes the congested condition of the parts by causing a profuse watery discharge. Persulphate of iron is also a favorite with him when wishing to produce an astringent effect upon a granulating surface. Tannic acid is also a useful mild astringent, but has, like iron, the disadvantage of discoloring the patient's underclothing. Paquelin's cautery and the actual cautery he had no personal experience of, having always effected his purpose by other methods. Intra-uterine injections he considered of service sometimes, but on account of the pain and violent symptoms sometimes following, thought milder methods should be adopted. In old chronic cases, with the uterus decidedly enlarged and diseased, and the os flabby and patulous, the organ is so tolerant of manipulation that even injections may be employed with comparative safety. Whenever fluids are to be injected the cervical canal must be straightened and enlarged so as to admit Chamber's reflex current catheter, or some such device, which will secure a free return of the fluid. A safe method is the use of a small

graduated hard rubber uterine syringe having a long slender nozzle. The syringe having been filled with the fluid to be used, the nozzle is loosely wrapped with absorbent cotton and introduced within the cavity, and then injecting carefully and slowly just sufficient to saturate the cotton, the syringe is slowly rotated so as to swab the whole inner surface. But as injections offer no marked advantage the essayist thinks they should be abandoned, or certainly very rarely employed. In some cases caustics and astringents effect only partial cure. In obstinate endometritis with fungoid degeneration a muco-purulent discharge and long continued menorrhagia, energetic measures are necessary. The denudation of the endometrium must be penetrating. The most effectual method is by thorough curetting. The uterus should be firmly held by tenaculum or vulsellum forceps and the rough portions scraped out without any previous dilatation of the cervical canal. During the curetting, one hand should be placed over the uterus externally, pressing it down so that every part of the inner surface can be reached. The cervix becomes more tractable so that subsequently a larger curette may be employed if necessary. After the denudation the inner surface is to be thoroughly swabbed with fuming nitric acid, Churchill's tincture of iodine, Monsel's solution of iron, or some other agent of a penetrating character. Local treatment must be supplemented by constitutional. Aim at reducing the enlarged uterus by ergot and strychnine, followed by tonics, quinine and iron. In old chronic cases the curetting may have to be repeated two or three times after the menstrual periods, for, do what we will, relapses will occur, so that the treatment must be persevered in. In treating these disorders the constitutional element must be considered, for in some cases both local and constitutional causes are met with, and in most cases constitutional treatment is of great service, but we must aim to remove the cause, whether local or constitutional. Dr. Rosebrugh said that the frequency of the application depended upon the agent employed—as a rule every fourth or fifth day; if the patient came from a distance, once a week. He nearly always employs the cotton-wrapped applicator, and in order to thoroughly cauterize the surface makes two or three applications at each visit. In many cases where the endometrium seems involved he restricts the application at first to the

cervix, and this with constitutional treatment proves sufficient to induce uterine contractions, and the improvement is continuous until a complete cure is effected. When the inner surface is roomy, and the os very patulous, admitting applicator readily, he pushes the applicator into the cavity and swabs the inner surface and then swabs dry with absorbent cotton the cervical portions of the uterus and vagina. A tampon of absorbent cotton, moistened with glycerine and having a withdrawing string attached, is left in the vagina a few hours. In the discussion which followed, the members differed on the following points:

Dr. Malloch thought more attention should be paid to malpositions of the uterus, and that when these were remedied only mild topical applications were necessary, such as hot water.

Dr. Mullin thought the uterus should be regarded as amenable to medical influences as other internal organs to which topical treatment could not be applied. Local treatment might be useful in certain conditions, but in his experience the conditions which give rise to menorrhagia were not always to be benefited by local treatment, on account of the pain suffered from intra-uterine applications, and after these applications had been abandoned he had found some patients much benefited and restored to health by rest, especially during and after the menstrual period, and the use of general remedies.

Dr. Stark said that while he agreed with Dr. Rosebrugh in his treatment, he preferred to treat the patients at their own houses so as to have the benefit of rest at once. He expressed himself as being at first astonished at Dr. Rosebrugh's heroic use of the curette. Since then he had had great success with it.

Dr. Ryall referred to the fact that formerly the great object in treatment seemed to be the dilatation of the cervical canal, while now gynæcologists sought by means of trachelorrhaphy to close up the canal, and in conclusion he said he wondered what became of women fifty years ago, before the days of dilatation and contraction and other special treatment.

#### ST. LAWRENCE AND EASTERN MEDICAL ASSOCIATION.

A meeting of the members of the St. Lawrence and Eastern Territorial Division was held in Cornwall, January 27th, 1885. Present:—Drs. Bergin (chairman), McMillan, Brouse, Moore, Easton, Pickup, Pringle, Alguire, Munro, Harrison, Hamilton, Gravely, S. A. Hickey, G. C. Wagner, Davis, Reddick and Lefevre.

The chairman addressed the meeting upon the

following subjects: the proposed increase of the annual fee to the Council, the advisability of raising the standard of medical education particularly in preparatory examinations, the Imperial Medical Act, the establishment of a code of ethics, and revision of the tariff.

The following resolutions were carried:—That in the opinion of this meeting it is not advisable that the annual fees should be increased to \$5, as proposed by the Medical Council.

That this meeting disapproves of Universities and Colleges having no medical schools in connection with them, being represented in the Medical Council.

That this meeting approves of raising the standard of the matriculation examination. That candidates for matriculation should be obliged to present credentials of matriculation in arts from any Dominion University, which will entitle them to matriculate in medicine upon payment of fees.

That this meeting sincerely hopes and requests that the Medical Council will take such steps as shall forthwith give to this province a legal code of medical ethics.

That this meeting feels very strongly the injustice of being obliged to register Imperial graduates without examination, a privilege we deny our own graduates, and that we desire the Council to take such steps as may be advisable to obtain justice in this matter.

That it is desirable to have a taxing master appointed for each Territorial Division.

That the registered medical practitioners resident in the St. L. & E. Division do now form themselves into an Association, to be known as "The Medical Association of the St. L. & E. Division, the officers to consist of a president, two vice-presidents, a secretary and a treasurer; the president to be the representative of the Division in the Ontario Medical Council, and the other officers to be elected annually. The following were elected:—Dr. Bergin, President; Drs. Brouse and McMillan, Vice-presidents; Dr. Lefevre, Secretary; Dr. Moore, Treasurer.

A committee was appointed to revise the tariff, and their report being adopted, the Secretary was instructed to forward it to the Territorial representative, to be submitted by him to the Medical Council for approval at the June meeting.

J. M. LEFEVRE, M.D., *Sec.*

## Selected Articles.

### REVIEW OF THE GROWTH OF McDOWELL'S OPERATION IN 1809.\*

BY R. S. SUTTON, M.D., LL.D., PITTSBURG.

In the bleak cold of a December day, in 1890, a woman riding on horseback, arrived in Danville, Kentucky. She had taken farewell, perhaps forever, of relatives and friends, and had just completed a journey of sixty miles that she might be near a surgeon, who had promised to open her abdomen, and endeavor to remove a large ovarian cyst it contained. She was to be the subject of an experiment—an experiment at the hands of a surgeon living on the borders of civilization—an experiment which would involve her life, and to which she must submit without the blessing of chloroform or ether. This woman possessed of marvellous courage was Mrs. Crawford, McDowell's first patient in ovariectomy, and the first patient on whom the operation was ever deliberately undertaken. She recovered and lived to the advanced age of seventy-nine years, a period of thirty years beyond the operation.

The conditions surrounding, and forming part of this operation, are worthy of more than a passing notice. At the present time, they are declared by the ablest operators to be of more than accidental importance.

In the light of all the recent advances concerning the environs of an ovariectomy patient, I ask you to listen thoughtfully, and inquire of yourselves: Have modern operators had better environments than McDowell? Is their quarantine better than his was? Whether accident, or necessity, or the simplicity of border life, provided these conditions so favorable to recovery, your orator will not inquire, but hopes to show that McDowell did operate under conditions as favorable as does Dr. Keith or Mr. Lawson Tait.

1st. The patient was refused operation in her own home.

2nd. She was operated upon in Dr. McDowell's own house.

3rd. History mentions but one assistant present at the operation.

4th. The patient had never been tapped.

5th. We may safely infer that the room in which the operation was performed, contained, at this early date in Kentucky, no superabundance of furniture or upholstery.

6th. That the room was ventilated by an open fire-place is more than probable.

7th. The atmosphere was that of a healthy border town.

8th. No sponges were introduced into the abdomen.

9th. He ligated the pedicle and dropped it in.

This operation will stand the criticism of the most exacting specialist of the year 1885, save in two particulars: viz., the ligature was not carbolized or scalded, the ends of it were left hanging out of the lower angle of the wound, and merely turning the woman on her side to permit all fluids to escape from the cavity of the abdomen was scarcely enough in that direction.

The incision was made on the left of the rectus muscle, but in his next case McDowell made it in the linea alba, between the umbilicus and pubis.

Pause a moment! Think; at the end of almost three-quarters of a century, the operation stands almost where McDowell left it, with one solitary exception, viz., the ends of the ligature surrounding the pedicle are cut short.

Restless human nature, not satisfied sought other means of treating the pedicle, a review of which is fraught with good instruction. For eleven years the operation remained in the hands of McDowell, and he adhered to ligation of the pedicle, leaving the ends of his ligature hanging out at the lower angle of the wound. In 1820, Chrismar, of Württemberg, tied the pedicle in two portions, leaving the ends of the ligature hanging out at the lower angle of the wound. In 1821 Nathan Smith, of New England, tied the pedicle with "strips cut from a kid glove;" he cut the ligature off close to the knots, and dropped the pedicle into the abdominal cavity.

Neither Chrismar nor Nathan Smith knew anything of McDowell's operations. Were the teachings of Hunter and John Bell working upon other minds, as well as upon the mind of Dr. McDowell? The last named sent to Mr. John Bell, of Edinburgh, an account of his cases. Mr. Bell being then in Italy, his colleague, Mr. Lizars, received the report. It is probable that this record was received in 1818. For six years Mr. Lizars kept it to himself. He attempted ovariectomy four times, and succeeded in one case, the patient surviving the operation seventy days. In one case he opened the abdomen by an incision reaching almost from the ensiform to the pubis, and thrust his hand into an empty belly. He requested every one of his students to put his hand into the abdomen, and finally exclaimed, referring to an army officer present, "Where is the military gentleman?" and had him make the same manual exploration. Mr. Lizars then closed the wound, *and it healed by first intention.*

Owing to the fact that Mr. Lizars's results were bad, twenty years elapsed before ovariectomy was again attempted in Scotland. In 1845, Dr. Handy-side performed it. Another halt of seventeen years occurred, bringing us up to 1862, at which date but one success had been attained in Scotland.

\* The Address in Obstetrics, Am. Med. Association.

In that year Dr. Thomas Keith did his first operation.

Let us now cease the pursuit of Dr. McDowell's operation, as it was reported to Mr. John Bell, which report the latter did not live to see.

Up to the year 1843, I find the records of only eighteen completed ovariectomies in America. In this year Dr. Alexander Dunlap, of Springfield, Ohio, and Dr. John L. Atlee, of Lancaster, Pa., did their first cases, the latter removing both ovaries. Eleven years later (1855), Dr. Kimball, of Lowell, began operating. These three are now the only living pioneers of the art. May they live long to enjoy the distinction!

The operations in the United States were already numerous, and the stability of the operation secured. This was before Sir Spencer Wells did his first ovariectomy.

It is estimated by Peaslee that up to the last quarter of 1863, over three hundred ovariectomies had been done in this country. At this date, Dr. Keith was only beginning in Scotland; the operation was performed for the first time in Russia, and was only a year old in Italy. Twelve years after the death of Dr. McDowell, in 1842, Dr. Charles Clay, of Birmingham, England, did the first operation in that country; prior to this time, Jeaffreson, Walne, King, and West had each removed by abdominal section, parovarian cysts. In 1851, Baker Brown began operating in St. Mary's Hospital, London; his results were not good, and the intense opposition of his colleagues drove him from the hospital; he then founded "The London Surgical Home," where his results compared favorably with those of any other surgeon of his time. *It was mainly due to his action that the practice of performing ovariectomies in large hospitals, where isolation is impossible, ceased.*

From Baker Brown, Nélaton learned the operation by personal observation, and returning to France, related, in a public lecture, how he had seen Brown do five cases, three of them in a single day; and thus through the influence of Brown on Nélaton, the opposition to ovariectomy in France was largely diminished. In 1854, Baker Brown taught Sir Spencer Wells the operation, and in 1857 Sir Spencer did his first operation. In 1864, according to Sir Spencer Wells, the operation was completely established in London, and, we may add with pride, in every country in the civilized world.

But while the surgical world recognized the operation, there was a diversity of opinion with regard to the treatment of the pedicle. From the date of Dr. McDowell's first operation up to 1821, when Dr. Nathan Smith operated, the ends of the ligature were brought out at the lower angle of the wound; Dr. Smith was the first to cut the ends off. For sixteen years after, no other method was offered. In 1837, Stilling of Cassel, in the province of

Hesse-Nassau, Germany, used the cautery, and suggested stitching the pedicle to the wound.

Nine years barren of new suggestions again elapsed, when, in 1846, Dr. Handyside, of Edinburgh, Scotland, carried the ligatures through the cul-de-sac of Douglas into the vagina. In 1848, Stilling treated the pedicle outside of the peritoneal cavity. Two years later, in 1850, this method was inaugurated in London by Mr. E. W. Duffin. The introduction of the extraperitoneal method of treating the pedicle by Stilling, in 1848, began a long and serious conflict which has happily died out with the method. Maisonneuve, of Paris, in 1849, had twisted the entire pedicle in one case, and Martin of Jena, had stitched the pedicle to the wound. About this time Langenbeck stitched the pedicle to the wound, and covered it with the skin from the margin of the incision.

Eight years later, in 1850, Dr. John L. Atlee, of Lancaster Pa., introduced the *écraseur* to divide the pedicle. He was imitated by a number of prominent operators, notably by his brother the late Washington L. Atlee, Sir Spencer Wells, Dr. Keith, Professor Pope, of St. Louis, U. S., and Professor Billroth, of Vienna. This year proved unfortunate for the operation, for during it Mr. Jonathan Hutchinson invented the clamp which perpetuated the extraperitoneal mode of treating the pedicle. In 1860, Sir James Y. Simpson secured the pedicle within the cavity of the abdomen by acupressure needles passed through the abdominal wall. About 1865, Koeberle, of Strasburg, invented his *serre-nœud*, or wire constrictor, with which he grooved the pedicle prior to applying the ligature.

In 1864, Mr. I. Baker Brown, of London, reverting to Stilling, of Cassel, established the use of the cautery, a method rejected in London, taken up by Dr. Keith, and now credited through him with the *best statistics yet attained by any operator*. In 1868, Masslovsky, a Russian, amputated the pedicle by double flaps, one on each side, and stitched the flaps together. In 1869, Dr. McLeod, of Glasgow, Scotland, by means of two pairs of strong forceps, twisted the pedicle entirely off. During this year, Dr. Peaslee invented a scabbard and knife by means of which the pedicle was secured, the ligature traversing the scabbard. After forty-eight hours the ligature was cut by introducing the knife into the scabbard, when both ligature and scabbard were withdrawn. In 1870, Dr. Thomas Addis Emmett reported eighteen cases in which he had secured the pedicle by means of silver wire.

Up to the present year (1885), every conceivable thing has been done with the pedicle. It has been tied entire; tied in sections; been twisted off; burnt off; crushed off; cut square off; cut off in flaps; left inside; left outside, and then made to slough off. The extraperitoneal method of treating the pedicle is gone. The question is now resolved into the merits of the ligature



cut short, the Dr. Nathan Smith method, or the clamp cautery, as introduced by Mr. I. Baker Brown, of London, in 1864. If the clamp as devised by Mr. Jonathan Hutchinson was a bad instrument, and according to Mr. Tait, reduced the statistics that Sir Spencer Wells should have attained, it must have similarly affected the results of those who have employed it in the United States. Recently ligation and the cautery have given almost equal results.

The operation of Dr. McDowell in so far as it relates to the treatment of the pedicle, is, therefore, triumphantly where he placed it, despite the ingenuity of the surgical world, having undergone but a single alteration, namely, Dr. Nathan Smith's improvement of cutting the ligature short. I have not been able to learn anything as to the extent sponges were used by the pioneer operators. When Dr. Keith was about to do his first operation, he had the water to be used boiled the night before, and he made everything scrupulously clean; during the operation he was surrounded by old practitioners.

After removal of the cyst, he thrust a big sponge into the abdomen, and brought it out full of fluid. As he was about to repeat this, one of the doctors seized his arm, and exclaimed, "For God's sake don't do that again." While he hesitated, the others argued that any fluid left in the body would be a nice protection to the intestines. He closed the wound. Subsequently the patient did badly. He at once opened the wound and let out a pint of dirty fluid, and the patient recovered. From that time he advocated careful sponging after the operation, *and he was the first to insert a flat sponge under the wound while the stitches were being placed.* Koeberle, who also began to operate in 1862, *introduced the compression forceps and drainage, first by short and later by long glass tubes.*

I here show you the Baker Brown cautery clamp, used by Dr. Keith, the compression forceps of Koeberle, *also the modification of Sir Spencer Wells,* and the drainage tubes so much in use by operators in great Britain.

The technique of McDowell's operation is, probably complete, *and its future will depend on the subject, the place of application, and the care taken to protect the patient from extraneous sources of danger.* It may be compared to a mighty oak, each decade of years having added to its greatness until its far-reaching branches furnish shelter for the thousands of men and women who require abdominal section. Its ramifications are hysterectomy for fibroids, hepatotomy, cholecystotomy, normal ovariectomy, the Hegar-Tait operation for the removal of both ovaries and tubes, nephrectomy, exploratory incisions, gastrotomy, and enterotomy. It still continues to grow, and the task of pointing out the leaves that have been added to its foliage during the last year requires our efforts ere they

fall about the roots and contribute themselves to the growth of the parent tree.

Valuable lectures and papers have been given by Dr. Keith, M. Lawson Tait, Mr. Savage, Sir Spencer Wells, and Mr. Bryant, all in the *British Medical Journal.*

The results of valuable experiments on lower animals have been published by Prof. C. T. Parkes, of Chicago. Many successful cases of the Hegar-Tait operation done by our countrymen, and the surgeons of Great Britain, have been published in various journals.

Mr. Thornton has been successful in gastrotomy for the removal of a large foreign body, and has had seventeen successful cases of nephritic surgery ten of these being nephrectomy by abdominal section. Drs. Keith and Bantock continue to do supravaginal hysterectomy with unparalleled success, and it is premised that if their success continues, it will elevate their method of operating beyond the reach of controversy. They both adhere to the extraperitoneal treatment of the stump, while the continentals practise the intraperitoneal method.

The recent visit of Mr. Lawson Tait to the United States, has given great impetus to the Hegar-Tait operation for the removal of diseased tubes, and for the removal of ovaries and tubes for the cure of fibroids of the uterus.

For the purpose of encouraging the conservative abdominal surgeons, *those who look carefully to the environment of their patients,* I point with great pleasure to the fine statistics of Dr. John Homans, of Boston, and of Dr. Robert Battey of Georgia, whose early initiation of normal ovariectomy was suggestive eventually of the Hegar-Tait operation which included the tubes.

Ovariectomy and its offshoots comprise almost, if not the entire field of abdominal surgery. The establishment of the parent operation brought out the others, if not for the first time, it revived and established them after they had been practically abandoned. "The seed sown by Bell and Hunter, carried by McDowell, and planted in Kentucky;" its first growth was slow, but gathering strength from the passing years, its top has risen high, and its great branches cover a wide space, where unfortunate men and women of every land and clime gather to find relief from suffering and to acquire new leases of life.

The carbolic spray is still a matter of dispute. In Great Britain, Mr. Thornton adheres to it as of old, Drs. Keith and Bantock, and Mr. Tait will have none of it. The latter said to me, "I sold out all my right, title, and interest in Listerism, with my tea-kettle to Battey."

*So far as I know the best statistics yet obtained in ovariectomy in the United States belong to Dr. Battey, of Georgia, and Dr. John Homans, of Boston, Mass., both of whom operate under the carbolic spray,*

and in apartments kept especially for abdominal operations. I make special mention of the fact that these gentlemen use the carbolic spray, for the reason that Dr. Emmett says, in his last edition, p. 715, "I do not know of any prominent operator in this country who now uses the spray," evidently an oversight.

I do not use the spray myself, but look upon the entire Lister system, less the spray, as firmly grounded in the surgical mind. Cleanliness and Listerism can never be separated, for "Listerism is the gospel of cleanliness;" without the latter you cannot have the former.

The year has wrapped up in its eternal folds one whose name is synonymous with the surgery of women; whose reputation is immortal, who in America at least, stood next to McDowell; beloved by his own countrymen honored by the entire surgical world. No eulogy of mine can increase his fame. I speak of *the great, the good, the pure, the noble, the generous* Marion-Sims. Like McDowell, he possessed a genius for origination, and will share with him the admiration and plaudits of future generations.—*Med. News.*

#### HYPERTROPHY OF THE PROSTATE.

The gradual invasion of symptoms of urinary obstruction in a man of advancing age would always suggest the probability of hypertrophy of the prostate. But the existence of this condition may be demonstrated by a digital examination. The patient is placed in a supine position; the surgeon stands on his left side, and introduces at least two phalanges of his left index finger, slowly and gently into the rectum, while the patient's knees are flexed and separated from each other. The surgeon examines whether the enlargement involves one or both lateral lobes, equally or unequally, whether it affects chiefly the breadth or depth, whether it is soft or hard, regular or irregular, solid or fluid; whether fluctuation can be felt in the bladder behind the prostate. He should also examine as to tenderness on pressure, its degree and locality: he should also estimate the temperature of the parts. Prostatic calculi can sometimes be detected by the finger. While making these examinations with his left hand, he should introduce a catheter with his right hand, while the left index finger judges as to the thickness of the intervening tissues. The catheter should be of as large size as the calibre of the urethra will allow. If urine flows freely when the catheter has not penetrated more than  $6\frac{1}{2}$  to  $7\frac{1}{2}$  inches, and the handle is not much depressed, it is fair to infer that there is not much enlargement of the prostate. If the catheter has passed 8 or 9 inches, and the urine does not flow until the handle is considerably depressed, there is good evidence of prostatic enlargement. A pros-

tatic catheter, longer than the ordinary catheter, and its beak nearly at right angles with its shaft, will be required, in such cases, to draw off the urine. Or a long soft catheter may be employed.

To explore the interior of the bladder, an instrument with a short beak, like Leroy's or Mercier's may be used.

*Treatment.*—There are three principal indications: *First.*—To obviate the results of obstruction. *Second.*—To improve the constitutional condition of the patient. *Third.*—To diminish the enlargement, or to retard its growth.

The first is the chief indication. The bladder should be evacuated as thoroughly as possible at least once in twenty-four hours. It is often desirable to do this three or four times a day. When the residual urine amounts to only two or three ounces, once a day may suffice. When it amounts to five or six ounces, the bladder should be evacuated at least twice in twenty-four hours. When the power of urinating is nearly lost, the catheter should be introduced as often as the desire to void urine is felt. The patient should be taught to introduce the instrument himself. In determining the question as to the use of the catheter, the degree of irritability of the bladder and of the urethra, and the acrimony of the urine are to be taken into account. When the urine is acrid and fetid, the bladder should be washed out with warm water, and with antiseptic lotions. The patient should be taught to use a flexible catheter, when it is practicable. But special care should be taken to avoid the use of flexible catheters which are worn or cracked, or which have their eyes deformed. The eyes of the catheter should be of full size, as the urine is often viscid, and will not flow through a small aperture.

But in some cases, a silver catheter must be used, and great care should be taken in instructing the patient, that he may do himself no injury. In using a flexible instrument a stilet six inches long may be used, stiffening the handle, but leaving the distal end flexible. When there is retention of urine, and the catheter is passed with great difficulty, it may be left in a number of days. The pressure of the instrument may, perhaps, cause some absorption of the hypertrophied part. To guard against the injurious consequences of non-evacuation or imperfect evacuation of the bladder, the use of the catheter is very important.

In cases in which treatment has been neglected and there is a very large amount of residual urine, a pint or more, it is not safe to withdraw more than half of it at once. From day to day, the quantity withdrawn may be increased, and, in the course of a week or two, the bladder may be emptied. The danger of the complete and sudden evacuation of the bladder under these circumstances was first indicated by Sir Benjamin Brodie.

When the disease has not advanced to the de-

gree which has been mentioned, there are certain complications requiring attention :

*1st.—Atony of Muscular Coat of Bladder.*—This is usually relieved in part by the regular use of the catheter. Other means may be of service. Cold applications over the abdomen twice a day. Cold injections into the bladder every day, or every other day. Electricity, strychnia, iron, ergot.

*2nd.—Chronic Cystitis.*—This is indicated by frequent and painful micturition, with pus and mucus in the urine. Relief is often afforded by washing out the bladder with warm water—100° Fahrenheit. The water may be introduced into the bladder by an India-rubber bag with a nozzle adapted to the catheter, or with a fountain syringe. But a more convenient instrument for the purpose is a hard rubber syringe, which has been constructed under my direction by Tiemann & Co., of New York, and which is known as Post's Vesical Syringe. It holds four ounces, and is of such a shape that it can easily be worked with one hand. Its distal extremity is adapted to a moveable tube, provided with a stop-cock, and tapering from a circumference of 30 mm. at the base to 10 mm. at the apex, so that it will fit a catheter of any size in ordinary use. Both ends of the syringe can be unscrewed, so that either end of the piston can be renewed by the surgeon without the aid of an instrument maker.

After the bladder has been washed out with warm water, mild astringent injections may be employed, such as mineral acids largely diluted; weak solutions of acetate of lead, nitrate of silver, etc. Hot hip-baths may often be used with advantage: also, hot fomentations over the abdomen. Counter-irritants are sometimes useful, as sinapisms and blisters. I have seen very great benefit resulting from the use of the actual cautery in the hypogastric region. Leeches may often be applied with great advantage, to the perineum or around the anus.

Internal remedies are often of service, such as *diosma crenata*, *pareira brava*, *uva ursi*, *triticum repens*, *copaiba*, *cubebis*, *ol. santal*, *demulcents*. Gross recommends highly *infus. uva ursi* and hops. Alkalies often have a very soothing influence even when the vesical urine has an alkaline reaction.

*3rd.—Irritability of Bladder*, with frequent painful micturition. Opiate suppositories are often useful. *Ext. belladonna* or *hyoscyamus* may sometimes be combined with it. Opiates may also be given by the mouth. *Chlorodyne* has been given with advantage. When there is phosphatic deposit, inject the bladder with weak nitric acid once in a day or two—one or two minims to  $\frac{3}{4}$  j: quantity  $\frac{3}{4}$  ij to  $\frac{3}{4}$  iv. A solution of acetate of lead, gr. j to iv, to an ounce of water,—when urine is fetid, carbolic acid i per cent.

In cases of vesical hæmaturia, gallic or tannic acid may be given internally, gr. v or vj, ter. in

die. Mineral acids. *Ol. terebinth*, x to xv, in emulsion. Sesquichloride of iron. When hemorrhage is alarming, a bladder filled with ice may be applied to the hypogastrium or perineum. Ice-water may be injected into the rectum, or ice suppositories may be used. A collection of blood in the bladder will often obstruct the eye of a catheter when the patient is in an erect posture; but when he assumes a supine position, the blood will gravitate towards the posterior part of the bladder, and the urine will flow through the catheter. The attempt to break up the clot is likely to cause fresh hemorrhage. When there is complete retention from a clot, and symptoms are urgent, Bigelow's or Otis' Evacuator may be employed. In extreme cases cystotomy may be resorted to.

Incontinence of urine may occur; this is usually an overflow from a distended bladder, but there may be inability of the bladder to retain more than a very small quantity of urine. In either case, an India-rubber receptacle may be worn.

There is often liability to congestion and inflammation from slight causes, as exposure to cold, riding on horseback, journeying, sexual excitement, alcoholic stimulants, etc., giving rise to fever, gastric disturbance, muco-purulent or bloody discharge. Relief is afforded by warmth, rest in bed, laxatives and anodynes. In such cases, there should be great gentleness in use of catheter,—leeches around anus, dry cupping in perineum.

*General Treatment of Patients with Enlarged Prostate.*—Carefully guard against catarrh, indigestion or constipation. Diet carefully regulated—avoid indigestible food. Alcoholic stimulants should be altogether avoided or their use carefully regulated. Warm clothing, dry feet, warm foot-baths and general baths. Muscular exercise should not be neglected, but it should not be carried to such an extent as to produce great fatigue. When the patient is tired, he should rest in a horizontal position; he should avoid despondency, and keep up his spirits by cheerful society, employment and recreation.

*Special Treatment of Enlarged Prostate.*—Medical treatment has not yielded very satisfactory results. Conium, different preparations of mercury and iodine, muriate of ammonia, and various mineral waters have been recommended, but none of these remedies seem to have exerted any remarkable influence in diminishing the bulk of the prostate, or in retarding the progress of the disease. The use of ergot by the stomach or by hypodermic injection has been recommended. Henry Morris, in a paper published in the *Lancet*, December, 22nd, 1883, states that he has seen great benefit from the use of ergot. Dr. Washington L. Atlee, in an article published in *N. O. Med. and Surg. Journal*, August, 1878, gives similar testimony. Under its use, several of his patients were able to dispense with the use of the catheter. He

gave 20 drops of the fluid extract every four hours, until a decided improvement took place, and then diminished the frequency, finally giving only one dose at night.

In the *Brit. Med. Journal*, 1878, vol. II, page 500. Dr. William Bird, of York, states that he has derived great benefit from the hypodermic injection of ergotine in doses of  $\frac{1}{3}$  of a grain.

Pressure has been recommended as a means of diminishing the bulk, or retarding the growth of a hypertrophied prostate, and the use of large catheters or sounds is probably of some service in this respect.

Electricity has been recommended, but it has not realized the expectations of those who have used it.

The removal of obstructing portions of the prostate by ligature, excision or crushing has been recommended, but there is a difference of opinion among surgeons as to the expediency of this method of treatment. Gouley recommends a median incision of the perineum, opening the membranous part of the urethra on a grooved staff, and introducing a catheter into the bladder. In a more severe class of cases, he recommends the ablation of the median prostatic outgrowth. He explores the prostate by introducing a finger through the perineal section, and if a median outgrowth or isolated tumor be discovered, he enucleates the tumor, or excises the outgrowth, or removes it with a wire *écraseur*. After the removal of the tumor, he leaves a catheter in the bladder a number of days. —*New England Med. Monthly*.

### ON DIET IN DISEASE.

Dr. J. Milner Fothergill gives the following in the *Medical Times*, May, 2, 1885:

A patient amused me very much yesterday. She had been for some time getting weaker and thinner, with her liver out of order, while her medical man had been feeding her upon meat and giving her vegetable tonics and iron, but without good result. At last she suspected that the treatment did not suit her, and so consulted me. When asked to put out her tongue, she observed, "The other doctor never asked to look at my tongue." If he had, he might have been more successful with his treatment. "Has he been giving you steel?" I asked. "Yes, and it did not agree with my liver," she promptly added, evincing a shrewdness that took me aback. On vegetable tonics without iron, and much lighter food, she got on famously. Yesterday she called to report her improvement.

Some time ago, in conversation with the manageress of one of the many Homes now springing up where paying patients can be nursed, the subject of feeding sick persons cropped up, and she

was very enthusiastic about "a twenty-minutes pudding," but of what it consisted did not transpire. A tentative remark about the digestion of the starchy materials of our food flew past her unheeded. It was soon clear that of any rational ideas of digestion, theoretically or practically, she was in unilluminated ignorance: all she knew was a little empirical knowledge, and of that she did not possess a superabundance. Who then, is to know this matter of feeding? Who is to tell the student of the difference betwixt raw or uncooked starch and cooked starch?—that in the latter the insoluble starch-granule is not only cracked, but the starch is largely converted into soluble dextrin by exposure to heat? that by the addition of some such soluble carbo-hydrate to meat-broths they endow these broths with a decided food-value? and that the meat-broth itself is but an agreeable vehicle for some food? Yet this is what he ought to be instructed in, if he is to be fitted to meet disease. When the patient sinks of exhaustion, of what does he die? His stores of force are run out; but what is the material which constitutes the body-force? I should read with delight a lecture upon this topic by Dr. Austin Flint or Dr. Da Costa,—or perhaps some less illustrious physician will grapple with the topic. We know that when a patient declines all food he will die in a given number of days. If a healthy person be hungered, as by shipwreck, he also will live a given number of days. In the latter case death will come all the sooner if the surrounding temperature be low. In the former case the duration of life will be shorter as the body-temperature rises. There is a question of combustion involved. It may not be the whole question, but it is an important factor! Alcohol is a readily-combustible hydro-carbon: it is used freely in critical times. Does not the idea naturally suggest itself that somehow the store of glycogen—the body fuel—is a cardinal matter? If this be so, it is evidently desirable to keep up the stock of this material so that it may not be exhausted. If raw or uncooked starch be employed, probably it is little acted upon by the diastase of the saliva, or even the diastase of the pancreas, both organs being crippled by the general malaise. But a starch which has been rendered soluble by previous baking or by the matting process has been so modified that it is highly soluble.

I do not know how the matter stands in the United States, but as regards the mother-country, little, very little use indeed is made of those prepared foods spoken of—sometimes derisively—as "Baby-Foods," either in cases of primary dyspepsia or in that debility of the digestive organs which is involved in serious morbid conditions. Yet by the addition of cooked starch, as biscuit-powder, to meat-broth, and of malt preparations to milk or milk somewhat diluted with water, foods

nutritive and at the same time readily assimilable are furnished to the sick person. Of the advantage of a fairly competent knowledge of such foods, both in their chemical elements on the one hand and in their variety on the other, probably no one can be better aware than myself: and such knowledge has been of infinite service to me, or some grave delusion exists in my mind. We must, too, remember another aspect of the subject,—viz., variety. While we are in health we are apt to growl about lack of variety in our food: how much more, then, the sick man! If the changes can be rung by different forms of meat-broths combined variously with different prepared foods, how much variety can be furnished to sick persons, and with that how much inducement to take that nourishment, so badly wanted and so hard to supply in many instances! Sago, tapioca, and rice or barley can all be placed in a slow oven and baked for an hour without scorching, and so be prepared for use in the sick-room. When the patient is convalescing, a milk pudding can be prepared of such material, which requires but little of the digestive act. Or there are various forms of plain biscuits which are admirably adapted for use with broths or soups (the Channel Islanders always thicken their soups with biscuit broken fine or powdered). By such means a good and, indeed, substantial meal can be furnished to a phthisical person with softening tubercle and a feverish temperature,—a typical instance of enfeebled digestion due to general malaise. And as for gastric catarrh or atonic dyspepsia, such a meal would not be likely either to become enfolded in a layer of mucous or to present any difficulty as to solubility. These may seem very simple matters, scarcely worth putting on paper; but the professional acquaintance with them is not as ample as it might be with advantage to invalids and sick persons. When a medical man lifts his eyebrows or protrudes his lip when "Baby-Foods" are mentioned in relation to dyspeptics and persons acutely sick, the impression he makes on my mind is this: that he has not made a study of the matter of food and its digestion, and that he has yet to learn some matters which, when acquired, will enlarge his usefulness and strengthen his hands when he stands by the bedside of his patient.

#### DURATION OF CONTAGIOUSNESS IN INFECTIOUS DISEASES.

The only attempt within my knowledge to formulate experience in respect of the duration of infectiousness, is that of Dr. Miller, of Dundee, whose tabulation is as follows:

Small-pox—14 days after termination of scabbing.  
Typhus—28 days from inception.  
Scarlet fever—7 weeks from inception.

Diphtheria—6 weeks from inception.

Whooping-cough—8 weeks from inception.

Measles—6 weeks from inception.

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

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

*Typhoid Fever.*—Those who believe in the direct personal contagiousness of enteric fever are few in number, and I fancy that nearly all of us will agree that the intestinal discharges are all with which preventive medicine has concern. Whether these retain their infectious properties during the whole process of the malady is a question still in uncertainty, and rendered more obscure by the apparent demonstration that the disorder may, under certain undetermined circumstances, be generated *de novo* from ordinary sources of filth-poisoning. At all events, isolation of the person seems unnecessary as soon as convalescence is complete.

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

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

bility, except by contact ;" another, equally eminent, declares that contagiousness endures until the last trace of inflammation or infiltration secondary to the diphtheritic process has disappeared ; a fourth would protract the duration of quarantine for a month, or at least three weeks, after all symptoms had abated, and would forbid return to school while any redness of the fauces or any coryza lingers. The discrepancy of opinions in this respect among the leaders of professional thought suffices to show the need of more definite data to guide our deliberations.

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

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

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

### ACTINOMYCOSIS.

Some incidental remarks made at a recent meeting of the Pathological Society revealed the existence of the first genuine instance of Actinomycosis in this country. The case occurred, we believe, in the practice of Dr. Harley at St. Thomas's Hospital, the post-mortem examination being made by Dr.

Sharkey, and the microscopical examination by Mr. S. G. Shattock, curator of the museum. As the disease in man has only been recognized within the past decade, and as no cases have hitherto been recorded in this country, it is not surprising that but few members of the profession in England should be acquainted with it. A valuable clinical contribution to our knowledge of the affection in man, has recently appeared from the pen of Dr. J. Israel.\* In 1882, professor Ponfick published an almost exhaustive monograph on the disease, in which most of the facts then known were embodied. From questions which have been addressed to us, we believe that a brief account of the elemental features of the affection will be welcomed by the majority of the profession, to whom the malady is unknown.

The affection is presumably one which is dependent on the presence and activity of a micro-organism. The micro-parasite is a member of the fungoid class, and consists chiefly of a mycelium which divides in a dichotomous fashion, and gives rise by its spread from a centre to a radiate appearance, whence its name—actinomyces—is derived. The circumferential ends of the mycelial sprouts have a flask-shaped swelling. The little masses of felted mycelium may be recognized by the naked eye as sulphur-yellow bodies of about the size of a hemp-seed. The disease which this parasite is supposed to cause may develop in many parts of the body. The most common site appears to be the jaw and parts bounding the mouth. The affection in animals has long been known in this situation under various names, and has been regarded as a form of scrofula and as a new growth. It is believed that the parasite gains an entrance through the medium of a carious tooth, or some wound of the gum leading to the jaw bone. There is but little to be said of the morbid anatomy of the disease. A swelling forms in the jaw, and gradually increases in size. This tumor in its earliest stages may be punctured without any matter being let out, although it generally has an elastic and semi-fluctuating consistence. A section made into a tumor in the early stage of its existence shows a reddish-white area sprinkled in places with gold-coloured granules. Later on abscesses and fistulæ form, in the discharge from which sulphur-colored bodies may be seen. Broadly speaking, the tissue of the morbid new growth, which must be regarded as inflammatory rather than sarcomatous, has very much the characters of ordinary granulation tissue. Actinomycosis may occur primarily in the respiratory tract proper, and Dr. Israel makes this class of cases his second group. He narrates a case in which the disease was localized to the bronchial mucous membrane. The patient was a girl aged fifteen, who suffered from the signs and symptoms of chronic bronchitis,

\* Klinische Beiträge zur Kenntniss der Actinomycoese des Menschen. Berlin: A. Hirschwald.

with fetid expectoration, in which the actinomyces were readily discovered. Another case of a man, aged twenty, is given, in which the primary localization of the disease was in the parenchyma of the lung; it was afterwards propagated to the pleura and to the prævertebral tissues. Some of the cases have many of the clinical characters of empyema with discharging sinuses, and in such cases a complex system of fistulæ not unfrequently undermines the morbid tissues. The structures in the posterior mediastinum and prævertebral regions are often affected, and the bodies of the vertebræ may become carious. Dr. Israel makes his third group of cases include those in which the disease begins primarily in the intestinal canal. In some of the cases the foci of the disease are widely disseminated. The liver, spleen, muscles of the back, and muscular substance of the heart have been shown on post-mortem examination to have numerous centres of actinomycosis. Large abscess cavities may form behind the peritoneum as well as behind the pleura, and these may communicate by many perforations of the diaphragm. The symptoms necessarily depend chiefly on the localisations of the disease as well as on its rate of progress, and present therefore extremely varied clinical pictures. Dr. Israel's work contains an account of thirty-eight cases, which number includes all that have hitherto been recorded.—*Lancet*.

[Dr. J. B. Murphy, of Chicago, reported two cases in the human subject, before the Chicago Medical Society (*Chicago Medical Journal*, March, 1885). In both the disease attacked the lower jaw, and the peculiar sulphur-colored granules were readily recognized. Both patients recovered. These are probably the first cases which have been recognized on this continent ]—ED. LANCET.

TREATMENT OF RINGWORM OF THE SCALP.—The following is a very simple and effectual method of treating ringworm of the scalp.

The child affected is made to sit down before a wash basin half filled with warm water. A folded towel is first of all tied around the child's forehead, in such a way that no fluid poured on the head can trickle into the eyes.

It is best to cut the hair short all round the affected part. If there be many spots of ringworm, the whole head may be closely cropped. Have ready a two-ounce bottle of common spirits of turpentine, an ounce bottle of tincture of iodine, a camel's hair brush, and cake of 10 per cent. carbolic acid soap.

While the child bends forward over the basin, the spirits of turpentine is freely poured over one or more spots at a time, the forefinger being used to rub the turpentine well into the scalp. Almost immediately the dirt and greasy scabs disappear, and the short broken hairs are seen to stand up

like bristles. Generally, in about three minutes time the child cries out "Oh, it nips!" and we know the turpentine has penetrated deeply. Immediately the piece of carbolic acid soap is rubbed well into the parts which have been acted on by the turpentine, and warm water is freely applied to make this soap into a lather, by which means the head is well washed, and soon appears to be beautifully cleaned. The smarting, such as it is, quickly disappears. The head is then well dried with a towel. Common tincture of iodine, in two or three coats, is now painted well over the affected parts, and allowed to dry. As soon as the hair is dry, some carbolic oil (1 in 20) is rubbed through the hair to catch such spore as may be there.

This treatment, applied every morning, or morning and night in very bad cases, generally cures the worst cases in the course of a week. During the last five years I have used no other method of treatment. The explanation of its success is as follows: common spirits of turpentine is a powerful germicide, but is a still more powerful solvent of the sebaceous or greasy matter of the scalp, and it rapidly penetrates into all the epithelial structures of the scalp, the affected hairs included, and clears the way for a more powerful germicide, namely, the tincture of iodine.

It is an interesting chemical fact that spirits of turpentine, or more correctly, oil of turpentine, is a powerful solvent of iodine. This quickly destroys the fungus of ringworm. If tincture of iodine be applied to the spots which have been treated as above, first with the spirits of turpentine and then washed with carbolic acid soap and water, it finds its way down into the epithelial structures, and into the hair-follicles, following the course which the spirits of turpentine has taken. It is of no use to apply watery solutions of germicides until the sebaceous or greasy matter of the scalp has been first removed.

In some severe cases I have used a solution of iodine in turpentine, ten grains to the ounce, instead of the tincture of iodine, after the head has been washed and cleaned; but in most cases the use of tincture of iodine, after the part has been acted on by spirits of turpentine as above described, is quite sufficient to destroy the disease.

Ringworm of other parts of the body may be treated with spirits of turpentine and tincture of iodine in the same way. One great advantage of this treatment is that it may be used on the head of the youngest child, and causes little or no distress at any time.—*Brit. Med. Journal*.

RAPID ANÆSTHESIA BY ETHER—Dr. A. F. Müller says in the *Med. News* April 4th: "The following method of rapid anæsthesia by ether was suggested to me seven or eight years ago by a thought that the great length of time often consumed in

etherizing patients was due to the fact of the frequent interruptions necessary to replenish the cone or towel used for the purpose, and the consequent partial recovery of the patient. To obviate the difficulty and obtain a continuous flow of pure ether vapor, I have made an apparatus, consisting of the two valves of a rubber football sewed together at the edges and connected by a tube with a bottle containing ether, which is plunged into a bucket of hot water. Ether boils at 98°, and vapor passes over steadily and rapidly, and is inhaled by the patient, whose face is covered by the inhaler, protected by a clean towel.

The result has been surprising, as will be seen by the following cases, all etherized by this method within the last three months at the Germantown Hospital. In none of the cases was there nausea previous to anæsthesia; one at least came to the house the morning of the operation having eaten a hearty breakfast. In most cases no struggling, and if so, only slight; no stage of excitement. In cases that require only a few moments for operation, the patient wakes up as quickly as after nitrous oxide. After patient is etherized, the amount passing over can be regulated by a stopcock at the bottle end of the tube.

The apparatus I have used is very crude, made only for the purpose of experiment, and I am having an improved one made, which I hope will be more satisfactory in its details."

The quantity of ether used to produce complete insensibility in no case exceeded three ounces; in some it was less than an ounce and a half. Dr. Müller reports 18 cases in which unconsciousness was produced in from 30 seconds to 2 minutes.—*Maryland Med. Journal*.

**KUSSMAUL'S COMA.**—Dr. Saundby read a paper on Kussmaul's coma before the Midland Med. Society, based upon two recent cases. He ascribed its symptoms, drawing attention to the peculiar character of the dyspnoea as constituting a distinguishing feature of pathognomonic significance. He especially insisted upon the fact that this form of coma was not restricted to diabetes, one of the cases related being an example of its occurrence in advanced renal disease. He referred to the various theories which had been advanced to explain it, and stated precisely the exact position of the acetonæmia question. He explained the methods used for testing the acetone, and showed Nobel's test with nitro-prusside of ammonia. In his opinion, the symptoms were due to the action of some poison nearly allied to acetone. He referred to Minkowski's suggestion that they might be the result of de-alkalization of the blood from the presence of some acid in great excess. After discussing the predisposing and exciting causes and the diagnosis, he pointed out that it was not invariably fatal. Treatment in the earlier stages should be

elimatory, by purgatives, if the bowels could be got to act, and later on the intravenous injection of a neutral saline solution should be tried. The result in one case was to restore animation for the time; and where recovery was possible, more permanent results may be expected.—*Am. Med. Digest*.

**RESECTION OF THE CLAVICLE FOR SARCOMA.**—An interesting surgical case has been placed on record by M. Polaillon. The patient was a girl aged sixteen, in whom a swelling of the outer end of the right clavicle was first noticed eighteen months ago, and had gradually increased in size. There was not much interference with the movements of the arm, and but little pain. The tumour was about the size of the fist, of bony consistence, and lobulated in outline. The skin over it was normal. There were no signs of compression of the brachial nerves or vessels. The lymphatic glands were healthy. Careful examination showed that the tumour did not pass beyond the limits of the expanded clavicle in any direction. The operation was performed on Jan. 29th under the spray. A horse-shoe shaped incision was made through the soft tissues, and the flap turned inwards, its base being at the neck of the patient; the clavicle was cut through at the insertion of the sterno-mastoid in the inner third of the bone, and then disarticulated at its outer extremity. In order to isolate the tumour the fibres of the trapezius and deltoid were cut through at their insertion into the clavicle. Antiseptic dressings were applied. The patient did well, and left the hospital six weeks after the operation. There was but little deformity, and the movements of the arm were perfectly preserved.—*London Lancet*.

**THE TREATMENT OF ASTHMA**—According to Dr. Rodet, the best means of overcoming a paroxysm of asthma consists in subcutaneous injections of morphia and inhalations of iodide of ethyl. Twelve drops of the latter, poured on a handkerchief and inhaled, procure almost immediate relief. The different papers and cigarettes which have been recommended are worthy of a trial, a change of air and occupation is often essential. In catarrhal asthma, the treatment must be directed against the bronchitis and laryngitis, which are often benefited by a stay in a warm climate. According to M. Hardy, very good results are sometimes obtained by means of a blister applied to the thighs or arm. In nervous asthma, bromide and iodide of potassium are the most useful remedies, especially the latter. Gymnastics and baths of compressed air can also be recommended.—*Journal de Medecine de Paris*, No. 25, 1884.

**THE AFTER-TREATMENT OF SCARLET FEVER.**—Mr. George Smith, of Somerset, England, in a



short note on this subject in a recent number of the *Bristol Medico-Chirurgical Journal*, gives a plan of treatment of the desquamative stage of scarlet fever which has been quite successful in his hands, and which might be followed with good prophylactic results in every case. It is well known that in this stage there is very great danger that the disease may be conveyed from a patient to a healthy person, even several hundred miles away.

To obviate this danger, he has been in the habit for several years of having his patients sponged over the whole surface of the body twice daily. The sponging is begun, as a rule, about a week after the appearance of the eruption, and is continued until the desquamative stage is completed. The material with which the patient is sponged is a mixture of one ounce of oatmeal to one pint of boiling water; this solution should be made fresh each day, and used while tepid, or at such a temperature as may be comfortably borne by the back of the hand. The gluten of the oatmeal sticks the scales of the skin to one another and to the surface of the body, which allows of their removal without the usual risk of infecting the atmosphere or clothing; thus greatly lessening the risks of spreading the disease. The gluten also fills the cracks in the new skin and protects it from the cold; which diminishes the risk of the œdema which so frequently follows scarlatina.—*Am. Med. Association Journal*.

**NAPHTHOL FOR ITCH.**—Prof. Hardy publishes the following formula in the *Union Medicale*: Naphthol, 10 parts; vaseline, 100 parts. The powdered naphthol is to be dissolved in half its weight of ether. This solution is to be mixed with a portion of vaseline, and heated to 30° or 40° C., until the ether has been entirely evaporated, when the rest of the vaseline is to be added, and the mass carefully triturated. The homogeneous ointment thus obtained is to be kept from the access of air. It may be applied at any stage of itch, and whether it is or is not complicated with other eruptions. The duration of the treatment varies from 10 to 15 days.—*Med. and Surg. Reporter*.

**A NEW TREATMENT OF EPITHELIAL CANCER.**—Experiments now in progress, under the supervision of Dr. J. E. Garretson, at the Oral Hospital of this city, show a wonderful curative value in the treatment of epithelial cancer with the use of epiderm secured from the horse by means of a curry-comb, the treatment being nothing more complex than keeping a sore continuously covered with the ash-colored powder thus obtained. The horses are to be washed over night and curried with new curry-comb in the morning. After pick-out the hairs the powder is ready for use. When horse epidermis is not to be obtained, the scales may be scraped by means of a knife-blade from the human arm or leg.—*Med. and Surg. Reporter*.

**STRICTURE.**—In urinary obstruction, due to prostatic hypertrophy or thickening of the mucous membrane of the urethra, Professor A. B. Palmer says that relief can frequently be obtained, and the evils of catheterization avoided, by simply making the stream of urine act as a hydrostatic dilator in its passage. This can be readily done during micturition by compressing the urethra between the thumb and fingers so that no urine can escape. An effort is to be made at the same time to forcibly empty the bladder. The result is that the urethra is gently and uniformly distended without pain. This distension can be obtained and sustained at will, and in a majority of cases, if daily repeated, will soon be followed by the power of almost completely emptying the bladder, with a fair and often a full stream.—*Medical Bulletin*.

**JABORANDI IN OBSTINATE HICCOUGH.**—Pagenstecher (*Contrib. f. d. ges. Therap; Bull. gén. de Thérap.*) reports a case of hiccough which had resisted every known remedy, including the bromides, morphine, chloroform, and electricity. The patient's diaphragm contracted in the most violent manner about twenty or thirty times a minute, and he had been unable to take any nourishment for three days. After receiving four grains of jaborandi-leaves, in the form of a decoction, he had a profuse perspiration, after which the hiccough was completely checked.—*New York Med. Jour.*

To render blood more coagulable—when we have effusions of the same into cavities and so cannot ligate the bleeding orifices, Prof. Gross advises—

B.	Acid . gallici.	gr. ij	
	Digitalis foliorum,		
	Ergotin.,	aa	gr. j
	Opii,		gr. ss. M.
SIG.	—Ter die.		

When the stomach is irritable, so that medicines cannot be retained, and if it should be necessary to purge the patient, Prof. Gross recommends the following injection, should there also be much tympany: Oil of turpentine, ʒss, rubbed up with the yolk of one egg, then add castor oil, ʒiiss, warm water, Oj. To be used as an injection.—*Col. and Clin. Record*.

**PRURITIS ANI** and the distressing itching of urticaria and mosquito bites can be much alleviated by local applications of methol. It may be used by rubbing the methol pencil lightly over the surface, or by dissolving a small amount in alcohol and bathing the part.—*Lancet and Clinic*.

**LITTLE BOY:** "Please I want the doctor to come and see mother." Servant: "Doctor's out. Where do you come from?" Little Boy: "What! Don't you know me? Why, we deal with you. We had a baby from here last week!"

# 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.*

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*The LANCET has the largest circulation of any Medical Journal in Canada, comprising four-fifths of the entire Medical Profession.*

## THE AMERICAN MEDICAL ASSOCIATION

The thirty-sixth annual meeting of the American Medical Association was held in New Orleans April 28th and following days, under the presidency of Dr. Campbell, of Augusta, Ga. Although the attendance was not as large as was anticipated, the meeting was, upon the whole, a very interesting and profitable one. The address of the learned President was an able effort, and was listened to with profound attention. He referred to the honor conferred on the State he represented, and eulogized the long list of illustrious men who had guided the destinies of the Association, making special reference to Gross, Sims and others. He also paid a high compliment to Dr. N. S. Davis, of Chicago, who is generally regarded as the father of the Association, and who has faithfully watched over its interests for many years. He also alluded to the assured and satisfactory success of the *Journal of the Association*. He next referred to medical politics, so to speak, such as forensic medicine, the medical witness, the medical expert, etc., and suggested that a new Section should be formed, to which all papers, questions and reports in regard to the relations of medical men to legal tribunals might be referred.

The address on medicine was delivered by the chairman, Dr. Didama, of Syracuse, N. Y. Instead of giving a summary of the progress of this department during the past year, as is

required by the by-laws, he alluded to two topics merely as having acquired special prominence, viz: the comma bacillus and cocaine. In speaking of the relation of the former to cholera he made a remark which we are sure all will endorse, "The results of Koch's experiments were negative so far as treatment was concerned, but let us labor and wait, and in the meantime direct a little more attention toward prophylaxis and therapeutics." The subject of the address on obstetrics by the chairman, Dr. Sutton, of Pittsburg, Pa., was "The History of Ovariectomy." This address is published in the present issue of the LANCET, and will be found very interesting and instructive reading.

The presentation of the report of the Committee appointed last year to make arrangements for the forthcoming meeting of the International Medical Congress in 1887, occasioned some lively discussion. The objections urged were that several "new code" men had been appointed to important positions as officers of the Congress and its sections, and that several States and Territories in the South and West were entirely unrepresented. The result was the appointment of thirty-eight additional members to the original Committee, with power to revise and correct the list of officers previously announced. It is to be hoped that the action of this monster committee will not jeopardize the success of the Congress. The *Boston Med. and Surgical Journal* in commenting on the action of the association says that the Congress is "more interested in medical science in the abstract than in local medical politics," and "that the "new code" nonsense had best be allowed to pass into ready oblivion, and not be given fictitious importance by further discussion."

The report of the committee on publication showed that the "Journal" was free from debt, had about 4,000 subscribers and promised soon to be the foremost in the United States. Dr. Davis of Chicago, was unanimously requested to continue as Editor. The social side of the meeting was all that could be desired. The members enjoyed the generous hospitality of their chivalrous brethren in the South to the full. His many friends in Canada will be pleased to learn that Dr. Brodie of Detroit, has been chosen president for the ensuing year. The next meeting will be held in St. Louis, on the first Tuesday in May 1886.

## MISDIRECTED UTERINE EFFORT.

Every experienced accoucheur has met cases of misdirected uterine expulsive force. Two recent cases of this nature which have come under our observation, are the occasion of the following remarks. In both cases the women had borne several children. Labor in each case had always been both protracted and severe, continuing from twenty-four to forty-eight hours. Medical aid had invariably been called. In both cases, on arrival, the os was found fully dilated. The presentation was normal, and the head engaging the upper strait. The pelvis, in each case, was roomy and offered no unnatural obstruction. The pains were severe and attended with strong expulsive effort—in fact, of the character which usually marks the termination of a severe case of labor. A casual survey of the situation might easily have led to the prediction of a speedy delivery. A little waiting and a more critical examination, however, exhibited things in a different light. It soon became apparent that, notwithstanding the powerful uterine contractions, and the consequent suffering, little or no advance was made. From this it was evident that something was wrong. Placing the hand on the abdomen during the partial interval of pain, it was found to be prominent, and conical in shape, the apex pointing diagonally over the pubes. During a pain, this cone, with the hand resting on it, was carried forward over and beyond the pubic arch, thus doubling the fœtus upon itself, and showing that more force was directed to this point than to the outlet. Every obstetrician occasionally meets a case of which the above is more or less typical. The os is either dilated or dilatable; the presentation normal; the pelvis roomy, and the soft parts offering no apparent obstruction; the pains are severe, and the patient makes powerful expulsive efforts. All this, and yet hours of patient waiting and suffering are marked by no perceptible progress. The unfortunate woman is in great agony, and nature is fast becoming exhausted. Friends are in despair, and demand that “something” be done. The situation is a trying one to all concerned. Of course these remarks apply more or less forcibly to all cases of protracted labor irrespective of cause.

Having discovered the cause of delay, the next thing to do is to find and apply a remedy. Chlo-

roform, morphia, and chloral, as everybody knows, are all agents well fitted to relieve the suffering and also to promote normal uterine contraction, where there is a deviation from this condition. In the cases under notice, chloral was the agent selected. About twenty grains were administered the first dose, and ten grains at regular intervals afterwards. A sheet was folded to the width of an ordinary abdominal bandage. This was passed under the patient, and crossed over the abdomen. The upper end was handed to the nurse, sitting at the opposite side of the couch, while the lower end, which embraced the *cone*, was held by the accoucheur. The nurse was directed to make no traction, but simply to retain a firm hold. The force exercised consisted mainly in *resisting* the downward and forward movement of the prominent uterine segment or cone. The pains, which had been insufferable, and without distinct interval, became more tolerable, having intervals so well marked as to permit quiet and needed sleep. The woman, who a little while before was in the utmost agony and despair, was now quiet and hopeful, and thus the case rapidly progressed to a happy termination. In each case the duration of labor was reduced to less than one-third that of former labors.

These cases are not presented on account of anything striking or novel, nor yet on account of the line of management pursued. The object rather is to put the profession in remembrance of the great fact that much can be done to shorten the duration of labor and to relieve the pangs of maternity. These surely are objects worthy the attention of every physician endowed with proper feelings, and no apology should be deemed necessary for even a frequent reference to them.

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 FOOD FOR INFANTS.

The many predictions concerning the possible advent of cholera during the present summer, are receiving due attention from medical men and boards of health in our large cities, and the result of such attention cannot fail to prove highly beneficial to the public health. But should we have a very hot summer, as is not improbable, there will be the usual “Slaughter of the innocents,” in the large cities, and we think it important that the attention of the profession should be called to the

fact that three-fourths of the cases of sporadic infantile cholera are initiated by carelessness in the selection of the food given to bottle-fed infants. If from the first of June to the first of October every mother would see to it that her infant was fed with easily digested and in every respect suitable food for hot weather, we believe we should have to record at the close of this much dreaded summer a decrease instead of an increase in infant mortality.

Dr. H. Von Ziemssen, writing on *Sporadic Cholera*, in Vol. vii. of the Cyclopedia of Medicine, says:—"Regulation of the diet constitutes in fact the principal method of treatment of sporadic cholera and particularly cholera infantum. When mothers' milk is insufficient Liebig's Food or Nestle's Lacteous Farina are *alone to be recommended*. The latter is *especially* commendable because the physiological relations of the infantile digestive organs, particularly the lack of notable salivary and pancreatic secretions are taken into account in this fabrication, the starch contained in it having been transformed into dextrine." It should also be borne in mind that infant foods are also well adapted to the nourishment of invalids of all ages.

#### RAREFIED AIR IN PHTHISIS.

Experiments have been made from time to time in order to determine the effects of rarefied air upon respiration. The results generally show that an elevation sufficiently great to cause a diminution of the barometric pressure to one-third of its normal value is necessary to produce the desired effect upon the respiration, viz: to render it more frequent and profound. Experiments have been made with dogs by subjecting them to great variation of air pressure; but no change in the respiration was observed until a height was reached which showed considerable rarefaction of the air. It would thus seem that the influence of mountain air on the respiratory apparatus, which some physicians covet for their consumptive patients, is not very decided until heights of at least 5,000 or 6,000 feet are reached. An interesting result obtained by these experiments was that at very low pressures (about ten inches of mercury) the ultimate effect was a diminished nutrition of the tissues.

The results are of value in determining the curative properties of mountain air upon weak and

diseased lungs. But they are far from conclusive. Similar experiments were made in 1880 by Dr. Marcet with himself and a scientific companion at Courmayeur (3,945 feet) and the Col du Géant (11,030 feet high). In ascending from Yvoire to Courmayeur—a vertical distance of only 2,715 feet—the relative atmospheric humidity was lowered by 31 per cent. for the higher station, and the mean weight of the carbonic acid expired by the two experimenters was found to be in excess at the higher station over the lower by more than 8 per cent. This clearly shows the influence of even moderate altitude above sea level, coupled with increased atmospheric dryness, towards promoting combustion in the human body. At the high station of the Col du Géant, over 11,000 feet, the rate of breathing was accelerated by more than 39 per cent. in Dr. Marcet's case, and over 25 per cent. in his companion's. Although in the rarefied air of high levels the body makes more carbonic acid, it exhales it much more rapidly than under the lower pressure of the plains, and the augmented activity of the respiratory organs necessitated by breathing rarefied air is in many cases the chief curative agency of mountain districts.

ONTARIO MEDICAL ASSOCIATION.—The Association is to be congratulated on the large number of papers promised for the meeting in London on the 3rd and 4th inst. In fact it will scarcely be possible to get through with them in two days. In addition to the special subjects in medicine, surgery and obstetrics referred to in our last issue, the following papers are announced: Drs. Buck—"Sanity;" Bray—"Cæsarian Section;" Edwards—"Placenta Previa;" Beemer—"Brain Exhaustion;" Waugh—"Infantile Paralysis;" Fraser—"Continued Fevers;" Penwarden— ———; Graham—"Mitral Stenosis;" Groves—"Urinary Calculi;" Arnott—"Diet in Disease;" Campbell—"Locomotor Ataxia;" Ovens—"Trifacial Neuralgia;" McKechnie—"Pericarditis;" McLay—"Cystitis;" Harrison—"Foreign Bodies in Larynx;" Aylesworth— ———; Moorhouse—"The Germ Theory with specimens;" Worthington—"Lingual Neuralgia;" Duncan—"Warburg's Tincture in Canadian Practice;" Murray—"Uterine Hemorrhage after Abortion;" White—"Straight Splint in Treatment of Fractured Elbow of Childhood;"

Howe—"Effects of Cocaine on the Eye" and "The Blindness of Pregnancy;" Atherton—"Intestinal Obstruction;" Thorburn—"Passive Motion in after-treatment of Fractures;" Oldright—"Pathological Specimens;" Adam H. Wright—"Treatment of Abortion;" Yeomans—"Comp. Fracture of the Patella;" McPhedran—"Lymphadenoma" (Hodgkin's Disease); Henderson—"Pulmonary Cavities;" Dupuis—"Multiple Abscess of Liver.

In addition to the numerous papers a "Question Drawer" is to be instituted, in which members may place any question coming within the sphere of the Association. This will be opened and the questions read by the Secretary each afternoon and evening session and submitted for discussion. We hear that quite a number of our *confrères* from Montreal, Buffalo, and Detroit are invited and will be present.

**IODINE IN THE TREATMENT OF GOITRE.**—The injection of iodine into the thyroid body for the cure of goitre seems to be very generally practiced by leading surgeons, with much greater success than the treatment by excision. The only danger in the former plan is that of sudden death, which, although it rarely occurs, is extremely serious. As compared with excision the danger is trifling, hence it is much more preferable, provided it is curative. The safest place to make the punctures is, on either side, between the jugular vein and the sterno-mastoid muscle. The injections should not be confined to one spot; and should be repeated about once a week for several months. The following mode of injecting is recommended by Dr. W. J. Tivy, in the *British Medical Journal*:

"Having drawn up from thirty to sixty minims of tincture of iodine into the syringe, before screwing on the needle, adjust the needle to the syringe, and force a few drops of the iodine in the syringe through the needle so as to effectually expel all air from the needle itself; and having well oiled it with carbolic oil (one in twenty), push the needle to the depth of about an inch well into the goitre, and, raising the syringe higher than the point of puncture, so as to avoid injecting air, should any remain in the syringe, slowly inject the iodine; when this has been done, rapidly withdraw the needle, pinching up the skin around it to prevent any escape of the iodine."

The iodine treatment by injecting goitrous hypertrophy is one that requires time, patience and perseverance to accomplish a cure; but it is much safer than extirpation, and it is evidently superior to treatment by the application of iodine externally and iodide of potassium internally.

**HEART BEATS.**—Dr. W. B. Richardson of London, says he was recently able to convey a considerable amount of conviction to an intelligent scholar by a simple experiment. The scholar was singing the praises of the "ruddy bumper," and saying he could not get through the day without it, when Dr. Richardson said to him: "Will you be good enough to feel my pulse as I stand here?" He did so. I said: 'Count it carefully; what does it say?' 'Your pulse says 74.' I then sat down in a chair and asked him to count it again. He did so, and said: 'Your pulse has gone down to 70.' I then lay down on the lounge, and said: 'Will you take it again?' He replied: 'Why, it is only 64; what an extraordinary thing!' I then said: 'When you lie down at night, that is the way nature gives your heart rest. You know nothing about it, but that beating organ is resting to that extent; and if you reckon it up it is a great deal of rest, because in lying down the heart is doing ten strokes less a minute. Multiply that by sixty, and it is 600; multiply it by eight hours, and within a fraction it is 5,000 strokes different; and as the heart is throwing six ounces of blood at every stroke, it makes a difference of 30,000 ounces of lifting during the night. When I lie down at night without any alcohol, that is the rest my heart gets. But when you take your wine or grog you do not allow that rest, for the influence of the alcohol is to increase the number of strokes, and instead of getting this rest you put on something like 15,000 extra strokes, and the result is you rise up very seedy and unfit for the next day's work till you have taken a little more of the 'ruddy bumper,' which you say is the soul of man below."

**POTT'S DISEASE IN YOUNG CHILDREN.**—As a substitute for the plaster-of-Paris jacket Dr. H. C. Wyman, of Detroit, has devised a method of treatment which presents many commendable features. It is substantially a moveable jacket, and its application is as follows: The child being placed in such position that the spine is extended to nearly the normal limit; a piece of canton flannel large

enough to cover, say one-third of the circumference of the trunk, is laid on the back. A sheet of absorbent cotton having been placed over this, a cheese-cloth bandage six inches wide and several yards long, with the meshes carefully filled with plaster-of-Paris, is dipped in water and folded length-wise over the whole. When rubbed smooth with the hand so that it is perfectly adapted to the contour of the parts, a bandage is applied around the trunk, with figure-of-eight turns about the shoulders and pelvis, and the plaster allowed to set. The jacket thus constructed is in the form of a splint, and can be removed every night for the purpose of permitting massage.

**MEDICAL COUNCIL ELECTION.**—The following are the names of the newly elected members of the Ontario Medical Council:

*Territorial Representatives.*—Drs. J. L. Bray, Western and St. Clair; E. G. Edwards, Malahide and Tecumseth; R. Douglas, Saugeen and Brock; J. A. Williams, Gore and Thames; J. Russell, Burlington and Home; J. H. Burns, Midland and York; R. B. Orr, King's and Queen's; A. Ruttan, Newcastle and Trent; H. W. Day, Quinte and Catarqui; J. G. Cranston, Bathurst and Rideau; D. Bergin, St. Lawrence and Eastern; ———, Erie and Niagara.

*Collegiate Representatives.*—Drs. J. W. Rosebrugh, University of Victoria College; V. H. Moore, Queen's College; W. T. Harris, Trinity College; H. H. Wright, Toronto School of Medicine; F. Fowler, Royal Col. Phys. and Surgs., Kingston; W. B. Geikie, Trinity Medical School; A. G. Fenwick, Western Univ., London.

*Homœopathic Representatives.*—Drs. Geo. Logan, G. Henderson, C. T. Campbell, E. Vernon, G. E. Husband.

**PERSONAL.**—Dr. D. J. Grant, of Woodbridge, Ont., on the eve of his removal from the village, was presented with a beautifully engraved silver water pitcher, and Mrs. Grant with a massive silver salver, with suitable inscriptions. An address expressive of the high esteem in which both the Dr. and Mrs. Grant were held by the citizens, and best wishes for their future prosperity and happiness, accompanied the presentation. Many of the leading citizens were present, and all spoke in flattering terms of the Doctor's sterling qualities and of his successful public and professional career. We

heartily endorse the action and sentiments of his many friends in Woodbridge, and trust that he may be long spared to be a blessing to those among whom he may minister in the future.

**TORONTO UNIVERSITY CONVOCATION.**—The following gentlemen received the degree of M. B. in this University. J. H. Howell, *Gold Medallist*; L. Cars, M. R. Saunders, H. N. Hoople, *Silver Medallists*; C. H. Britton, F. W. Cane, J. D. Courtney, W. J. Greig, A. B. Kinsley, C. A. Krick, D. J. Minchin, D. Poole, M. Staebler, A. S. Thompson.

M. D., J. Bray.

**SCHOLARSHIPS.**—*First Year*, S. Cummings and J. A. Palmer. *Second Year*, F. P. Bremner and A. Ego. *Third Year*, A. W. Bigelow and G. A. Peters.

**TRINITY UNIVERSITY.**—The following is a correct list of the successful candidates in the primary examination:—J. R. Logan, H. H. Hawley, John McLurg, James McLurg, J. H. Hamilton, W. R. Nichols, J. M. Thompson, D. McLauchlin, A. E. Yelland, T. F. Campbell, C. R. Staples, J. E. Midgeley, B. Hawke (*Honors*), T. G. Lundy, W. J. Stevenson, W. Giles, H. C. Phillips, G. S. Pater-son, J. H. Hoover, O. J. Niemeire, F. E. Luke, J. A. Tuck, C. E. Thompson, J. C. Moffatt, D. Mc-Edwards, J. W. Hart, T. S. Philp, T. Primmer, W. F. Graham, W. I'anson, M. Maxwell, A. E. Mac-kay, J. P. Shaw, D. A. Kidd, H. R. McCullough, W. A. Fish, D. M. Gordon, J. J. Soden, C. A. Toole, D. S. Thompson, J. C. C. Grasset, S. H. Irwin, D. Kester, H. Blair, J. W. Shillington, T. Wilson, G. Gordon, S. T. Bell, R. A. Barber, H. S. Bingham, H. J. Caldwell, J. G. White.

**BISHOP'S MEDICAL COLLEGE, MONTREAL.**—The following gentlemen have passed their examination in this University:—M.D., C.M.—F. R. England, "*Wood*" and "*Nelson*" *Gold Medallist*; J. B. Saunders, *Chancellor's Prize*; C. E. Parent, C. R. Gillard.

**PRIMARY.**—A. F. Longway, *David Scholarship*; T. J. Groulx, *Practical Anatomy Prize*; R. Campbell, A. P. Scott.

**CORROSIVE SUBLIMATE IN CATARRH.**—Bichloride of mercury, in a solution of one grain to the pint of water, to which two ounces of cherry laurel may be

added, is recommended in the treatment of inflammatory conditions of the nose and throat, with profuse muco-purulent secretion. Crusts that may be present and tenacious mucus should be removed from the surfaces, which should then be sprayed with an atomizer provided with suitable tubes. Dr. J. N. Mackenzie regards it as a most valuable disinfectant in *ozæna* and foetor of the breath from pharyngeal disease. He found it successful in his own case in abating an acute coryza, and had good results in treating chronic nasal catarrh.

**NEW YORK POLYCLINIC.**—The Winter Session of the New York Polyclinic ended on Saturday, May 30th. The number of physicians who have attended the clinics since Sept. 22nd, is over 200. The Summer Session opens Monday June 1st, and will continue to Sept. 12th. The following clinics will be held each week: Gynæcology 12, Disease of Children 6, Surgery 8, Diseases of the Skin 6, Diseases of the Chest, General Medicine and Diagnosis 6, Diseases of the Eye 6, Diseases of the Throat, Nose and Ear 6, total 50. In addition Obstetric cases will be given to the class and a course in urinary analysis. The Laboratory of Pathological Histology will be open all Summer.

**ATROPINE IN EPILEPSY.**—David ("*Lyon méd.*") *N. Y. Med. Jour.*, administers to epileptic patients twenty grains of bromide of ammonium, and at the same time gives fifteen thousandths of a grain of sulphate of atropine night and morning. After this treatment has been continued for six months, he directs that two of the following pills be taken daily for at least a year:

Valerianate of zinc . . . . .	$\frac{3}{4}$ grain ;
Extract of belladonna . . . . .	$\frac{1}{10}$ "
Arsenious acid . . . . .	$\frac{1}{30}$ "
Extract of gientian . . . . .	q. s.

**TONIC AND DIURETIC.**—The following has been highly recommended in anasarca and other affections demanding similar treatment:

R Ferri sulph. . . . .	ʒi.
Pot. acetat. . . . .	ʒij.
Sq. scillæ. . . . .	ʒss.
Ext. digitalis fld. . . . .	ʒi.
Spt. juniper, co. ad . . . . .	ʒviii—M.

Sig. A tablespoonful in a little sweetened water three times a day.

**PNEUMOTHORAX FOR HÆMOPTYSIS.**—At a meeting of the Clinical Society of London, Dr. Cayley, reported a case of hæmoptysis treated by producing pneumothorax (*Lancet*, May 16th.) The patient was much reduced by repeated bleeding, and it was determined to admit air into the pleural cavity with the view of exercising atmospheric pressure and diminishing the circulation through the collapsed lung. The hæmorrhage was arrested, but the patient was too much reduced, and died of syncope, on the fifth day after the operation.

**UNIQUE CASES.**—Dr. Belfry of London, Ont., reports the case of a child which weighed 18½ lbs. at birth, and measured 23¾ inches in length. He also reports the case of a woman 42 years of age, now at the menopause, who is cutting two new incisor teeth. Her permanent incisors decayed and were extracted last year. She is a weakly woman; had a tumor removed from the abdomen 15 years ago in Manchester, England, and a discharging sinus has continued ever since. She is also suffering from caries of the os innominatum. Both cases are unusual if not unique.

**MELLIN'S FOOD.**—Among infant foods which have become popular with the profession may be mentioned Mellin's Food. The manufacturers, Messrs. Doliber, Goodale & Co., of Boston, are to be congratulated on the recognition of their exhibit of this Food at the New Orleans exhibition, the judges awarding it the first prize, a gold medal, as the best food for infants and invalids.

**CHOLERA INOCULATION.**—It is reported that between four and five thousand persons in Valencia, Spain, have been inoculated with cholera microbes by Dr Ferràn. The results are said to have been successful, and the epidemic is disappearing. A commission has been appointed by the British Government to investigate Dr. Ferràn's experiments.

**INTOLERANCE OF POTASSIUM IODIDE.**—Many persons are entirely unable to take even very small doses of iodide of potassium, without producing unpleasant effects. To overcome this it is recommended to combine with it ordinary doses of fluid extract of belladonna. The addition of a small quantity of fluid extract of liquorice will also cover the taste and render the mixture more palatable.

**CROTON CHORAL HYDRATE.**—This remedy, for-

merly so much relied upon in the treatment of painful affections of the 5th nerve, is now much used in the treatment of neuralgic dysmenorrhœa, sciatica, lumbago, etc. Five or six grains in glycerine and water may be given three times a day.

**VOMITING OF PREGNANCY.**—The application of ether spray over the epigastrium is recommended in the vomiting of pregnancy. Immediate benefit has been derived from its use where drugs of all kinds have failed to afford relief.

**CORRECTION.**—In our April issue, page 239, the address of J. Ellwood Lee, manufacturer of Levis' Splints, was incorrectly given. It should have been 425 Walnut St., Philadelphia.

**TRINITY MEDICAL SCHOOL.**—The Fellowship Diploma of Trinity Medical School has been formally recognized by the Royal College of Physicians, London, Eng., and also by the "Triple" Examining Board of Edinburgh. This Diploma is now recognized by all the licensing bodies in Great Britain.

The death of Prof. Henle, of Berlin, the celebrated anatomist and physiologist, on the 18th ult. at the advanced age of 74 years, is announced. Also Prof. Panum of Copenhagen.

**CORONER.**—Dr. G. H. Bowen, of Seeley's Bay, Ont., has been appointed Coroner for the Counties of Leeds and Grenville.

We regret to announce the death of Mrs. Dr. Workman of this city, at the age of 72 years.

This estimable lady sustained the sacred and endearing relationship of wife and mother, for nearly half a century, and embellished a life devoted to its duties with all the graces of the Christian character. Dr. Workman has our deepest sympathy in his great bereavement.

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### Books and Pamphlets.

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**INHALATION TREATMENT OF DISEASES OF THE ORGANS OF RESPIRATION.** By Arthur Hill Hassall, M.D., Lond. Longman & Green, London. Hart & Co., Toronto.

Dr. Hassall of San Remo, in the Western Riviera, has in the above volume furnished the profes-

sion with a succinct, but sufficiently exhaustive notice of the various requisites to be fulfilled by the very numerous forms of Inhalers that have from time to time been placed in the market, as also of the adaptability of the inhalation treatment for certain diseases of the organs of respiration. The subject is treated in seven chapters under the following heads: 1. Entrance of medicaments into the organs of respiration. 2. Principles concerned in the volatilization and inhalation of the medicaments. 3. The apparatus to be employed. 4. Inhalation chambers. 5. The quantities of the medicaments, the manner, frequency and duration of the inhalations. 6. The medicaments employed in inhalation. 7. The various diseases in which benefit may be expected to be derived from this mode of treatment. At the Continental spas it would seem to be the practise to make extensive use of inhalation chambers, the apparatus for which the author describes as also the various substances used for sprays and vapors, in which chambers the patients will remain for hours, breathing the artificial atmospheres. The work is a valuable addition to the literature on the subject

**A PRACTICAL TREATISE ON DISEASES OF THE EAR.** By D. B. St. John Roosa, M.D., LL.D., Prof. of Diseases of the Eye and Ear, New York Post-Graduate Medical School, and President of the Faculty; Surgeon to the Manhattan Eye and Ear Hospital. New York: Wm. Wood & Co. Toronto: Williamson and Co.

We are pleased to receive the sixth edition of this standard work on the ear. The author is well known as a specialist on the ear, and the previous editions of his work have been greatly appreciated by the profession. The edition before us has been revised with great care, new matter has been added and the work contains much information of value to the general practitioner. We have great pleasure in recommending this book to our many readers, as a reliable guide to the diagnosis and treatment of affections of the ear.

**A GUIDE TO THE DISEASES OF CHILDREN.** By James F. Goodhart, M.D., F.R.C.P., Assistant Physician to Guy's Hospital. Philadelphia: P. Blakiston, Son & Co. Toronto: Hart & Co.

The scope of this work may be defined by the following extract from the author's preface: "I have not considered it my function to write a book on general medicine, but so far as possible, I have kept in view the diseases which seemed to be incidental to childhood, or such points in disease as appear to be so peculiar to, or pronounced in chil-



dren as to justify insistence upon them." In the second chapter will be found valuable hints for the young practitioner on the diet of children in health, as also in the third chapter for the treatment of derangements arising from faulty diet. The fourth treats on acute and chronic diarrhoea. The author impresses on the reader the importance of never missing an opportunity of examining the alvine evacuations, as the appearances will give valuable suggestions for treatment. The fifth treats on stomatitis, thrush, cancrum oris. The sixth on diseases of the digestive tract. The remaining chapters, forty-eight in all, deal with the various diseases of infancy and childhood in a manner at once interesting and instructive. Unqualified admiration must be expressed for the ability exhibited in arrangement, and for the clear and attractive form in which the author has placed his views before the reader.

THE ANNUAL AND SEASONAL MAPS OF THE UNITED STATES, by Prof. C. Denison, M.D., Denver, Colorado. Chicago: Rand, McNally & Co. Size of map 58 x 41. Price, mounted on muslin, \$5 00: on thick paper, \$3.00.

These maps illustrate the climate, temperature, humidity, cloudings, direction of winds, and physical features of the country. They will be found invaluable to physicians and others who have occasion to recommend or take advantage of change of climate. All the mineral springs and health stations in the United States are also referred to in the tables. We recommend these maps to the attention of the profession in Canada.

MEDICAL BOTANY OF NORTH AMERICA. By Lawrence Johnson, A.M., M.D. New York: Wm. Wood & Co. Toronto. Hart & Co.

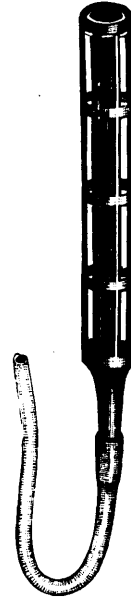
The above-named work is a valuable addition to Wood's Standard Library of Medical Authors. As the title indicates the book treats principally of the botany of the plants whose therapeutic activity has placed them in the various text-books on *Materia Medica*. The work is illustrated with well executed coloured plates and wood cuts, and supplies a hitherto existing want, viz., a good manual on medical botany.

### New Instruments.

#### COMBINED RECTAL AND INTRA-UTERINE IRRIGATOR.

Dr. J. S. Coleman, of Augusta, Geo., describes the following instrument in the *Brit. Med. Journal*, April 18th, '85:—In the *Medical Record* of New York, for May 10th, 1879, I presented to the medical profession the "Metro-clyst." I now desire

to call attention to a modification of this instrument, which makes it available for the diseases of the rectum and surrounding pelvic structures. The instrument is of hard rubber, and consists of a cylindrical frame or cage traversed by a central tube. This arrangement insures the easy exit of the injected fluid. Any ordinary syringe can, by means of rubber tubing, be attached to it. My preference in the use of hot water is for the siphon. Thanks to the genius of Dr. T. A. Emmett, we all now appreciate the indispensable value of hot water, in inflammation and as an hæmostatic. Though I have not yet had an opportunity of test-



ing the merits of this instrument in ovaritis, pelvic cellulitis, or peritonitis, I feel confident that we will find it one of our most efficient measures in combating these serious and obstinate forms of disease. So far as I am informed, Dr. J. R. Chadwick was the first to advocate the rectal use of hot water in the treatment of pelvic inflammations (*vide* his able and interesting paper in the *Transactions* of the American Gynæcological Society for 1880). To me it promises much in acute prostatitis, inflammation of the rectum, and internal hæmorrhoidal troubles. I have had most gratifying success from its use in a case of puerperal endometritis, and in one of rectal ulcers.

### Births, Marriages and Deaths.

On April 30th, H. K. Kerr, M. D., to Anna E., eldest daughter of F. Franklin, Esq., both of Hammond, N. Y.