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THE

BRITISH AMERICAN JOURNAL.

ORIGINAL COMMUNICATIONS.

ART. XLVII.—*Notes of Surgical cases.* By J. A. GRANT, M.D. Attending Physician General Protestant Hospital, Ottawa, also to the County of Carleton Gaol.

CASE I.—*Wound of the forearm by a circular saw; extensive loss of structure; recovery with a useful limb, from a rectangular to a straight position, by gradual extension.*

DEC. 20, '61.—Robert Spittle, waggon-maker, æt 21 years, while engaged about the machinery of his establishment, by accident his right forearm came in contact with the circular saw, revolving at a rapid rate. The wound inflicted extended in an oblique direction from the ulnar to the radial side of the arm, all the parts on front of the bones being divided, except the ulnar artery and nerve, and the flexor carpi ulnaris and a portion of the flexor profundus digitorum.

Portions also of the scaphoid bone and lower extremity of radius were removed. Upon examination the wound presented a ragged appearance, nearly an inch of structure being removed, there being slight hemorrhage from the lacerated extremities of the radial artery. This vessel being secured, and all foreign material extracted from the wound, its opposite sides were placed together by flexing the hand towards the forearm, as to form a right angle at the wrist joint posteriorly, and secured in this position by appropriate sutures and bandages. At the end of the fourth week union was complete, except at one point through which small pieces of exfoliated bone escaped. All tenderness in connection with the wound having subsided about the third month, gradual extension of the hand towards the posterior aspect was commenced by a posterior straight splint and roller, extending from the tips of the fingers to the elbow joint. The cicatrix was carefully observed, and the bandage relaxed whenever pain was produced. Thus by gradual extension and relaxation the hand attained its natural position, at the same time recovering in a great measure the use of the fingers, and the feeling in those parts supplied by the ulnar nerves. The above case is interest-

ing as an evidence of the importance of *conservative surgery* and of the amount of extension which can be obtained by gradual efforts, notwithstanding the adverse circumstances, viz. the removal of a considerable portion of integument and subjacent tissues and the subsequent inflammation. According to both Adams and Paget, inflammation, if of any extent, interferes very materially with the proper reparative process; the pabulum of new formation being described by Paget as "*nucleated blastema*," and different from inflammatory lymph, in which fibrocellular tissue is developed from nucleated cells.

Paget in his *Surgical Pathology*—page 176—says.—“It is evident that the exposure of the wounded parts to the air did little harm, if it was continued only for a few hours.” To the correctness of this statement I can testify, from having had many cases occurring among the operatives engaged in the large lumber mills in and about Ottawa. In fact it is surprising in many instances, with what rapidity the various structures unite, recovering both their original structural characters and functional activity.

Incised wounds of the fingers, by which every structure has been divided, to the smallest portion of integument, will unite, providing that the parts are immediately placed in apposition, and then retained by appropriate splints and bandages, afterwards interfered with as seldom as possible. In cases of divided Achilles tendons I have rarely found any difficulty, particularly if the external wound healed quickly, the union of the divided tendon being as speedy and complete as in ordinary cases of sub-cutaneous division. An anterior splint extending from the tips of toes to the knee-joint, I have found to give the heel a sufficient elevation, and answer instead of Monro's apparatus.

CASE II.—*Ununited fracture of the Tibia; operation and recovery.*

Thomas Murry, farmer, æt 35 years, of robust conformation of body. While engaged playing foot-ball, accidentally fell and fractured both bones transversely at the lower third of the leg. The fracture was rectified in the usual way by the medical man in attendance, and every care bestowed upon the case. At the end of six weeks the leg, not appearing to gain much strength, was placed in a starch bandage. After some weeks the bandage was removed, but the limb was weak as before. In this condition Mr. M. continued for about nine months, when I was consulted. Upon examination I found that the fibula had united, but not the tibia. An operation being decided upon, the seaton was considered most advisable. This however, I was unable to accomplish, owing to the irregular nature of the fracture and the close proximity of the parts. Having no Brainard's perforator, I substituted a strong packing needle, and thus pierced sub-cutaneously the extremity of each fragment at several points and afterwards passed the seaton as near the seat of fracture as possible. Lateral splints being applied and perfect rest enjoined, at the termination of six weeks union took place. The seaton was removed upon the ninth day, and cold water dressing applied to the wound. Three months from the date of operation he was enabled to take a lively interest in his usual agricultural pursuits. Over-anxiety on the part of the patient, a want of perfect quietude together with rather spare diet, were the original causes of non-union. With these precedents in view, I prescribed a liberal supply of beef

steak and porter, in order to enable the system to throw out that plastic exudation which is necessary for perfect ossific consolidation.

CASE III.—*Submaxillary calculus, 17 years in process of formation, spontaneously extruded.*

John O. B., æt. 41 years, thin conformation of body, and frequently subject to attacks of gastric and hepatic functional inactivity. When in Ireland 17 years ago, a nodule was first observed in the region of the submaxillary gland, about the size of a pea, slightly painful upon pressure, to relieve which blisters had been applied without any decided benefit. About a year from this date, a discharge, at first purulent, subsequently sero-purulent and sanguineous, took place from the mouth at the base of tongue and at a point nearly opposite the calcareous concretion. Occasionally the discharge would cease for a period of two or three weeks, during which arrest great pain was complained of, doubtless from the accumulation of morbid secretion and the closure of the excretory canals of the gland. As years rolled on, this nodule gradually increased in size, being quite movable, and retaining its hardness upon pressure. In October 1861, this same gland became the seat of acute inflammatory action which extended to the cheek and side of neck. Hot fomentations and poultices being applied, an opening formed externally, from which a quantity of purulent material escaped. Ten days afterwards, during the act of coughing, this calculus (Fig. I., weight 3 i. grs V.) was extruded from the mouth, after which instantaneous relief was experienced. To the present time neither has there been a return of pain nor swelling, and as to the functional activity of his system, a most marked change for the better, in relation to those organs which appeared more or less inactive during the formation of this calculus. Rokitansky states that these calculi or concretions are "white, friable, and either round, oblong, cylindrical, or obovoid; in size varying from that of a millet-seed or pea to even that of a hazel nut. They are either solitary, or, if small, frequently very numerous; and they are composed of phosphate and carbonate of lime, held together by animal matter." Chambers on Digestion, p. 273, states—"Saliva is poured out from so many parts, that serious injury would not be likely to happen even if one source was quite impeded. Besides which, the glands which furnish it possess a great power of accommodating themselves to considerable change of circumstances, so that many of those addicted to the nauseous habit of spitting do not seem to suffer from it. Others, however, less robust do suffer, and I feel no doubt that the loss of saliva has something to do with their ailments." Of the latter class I would cite this case as an illustration. For many years a copious flow from the mouth during sleep of sero-sanguinolent saliva saturated his pillow, and for which he was unable to account. From the weakened state of his digestive functions during the retention of this calculus, and the almost immediate improvement after its expulsion, the deductions appear the more feasible.



CASE IV.—*Piece of bone of unusual dimensions lodged in the lower part of the œsophagus; man aged 56 years; removal on the 5th day, recovery.*

Mr. P——, æt. fifty-six years, on the 11th May, 1862, while at dinner,

swallowed a piece of bone; a sense of choking and dyspnœa ensued, which, after a time, subsided in a measure. The patient could not rest at night, and he expectorated quantities of mucus, and was unable to swallow anything excepting the smallest quantity of liquid, which produced considerable pain and uneasiness. The suffering continued, varying in intensity, until the fifth day, and even then he was of opinion that no bone had been swallowed, but laboured under the idea that a piece of meat had been arrested in its progress to the stomach. The difficulty of being able to know exactly what had passed into the œsophagus, is accounted for by the absence of many teeth, and a consequent deficiency in mastication. A probang mounted with a bit of sponge was passed into the œsophagus to its lowest part, where the foreign material was evidently lodged. Being so near the stomach I endeavoured to free the passage by forcing the obstructing material into the proper *digester*. Failing in this respect, the whale-bone probe, with double blunt hook, was introduced, and removed several small pieces of meat. The pain, irritation, and difficulty of swallowing still continued,

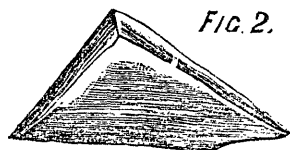


FIG. 2.

associated with most marked prostration. The hook was again passed, fully a distance of 14 inches, and fastened to what, I could not say; however considerable force was necessary to remove it, and that being accomplished, the bone (of which a representation is given full size, Fig. 2) appeared. After

a few days' uneasiness, all irritation subsided, and recovery took place without any apparent difficulty.

Ottawa, October 8th, 1862.

ART. XLVIII.—*Examination by the Medical Board U. S. A. for the Reserve or Staff Surgeoncy.*

To the Editor of the British American Journal.

DEAR SIR,—Please find appended an account of the examination to be undergone by a candidate wishing to join the U. S. army as reserve or staff surgeon. I send my examination as a sample of the rest. It may interest your readers to know upon what plan the examinations are conducted. You will readily admit that they are pretty rigid, and I am sure nothing can be more thorough and at the same time more fair. The examinations are conducted by a Board, presided over by Drs. Allen and Brinton; and if they do not insure to the U. S. A. a good corps of surgeons, it will be from no lack on their part, as they are indefatigable in their exertions to place the medical department of the Army upon a high footing. Those who pass this board receive their commissions as Staff or Reserve Surgeons, are not obliged to follow the regiment, but they take charge of the various hospitals, and are sent for to the field when any battle takes place or is expected. The amount of practice they therefore get is more than if attached to a regiment, and the opportunities for acquiring surgery are innumerable. I shall write now and then any case which might be of more than ordinary interest.

I am, yours truly,

GEORGE E. PATTEE, M. D.,
McGill College.

Anatomy.

1. Describe the humerus, giving its articulations, the muscles attached, with their origin and insertion.
2. Describe the external carotid artery, its course, its relations, and its branches, with their distribution.
3. Describe the alimentary canal, its divisions, locations, structure, functions, and relations.
4. Describe the 5th pair cranial nerves, their origin, course, relations, and branches, with their distribution.

Surgery.

1. What is a *carbuncle*?—what is a *boil*?—what their treatment?—What is *caries*?—what is *necrosis*? Describe minutely the process of exfoliation. How is a sequestrum formed, how treated?
2. Describe the different varieties of Erysipelas, their symptoms, and treatment. How would you reduce dislocation of the first phalanx of the thumb upon the dorsum of its metacarpal bone?
3. How would you treat fracture of the tibia and fibula, oblique fracture of the neck of the humerus, of the olecranon process of the ulna, of the coronoid process of the ulna?
4. Explain the necessary steps for tying the external carotid, posterior tibial, and ulnar arteries, the localities for such operations, and the parts involved.

Practice of Medicine.

1. Describe a case of small-pox, its prognosis, and treatment; also the differential diagnosis between it and *scarlatina* or *rubeola*, at the commencement of the disease.
2. Give the symptoms, physical and rational, and treatment of *pericarditis*, also the lesions found after death, and what disease it is most frequently intercurrent with.
3. Describe the composition, chemical and microscopical, of the different urinary deposits. Give your treatment for the lithates.
4. Describe a case of epilepsy. How would you tell a case of simulated epilepsy?

The above consisted of the written examination, one branch with its set of questions being considered each day. Of course the questions given to the other candidates differ, some being examined first on "Practice of medicine," there being four examined at one time. After these written examinations, which by the way you have four hours each day to answer in, the candidate is examined for two hours during each successive day, for two days, orally, in anatomy, practice, chemistry, physiology, surgery, toxicology, and hygiene. They on the next day, during the forenoon, are required to ligature arteries, amputate, and perform several of the various surgical operations in the dissecting room, for which purpose subjects are always in readiness. On the afternoon of the

same day, the candidate has to undergo a practical examination in the hospital, diagnosing and prescribing for the different diseases, and surgical cases before him. If successful in this examination, he is appointed to the Corps of Reserve or Staff surgeons.

Washington, D. C., September 19th, 1862.

(An examination such as the foregoing, is undoubtedly, if faithfully carried out, competent to secure for the U. S. army the highest talent on the Continent, but we must confess to some misgivings that such examinations prove the exception and not the rule. If we are wrong, we can hardly account for the singular denouement of surgical practice contained in the following extract from the *Boston Post*, a paper which we believe is usually well informed upon most subjects. The subject is even, we suspect, hinted at in the reported proceedings of the "Providence Medical Association," held on the 18th September last. At the distance we are from the scene of warfare, distorted accounts of medical and surgical practice have reached us, and these to an alarming extent. Knowing as we well do the high scientific attainments of the gentlemen holding high professional positions in that army, we are sure that such blunders could not possibly occur with them or their immediate subordinates. The following is the extract to which we have alluded:—

"LINT A SOURCE OF MISCHIEF.—A writer to the *Boston Post*, who is probably a surgeon, says: "Every ounce of lint sent to the army does mischief. Its only use is to cover up the blunders of bad surgery. It is seldom used by the best surgeons here. In the army it is crowded into wounds by men who know no other way to stop hemorrhage, and there it remains till it becomes filled with filth and maggots. It retains the discharges till they putrify, and produces intolerable stench. The termination of its work is the death of the patient."

We regret much to state that Dr. Pattee, the writer of the foregoing communication, has been brought home to this country, labouring under a serious attack of Hæmoptisis, induced we are told by the arduous duties of the hospital practice in which he was engaged. After examination he had been appointed an assistant-surgeon, and then a surgeon, and, at the cessation of his duties, was in charge of a large hospital at Washington.—*Ed. B. A. J.*)

ART. XLIX.—*Analysis of 100 Ophthalmic cases, showing the comparative frequency of the various diseases of the eye in Hamilton.* Contributed by A. M. ROSEBRUGH, M.D., Hamilton, C. W.

Thinking it would be interesting to the readers of the JOURNAL, I have transcribed from my case book the diagnosis of 100 cases of disease of the eye as they came under my observation during the months of March, April, May, June and July, 1862, in the city of Hamilton.

From observations made during a period of about three years, I am led to believe that the analyses of these 100 cases will give at least an approximate idea of the percentage in which the various diseases of the eye exist in Canada West.

DISEASES OF THE LIDS.	DISEASES OF THE CONJUNCTIVA.	DISEASES OF THE IRIS.	DISEASES OF VITREOUS HUMOUR.
Entropion 1	Conjunct. Simplex 3	Iritis—Idiopathic . . . 1	Effusion in 1
Ectropion 1	“ Catarrhal . . . 1	“ Specific 1	DISEASES OF THE OPTIC NERVE.
Trichiasis 1	“ Phlyctenular 14	Synechia 2	Paralysis from cerebral inj. (“ Amaurosis”) 1
Tinea 1	“ Granular . . . 11	Occlusion of Pupil. 2	DISEASES OF ACCOMMODATION.
Lippitudo 4	“ Granu. with ulcers of Cornea 4	Prolapse of the Iris 1	Presbyopia 1
Symblepharon 1	Pterygium 2	DIS. OF THE CHOROID.	Myopia 2
Tumors 3	DIS. OF THE CORNEA.	Choroiditis 2	Asthenopia 1
DISEASES OF THE LACHRYMAL ORGANS.	Nebulæ (Scrofulous) 2	Atrophy (“ Amaurosis”) 3	DISEASES OF THE BALL OF THE EYE.
Strictures of the Canaliculi 1	“ (Syphilitic) 1	DIS. OF THE RETINA.	Ophthalmitis 1
Strictures of the Nasal Duct 1	Central Leucoma . . 3	Retinitis (“ Amaurosis”) 1	Atrophy 4
Mucocele 3	Pannus 2	Retinitis Pigmentosa (“ Amaurosis”) . . 1	
DISEASES OF THE EXTERNAL MUSCLES.	Keratitis 2	Effusion upon Retina (“ Amaurosis”) . 1	
Strabismus 4	Staphyloma 1	DIS. OF LENS AND CAPSULE.	
Nystagmus 1		Soft Cataract 1	
Diplopia 1		Hard Cataract 2	
Paralysis of External Rectus 1		Traumatic Cataract 1	

SUMMARY.

Diseases of the Lids	12
“ “ “ Lachrymal Organs	5
“ “ “ External Muscles	7
“ “ “ Conjunctiva	35
“ “ “ Cornea	11
“ “ “ Sclerotic	0
“ “ “ Iris	7
“ “ “ Choroid	5
“ “ “ Retina	3
“ “ “ Lens and Capsule	4
“ “ “ Vitreous Humour	1
“ “ “ Optic Nerve	1
“ “ “ Accommodation	4
“ “ “ Ball of the eye	5
“ “ “ Orbit	0
Total	100

The proportion in which ophthalmic cases exist in proportion to a given population it would be difficult to ascertain ; I will however, venture the statement that they exist in this vicinity to the extent of about one per cent.

Hamilton, C. W. September 21st, 1862.

ART. L.—Frozen Parts—Frost Bites. By R. NELSON, M. D., New York.

Read before the N. Y. Medico-Chirurgical College, Dec. 27, 1860.

This paper is not called for in this region of New York, where the cold is seldom sufficient to freeze people ; but in the north and north-west it may be useful, as giving a rational statement of what ought and ought not to be done in

cases of frost-bites. It was written last year, but not then published, owing to causes unnecessary to be mentioned. It was suggested by the following article, which appeared in the *New York Herald* of December 30, 1859, in which it is said that the weather was so cold at the time of the great fire, December 16, 1835, that "*barrels of brandy and other spirits were kept beside the engines and emptied into the boxes to keep them from freezing. The firemen were compelled to put brandy into their boots to keep them [their feet] from freezing.*"

No doubt that the above statement is correct as to the use made of the spirits, but there the accuracy ends. Much knowledge, also error, is imbibed by the masses from newspapers. A statement, in *print*, is so potent, that it is believed and propagated as a truth, while the same statement made in *words* would be disregarded. On this account I notice the above extract to refute, not the fact, but the conclusion and the dangers likely to ensue from its application, especially since a large portion of people believe that, since spirits do not freeze, any thing put into spirits, like it, will not freeze; but this is false.

Experiment.—Fill a flask with spirit—say whiskey, and place it in the air, the thermometer at 10 or 20° below 0, Fah.; next, fill two phials with water, well stoppered. Hang one phial in the air and one in the whiskey—this will happen: the water in both phials will freeze; the one in the air not so soon as the one in the spirit, because the spirit being at the same temperature as the atmosphere, and a denser body, will more quickly than the air absorb the caloric from the phial suspended in it, than the atmosphere will from the phial in it. The water in the phials will remain for a time transparent, because liquid, and when cooled down below freezing will suddenly grow milky-white, and in *an instant* after, the phials breaking, will become solid ice; because up to the moment of freezing, the phials resisted that expansion without which the water could not solidify into ice. These physical facts are so evident, that it would be a waste of time to dwell longer on them. The masses are ignorant of these physical facts, and are confirmed in their error by such statements as the one above-mentioned, and ought to be corrected. To show that this error has had at least one application within my knowledge, I shall now mention one case.

Case 1.—Two gentlemen interested in land went into the forest with a surveyor to mark out a boundary. The day was moderately cold—about zero. The day's labour over, and having a bottle of brandy left, they poured a portion into their boots, under the idea of securing their feet from cold. They had an hour to *walk* before reaching a house, and this exercise preserved them; for had they ridden, undoubtedly they would have lost their feet.

Case 2.—A grocer had a number of puncheons of rum piled up in his yard in a very cold climate. He sent two of his clerks to tap one of them, which was done; but the hole having been bored too large for the cock they had with them, one thrust his thumb into the hole to stop it, while the other ran into the house for a suitable cock. In a minute, or a little over, he returned, and his companion withdrawing his thumb, found it white, senseless—frozen. The bone of the first part of the second phalanx was frozen, and ultimately was lost; for a frozen bone *never* recovers.

I might cite many more cases in illustration of the danger to be feared from

spirits cooled to a *low* temperature, but which, however interesting, would extend this paper to too great a length.

What takes place when a part freezes.—This ought to be understood before attempting to remedy the evil; and let us take the case of an ear. The cold air at first excites a biting pain, increased redness from afflux of blood invited by the pain; a while longer the pain diminishes, and the redness lessens—nearly disappears; all at once a sharp sting will ring, as it were, through the part, and as suddenly all pain will cease—it is frozen, is quite white, bloodless; innervation, circulation, and life have ceased in the part. Should the exposure continue, the freezing will extend, and the pain at the frozen limit will recede farther and deeper. It is different for covered parts—as the fingers and toes; here the pain is less acute; there is rarely any preceding redness, nor is the moment of freezing announced by the sudden sting felt as when it is an exposed part. When long continued, not only the soft parts, but also the bone, become involved. All these freezings necessarily proceed from without inwardly, and the thawing or recovery of the part ought to follow the reverse order, else destruction will ensue. The particles first frozen must be the last thawed; for, should the surface be thawed first, a frozen stratum will remain between it and the deep living structure, cutting off all communication of innervation, circulation, and life from below, leaving this imprudently thawed part isolated, and subject to the laws of dead matter already interfered with by the chemical and vesicular alteration which freezing induces. Therefore the thawing must take place slowly from *within*, each particle, as it thaws, receiving such innervation as it is susceptible of—such amount of blood as the injured vessels will admit, particle by particle—and a dose of life from the nearest living atoms. This much said, we are now prepared for the treatment.

Treatment of Frost-Bites.—Application of Snow.—A popular error exists—almost universal—that a frozen part is to be restored by rubbing it with snow. By this *rubbing* and *indiscriminate choice of snow*, two great errors are committed, each of which adds to the first injury.

First.—Rubbing.—Its advocates may possibly say rubbing will set the blood in motion, and help to generate heat to thaw the part—false. A frozen part is a solidified one, and the blood usually there is now absent; but even if present, it could not be made to circulate until thawed; therefore, this first act is worse than useless, since it cannot affect the object intended. The juices that give pliancy and compressibility are frozen into minute crystals, more or less approximated. In this state, bending or compressing (the effect of rubbing) will produce innumerable small fractures in the tissue, which, on becoming thawed, will leave as many lesions, added to the one created by the simple congelation; an accident sufficiently severe in itself. The friction cannot give fluidity to that which is solid, as is a frozen part, and by its alternate pressing and kneading, will produce mechanical interstitial damages.

The *second* error is the *indiscriminate quality of the snow*, as regards its temperature, and is a more serious one than that of friction. Frost-bites can scarcely happen at a less temperature than zero, or 30° to 25° below the freezing point, and snow at such a time must be at an equally low temperature. If snow so

could be applied, it cannot contribute caloric to thaw the frozen part, but must abstract caloric from it, and tend to either keep it frozen or freeze it deeper than it was before the application.

Case 3.—Two gentlemen driving in a very cold day, one of them froze the tip of his thumb; his companion told him to rub it with snow. He drew his thumb out of the mitten, and with the other hand (a mitten on) picked up the cold snow from the roadside, which he vigorously rubbed on his thumb, but it would not thaw! with this infallible remedy. He continued to repeat the dose as they rode along, and the thumb continued to freeze more and more; at last an acquaintance met them, and apprised them of the error they were committing; but too late; for already had the first and part of the second phalanx frozen, bones and all, to the ultimate inevitable loss of the limb. The day was cold, below zero, and the temperature of the top snow the same, of course. Since the tip of the thumb froze through the mitten, it would have taken little reflection to know that snow as cold as the air that froze through the mitten, when immediately applied would surely freeze the part more. But who is there that reflects or reasons on a dogma? It is accepted as a matter of course, and the more readily when it is incomprehensible.

Another, Case 4, a contrast to the foregoing.—Two gentlemen rode side-by-side in extremely cold weather, well muffled up. One of them had his cheek slightly exposed to a blast that blew under the peak of his cap. He felt the sudden sting that precedes, or rather accompanies freezing, and well knew what had happened, and what to do, for he was a reflecting man. The driver, looking round, apprised him that his cheek was nipped—never mind, drive on, was the reply. All he did was to crouch his face a little lower into the shawl, for it was too cold to raise his arm and hand from the tucking in. He trusted to the shelter he now got, and the rising heat from his body, to *slowly* restore the part. The road took a turn and the wind ceased to scathe the frozen cheek, which now *gradually* thawed by the ascending heat from his body. In a little time the cheek began to smart; to remedy this he contrived to expose his cheek to a little more air, and so cooled off the rising reaction and too rapid thawing. When he reached the halting-place, an hour after all was well, only a little tender, to the surprise of his companion and the driver, who could not conceive how a frost-bite could be recovered from without having recourse to the inevitable rubbing and snow.

It is easy, now, to perceive how a frozen part is to be thawed. It must be borne in mind that the particles last frozen are those which must be first permitted to recover, and prevent the next outward layer from doing so until the inner one has, which can only be done by retarding the thaw of the outside. How is this to be done?

By applying such a degree of cold as will not increase the freezing, at the same time prevent it from thawing until it is reached by the natural thawing from within outwardly. This object is easily attained; for where frost-bites happen there is at hand either snow, ice, or frozen earth. When the weather is very cold the snow or ice will be nearly of the same low temperature—10°, 20°, 30° below zero, Fah. Such snow is too cold; it will freeze the part more than it was before

its application. But it is easy to get warmer, or less cold snow—snow of a suitable temperature—such as will not additionally freeze. This suitable temperature is barely the freezing point, 32° above zero of Fahrenheit. It is easy to raise the temperature of snow, however cold, to this degree, by simply putting a few handfuls into a basin of water, which will instantly bring it to the temperature needed. When there is no snow or ice, frozen earth may be substituted. The water will be brought to 32° , the exact point to permit slow thawing from *within*, as already mentioned. If it be the fingers or toes that are attacked, immerse them in a basin full of this slushy snow, ice, or mud water; should it be an ear, or nose, or cheek, apply this water by means of a napkin, frequently dipping it so as to keep it at this barely freezing (or thawing) temperature, until colour and softness return to the part. After that, less cold water may be used, so as to keep down the inflammatory congestion that is likely to follow. While this slow process of thawing is being effected, avoid that rubbing and kneading, the error of which has already been noticed. When the part has thawed, and is not dead, the epidermis will often blister like a scald. Prick these blebs, as they form, and dress with *basilicon* rather than with cerates, and exclude the air and light, since these increase the inflammatory state.

When the congelation has penetrated deep, the part will slough, however judiciously it may have been thawed. Should the freezing have reached a bone, as a phalanx, even slightly, it will never recover, (as in case 2).

Case 5.—A young man, a carpenter, unacquainted with the *feeling* of intense cold, this being his first winter in a severe climate, left his work to go to his dinner at a short distance, carrying in one bare hand a jack-plane, in the other a hand-saw, both dense wood and good conductors. On entering his house he found the tips of his fingers nipped and white. His wife applied the popular remedy, which this day was very cold, dry snow. She *rubbed* his fingers assiduously, until the white and the frost extended to his knuckles, and desisted only when her own began to be nipped. Two days after he called on me; his fingers now looked like as many black sticks, and becoming dry. In a month more they separated from the palms, leaving him fingerless of both hands. The poor young wife, in giving an account of the affair, dwelt emphatically on her diligence in rubbing the snow, saying that the more she rubbed the more his fingers froze. Had this popular error not existed, or had she known the difference between *cold* and *warm* snow, she would have used her own common sense, and saved, instead of destroyed, her husband's fingers.

Case 6. A man 50 years of age froze all his toes. They were thawed *populariter*; but in two days the soft parts became black, then dry. In six or eight weeks they began to fall off at the metatarsi; also the heads of these bones. After several months of suffering a thin shiny cicatrix covered the stumps, but the pain continued, because the remaining bones were struggling with slow disorganization. An inch long of each metatarsus was amputated; this was followed by instant cessation from pain, followed by a good cure.

When the whole frozen portion of bone does not separate, or when a bone is only slightly touched, the investing tissue may recover, but most likely will remain swollen by congestion and a languid inflammation; while the bone

beneath will undergo a great and slow change, losing its hardness, the lime gradually wasting away, leaving it with a soft, semi-cartilaginous, yellowish look, and will never recover.

Case 7.—A party of infantry was sent on a march of two days in the winter of 1813. On the second day they returned to quarters, some of them on two or three sleighs, so exposed that there were several frozen toes. One man, after the great-toe thawed, the epidermis blistered, and the nail came off; new epidermis formed, also a sickly nail, from the edges of which oozed a fœtid, watery fluid. The flesh remained swollen, purple red, and a continuous aching persisted for nearly a year, relieved by amputation only. The bone was softened, and diaphanous in several places, like a bone macerated in acid; in other parts it was dead and carious. Another man had to lose two of his toes thirteen months after the accident; in his case the phalanges were similarly affected.

Case 8.—A man about 35 years of age, looking haggard from continued aching pain in the great-toe. He had applied various medicaments without benefit, and taken the advice of several practitioners, who he thought did not understand the case. He called on me in August, and at the first glimpse of the toe, being familiar with such cases, I told him to his surprise, that his toe had been frosted. At first he could not credit my statement: he had never been frost-bitten. But on reflection he remembered he had been out a couple of days in the snow in the winter-time on the Sierra Nevada, and that the pain dated from that time. No doubt the toe had thawed in his marchings, and when he came to encampment the frost-bite was not noticed as such at the time. The toe was removed, with a portion of the metatarsus; the phalanges were softened in some places to a thick or very consistent jelly, caries in other portions, no pus anywhere. The soft parts were similar to cases 7 and 8.

Great Chilling from Falling into Winter Water.—Not unfrequently it happens in travelling on the ice that the horse and sleigh break through a weak or lately frozen part. As regards the horse, when rescued, he quickly *shakes* off the excess of water, and in five or ten minutes' smart driving, he begins to steam, and is warm enough to escape injury. The same for man, since there is neither time, place, nor means to change wet for dry clothing; and could this be done, it would prove injurious by the time consumed and the exposure. All that need be done is to make a quick squeeze or rubdown to press the excess of water out of his clothes; that done, like the horse, set to running as briskly as he can, but not ride. This exercise will be difficult for a few steps at first, but will soon succeed. If the weather is cold, his outward clothing will soon stiffen and freeze, and protect that which is under from further cooling by the air, while that next his person will warm from the heat of his body, generated by the exercise. If he reach a house in half an hour he will be safer than if he reached one in five minutes; for, when a person so immersed is immediately changed in a house, he is heated almost in vain from *without*—he will, in this case, continue chilly for several days after on the least exposure, even in a house; but if warmed from within outwardly, by exercise, he may then be changed, and escape future accidents, congestions, &c.

Case 9.—Two little boys playing on the ice of a pond, broke through; the

accident was seen, and they were soon rescued. One boy, the richer one, was carried into his father's house near by, shivering, trembling, blue mottled, quickly stripped and plunged into the bedroom warm bath. This boy felt cold for several days after, shivering when the door was opened, though in a warm house. The poor boy was taken charge of by a labouring man who ran to the rescue, took the little fellow by the wrist, dragging and running him along a considerable distance, to his father's house. On his withdrawal from the pond, the man quickly rubbed him down and the water out of his clothes. By the time he reached his house, his outward clothing began to freeze, but the boy had already through the exercise recovered from the chill; his clothes were now changed for dry, and he experienced no subsequent tenderness from cold as the other boy did. In these cases it might be beneficial to take a *little* alcoholic liquor once; but I am not certain that it would prove as beneficial as some people suppose.

Freezing to death—the whole person.—I have personal knowledge of many instances of persons being frozen to death. It is astonishing in how short a time a man will freeze to death—in an hour, even in less time. I shall mention a few cases only out of many.

What physiologically takes place, when a man freezes to death, is nowhere accurately described that I know of. It is commonly stated that there is a great tendency to sleep, which must be resisted, else death will follow, as if sleep of *itself* was the dangerous thing. No doubt sleep, or an exhaustion resembling sleep, overtakes a person chilled through, and should he give way to repose, and not carry on that exercise which generates caloric, would cool more and more down unto death, and then freeze. A man frozen to death cannot describe what his feelings were; but there are many persons to be met with in rigorous climates who have been on the brink of perishing in this way, and from these, by proper inquiries and my personal experience, the facts are easily ascertained.

What does take place is—the person is generally fatigued and hungry; commences to cool down in the limbs and surface first; the blood returning thence, diminishes the temperature of the interior blood with which it mixes, pulse after pulse.

Proof.—Thirty years since, when it was the fashion to bleed for accidents, the blood from a cold arm and hand escaping from the basilic vein might be found at 50° or less. Who has not often experienced, when riding on a cold day, the face very cold, the parotid fluid trickling in cold gushes over his second superior molar tooth? The external blood, then, is much colder than natural. This constantly returning cold blood tends to reduce the temperature of the whole mass, cooling the interior. The pulse diminishes in volume, becomes thready, almost ceases; listlessness like sleep comes on, insensibility follows, breathing ceases—death. Then it is that the body freezes in a short time, for the interior as well as the exterior require but a few degrees more reduction to become solidified. These facts are of frequent occurrence in cold climates, and escape notice by the ignorant mass; but intelligent and reasoning persons perceive them and know them well.

Case 10.—A farmer, about 50 years of age, left home early in the morning with hay to be sold in the market, and did not sell his load until late in the

afternoon of a cold day, about 10° below zero. All day he eat nothing, took no exercise to keep himself warm. He gradually cooled down, and of course his clothing. He got into his sleigh, sat down in the bottom with his back to his horse, a common practice, and followed in a long line of returning market sleighs on his way home. His horse, being under no control, lagged slowly along; arresting the progress of those behind; this induced one of the hindmost travellers to run forward to whip up that horse, when he found the sitting man dead, stiff, frozen. This had occurred in less than an hour after starting.

Case 11.—A man about 56 years of age was seen to leave a poor house about 9 o'clock in the evening. He sat down in his sleigh and gave his horse, a poor, sorry one, his own way. The night was very cold— 20° below zero. At that time I passed him on professional business a few miles into the country. On my return my driver called to me, saying, there is the old white horse we passed, outside of the road in the hollow (where the wind had swept the snow away near a house). We stopped, found the poor man sitting, dead, his arms and legs frozen stiff. All this passed in one hour's time. I could relate many more such occurrences, and more interesting in the circumstances, but the description of which would be too lengthy for this article.

I hope this paper will tend to correct the erroneous belief in RUBBING with COLD SNOW a frost-bitten part; and induce some people to reflect on the *reason why* they do a thing, and not accept a doctrine because it is incomprehensible, and who believe it because it is marvellous—"The hair of the dog is good for its bite."

I have written this imperfect sketch because I am not aware of any surgical book that treats of these accidents. There is a *sensation* notice on frost by Baron Larrey, in his account of the great retreat from Moscow. He there deliberately states that the *first part* of those unfortunate fugitives that froze was the eyes! This absurdity I should not notice were it not from the quarter it comes, and having heard people repeat it, and believe it because it is in PRINT, and is marvellous. The Baron neglected in his romance to mention how these men managed to keep on the march with frozen eyes. I doubt much whether he once got out of his flying sleigh, well wrapped in robes and furs, in his hurry to escape from the white bears, to examine and prescribe for these frozen eyes. But many people take as true all that is said by this hero of broad-sword and red-hot-iron surgery, who has slain more men than he has saved; remorselessly tortured with fire more sufferers than he has assuaged; and by his example and great name led blind followers to imitate and repeat his cruelty and inhumanity. I knew him.

LONDON CORRESPONDENCE.

No. X.

I must now say a few words about the Great International Exhibition, which is to be brought to a close on the 1st of November, although it *may* be kept open to the 18th, to sell off some of the things. I have made frequent visits to it, and have leisurely examined almost every one of the Courts throughout the

building; in fact, each successive visit has been devoted to the inspection of some particular part. In this way only can such an immense collection of objects be thoroughly appreciated. It would be utterly impracticable, even if I had the desire, to describe what I have seen, but I shall briefly refer to a few things. In the *Lancet* and *Medical Times* most of the novelties in the way of drugs, instruments, or other matters interesting to the profession, are being noticed and illustrated. But, of course, there are many *curious* things which they must pass over.

There is a glass case in the Japanese Court which is filled with instruments in common use among the medical men of Japan. They are apparently modifications of European, possibly of the Dutch, surgeons who first traded with the empire. Their enema syringes look a good deal like those we employ for injecting subjects; they are long and slender, and made of brass, and hold comparatively but a small quantity of fluid. Possibly their enemata make up for this in strength. Their fistula knife is probably original, for it is shaped like the blade of a sickle, tapering to a point; it is about 7 or 8 inches long, and the narrow end is intended to pass into the fistula, thence into the bowel, and brought out of the anus, being then allowed to cut or mow its way through on its concave edge. I should say that on the whole very few are original in design, although there is an undoubted Japanese finish to the whole lot of them.

The collection of instruments by English and French exhibitors is really something marvellous, but it appears that the former carry off the palm in invention. The style of arrangement in the French Court for the purpose of general display is most excellent. The ornamentation of many of the French instruments is really most elaborate, and adds greatly to the cost; this is seen especially in many of the smaller articles, such as lancet cases, etc., but then again labour of every kind is so much cheaper on the continent. Luer, Charriere, and Matthieu are the chief French exhibitors; the first of these carries off the palm in the beauty and perfection of finish.

I made a prolonged examination of the instruments for the inhalation of pulverized liquids, the invention of Dr. Sales Giron of Paris, and the apparatus was set agoing for the purpose of shewing their action. The term is a curious one, but it is in reality the formation of a fine spray, through the action of a fine stream of the medicated fluid against a piece of fine wire gauze, and if the mouth of the invalid is held before the instrument, a few inches away, the spray is readily inhaled. The fineness of the spray can be regulated, so as to make it resemble almost a delicate vapour. The instrument is costly, ranging from 3 to 4 guineas. Its principle is admirable, but a fault I find with it is, that any metallic solution cannot be employed, as it would at once corrode the fine wire gauze. Nitrate of silver or sulphate of copper solutions, for injection into the larynx and trachea, are wholly out of the question with this instrument, and yet what are more important? The official in this court presented me with the inventor's pamphlet, describing the mode of application in diseases of the chest.

Many of the French instruments are gilt, which gives them a pretty look. The laryngoscope as made by Matthieu, of Paris, is most handy, as the handles

and little mirrors unscrew, and are all contained in a case, not bigger than a flat cigar box, most suitable for the pocket.

In the French Court I was much struck with the magnificent and chaste collection of carved objects of every kind in ivory, a branch of art in which the moderns completely out rival the ancients, yet again we are beaten by the Chinese altogether. Ivory appears to be much more generally used as a means of ornamentation amongst the French, and other continental nations, than among ourselves. For ornamental binding it is also much employed, and many of the photographic and other albums, are decorated with it. In almost all the shops of London, these small albums for photographic portraits, coronets, crests, arms, monograms, seals, postage stamps, autographs, and other fancies are seen in profusion, mostly bound in variously coloured morocco, and handsomely decorated with gilt clasps. Handsome as many are, they are completely eclipsed by the collection in the French, Austrian, and German Courts, where jewels, painting, gold, silver, and ivory are worked into the binding, and no doubt many of these albums must be very costly articles.

In the Canadian Court the photographs of Notman, of Montreal, are considered most excellent, and bear comparison with any in the Exhibition. I was much pleased to see many familiar faces, and none more so than that of my esteemed friend Dr. Macdonell, who certainly looks well. Dr. de Bonald's Pneometer lies in a horizontal case, and looks like some philosophical instrument. It was well worthy of a medal for the ingenuity displayed in its construction, but I must acknowledge that its application to practice could never be so handy as some of the instruments in use, for estimating the vital capacity of the chest. The botanical and geological collections in the Canadian Court economically are most satisfactory, and have been thoroughly scrutinized. There is a very good horizontal section of a walnut tree, with the rings so distinctly marked, that its age of 400 years was readily made out, and this is marked upon it.

The collection of minerals and economic materials throughout the building is a display that puzzles and distracts the mind by its extent and richness, and every taste can be gratified most fully. Particular departments have their admirers, yet, taken as a whole, Great Britain and her Colonies remain unrivalled. Canada and Australia appear strong competitors, and the newer colonies of Australia carry off the palm for the extent of their riches. Take the colony of Victoria, with a revenue of £3,000,000, and contrast it with the large Province of Canada, whose revenue is so much less. No doubt the sources of prosperity exist in Canada, but they do not seem to be so productive to the State at any rate. People openly talk here about Canada requiring some great financier, like Mr. Laing, who did so much for Indian finance. Canada, they say, ought to have a revenue of 5 or £6,000,000, commensurate with her greatness and extent; for no doubt, when the hitherto United States are divided into a number of confederacies, Canada will be indeed a great kingdom in comparison, where liberty of the real kind, anti-repudiation, solvency, honesty, and happiness dwell. But I am digressing.

The great collection of jewels and precious stones in the Exhibition will have the effect of causing people to be discontented and unhappy with their own

small and insignificant specimens. And many a wealthy husband and father has already felt the effects of this. In Mr. Hancock's case is a diamond necklace valued at 85,000 guineas! Je-ru-sa-lem!!! Who could buy it? and yet they expect to sell it. The Devonshire gems, all antique, are considered as valuable as the Koh-i-noor. Some of the cases, as the *Times* says, supply even convenient illustrations of the pages of scripture, and exhibit the jasper, the sapphire, the chalcedony, the emerald, the sardonyx, the sardin, the chrysolite, the beryl, the topaz, the chrysochryse, the jacinth, and the amethyst, which compose the walls of the mystical holy city. In a single day any one may see the great historical relics in the Exhibition, which will carry him back into remote ages, and give him another idea of past nations than what he now had.

Among the metals in the English Court is found Platinum in abundance, in large sheets, in rolls, and every conceivable form; it is a very interesting sight. There is a cake of Iridium, a button of Rhodium, and pieces of Ruthenium. These are in the collection of Messrs. Johnson and Matthey, whose reputation is world-wide in regard to these things. Platinum is also seen in the French Court, where Aluminium is abundant. In Phillips' case a fine collection of Coral of various colours, and worked up in various ways, attracts attention; to my mind the pink diadems for ladies' heads are most beautiful.

But I must leave the Exhibition, which will long be remembered for its wonders, as probably they will never again be witnessed together, as on an occasion, for it may be some 30 or 40 years.

Many of your readers will no doubt recollect Mr. William Whiteford, who formerly lived in Montreal. He was called to the Bar of the Middle Temple in July last, and in common with many other friends, including Dr. Rae, the arctic traveller, the writer was present at his call party on the 10th July, which was a right jolly one.

I leave this morning for Cambridge, to attend the annual meeting of the British Association for the Advancement of Science, and shall not fail in my next letter to give a few particulars of its novelties. Last year, I did not give any account of the Manchester meeting, but if you will permit me, I shall say something about it too very shortly, for there were occurrences that happened there that will well bear repetition and more detailed description; especially the descent into the deepest coal mine in the world, and travelling underground for some hours on the road to the terrestrial bowels.

London, 1st October, 1862.

REVIEW DEPARTMENT.

ART. LI.—*The Fourteenth Annual Report of the Montreal General Hospital, with a list of subscribers for the past year, and of the officers for the present year.* Montreal: JOHN LOVELL, 1862. phlt. pp. 16.

The Fourteenth Annual Meeting of the Corporation of the Montreal General Hospital, was held in the Governors' Hall of the Institution, on the 20th May

last, and the proceedings at it, having been published in pamphlet form, now lie before us. From among the details we glean the following:—

The annual expenditure amounted to.....	\$15591 81
The annual income amounted to.....	\$15187 10

Excess of expenditure over income.....\$ 404 71

It may prove to many a matter of interest to ascertain whence come the the receipts of the Institution, and we accordingly quote from the report the following detail:—

Grant from Provincial Legislature,.....	\$5000 00
Pay Patients,.....	1057 93
Interest on Permanent Fund and Property,.....	4727 19
Collections in the City,.....	2419 03
Donations,.....	455 02
Tonnage duty for 1859-60,.....	725 15
Students' Fees,.....	354 00
Board Money,.....	116 68
Articles sold,.....	27 85
Contents of Poor Box,.....	30 51
Funeral Expenses repaid,.....	19 74
Assessments repaid,.....	54 00
	\$15187 10

It will thus be noted that all the Hospital receives from or through government agency is \$5725.15; \$5000 of which is the Parliamentary grant, the remainder being the tonnage duties levied on sea-going vessels bound to Montreal. When it is recollected that this Hospital is one of the oldest in the Province, and that the annual number of its patients exceeds that of any other, with the possible exception of the Marine Hospital of Quebec, (and we question much if a larger number of patients are treated there,) the miserable sum doled out to it by the Legislature can be imagined. On this subject the report says:

“In view of the increasing usefulness of the Hospital, and of the very large number of patients annually relieved by it, the Governors of the Society cannot overlook the fact, that sister institutions situate in less populous towns, with fewer indigent sick to provide for, receive from the Provincial Legislature a much larger amount of aid annually than the Montreal General Hospital; a disparity not justified by the respective claims of the several institutions.”

The number of patients treated during the 12 months preceding last May, was 9055—1255 in-door and 7800 out-door; the following being the results of the in-door patients—

Cured or relieved,.....	1111
Died,.....	73
Remaining in Hospital,.....	71
	1255

Besides the 73 deaths, it appears that 22 died within three days after admission, and are therefore not included in the list.

In another part of the Report, a comparison is drawn between the admissions of the last year and that preceding, showing a very marked increase, thus :

The in-door patients of 1860-61 were.....	994
“ “ “ 1861-62 were.....	1255
Being an increase of.....	261
And the outdoor patients of 1860-61 were.....	6275
Those of 1861-62 were.....	7802
Showing an increase of.....	1527

The cause of this increase is attributed to the greater number of seamen who visited this Port last year, and to the general increase of the population, which at the last census was estimated at 100,000.

The Report concludes with a detail of the diseases treated, and a list of the operations performed.

The attending medical officers are the following :—

During the first quarter, May, June and July,...	Drs. Fraser & Reddy.
“ second quarter, Aug, Sept. and Oct.,...	“ Scott & Wright.
“ third quarter, Nov., Dec. and Jan.,...	“ Jones & McCallum.
“ fourth quarter, Feb., March and April,	“ Howard & Craik.

Resident Medical Officers :

William H. Taylor, M.D., L.R.C.S.E., House Physician and Surgeon.

Joseph Drake, M.D., House Apothecary.

The Report is strangely silent about the Board of Consulting Medical Officers. Why this omission has taken place we cannot understand, but surely when the greatest care has been taken to enumerate all the officers connected with the Institution, even to the Secretary and the Apothecary, the absence of the names of the Consulting Physicians strikes us as peculiar. We have, however, no doubt that it was an oversight.

ART LII.—*A Practical Treatise on the Diseases of the Heart and great vessels, including the principles of Physical Diagnosis.* By WALTER HAYLE WALSHE, M.D., F.R.C.P., &c. A new American, from the third and much enlarged London edition. Philadelphia: Blanchard & Lea; Montreal: Dawson Brothers; 1862, 8vo., pp. 420.

Of the various treatises bearing on the elucidation of the diseases of the heart and great vessels, the volume now before us stands pre-eminent, not only for the critical accuracy displayed in the detail of the different affections, but also for the severe analysis of the value of the various symptoms of which they are the origin. The present edition has been completely revised and remodelled, but the chief additions have been made in the practical portions of the work. “Several affections of which little or no account had been given in the preceding editions, are here treated of in detail. Functional disorders of the heart, the frequency of which is almost rivalled by the misery they inflict, have been closely reconsidered; more especially an attempt has been made to render their essential nature clearer, and consequently their treatment more successful, by an analysis of their dynamic elements.” And we assuredly cannot but coincide in the truthfulness

of the concluding lines to the preface of this third edition, in which the great advance in this especial department of Pathology is so modestly expressed, and to which Dr. Walshe has himself contributed to a greater extent probably than any other living observer. "While we are, on the one hand, enabled honestly to affirm that the medicinal means of controlling organic diseases of the heart have of late years improved; we can, on the other, lay fair claim to still greater advances in a hygienic point of view. And hence it comes that the hopeless motto of Corvisart's work on cardiac diseases, "*hæret lateri lethalis arundo*," infinitely well chosen in his time, grows yearly less and less appropriate."

Walshe "on the Heart" is a work so thoroughly well known, and its value so accurately appreciated, as a standard on the especial subject of which it treats, that anything approximating to a laboured review of it is emphatically a work of supererogation. The high encomiums which the preceding editions universally received from the medical press, are merited to a far higher degree by the present one. The student could not be directed to study a more valuable treatise, while the physician will find it a most truthful guide to the analysis of a series of symptoms which, while they entail upon the sufferer a life of wretchedness, too frequently baffle the greatest skill. No more valuable work could adorn the library of the latter. It can always be consulted by him with the greatest satisfaction, and we feel persuaded that, confessedly difficult as the diagnosis of cardiac affections is, a careful perusal of these pages will render many a point clear which was previously obscure, and lead to a treatment more rational and suitable to the alleviation of human suffering. Both in this work, and that "on Diseases of the Lungs," Dr. Walshe may be truly said to have carved out for himself his *monumentum ære perennius*. We cannot too strongly commend these two valuable works to the attention of our readers.

PERISCOPIC DEPARTMENT.

MIDWIFERY.

ON THE PATHOLOGICAL ANATOMY OF PUERPERAL FEVER.

BY PROFESSOR BUHL.

PROFESSOR BUHL, of Munich, having examined the bodies of fifty women who died of puerperal fever, states that a constant and characteristic appearance is a poppy red, or dark brown or grayish-black mass lining the inner wall of the uterus, giving forth sometimes a gangrenous and sometimes a putrefactive smell. It is this matter which supplies the poisonous infection of puerperal fever; but as to the cause of the production of the fever differences of opinion prevail; some regarding it as the consequence of the immediate passage of poisonous matter into the womb, while others think that a preliminary poisoning of the blood by miasmata takes place, the corrupted mass being only a secondary result. Anatomically, we may distinguish two forms of puerperal fever—puerperal pyæmia and puerperal peritonitis—forms which may be clinically distinguished, as it is of importance in prognosis that they should be so.

Puerperal pyæmia does not usually prove fatal before the ninth day, and fre-

quently not until after the third week. It is chiefly met with where the disease does not put on an epidemic form, the veins being the channel of infection; coagula, accompanied by suppuration, being found in the veins of the walls of the uterus, in a pampiniform plexus or in a spermatic vein. In no instance did the author ever find both spermatic veins obstructed, and in only one case was the entire vena cava inferior filled with adherent coagula. These coagula and their subsequent caseous metamorphosis are quite sufficient to establish the existence of puerperal pyæmia, the so-called metastatic abscesses being seldom met with. Œdema of the lungs and ecchymosis of the pleura were frequently met with by the author.

The puerperal peritonitis was more frequent, more violent, and more rapidly fatal than the puerperal pyæmia, inasmuch as death sometimes occurred within two days after delivery, and in but few cases was delayed to the third week. Of the 32 cases of this variety only 2 were chronic, proving fatal in the course of six or eight weeks. In all the cases purulent exudation was found, in 18 instances occupying the tubes, and in 14 the subserous tissue of the uterus. The two conditions were found combined in only four instances, and a plugged condition of the veins was observed only in 5 instances. Of the 18 instances in which puerperal pyæmia occurred, in only 2 was there pus in the tubes, and in only 1 subserous effusion of pus; so that of 20 cases of tubal suppuration, in 18 peritonitis was present, and of the 14 cases of subserous suppuration peritonitis occurred in 13. On the other hand, of 23 cases of purulent coagula of the veins, in only 5 did peritonitis occur, and in all these there was subserous or tubal suppuration also, and in 16 cases in which these parts exhibited no pus, no peritonitis took place. The disease of the veins thus bore no relation to the occurrence of peritonitis. It results from these facts, that peritonitis may arise either from the immediate paasage of the poisonous material from the uterus through the tubes, or from the conveyance of this from the inner wall of the uterus by the lymphatics. The supposition that the pus may have proceeded from the peritoneum into the tubes is negatived by the fact of these having been free of it in fourteen cases; and the pus of the peri-uterine, subserous tissue or of the lymphatic vessels must be regarded rather as a consequence than a cause of the peritonitis, inasmuch as it was absent here in 20 instances. The prognosis is not alike in these two modes of origin of the peritonitis. That induced by the pus from the tubes is a much slighter and more simple inflammatory process, met with when there is little or no epidemic extension of the disease; while the peritonitis resulting from lymphatic absorption is a much severer form of disease, proceeding or accompanying general infection, and is especially met with in the epidemic form.

In both of the principal forms of puerperal fever, besides the morbid uterine appearances there were found—1. Almost constantly swelling and watery infiltration of the retro-peritoneal, inguinal, and (though seldomer) the mesenteric glands. 2. Osteophytes on the internal surface of the cranium. 3. In several cases, especially in pyæmia and lymphatic absorption, a distension of the cortical substance of the kidney, together with the microscopical appearances corresponding to the acute stage of Bright's disease. In only two of fifty individuals was tuberculosis found.—*Froriep's Notizen*. 1861. No. 13.—*Med. Times and Gazette*.

NEW MANNER OF PLUGGING THE VAGINA.

In the *American Medical Times* for February 22d, Dr. E. P. Bennett has the following upon plugging the vagina:—

“In placenta prævia and in cases of abortion, the life of many a female is saved only by the judicious use of the *tampon*. This operation, so efficient, is many times a troublesome one, both for practitioner and patient, especially when

the substances introduced have been saturated with astringent solutions, as they usually should be to render them doubly efficient. In early life, I found much trouble in this respect, as the alum or other astringent so corrugated the parts as to render their introduction difficult and painful. Now, by using a common *glass speculum* all trouble is at once removed. You can pack the vagina to its utmost capacity in a single minute, without any trouble or suffering to your patient. In cases of abortion, in two instances where a small portion of placenta remained beyond the reach of instruments, and where hemorrhage was long continued and alarming, I succeeded in saving the women by plugging the os uteri with a piece of sponge—an operation easily done through the speculum, but almost impossible without it. One of these ladies was, and now is living in your city, and was reduced to the lowest condition. This plan may have been pursued by others; but so far as my recollection serves me, I have not seen it mentioned.”

MANAGEMENT OF PLACENTA PRÆVIA.

Dr. Charles Clay, of Manchester, proclaims, in the *Glasgow Med. Journal*, the most preferable method to be the simple detachment of the placenta from the os by the fore-finger, leaving the rest to nature. In an experience of forty years he never witnessed any bad consequences from this practice, and adds that there is infinitely less violence done, the danger much reduced, future difficulties are of less importance, and the results far more favorable. With version and immediate delivery, the fatality to the mothers has been one in three, and to the child one in two, while with simple detachment of the placenta it appears from the reports of Prof. Simpson, Dr. Radford and Dr. Clay, that only one mother died of forty-four, and one child in five cases.—*Am. Med. Times.*

PARTURITION WITHOUT PAIN.

The Lancet, May 24, contains a description of a new inhaler and anodyne mixture introduced by James Townley of Edinburgh. The inhaler is similar to one in common use, having in addition two tubes, an inch and a quarter long, and a quarter of an inch in diameter, running parallel to its floor, and placed above, and to the sides of the inspiring valve, so as to admit two small streams of fresh air, which to a great extent are inspired unmixed with the vapor of the anodyne. In place of the grating there is a curved prong for retaining the sponge under the right tube and opposite the hole in the right side connected with the cup which receives the mixture to be inhaled. The anodyne mixture is composed of alcohol, two ounces; aromatic tincture, one drachm; with sufficient chloroform added, short of the production of a turbid state of the fluid. The aromatic tincture makes it pleasanter to inhale, and also appears to prevent the sickness which would otherwise sometimes arise from long continued inhalation. The tincture is prepared with nutmegs, one drachm; cloves, two drachms; pterocarp chips, a drachm and a half; water, four ounces; alcohol, five ounces; mix. The object to be attained is to so far influence the nerves of sensation as to prevent pain, without producing unconsciousness. To effect this, the following directions are given: “The woman in the upright or recumbent position, as the case may be, holds the inhaler in her right hand. She is then directed to take a full inspiration, and to apply the inhaler to the mouth and nose. She is then to breathe rapidly for six, eight, or more inspirations (the inspirations and expirations being equal) only with the diaphragm and abdominal muscles, the chest being kept a fixture all the time. The inhaler should then be removed immediately, and one or two full, deep, quick chest inspirations taken. This will be found sufficient to relieve all pain, and there will be no loss of conscious-

ness. During the whole process it is desirable to have a full light upon the face, to watch the countenance and feel the pulse occasionally, and to observe the pupils. These, in some cases, are very quickly affected, and thus the inhalation requires to be suspended for a time. During the time the process is going on, I am in the habit of giving a tea-spoonful of brandy in a cup of weak tea with plenty of milk, and something to eat; or instead, a glass of wine and a little cake or bread and butter, from time to time, to keep up the strength and prevent that sudden pallor of the face which sometimes occurs. I may add, as only a portion of the alcohol is taken up in vapour, it accumulates in the sponge, so that it is necessary occasionally to squeeze it out before adding a fresh quantity." Mr. Townley has now given the anodyne mixture in 216 cases without seeing any bad result, and after mentioning a number of instances in which the previous labors had been very severe or complicated, he concludes that—"1st. It is possible for a woman to be delivered with less pain from the beginning to the end of her labor than a rhubarb draught would occasion. 2d. It is possible to afford that relief without interfering with the regular and natural action of the heart or brain. 3d. It is possible for the child to be born without the mother experiencing any pain whatever, while at the same time she retains her consciousness and power to bear down when told to do so; and the first knowledge of the birth of her child shall be from hearing it cry. 4th. That when a woman is confined without suffering pain, although she shall have had inflammation after each of six previous labors, the prevention of the suffering will have the effect of preventing the usual inflammation. 5th. That by preventing the suffering of labor, the woman does not lose her strength, and always has a speedy recovery."

ARREST OF SECRETION OF MILK.

Dr. Heriss, of Savannah, employs a saturated solution of camphor in glycerine in preference to belladonna. It is gently applied over the surface by means of flannel, several times a day. The same solution, with the addition of four grains of tannin to the ounce, is of utility in sore nipples.—*American Med. Times, No. 15, and Med. Times and Gazette, p. 511; Braithwaites Retrospect.*

MEDICINE.

CASES OF SEVERE NEURALGIA TREATED BY VALERIANATE OF AMMONIA.

The following cases of neuralgia, extracted from the case-book of Dr. O'Connor, are representatives of a large class of a similar character which have come under his care. They illustrate the success attending the use of the valerianate of ammonia as a remedy in the severer forms of this malady. Dr. O'Connor informs us that this drug, if retained in a state of crystallization, rapidly decomposes, and is uncertain in its action. It should be kept in solution and the smallest dose he is in the habit of giving of the latter is equal to twenty grains of the crystal.

Case 1.—J. R., a man aged 46 years, a porter, unmarried, was admitted Nov. 9th, complaining of excruciating pain in the right side of the face, commencing near the malar bone, from thence extending to the nose, over the whole of the upper, and then to the lower jaw. He has been subject to the pain for ten years; it is generally more severe about ten o'clock at night, but he is never totally free from it. For the last week it has been most excruciating, and he has had scarcely any sleep. He has been under the care of many medical men, and sought advice at various institutions without benefit. Dr. O'Connor ordered him a dose

of compound powder of jalap to be taken directly, and a draught of three drachms of Bastick's solution of the valerianate of ammonia in infusion of columbo every three hours.

On Nov. 16th he again presented himself at the hospital, when he said that after taking two doses of the medicine the pain was considerably relieved, and that he had no occasion to have recourse to the remedy after the sixth dose. He is now well and free from pain.

Case 2—P. B., a married woman, aged 31, admitted same day as the foregoing: has two children. For a number of years she has been subject to attacks of neuralgia, which come on generally about five o'clock of an afternoon and continue with great severity for five hours. The pain seizes her first in the right side behind the ear, extends to the nape of the neck and back of the head, and frequently shoots with great rapidity along to the malar bone, then to the lower jaw; and she is suddenly seized with pain at the region of the heart. She is suffering from aortic valvular disease. At times the pains are so severe that she cannot bear the slightest blast of wind, and is obliged to roll herself on the floor. She was ordered three drachms of the solution of the valerianate of ammonia in infusion of columbo every three hours.

On Nov. 13th she was very much better; has had only three attacks since the 9th. The medicine to be continued.

23rd. Has had no pain since the 18th.

Case 3.—R. P., a married woman, aged 42; has had eight children; works as a laundress; has suffered from neuralgia of the fifth pair on the left side for nearly twenty years, and has sought advice at many hospitals with only temporary relief. When the paroxysm is most severe the pain extends to the side of the neck and shoulder; it also causes deafness. She is obliged to go to bed, and cannot take any food, the slightest motion causing intense agony. For ten years back the paroxysms have been more severe and of longer duration. She was admitted under the care of Dr. O'Connor, on the 13th November, whilst in severe agony; had no sleep the previous night; her health is otherwise good; and the teeth perfectly sound. She was ordered four drachms of the solution of valerianate of ammonia, in infusion of calumba, to be taken every three hours; a dose of compound powder of jalap directly.

On the 27th she states that after a few doses of medicine the pain diminished, and on the following day it entirely disappeared.

Jan. 8th, 1862. This woman became an out-patient from an attack of influenza. She states that since the 28th of Nov. she has not had any return of pain.

Case 4—L. C., aged 49 a married woman, admitted on the 20th of Nov. She has had nine children; has been for nearly ten years subject to severe attacks of neuralgia of the right side of the face, right eye and the tongue. These paroxysms came on generally at eight o'clock in the morning and four in the afternoon, and as soon as she puts anything into her mouth she describes the pain as insufferable. Her health is otherwise good, and her teeth are all sound. She was ordered a draught composed of four drachms of the solution of valerianate of ammonia, in infusion of valerian, to be taken every two hours, and to be repeated oftener if the pain continues in its severity.

Nov. 30th. She states that since the 27th she has had sound sleep every night, and the paroxysms of pain only come on once a-day, and then of much milder character. The medicine to be taken every six hours.

Dec 14th. Has had no return of pain since the 1st, and now feels quite well.—*Lancet*, *Jan.* 18, 1862, p. 68; *Braithwaite's Retrospect*.

THE
British American Journal.

MONTREAL, OCTOBER, 1862.

INAUGURATION OF THE MOLSON WING OF MCGILL UNIVERSITY.

This new building, with the corridors completing the edifice of the University, and the gift of Thomas Molson, Esq., was inaugurated on the 10th inst., in the presence of His Excellency Viscount Monck, Governor General, and His Excellency Lord Mulgrave, Lieutenant-Governor of Nova Scotia. The proceedings went off with éclat; speeches having been made by the Governor General, the Honble. Judge Day, President of the Board of Governors of the University, Mr. Principal Dawson, and Dr. Hingston, on the part of the University Society. A very large assemblage of ladies and gentlemen were present. The Molson wing comprises the future Convocation Room and the Library, both of which are elegantly fitted up, while the former is adorned with a life-like full length portrait of the noble minded donor. Few of our citizens have done more to advance the cause of education generally in this city than Mr. Molson. Besides the erection of this wing to the University building, and the corridors which connect the two wings with the central building, and which contain the museum, and the rooms for experimental chemistry, he has erected at his own expense a large College in the Quebec Suburbs, which was for many years in active operation; while he, with his brothers, endowed the Chair of English Literature in the Faculty of Arts, called after their name. Such deeds carry their own reward, and emphatically the name of that family, but especially that of Mr. Thomas Molson, will descend to the latest times in intimate connection with the educational progress of this city. And no higher or more glorious reward need any man seek.

AMERICAN MEDICAL STUDENTS AT CANADIAN SCHOOLS.

We are not much surprised to find that American Medical students are seeking the completion of their studies in our Canadian Schools. Those who are not sufficiently advanced to follow the army in some medical capacity must do so, to avoid the conscription act, the effects of which, while it would entail a remission of their studies, would at the same time compel a ser-

vitute in the ranks on the part of a large number. This is probably another reason superadded to that adduced by our daily contemporary, the *Commercial Advertiser*. What influence the deplorable troubles of our neighbours will exert upon the opening classes at McGill University remains to be seen. We quote the following from the daily periodical alluded to:—

Arrival of Kentuckians—On Saturday last, eight young men arrived in this city from Kentucky, for the purpose of attending college. It is probable that many others in the States will avail themselves of the peaceful condition of this country to pursue their studies in our colleges.—*Toronto Leader*.

One gentleman from Kentucky and a few other Americans are attending the Medical School of Queen's College in Kingston. They seek freedom from the turmoil of war which distracts their own country.—*Commercial Advertiser*.

FERRO-PHOSPHORATED ELIXIR OF CALISAYA BARK.

We have to acknowledge the receipt, from Messrs. Kenneth Campbell & Co., (Medical Hall) of a phial of medicine under the foregoing title, containing three of our most important medicinal agents, and so combined as to render the preparation one of the most elegant which we have seen. We are not acquainted with its mode of preparation, nor the manner in which the ingredients are combined, but we can well understand the value of such a preparation as a tonic in scrofulous constitutions.

Calisaya is the name applied to the bark obtained from the *Cinchona Calisaya*, the tree which supplies us with the *yellow Cinchona bark* of commerce, which furnishes a greater amount of disulphate of quinine (nearly 3 per cent,) than any of the other varieties of this tree, and at the same time a much less amount of tannic acid. It is scarcely astringent at all, and hence its adaptability to a mixture with proto-salts of iron with which no discoloration would ensue, a fact of which advantage has apparently been taken in the preparation before us.

We think we scarcely err in recommending this beautiful preparation to the profession, although we do not like the guise in which it is presented to us, partaking too much of the character of a nostrum. It is prepared and patented by Caswell, Brock & Co., of Newport, R. I.

OUR PARIS CORRESPONDENCE.

We regret to be compelled to announce the discontinuance, for a few months at least, of the interesting letters of Mr. Cote, who fulfilled the duties of our Paris correspondent. The value of these letters has been duly appreciated. The discontinuance is caused by his spending a few months in Switzerland. We trust, however, that on his return to Paris, they will be resumed. In the mean time, we will continue to forward the Journal to his customary address in Paris, from which place we trust he may receive them in his temporary abode in Switzerland. We should be happy to receive communications from him even from the latter country.

McGILL UNIVERSITY.

The ensuing winter course of lectures will commence on Monday the 3rd of November next. From the present number of students in town, which at the

period of our writing is said to be unusually large, a class approximating to, if not exceeding, that of last season is anticipated. We have understood that the the classes in the several medical schools of Upper Canada are this year unusually large. These open early in the month of October.

ALLEGED MAL-PRACTICE—JURY TRIAL—DAMAGES £200.

An important case has just been tried at Brantford, before Mr. Justice Richards, an action having been brought against Dr. E. T. Bown for alleged mal-practice in setting a fractured thigh. The damages were laid at \$4,000. A verdict for \$800 was obtained. As developed by the evidence, the facts of the case are these: On the 8th of March last a boy named Craig broke his thigh. After ten o'clock at night, Dr. Bown was sent for and immediately attended. Upon examination he found an oblique fracture of the thigh bone. Splints were applied, and an inclined plane to rest the limb upon was made. At the end of four weeks, less one day, he removed the splints, and took away the inclined plane, considering that, as Craig was a strong, healthy lad, sufficient time had elapsed to allow the fracture to mend. Upon this occasion, it does not appear from the evidence that anything was said about the thigh being "crooked." On the following morning, Dr. Bown again visited the patient, and found that the provisional "callous" had given way. The bandages were re-applied, and at the end of a month, the fracture having healed, they were taken off. It was then found, as the friends of the boy alleged, that the injured limb was crooked, and two inches and a half shorter than the other. Hence the action. A good deal of medical evidence was given—contradictory, of course. Dr. Scott, of Toronto, said the injured limb was two and a quarter inches short, Dr. Billings, of Hamilton, said it would require a boot one and a half inch thick to compensate the defect. Dr. Thomas Aikins of this city explained that the method of measuring adopted by the surgeons who had been called for the defence, was fallacious, that the extent of the contraction was really not more than an inch, and not less than three quarters of an inch. Dr. Lizars—a gentleman who for three years was demonstrator of anatomy in Edinburgh University—agreed in all particulars with Dr. Aikins. Upon the medical evidence the case rested, and so far as we are able to judge from the report, it is somewhat surprising, that in the face of the clear reasoning of Drs. Lizars and Aikins, the jury could have given in the verdict they did. The Doctor's case seems a hard one. Fortunately for him, his reputation is too well established to be injured by it.—*Toronto Globe*.

We quote the foregoing epitome of an extremely important trial from the *Toronto Globe*, as it exemplifies in a striking manner the readiness with which Juries mulct the unfortunate surgeons who may fall into their hands. We think we are not wrong in stating, that shortening of the leg, after fracture of the thigh bone, is an invariable concomitant of the accident, and that such a result will, almost as a matter of course, attend the practice, in such cases, of even the best surgeons of the day; and this is scarcely to be wondered at when the action of the powerful muscles of the thigh bone is brought into remembrance. We can see, in the above short narration, nothing for which Dr. Bown's treatment should be condemned, certainly nothing for which he should be made to suffer such heavy damages. We trust that his counsel has advised an appeal to a higher tribunal, whose decisions are less influenced by private feeling and a greater sense of justice. In England such a verdict, if circumstances enforced an acquiescence in it, would be met by a subscription of the profession generally in the sufferer's favour.

BOARDING FOR STUDENTS.

We cannot too strongly urge upon students of medicine their taking quarters with Mrs. Quiskelly, (late Mrs. Hope, University Lying-in Hospital,) No. 81 St. Constant Street, close to the Montreal General Hospital, who has accommodation for eight gentlemen, whose wants will be abundantly provided for at a cheap rate. Mrs. C. is so well known to advanced students as to require no recommendation on our part. Students will meet a maternal treatment at her house.

EDITORIAL SUMMARY.

Gift of \$100,000.—The City of San Francisco has contributed towards the expenses of the sanitary commission of the U. S. Army, the munificent donation of \$100,000. Considering the purposes to which the money is to be applied, it cannot be considered but as a most judicious and well timed gift.

An aque Charm.—As a proof that superstition is not extinct in Great Britain, the *British Medical Journal* gives the following instance of a charm. It was given to a sick man by a labourer who professed to have cured thousands by it. It was in a sealed paper, and was directed to be worn in the bosom. A third party sacrilegiously broke the seal, and unfortunately the spell at the same time, as his ague was not cured. The following is a literal copy:—

“Wen Jeasus saw the plais wair he was to be cruseyfeyed he trembeled then says the jeus hunto him bath though haud hay gue. Jeasus saith hunto them, hif haaney man ceap these woord he shal never be troubeled with hay gues nor feavers sow then help this thy survent that puts is trust in the.”—*Brit. Journal*.

Medical Honours.—M. Claude Bernard, Professor of Medicine at the Imperial College of France, and Professor of General Physiology at the Faculty of Science of Paris, has been promoted to the rank of Officer of the Legion of Honour—*American Medical Times*, Sept. 27th, 1862.

The Astley Cooper Prize.—This valuable prize of £375 has been awarded this year to Dr. Edward Crisp, by the Physicians and Surgeons of Guy's Hospital, for his Essay on the Anatomy, Physiology, and Pathology of the Human Pancreas.

Yellow Fever.—It is stated on the authority of the *Lancet* that this fearful disease is committing at present fearful ravages among the French troops in Mexico. Out of a regiment 1,000 strong, no less than 475 men, exclusive of 13 officers, have fallen victims to it, and that every medical officer attached to the regiment has perished. It is stated moreover, that “in this sickly condition the remnant of the Emperor's troops were surrounded on a recent occasion, but, with the undaunted courage which characterizes them, they succeeded in completely routing 5,000 Mexicans, visiting them with dreadful slaughter.” The French troops are proverbially, but most recklessly, brave. On this point past history speaks most loudly in their favour.

Cushions for Field Service.—Dr. Coale, in a letter to the *Boston Medical Journal*, suggests the preparation, for wounded soldiers, of cushions made of bullocks' intestines inflated with air, to be covered with a pillow of suitable size. It would certainly subserve the same purpose as India-rubber, and would prove far cheaper.

Exempt on from Draft.—The physicians in Massachusetts, it appears, are all liable to the conscription act, excepting those who are members of the State Medical Society, who are especially exempted by a clause in the charter of the society.

New Diseases.—Among other causes of death of the Union soldiers in the military prisons at Salisbury, N.C., the newspapers give the following. One died of "Pemodes," five of "Menargatis," and one of "Phlormigatis." The *Medical and Surgical Reporter* of Philadelphia very quaintly solicits advice as to the pathology and treatment of these diseases. These cases resemble very much the poor Irish woman's disease of the "Bellygrum."

Salaries of Police Surgeons.—Among the officers of the Municipal Police of Paris is a head physician at a salary of 3,500 francs, and 12 district physicians with salaries of 1,500 francs each.

New Lunatic Asylum.—There is to be immediately erected a new one, on a fine locality between Dartford and Greenhithe, London. It is to be a pauper one, and the foundation stone was laid on July 29th. The site embraces fully thirty acres of ground. The design is by Mr. Bunning, architect, approved by the Commissioners in Lunacy.

Death of Dr. Brownell.—This gentleman was attached to the Upper Nile exploring expedition as Botanist, under the English explorer Petherich. Letters to this effect have been recently received in Boston.

Adulteration of milk.—At the Birmingham Police Court, a milk dealer was lately fined 20s. and costs, for adulterating milk with annatto, a vegetabes colouring powder, but which, it appears, possesses the peculiar effect of speedily bringing the cream to the surface, and concealing the presence of water.

Rennet wine.—The stomach of a calf freshly obtained and carefully cleaned, and digested in sherry wine, is recommended by Mr. G. Ellis, in the *Dublin Medical Press*, as a remedy in certain cases of dyspepsia.

Explosion of Gun Cotton.—A case of this nature occurred recently at Brooklyn, N. Y. Mr. Dornback, a chemist, was packing a quantity of 38 lbs. for shipment, when on pressing it down it took fire, setting his clothes in flames. In a few seconds, a more serious explosion occurred, which so seriously injured Mr. Dornback that he died in a few hours. A case like this suggests caution.—*Photographic Journal—Pharmaceutic Journal, Sept. 1862.*

Effect of concussion from heavy shot.—Those who stood in the turret of the Monitor in her battle with the Merrimac experienced severely the effects of the concussion when the shot struck near where they stood. Three men were knocked down, and stunned so that they had to be carried below, but they recovered before the fight was over.—*Medical and Surgical Reporter.*

Donation.—Dr. Seavy, of Bangor, has made a donation of \$1000 to the Maine Medical School, to be expended on the anatomical cabinet. Cannot some of our wealthy physicians act in a similar manner towards the McGill University?

The Wakley Memorial.—In 1859 an attempt was made to establish a Memorial of the eminent services rendered by the late Mr. Wakley to the profession. Although £460 were collected, the attempt fell through from various influential causes. Since his decease the attempt has been revived, and with every prospect of success. The sum of £240 after the payment of the expenses originally incurred, forms the nucleus of the new project which is now most favourably entertained, with every likelihood of being carried to completion. The "*monumentum ære perennius*" of the late Mr. Wakley is in truth the "*Lancet*," which he himself founded and edited for so many years with such distinguished talent.

Clever Women.—Within the last three months, three women, in the parish of Christ Church, in the island of Barbadoes were delivered of nine children; three at a birth to each; and they are all doing well. The same medical gentleman was accoucheur to them all.—*Barbadoes Globe.*

Rokitanski and Pathology.—The brilliancy thrown upon pathology by Rokitanski has caused the Austrian government to assist in every possible way the means of facilitating the labours of that eminent physician. It has accordingly ordered the erection of an appropriate theatre, wherein his investigations shall in future be conducted. This building was inaugurated on the 25th June, Rokitanski being himself the cynosure of the ceremony. The subject of his speech was "Liberty in Scientific Researches," one well worthy of the occasion.

Preservation of Flesh by Sulphurous Acid Gas.—Dr. Polli has lately announced that the recently killed flesh of animals, and even milk, may be preserved for months by exposure to this gas, arising either from the combustion of sulphur, or the vapour emitted from concentrated sulphuric acid; or by washing the meat in a dilute solution of the acid. He states that a fowl weighing 750 grammes, was plucked, and with the exception of the wings, treated in this manner. After 4 months it gained 5 grammes in weight; it underwent no change in colour or consistence; gave off not the slightest odour; and had all the appearance of a fowl killed 3 or 4 days. The only sensible effects produced by the acid gas, were a slight discoloration, a loss of flesh odour, and the peculiar odour (but faint) of the gas.—(*Dublin Med. Press, abbreviated.*)

Alleged Longevity.—W. Croft, a servant of Washington during the war of 1756, is stated to have died lately at Rummerville, Va., at the age of 128, leaving two sons, the youngest of whom is 97 years of age. Longevity would seem to have been hereditary in this family, as his father is stated to have died at the extremely advanced age of 132 in 1769, having had his son living at the age of 86.

SANGUINARIA CANADENSIS (Bloodroot).—It will allay the cough and irritation in some forms of follicular inflammation of the throat, associated with phthisis or bronchitis, and it is not less useful in the various forms of catarrh, particularly in the chronic, associated with emphysema; also in coryza. The paroxysms of asthma are relieved and their severity and frequency diminished. It is much used in pertussis and croup, and it appears to be, as an emetic, well adapted to the croupal form of diphtheria, while in the malignant form of the same disease an acetous decoction of bloodroot, used as a gargle, proves invaluable. Its usefulness in epidemic, malignant scarlatina has been fully tested by Dr. Jennings, of Virginia, in the same form of gargle, and there is some evidence of its good effects in certain forms of chronic rheumatism, and in some hepatic affections. In amenorrhœa it will prove, either alone or combined with other substances, one of the best emmenagogues. The skin diseases which have been cured by it in the form of ointment, are scabies, tinea capitis, impetigo of the scalp, and many others. The preparations in use are: powder, compound powder, powder with camphor, infusion, decoction, preserved juice, oil, extract, tincture, wine, vinegar, syrup and ointment.—*London Lancet.*

The following method is recommended for detecting the presence of arsenic in wreaths and dresses;—"Put a drop of strong liquid ammonia upon the green leaf, or dress, or paper, and if it turns blue, copper is present, and copper is rarely if ever, present in these tissues and fabrics without arsenic being also present—the green compound being arsenite of copper. I have tested papers and dresses in this manner more than a hundred times, and have never failed to discover arsenic when the ammonia changes the green into blue. It is, therefore, indirectly a very reliable test; and if every lady would carry with her, when she is shopping, a small phial of liquid ammonia, instead of the usual scent bottle, the mere touch of the wet stopper on the suspicious green would betray the arsenical poison, and settle the business immediately."

ON THE MODE OF DISSECTING LEAVES.

Several correspondents having applied to us for information as to the best mode of dissecting leaves, &c., we subjoin the following particulars, which a correspondent has kindly forwarded to us:—Steep the leaves, seed-vessels, or other parts of the plant, which are required to be dissected, in rain water; leave them exposed to its influence until the whole of the soft or pulpy matters are decomposed. The period required for this operation varies much in different leaves, &c., according to their texture; thus, some require but a few weeks, others as many months. When the pulpy parts are completely decomposed, the next operation consists in their removal from the fibro-vascular network with which they were originally connected. This requires much care and patience. There are two ways of accomplishing it: one, which consists in carefully exposing them to a stream of fresh water, using at the same time a brush; and the other by simply placing them in fresh water, and removing with care the decomposed portion, in like manner, with a brush. Some difficulty will be found at first in doing this without, at the same time, breaking the fibro-vascular network; but a little practice will soon render it easy of accomplishment. The adoption successively of simply fresh water, and a stream of the same, applied by means of a syringe, will be frequently found desirable. The pulpy portions having been removed, and the fibro-vascular network obtained the latter must be then bleached. For this purpose, prepare a weak solution of chloride of lime, by adding about an ounce of a strong solution of that substance to a quart of distilled water; then soak the skeletons in this solution for some hours; generally, three or four will suffice, but when they are very thick a longer period will be necessary. After this operation has been performed, wash the skeletons thoroughly in pure water, and, lastly, dry them by freely exposing them to light and air.—*Phar. Jour.*

BIRTHS, MARRIAGES, AND DEATHS.

BIRTHS.

At Industry Village, on the 22nd instant, the wife of B. H. Leprohon, M.D., of a son.
At London, on the 6th instant, the wife of Dr. Stevenson, of a son.

MARRIAGES.

On the 20th instant, at the residence of the bride's father, by the Rev. Wm. Bolt, A.M., Minister of Christ's Church, Scarborough', William Lapsley, M.D., to Susan Rolph, second daughter of Wm. Rolph, Esq., of Woburn, Scarborough'.

On the 25th instant, at Christ Church Cathedral, by the very Rev. the Dean of Montreal, assisted by the Rev. Canon Leach, Charles Frederick Goodhue, Esq., Barrister-at-Law, son of the Hon. George J. Goodhue, of London, C. W., to Maria K. R. Fraser, eldest daughter of William Frazer, M.D., of this city. Prof. Institutes of Medicine McGill university.

At Brockville, on the 23rd instant, by the Rev. Duncan Morrison, of St. John's Church, David H. Martyn, M.D., Kincardine, to Mary E. Matthie, eldest daughter of the late Wm. Matthie, Esq., Brockville.

At Montreal, on the 16th instant, by the Rev. Mr. Bond, of St. George's Church, Joseph Savage, Esq., of Montreal, to Mary Matilda, eldest daughter of Benjamin Workman, M.D., of Toronto.

DEATHS.

In Yorkville, on the 20th instant, Susan Frances, eldest daughter of J. P. Clarke, M.B., aged 19 years.

On the 24th ultimo, at Fergus, William Mutch, M.D., M.R.C., S.L., aged 53 years.

In Edinburgh, on the 20th July last, aged 80 years, Thomas Stewart Trail, M.D., Professor of Medical Jurisprudence in the University of Edinburgh. He lectured until within a few days of his death. He was the author of a work on "*Medical Jurisprudence*," and employed the leisure of the last years of his life in editing the eighth edition of the "*Encyclopædia Britannica*."—*Medical News*.

At the residence of her mother. Mme. Veuve DesRoches, 22 St. Lawrence Main Street, Montreal, on the evening of the 8th instant, after a painful illness of three weeks, Julie Felicite Brien dit DesRoches, the beloved wife of Dr. W. F. Monagan, of this city, aged 31 years.

In this city, on 2nd August, Henry, son of Dr. Wm. H. Taylor, House Surgeon to the Montreal General Hospital, aged 9 months and a few days.

At Lindsay, on the 4th instant, Belyvidera, wife of C. E. Martin, M.D., aged 21 years.

At New York, on the 11th instant, John C. Cheesman, M.D., aged 75, an old and able physician of that city.

Recently at Buffalo, Dr. Josiah Trowbridge, one of the oldest and most distinguished physicians of Western New York.

ABSTRACT OF METEOROLOGICAL OBSERVATIONS AT MONTREAL IN SEPTEMBER, 1862.

By Archibald Hall, M.D.

Day.	DAILY MEANS OF THE										THERMOMETER.		WIND.		RAIN AND SNOW.			GENERAL OBSERVATIONS.
	Barometer corrected and reduced to F. 32.	Temperature of the Air.	Dew Point.	Relative Humidity.	Ozone.	CLOUDS.		Maximum read at 9 P.M.	Minimum read at 7 A.M.	Its general Direction and Mean Force from 0 Calm to 10 Violent Hurricanes.	Rain in 24 hrs read at 10 A.M.	Snow in 24 hrs read at 10 A.M.	Total rain and melted snow.					
						Amount.	General description.											
1	29.380	69.6	64.4	0.100	0.10	0.10												
2	29.732	69.6	64.4	0.88	10.10	10.0												
3	30.082	57.7	49.0	0.74	9.0	0.6												
4	30.016	66.5	55.2	0.68	4.0	4.3												
5	29.947	72.6	53.1	0.72	6.5	7.3												
6	29.984	72.6	53.1	0.89	10.0	10.0												
7	29.852	64.2	57.9	0.82	9.5	10.0												
8	29.755	73.9	64.1	0.74	7.0	7.3												
9	30.147	70.0	56.6	0.65	8.5	2.0												
10	30.211	68.4	54.2	0.66	4.0	0.0												
11	30.083	72.3	53.1	0.57	3.5	0.0												
12	29.906	73.3	64.4	0.77	2.0	8.6												
13	30.346	55.3	42.9	0.64	2.5	6.0												
14	30.253	55.9	48.9	0.73	3.0	6.0												
15	30.117	55.0	53.1	0.89	9.5	9.0												
16	30.197	56.3	49.0	0.75	4.5	0.3												
17	30.112	60.8	45.9	0.61	3.0	2.3												
18	29.820	70.2	61.6	0.76	6.5	9.6												
19	29.984	66.1	53.2	0.81	5.0	5.3												
20	30.063	59.4	50.2	0.73	6.0	3.6												
21	30.238	56.0	44.9	0.63	2.5	0.3												
22	30.203	62.0	50.5	0.69	3.5	3.3												
23	29.914	68.9	53.6	0.73	4.0	0.6												
24	29.869	57.6	48.4	0.76	7.5	4.6												
25	29.882	59.9	49.8	0.71	5.0	1.3												
26	29.991	63.9	51.5	0.67	3.5	1.0												
27	30.046	67.9	55.1	0.66	2.5	0.0												
28	29.921	67.6	54.8	0.64	4.0	3.0												
29	29.875	59.6	49.1	0.71	4.0	9.6												
30	30.216	43.0	34.5	0.74	4.0	5.6												
S's																		
M's	30.027	63.08	5.302	7.26														

ABSTRACT OF METEOROLOGICAL OBSERVATIONS AT TORONTO IN SEPTEMBER, 1862.

Compiled from the Records of the Magnetic Observatory.

Day.	DAILY MEANS OF THE						THERMOMETER.		WIND.		RAIN AND SNOW in 24 hours ending at 6 A.M. next day.			GENERAL REMARKS.			
	Barometer reduced to 32° Fahr.	Temperature of the Air.	Relative Humidity.	Amount of Cloudiness.	Maxim. read at 6 A.M. of next day.	Minim. read at 2 P.M. of same day.	Dew Point at 3 P.M.	General Direction.	Mean Velocity in miles per hour.	Rain.	Snow.	Total rain and melted Snow.					
													Ozone in 24 hours ending 6 A.M. of next day.				
1	29.1973	61.38	84	0	71.0	63.6	61.5	N.	54	W.	14.46						
2	.6172	47.45	63	2	59.0	42.0	34.0	N.	27	W.	3.82				Aurora.		
3	.7417	55.50	71	2	64.8	39.0	50.0	N.	7	W.	3.19				Faint Aurora.		
4	.6960	64.45	80	2	75.2	52.5	64.5	S.S.W.	23	W.	5.71				Hoar frost a.m.		
5	.6237	69.32	73	8	79.4	57.5	65.5	S.S.W.	27	W.	3.58	.800					
6	.5550	69.63	92	10	77.0	64.2	71.0	S.S.W.	22	W.	3.41	.560					
7		Sunday			75.5	64.3		S.S.W.	37	W.	7.67	.040			Dense Fog during night.		
8	.5678	67.27	68	7	75.5	65.0	53.0	N.	19	W.	9.87						
9	.8790	57.97	82	0	65.0	49.4	59.0	N.	64	E.	2.09						
10	.8368	61.03	74	0	69.0	49.4	59.0	N.	77	E.	2.87				Bright Aurora.		
11	.6690	66.22	78	3	74.0	54.4	64.0	S.	69	E.	3.18	.007					
12	.6963	61.55	77	7	63.8	63.2	50.0	N.	27	W.	11.64	.005			Sheet lightning during even.		
13	.9805	48.70	81	5	55.0	44.8	44.5	N.	68	E.	3.75						
14		Sunday			62.0	45.0		N.	12	E.	2.23						
15	.7863	57.45	91	8	65.0	48.6	61.0	N.	22	E.	4.06	.037					
16	.8280	56.97	79	6	62.2	54.6	54.0	N.	83	E.	3.98						
17	.5727	62.82	89	6	67.0	51.8	59.3	N.	86	E.	6.34						
18	.4582	66.75	83	7	74.0	64.0	62.5	S.	80	W.	6.77	.195					
19	.7650	58.30	77	5	68.8	55.4	57.0	N.	82	W.	4.86				Faint Aurora.		
20	.7505	58.22	82	3	67.8	49.8	60.0	S.S.W.	32	W.	2.85						
21		Sunday			65.0	54.2		S.S.W.	83	E.	3.00						
22	.7565	62.07	85	2	73.8	48.4	64.0	N.	10	W.	2.62				Dense Fog a.m.		
23	.5567	64.75	80	6	75.0	59.8	63.0	N.	80	W.	7.29	.385					
24	.6815	53.40	68	4	69.2	52.8	37.0	N.	17	W.	6.82						
25	.7302	54.58	77	1	64.0	45.0	52.0	N.	26	W.	4.38				Aurora.		
26	.7195	57.43	75	0	67.8	45.0	57.0	N.	28	W.	2.99				Aurora.		
27	.6823	57.42	84	5	66.2	45.0	53.5	S.	84	E.	1.04				{ Solar Halo distinct		
28		Sunday			70.6	52.0		S.	8	E.	1.50				{ Aurora.		
29	.6115	58.88	82	6	68.0	54.5	56.5	N.	6	E.	6.71				Sheet lightning during even.		
30	.7993	49.63	82	5	62.5	46.0	44.0	N.	64	E.	5.52						
S's																	
M's	29.6830	59.59	80	5	68.24	52.55	55.62	N. 59	W.	5.07							