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CANADA

MEDICAL AND SURGICAL JOURNAL

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CANADA

MEDICAL AND SURGICAL JOURNAL.

July 1872

ORIGINAL COMMUNICATIONS.

A Case of Paralysis with Aphasia occurring on the Fifth Day after Parturition—Death and Post Mortem. By JOHN REDDY, M.D., L.R.C.S.I., &c., Physician to the Montreal General Hospital, &c.

I wish to supplement a paper read by me before the Medico Chirurgical Society of Montreal, on the 9th March last, on Paralysis with Aphasia, (when I gave the history of four cases,) by recording another case which has since come under my charge, and which I deem of sufficient interest to lay before your readers, particularly since, as it terminated fatally, I had an opportunity of verifying the diagnosis by a post mortem. It bears a most striking resemblance in some of its pathological features to Case No. 1 in my former paper.

Mrs. M., aged 45, of middle stature and spare habit, I confined on the 17th April, 1872, of a large male child. The labor was of short duration, terminating favorably—(this was her seventh labor). On the second day she remarked that before her confinement she had been much troubled with a cough which had now nearly altogether subsided. On the third day the breasts were well filled and the child nursed freely; she appeared in good spirits, nor did anything unusual arise to affect her perfect recovery till the morning of the 22nd (or fifth day), when, on my arrival, the nurse informed me that some short time previously she awoke, as if in a fit or dreamy fright; her face was quite distorted; the ability to speak or sit up being absent; that when the fright had subsided she was seized with coughing, and forced up quite a quantity of thick saliva which flowed from her mouth; up to this moment she appeared to be doing well, and had spoken to her a short time previously. I found her lying on the right side, partially propped up in bed; thick, glairy mucus, in a long string, flowing from the right side of her mouth. The face and right

side of body hemiplegic; her pulse 78, and temperature 98 2-5; she was also aphasic, with the exception of answering "no" or "yes," intelligently, to leading questions; could swallow, but not freely; her breathing was peculiar, and apparently somewhat oppressed; the face had a peculiar, bluish tinge, and the right jugular was very full and tense; bowels had been freed the day previously with castor oil; the lochia were correct, but the milk had considerably diminished; had frequent coughing fits, and ejected quite a quantity of glairy, transparent mucus, free of air; percussory sounds were much clearer than natural all over the chest; heart's action: first sound slightly below par, second regular, no murmur existing; subcrepitating rales heard all over the chest, anteriorly and posteriorly, occupying about the first two-thirds of inspiration, which had a prolonged character; expiration was short, sudden and quickly accomplished. I may mention here that partial emphysema of both lungs had existed for some years back, and I have had frequently to attend her for severe attacks of bronchitis, when she had that characteristic breathing and cough that peculiarizes asthma; the urine was normal in color and quantity, and did not contain albumen; tickling the sole of the foot on paralyzed side produced active reflex movements; no muscular rigidity was present.

From the above symptoms and signs I at once came to the conclusion that obstruction of the right side of the heart existed, (probably pulmonary artery); also, that an embolus, no doubt, occupied the middle and, possibly, anterior cerebral arteries of left side.

Treatment consisted in: Turpentine epithems to be applied every fourth hour to the chest; during the intervals, hot linseed poultices, to which a small quantity of mustard was added; the patient's body to be raised against pillows to relieve the dyspnœa, and to give a tablespoonful of the following mixture every fourth hour: ℞ Bromidi Potass, ʒij; Iodide Potass, gr. xxxvi; Chloroform, ʒij; Ext. Polygal Senegæ Fluid, ʒij; Aquæ ad ℥vj.; diet, milk, chicken broth, &c.

This treatment was steadily persevered in all the day with partial relief. The face has lost the bluish tinge, and the venous congestion has also subsided.

23rd.—Pulse, 80; temperature, 98 2-5; was very restless during the night, constantly desiring to be raised forwards into a sitting posture; has expectorated quite a quantity of viscid mucus; lochia present, but paler; milk entirely gone; continue treatment.

Evening.—Symptoms appear much more grave; face congested to a bluish purple color; pulse, 104; orthopnœa, with highly exaggerated respiration; rapid suffocation imminent. Ordered a zinc sulphate emetic, which was followed by immediate relief and marked benefit, as the patient could lie flatter in bed, and the breathing was relieved. Continue treatment.

24th.—Pulse, 82; temperature, 99; passed a restless night, with considerable dyspnœa; diarrhœa also set in about 4 a.m., and the expectoration has nearly ceased; she appears now tranquil. Ordered a few powders of compound powder of chalk while necessary.

Evening.—Diarrhœa much better; no marked difference in the general symptoms.

25th.—Pulse, 88; temperature, 99 2-5; condition about the same as yesterday; diarrhœa better, but the cough more troublesome.

26th.—Temperature, 99; pulse, 94; full, but occasionally irregular; face puffy and red; very great restlessness, and a seeming inability to assume any posture of ease; respiratory movements hurried; heart's action strong, laboring and irregular; intelligence perfect, but aphasic state more decided; no power of answering no or yes, which to this existed throughout; subcrepitant rales are again heard all over the chest. Ordered a mixture of aconite and digitalis occasionally, to supplement present treatment.

Evening.—Pulse, 86; heart's action more regular, but the lungs seem gorged with mucus; face has again assumed the cyanotic color; veins of neck turgid; the zinc emetic again resorted to, with partial relief.

27th.—Pulse, 108—irregular; heart's impulse not so full, but the irregularity exists; the diarrhœa has again returned, and the clear saliva is flowing freely from the mouth; slight difficulty in swallowing. These latter symptoms, I consider, are due to the paralytic affection. She is evidently growing worse, and at mid-day this became most striking. At 5 p.m. she was seen in consultation with me by Professor G. W. Campbell, who was at once struck with the nature of the case. She was then perfectly conscious and her perceptive faculties active; yet all the symptoms had so increased in gravity that we could only regard the case as utterly hopeless. Increase in the strength of the doses of bromide and iodide of potassium was agreed upon, but of which she had only one or two doses, as towards midnight she became very restless; symptoms of suffocation setting rapidly in, and she died a quarter to seven in the morning.

AUTOPSY

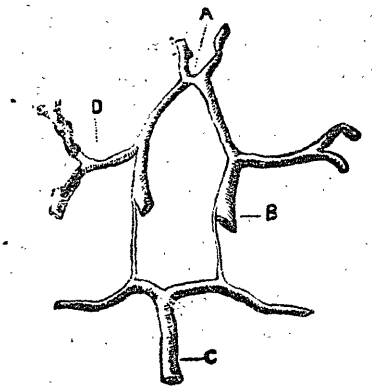
eight and a half hours after death; body much emaciated; rigor mortis marked.

Brain.—On removing the calvarium, which was not more than ordinarily thick, the dura mater was found firmly adherent to it through the enlarged pacchionian bodies; veins of dura mater full; general appearance of membrane normal. On exposing the brain there was nothing marked in its condition excepting that it was soft in consistence and pale. The arachnoid was not thickened in any part, and contained little, if any, fluid in its spaces. On making the usual section of the right hemisphere, the punctæ vasculosæ did not appear more than usually marked or engorged with blood. The right lateral ventricle contained about a drachm of clear serum. Nothing abnormal was noticed in connection with its contents, excepting the altered consistence which seemed to pervade the entire brain substance. Careful and minute sections of the corpus striatum and thalamus opticus were made without any positive result.

Left Hemisphere.—Punctæ vasculosæ normal; brain substance softer, in fact, than opposite side; gives way rather than cuts under the knife. On extending the section to a level with the corpus callosum a localized spot of softening, in area about an inch and a quarter square, was found extending from the lateral and anterior aspect of the corpus striatum forwards and outwards to near the circumference of the brain, involving the fissure of Sylvius and those convolutions known as the Island of Reil. The general aspect of the softened portion was white, but in places—say, in three or four spots, varying in size from a pea to a small marble—there was bloody infiltration and staining of the brain matter of a diffuse pinkish character. The ventricle contained about half a drachm of straw-colored serum, with minute flocculi of lymph floating therein. There were two small deposits of lymph, of the size of a split pea, on the floor of the ventricle; one over the semicircularis; the other in the extreme angle of the anterior cornu. They were firmly adherent in their places.

Base of Brain.—General appearance identical with that of

hemispheres. Arachnoid not thickened or œdematons in any place.



A.—Anterior Communicating. *C.*—Basilar.
B.—Right Carotid. *D.*—Left Middle Cerebral with Embolus.

Arteries—Left Middle Cerebral.—At the point of divison into its branches, three quarters of an inch from the carotid, the vessel appeared to bulge and felt decidedly resisting to the feel, thought to be atheromatous. Immediately beyond this, and plugging the two main branches, from the very bifurcation, were firm, dark clots, well defined and readily distinguishable from the vessels, both in their front and rear. Each clot was about half or three-quarters of an inch in length, and occupied the entire calibre of the vessels. All the branches beyond the obstruction were empty, collapsed and smaller, apparently, than normal.

There were also noticed two or three small but soft clots in the left anterior communicating, and left posterior communicating arteries. These occupied only about half the calibre of the vessels. Nothing requiring special notice was found elsewhere in the brain.

Heart.—Normal size. Considerable fatty accumulation, especially over left ventricle.

Left Ventricle.—Normal in thickness. Mitral valves healthy.

Right Ventricle.—Tricuspid valve entangled in an immense washed clot or antemortem polypus, which likewise extended up the pulmonary artery for a considerable distance.

Aorta.—Valves normal and patent. Three or four small spots of atheroma, scarcely raised from the surface of the vessel, and none larger than the head of a pin were noticed. Otherwise heart perfectly healthy.

Lungs.—Margin emphysematous. General condition healthy.

After the post-mortem I examined, under the microscope (250 diameters), a portion of the brain taken from the corpus striatum, and from the pinkish, softened substance in the Island of Reil, I found quite a quantity of oil globules and a large number of corpuscles of a somewhat roundish shape, varying in size from half a split pea down to the eighth of an inch; some having a small papilla at one end, others having a granulated appearence. On comparing drawings I made of these with what Gluge calls his "compound inflammation globules" many are identical.

The accompanying wood-cut is an exact representation of the embolus which occupied the left cerebral artery, and does ample justice to the very beautiful and carefully made wet preparation put up for me by Dr. Roddick, House Surgeon, Montreal General Hospital, who also kindly assisted me at the post mortem.

877 St. Catherine Street, Montreal, 13th June, 1872.

The Small-pox Epidemic in St. John, N. B., in 1871. By L. C. Allison, M.B. Read before the New Brunswick Medical Society, 3rd April, 1872.

(Continued from page 449 Vol. VIII *Canada Medical Journal.*)

TREATMENT OF HÆMORRHAGIC SMALL-POX.

As long as the head continues hot and aching I would apply cold to it, either by a bladder filled with ice, or by iced fomentations constantly repeated. An ice-bag may also be applied over the loins. Anti-emetics are useless if not hurtful. While the vomiting lasts I would give the patient small pieces of ice, or let him suck iced milk through a quill tube; and in all cases of small-pox I may say that it is worth some trouble to obtain a regular supply of milk, as well as to see that the patient takes his drink, whatever it may be, by small mouthfuls at a time. Dry heat may be applied to the epigastrium, with a small sand or salt bag, or a small flat stone, or a tin cup, heated and laid on a piece of flannel. I would not apply turpentine or mustard, far less a blister to the skin, for if you set up derivation from the cutaneous vessels, or let the cuticle get ruffled, you will make a new point for hæmorrhage to come from. On the second day, or as soon as the hæmorrhages have commenced, the pulse become soft and feeble, and vibices begun to appear, a mixture should be made of wine, brandy, or whiskey, with milk and eggs, if these last can be obtained, flavored with sugar and a little nutmeg or cinnamon, and the patient should be dosed with this *ad libitum*. Internal astringents will not control the hæmorrhage, but if any are given

I would use gallic or tannic acid, or the acetate of lead with or without opium, and eschew turpentine as there is invariably more or less hæmaturia, and generally *more*. Such is the only treatment that I can suggest for these formidable cases, and although it is merely palliative, I think that in some degree it mitigates the patient's sufferings, which is pretty nearly all that we can do. In the case to which I lately alluded, I am satisfied that the free use of alcholic stimulants along with milk and eggs, prolonged the patient's existence also. He was a blacksmith, a large finely made man, in the prime of life, but debilitated by having but recently recovered from an attack of typhoid fever. He had intestinal and renal hæmorrhage, with abundant petechiæ upon the legs and arms and some large claret-coloured vibices. I was agreeably surprised by his surviving through the first week, but on the ninth day my attempts at stimulation and nutrition were put a stop to by the supervention of paralysis of the æsophagus and soft palate, rendering him unable to swallow. Next day he died.

Dr. Aikman (*Glasgow Medical Journal*, November 1871,) regards this form of small-pox as due to prostrated innervation and recommends wet packing and the internal use of strychnia. As I have not seen his original article I do not know how far or with what results the plan has been tried. Had I known of it at the time I would certainly have tried it, though not with any high hopes of success, for I think that if the nervous centres are affected it can only be secondarily, and through a perverted crasis of the blood which neurotics cannot rectify. One thing I have forgotten in speaking of the hæmorrhages. They are chiefly from mucous membranes and beyond the reach of interference. But if they occur on the surface as they will from old scars, newly healed cuts, frost-bites, ulcers, &c., they must be checked by the local application of astringents such as the perchloride or pernitrate of iron, or if on the extremities, by a pad or a bandage. In one of my cases there was upon each leg a large ulcer, whose surface, on the second day, presented a villous appearance, and bulged above the skin like a stuffed crimson velvet pin-cushion. The same evening free hæmorrhage took place from these surfaces; I never saw capillary circulation so active. Although I attended within a few minutes, he had lost a large quantity of blood in the interval; cold sponging had no effect upon the hæmorrhage, but I arrested it by applying a compress and bandage to each limb. No further bleeding took place during the night, but next morning the patient was passing passing pure blood from both bladder and rectum, and in the afternoon he died.

IN THE TREATMENT OF PETECHIAL SMALL-POX

Quoted in *Lancet*, 10th February, 1872.

milk should be given while the vomiting lasts, and when it has ceased, the brandy and egg mixture should be added. If the eruption developes itself it will be a confluent of the most unfavourable, and the fever will be typhoid in character. Hence my practice was to give nutrients and stimulants freely, and I think that Dr. Holden's case was the same. I sometimes gave the sesqui-carbonate of ammonia in doses of gr. iv. to gr. vi., but when there was much tendency to hæmorrhage I preferred to use the alcholic stimulants, on the theory of Richardson that alkalies lessen the coagulability of the blood.

In treating the

CONFLUENT CASES

that were uncomplicated with hæmorrhage or petechiæ I followed the rules that are generally laid down by our authorities and which I need hardly detain you by recapitulating. During the preliminary fever all that is needed is to relax the bowels by a mild saline aperient, e. g., the sulphate of magnesia combined with dilute sulphuric acid, to give cooling drinks, of which aerated lemonade is the best—if it can be had, and feed with arrow-root or thin oatmeal gruel. When the secondary fever has set in, milk and beef tea should be given, but it must be kept in mind that besides the prostration due to the disease, we have to contend with the exhausting effects of a very extensive suppuration, which is not always confined to the superficial and visible regions of the body. We must always be on the look-out for deep-seated abscesses and for diffuse cellulitis in the limbs. Should this last event happen, an incision ought to be made as soon as fluctuation has become distinct; and before the wound heals, extensive sloughs will come away from the deep-seated fasciæ where the trouble originated. In one of my cases, which was not otherwise a very severe one, large portions of the intermuscular planes of the forearm were thrown off in this way. Cellulitis is met with in mild cases as well as in severe ones, especially where the patient is deficient in physical and mental stamina. Why it should happen after a moderate eruption I cannot tell, unless from a portion of the materies morbi having been diverted, in some way, to the deep fascia, instead of seeking its usual outlet by the cutis. Secondary complications were not numerous in my observation. I met with three or four cases of abscess in those who recovered, and two cases of bronchitis and another of pyæmia among those which proved fatal. The only mischief to the eye which I saw was in a

confluent case that proved fatal on the twelfth day, and in which both eyeballs became abscesses and discharged their contents on the day before death. I should also mention the natural complication of pregnancy. I found pregnant women in infected families ten or twelve times, and was twice unfortunate enough to find them the first attacked. One of these mothers had been previously vaccinated, and she got off with varioloid; but her child was born jaundiced, and died of confluent small-pox, which showed itself on the 7th day after birth. An attempt to vaccinate it failed. The other mother had confluent small-pox, of which she died. Vaccination succeeded in producing vesicles upon the child, and, I think, mitigated the small-pox which followed, but it still proved severe enough to exhaust the diminutive patient after a struggle of nineteen days' duration. I had time to vaccinate the other pregnant women, and but one of them took the disease. She had it in a mild, distinct form and recovered speedily, but her child was born dead two or three weeks afterwards, with twelve large flattened papules, something like those of urticaria, scattered over its face. The abdomen was tumid, divested of cuticle, and of a reddish-brown color. I have no doubt that this child received the disease from its mother in utero, and died of it while she was recovering, some time before its birth.

I need hardly detain you with any remarks upon the milder forms of small-pox and their treatment.

In speaking of points of treatment that apply to all cases alike, I will be as brief as possible. First, as regards specific treatment there are none deserving of any confidence. The plan of inducing artificial pustulation, at an early stage, by ointments of tartar emetic and croton oil, I never tried, and I do not think that it sounds plausible even in theory. After what has been already stated I need not point out the mischief that would be likely to attend upon it in a case of hæmorrhagic small-pox, where every superficial breach of the tissues tends to become the seat of obstinate capillary hæmorrhage. In cases tending to confluence it would seriously add to the patient's discomfort, which is sure to be quite serious enough without any addition from the treatment, while in the milder cases the plan will be quite officious and unnecessary. In short, I have great faith in the old maxim that the less eruption that appears the better. If suppuration could draw the miasm away before it had time to mature itself in the blood, the patient with ulcers that I have mentioned, and another who had gonorrhœa, ought to have had at least some form of small-pox less severe than the hæmorrhagic. The plan seems founded upon a mistake. The materies morbi does, indeed,

determine in greater quantity to parts where there is increased vascularity, such as recent scratches, &c., but only after it has been fully matured, or, as the older physicians used to say, "concocted" in the blood, and has begun to show itself in other parts of the skin as well. These scratches have a *preference* but not a *priority* of eruption.

Neither did I experiment with the sarracenia, which some have extolled so highly as a specific, for I believe that during the last ten or twelve years the merits of this ill-looking and ill-tasting decoction have been pretty effectually exploded by an extensive series of trials. Apropos of this subject I may add that whenever you find the adjectives "Indian" or "Great Indian" prefixed to the name of a remedy, and a remarkably wonderful list of cures attached to it, you may at once take it upon yourself to affirm, decidedly, that the thing is not so, especially if it should happen to be a remedy for a disease from which Indians notoriously suffer more than any other race of mankind.

In short, we have, as yet, no specific for small-pox. But there are a number of drugs which have been recommended from time to time as useful adjuvants in the treatment. I shall mention only three of them, which were used to some extent by Dr. Holden and myself, and these are sesqui-carbonate of ammonia, carbolic acid, and the hyposulphite of soda. We found that

Carbonate of Ammonia exerted no influence in modifying the eruption or shortening any of the stages of the disease. In doses of from four to eight grains it is a good and useful stimulant in cases where there is no marked tendency to hæmorrhage. But when this tendency exists I would withhold it for the reason already given. Until lately, the use of

Hyposulphite of Soda was almost confined to cases of Sarcina Ventriculi, in which it proves useful as is generally supposed through destroying the microscopic germs of the disease, by the sulphurous acid which it disengages. Two or three years ago Professor Polli, of Milan, proposed to administer it in infectious diseases, with the idea of arresting fermentative changes in the blood in the same manner. In some of the miasmatic fevers good results are stated to have been obtained from the practice, but I cannot confirm them with regard to small-pox. I administered the hyposulphite in doses of gr. x to ʒss repeated every four hours, in several instances, but could never satisfy myself that it had any effect, either in modifying the eruption or in sensibly ameliorating the symptoms. I think that it is an open question whether this drug really does evolve free sulphurous acid after

absorption into the blood in the same manner as it evolves it in the stomach.

Carbolic Acid has also been highly recommended as an internal remedy in zymotic diseases, I know not upon what theory, but probably upon the similar one of arresting germ multiplication and so hindering fermentation in the blood. I administered it in a number of cases, from an early period in the disease, sometimes alone and sometimes combined with Aqua Mindereri, in the form of carbolate of ammonia. I never observed that it checked or aborted the eruption, but I have so often seen the concomitant symptoms, especially the headache, improve during its administration, that I am rather inclined to think favorably of it as a palliative. I would not speak dogmatically upon this point, as in estimating the effects of remedies upon symptoms there are many sources of error capable of misleading much more careful and elaborate observations than any which I had an opportunity of making. Nor should it be forgotten that in making such enquiries we must attach a much greater value than usual to negative results, as compared with positive or what appear to be positive ones. In quite a number of cases the symptoms referred to resisted the effects of carbolic acid as well as those of other remedies. Yet, in some forty or fifty instances where I administered it seemed to relieve them more or less, in at least three out of four. In one case where the eruption was not copious, but the headache very severe and persistent, I increased the dose to the very large one of gr. x, and the headache at once ceased. In fine, carbolic acid will not shorten the stages or lessen the mortality of the disease, but as a palliator of symptoms I certainly think that it deserves a more extended trial. In the

LOCAL TREATMENT OF THE ERUPTION

I used carron oil to relieve the itching, and found it answer very well. It is not a very pretty or savory preparation, but in this disease such points are of less consequence than usual. In young children, when the eruption is copious, the hands should be muffled with cotton wool or the softest rags that you can get, and in spite of what you can do they will often succeed in tearing the vesicles extensively, for the cuticle is very thin and tender. When the cutis has been laid bare, the raw surface should be oiled with carron or olive oil and dressed with cotton wool. This accident is very liable to happen in those severe cases where large wrinkled bullæ appear, loosely filled with bloody or turbid serum. These should be evacuated and the wrinkled cuticle smoothed down and oiled. I did not find time to make any

observations upon the value of unguents in preventing pitting, but am to believe it trifling, if anything. The pitting, I think, depends mainly, if not entirely, upon the nature and amount of the eruption, and is not controllable by local remedies. In discrete eruptions it does not take place to any extent, but I never saw a confluent case that recovered without showing more or less of it. It does not occur until after the remains of the original pustule have disappeared. Sydenham, in noticing this fact, attributes it to a corrosive humor contained in the small furfuraceous scales that succeed the crust after it has fallen off. Light seems to have but little effect upon it, for I just now remember three of my patients of the same sex and nearly the same age, two of whom lay in darkened rooms, and the third in one that was well lighted. These cases were closely alike in symptoms and progress, and the degree of pitting was about the same in all three.

While speaking of the local treatment of the eruption I may allude to the sore throat which is always a distressing symptom in confluent cases. A variety of drinks have been recommended, the most elegant of which is an infusion made by pouring hot water upon black currant jelly—(Marson). If this cannot be had, molasses and water in the proportion of one part of the former to four or five of the latter make a very good substitute.

I think that I have now touched upon all the points of treatment upon which I have any special remarks to offer. I have not deemed it necessary to occupy your time by repeating all the practical details that are universally agreed upon, but have contented myself with noticing some points upon which there are differences of opinion, and upon such points stating my own and the reasons which I have for holding it. To go into full details of the complications that may arise, and the treatment which they require, would have led me beyond my limits, and was, moreover, unnecessary as all these have been thoroughly set forth by such excellent authors as Gregory and Marson, whose descriptions and directions leave nothing for any one to add to them. They are by far the best modern authorities that I have met with. The objective phenomena of the disease have been well described by Trousseau and almost well by Sydenham, whose observations—made two hundred years ago and under disadvantages of which we can hardly conceive the magnitude—are wonderfully truthful and accurate, and form, as everybody knows, the foundation upon which the whole modern system of treating the eruptive fevers has been constructed. The epidemic of 1870-72 will add largely to the information supplied by these authors and by others, as it has brought under common observa-

tion, forms of the disease which hitherto have been but rarely met with.

I have still a word or two to add upon

DISINFECTANTS.

When the patient has got well, the last part of our duty is always to disinfect the premises. Even while the disease is in progress it is well to surround it with agents that evolve an acrid gas, which destroys the organic effluvia, and in doing so, probably decomposes part of the miasm by means of which the infection is propagated. For this purpose various substances have been used, of which I know none that is handier, cheaper, or more effective than chloride of lime, which, when moistened with sulphuric acid, gives off its chlorine freely. Sulphurous acid gas, generated by the combustion of sulphur, has been used occasionally. Its fumes ought certainly to effect a thorough destruction of the organic effluvia, but even when largely diluted with atmospheric air they are so intolerably acrid in respiration that they are hardly to be employed, unless it be possible to get all the people off the premises. The crusts that fall from the patient's skin, and the dressings that have been applied to it, should all be carefully collected and burnt. Such of the clothes and linen as are washable should be washed with Condy's fluid (a saturated solution of permanganate of potash) in the proportion of a tablespoonful to the gallon of water, and if they are boiled it will be all the better. Heavier clothes and mattresses should be fumigated for at least twenty-four hours with chlorine or some other disinfecting gas. But bedding that has got very dirty, old straw ticks and clothes of little value, had better be burned at once.

I have now, gentlemen, laid before you a hasty sketch of the epidemic of 1871, in which I have tried, as far as possible, to collect the important facts apart from repetition and minute details. I have laboured to be as brief as possible. I hope that I have not been obscure. The disease of which I have been speaking is a strangely interesting one. It has, indeed, many repulsive aspects both for the physician and his patient. There is no ailment which puts the patient so much in need of assistance from others, and at the same time throws so many difficulties in the way of his obtaining it; which in so large a measure combines protracted suffering and peril, with the risk of future deformity and disablement, which renders him so hateful to his fellow beings at a time when he so much needs their kindness and sympathy. There is none which demands from the physician more skill, readiness, and patient, unselfish labor, at the same time that it involves

him in so many quarrels, exposes his reputation to such serious risks, and earns him so little in the way either of pecuniary recompense or public gratitude. It brings us into contact upon the one hand with filth, stench, and physical loathsomeness; on the other with fright, selfishness, and many other despicable traits of human character. Yet with all this, there is no disease which offers us so interesting an exhibition of the abnormal but regulated workings of nature in the human body. There is none from which a conscientious physician can derive, in greater measure, the satisfaction that rewards useful labor bestowed from no unworthy motive. And there is none which tends more to call out and exercise those qualities of kindness and philanthropy which every physician should endeavour constantly to display towards his patients as far as poor human nature will let him.

TABLES.

(A.)—STATISTICS OF ORDINARY EPIDEMICS.

Deaths from Distinct Natural Small-pox	1 in 10
" Confluent " "	1 in 3
" Small-pox after Vaccination	1 in 33

Aitken, "Practice of Physic," vol. i., p. 256.

(B.)—STATISTICS TAKEN AT ST. JOHN, IN 1871.

(1.)—NATURE OF THE CASES.

	Attacked.	Died.	Mortality, per cent.
Haemorrhagic Small-pox	11	11	All
Petechial "	14	14	All
Confluent and Copious Small-pox	95	38	40
Discrete Small-pox	54	8	14.8
Varioloids	31	..	Nil
	205	71	

(2.)—EFFECT OF VACCINATION.

	Attacked.	Died.	Per Cent.
Non-Vaccinated	138	69	50—1 in 2
Vaccinated	67	2	3—1 in 34

ARREST OF THE EPIDEMIC BY VACCINATION.

	Attacked.	Died.
Cases in February	85	28
" March	74	25
" April	19	9
" May	18	6
" June	5	3
" July	4	..
	205	71

The District Vaccinations were done in March.

(3.)—EFFECT OF AGE ON THE MORTALITY.

	Attacked.	Died.	Per Cent.
Under 1 year old	9	6	66
" 5 years old	35	19	54.3
From 5 to 20 years old	103	29	28.1
" 20 to 40 "	55	19	34.5
Above 40 years old	12	4	33.3
	205	71	

(4.)—DURATION OF THE FATAL CASES.

No.	Days' Duration.	Nature.	No.	Days' Duration.	Nature.	No.	Days' Duration.	Nature.
1	3	Hæmorrhagic.	80	11	.....	154	7	.....
2	3	"	81	11	.....	155	9	.....
7	7	.....	83	7	Petechial.	156	9	.....
8	7	.....	87	6	"	159	3	Hæmorrhagic.
9	8	.....	91	4	"	160	6	.....
11	12	.....	92	10	.....	162	18	.....
20	15	.....	95	5	.....	164	10	.....
21	6	Petechial.	97	15	Discrete.†	166	5	.....
22	5	.....	104	5	.....	168	6	.....
27	9	.....	106	6	.....	170	8	.....
28	9	.....	107	9	Petechial.	175	8	.....
43	2	Petechial.	111	5	.....	176	3	Hæmorrhagic.
45	6	.....	113	4*	.....	177	7	.....
46	6	.....	114	19	Copious. ‡	178	1	Hæmorrhagic.
47	13	Petechial.	123	3	Hæmorrhagic.	181	5	.....
49	6	"	126	9	.....	182	8	Petechial.
52	14	.....	132	11	Petechial.	184	5	"
57	10	.....	133	5	.....	185	6	"
60	2	Hæmorrhagic.	135	2	Hæmorrhagic.	186	2	Hæmorrhagic.
62	10	Petechial.	144	5	.....	191	1	"
68	2	Hæmorrhagic.	147	9	Hæmorrhagic.	199	11	.....
74	11	.....	150	7	.....	202	16	.....
78	5	.....	152	5	.....	203	5	.....
79	6	Petechial.						

* Hours. † Pyæmia. ‡ Infant.

The average duration of these fatal cases was seven days and a fraction.

Hospital Reports.

MEDICAL AND SURGICAL CASES OCCURRING IN THE PRACTICE OF THE MONTREAL GENERAL HOSPITAL.

Case of Depressed Fracture of the Frontal Bone, with Fracture of Fourth and Fifth Cervical Vertebræ, under the care of G. E. FENWICK, M.D. Reported by Mr. W. A. MOLSON.

Oscar Stromme, aged 27, Norwegian sailor, was admitted to Montreal General Hospital, under care of Dr. Fenwick, 11th June, 1872, at 7:30 a.m. He had been assisting in the storing of ice on board the steamship "France," and, while standing at the edge of the hatchway, the hooks holding the block of ice gave way, and he was precipitated to the very bottom of the ship, striking, with his feet, the blade of a spare fan. The violence of the fall threw him first forwards upon the edge of the blade, causing fracture of the skull, then backwards, breaking his neck. He was brought to the hospital almost immediately, when his condition was found to be as follows:

Pulse 72, regular but weak; temperature in axilla 97 3-5; lividity of entire surface; was quite rational, but knew nothing of the particulars of the accident. On examination, a wound, three inches in length and three-fourths of an inch in breadth, was found to extend across the forehead, at the roots of the hair, communicating with a depression in the skull, three inches in length, in the line of the external wound, nearly an inch in breadth, and from one-half to three-fourths of an inch in depth, the deepest portion being above. In moving him, he complained bitterly of pain in the back of the neck, and, on examination, it was thought that a depression of one or more cervical vertebræ existed. Sensation was entirely absent in the lower extremities and for some distance up the trunk. There was loss of power in the upper extremities; but, on being disturbed, he complained of pain in the arms, especially the right. The breathing was most peculiar, being entirely diaphragmatic, the chest-walls not moving in any part; reflex sensibility entirely absent; paralysis of the bladder and rectum. Before admission to hospital several ounces of brandy had been administered to him, which produced considerable irritability of stomach, causing violent emesis.

A bladder of ice was applied to the head, hot applications to the feet, with beef-tea and pieces of ice internally.

9 p.m., same day.—At times he has been slightly delirious, but when spoken to was immediately aroused and answered intelligibly. The paralytic symptoms have not altered, with this exception, that the pain on moving the upper extremities is increased. He has taken nourishment freely without vomiting. Pulse 80; pupils slightly dilated; passed a small quantity of water in the forenoon; bowels quiet; the breathing continues quick and purely diaphragmatic, showing that the lesion to the cord exists below the portion giving off the phrenic nerve.

June 12th, 9 a.m.—Patient pretty quiet during the night; mental condition somewhat the same as yesterday; pulse 100; temperature in axilla 101; no vomiting; sensibility absent as high as the nipples, above them intense hyperæsthesia, especially of the right arm; face slightly cyanotic; has not urinated for nearly twenty-four hours.

8:30 p.m.—Pulse 92; temperature in axilla 101 4-5; temperature between the toes 102 4-5; temperature of cheeks 108½; has been delirious all day, and for the past three or four hours breathing has been more labored; can be aroused only with great difficulty. It was found necessary to catheterize him, when about half a pint of dark-coloured ammoniacal urine was drawn off. He continued to grow worse from this time, and died early on the morning of June 13th.

Autopsy Sixteen Hours after Death.—Rigor mortis well marked. Head; besides some of the characters mentioned above in the history of this case, there was noticed, on removing the calvarium, a depression of the inner table, corresponding to the internal fracture. This depressed portion of bone extended for about two inches in breadth. Through the fracture, the brain could be reached by an aperture in its upper part; considerable effusion of blood, with formation of clot between the bone and dura mater. It may be mentioned that the external wound was situated higher on the forehead than the fracture, showing that the violence must have been from above. Dura Mater wounded over the left hemisphere, opposite the opening in the inner table, for about one inch in length. On removing the membranes a thin clot of blood was found occupying the entire space between the dura mater and the arachnoid on that side; veins engorged with blood; general congestion and staining of surface of entire hemisphere; occasional flocculi of lymph beneath the arachnoid; corresponding to the opening in the dura mater, was a wound in the brain substance of the same dimensions, with considerable hæmorrhagic effusion

in the neighborhood; brain matter softened and readily washed away under a stream of water. On making section of the right hemisphere, the brain was found softened for about half an inch below the bottom of the wound. *Punctæ Vasculosæ* normal; ventricle healthy; other portions of the brain normal, with the exception of slight bloody extravasation beneath the dura mater, over portions of the left hemisphere; weight of brain fifty (50) ounces. Back.—Upon cutting down on the back of the neck, an extravasation of blood into the tissues was noticed, extending for a distance of five inches along the left vertebral groove, with fracture of the spinous processes of the fourth and fifth cervical vertebræ. The spinal dura mater being exposed, it was found covered with a thin layer of extravasated blood for about three inches of its extent, or over that portion corresponding to the above-named vertebræ. Examined, *in situ*, the cord was found deeply indented in two places, but more opposite the fifth than the fourth cervical vertebræ; and, on removing it, fracture of the entire body of the fifth was found. In that situation, therefore, the cord was impressed from two aspects, thus accounting for its almost entire division.

Case of Injury to Spine—Paraplegia—Head Symptoms, Death on sixth day. Under the care of Dr. JOHN REDDY. Reported by Mr. F. J. Shepherd.

J. M, aged 59, was brought to the Montreal General Hospital, on the evening of the 10th of May, suffering from paraplegia, the result of injury to the back.

History. When in the act of stepping on a scaffolding it gave way, precipitating him a distance of some twenty-five feet to the pathway below. When taken up, he was found insensible and immediately brought to hospital.

On admission he had sufficiently recovered to be able to give a lucid account of the accident, pulse shabby, lips pale and general lividity. On examination there was discovered a depression opposite the eleventh dorsal vertebra, with intense pain in that region. To use his own words "he was a man who took a little but was never out of the way with liquor." He says he was perfectly sober when the accident occurred. He had also a slight scalp wound.

May 11th. Seems quite sensible this morning, very talkative, has a small, rapid, shabby pulse, coated tongue, urine highly alkaline, found it necessary to catheterize him, drinks freely and vomits constantly, complains of great pain about the middle of the back and sides, morning temperature in axilla 100 2-5, pulse 118, evening

temperature in axilla 100, pulse 100, and still shabby and small, abdomen distended and tympanitic.

Treatment.—Water-bed, ice to spine, cold to head, stimulants, four ounces of brandy, beef-tea and milk *ad libitum*. Ordered Potass, Bromid grs x Potass, Jod. grs. v every four hours.

May 12th 9 *a. m.* Pulse somewhat stronger and less rapid, tongue dry, brown and cracked, skin moist and cool, urine dribbles constantly, vomiting and thirst have ceased, still complains of great pain in the side. Temperature in axilla 98 1-5, pulse 96.

8.30 *p. m.* Pulse not so strong, skin hot and dry, temperature 96 2-5, pulse 80.

May, 13th 9 *a. m.* Bowels open this morning, quite delirious, had strange illusions such as fancying that some one was trying to remove the bed-clothes, eyes very restless, talks and laughs constantly, skin moist and cool, respiration performed imperfectly, has a troublesome, short cough, indicative of weakness of the respiratory muscles, heart's action feeble, temperature 99, respirations 25, pulse 95.

8 *p. m.* Pulse less frequent and weak, skin hot and dry, delirium more violent, general tremor, similar to that in delirium tremens, extremities cold, temperature 101 3-5, respirations 26, pulse 75, was ordered two ounces more of brandy. It becomes a question whether this delirium is not that produced by alcohol.

May 14th 9 *a. m.* Pulse somewhat stronger, delirium still continues, grasps at imaginary objects, tremor continues, great restlessness, can answer a direct question intelligibly and recognizes persons and objects, conjunctiva suffused, paralysis of bladder and rectum continues, last night had a turpentine epithem applied to chest, and chloral, hydr grs x administered every two hours.

May 15th 9 *a. m.* Very weak, condition semi-comatose, can be aroused with difficulty, no delirium, eyes dull, heart weak, respirations very irregular, temperature 101 4-5, pulse 88.

8.30 *p. m.* Pulse hardly perceptible, respirations very weak, quite conscious, says that he does not expect to last long.

May 16th. Died at 2 a. m.

Autopsy.—*Brain.* Arteries atheromatous, especially right carotid at its division—dura mater firmly adherent to calvarium, Pacchionian bodies large and very adherent, Brain substance firm in consistence, *punctæ vasculosæ* normal, slight effusion of lerous fluid into ventricles.

Spinal column.—Great extravasation over the spine from the 5th to the 12th dorsal vestebra, comminuted fracture of the entire 7th dorsal vertebra, the cord in that region being pressed upon from both aspects, a spicula penetrating its substance. The entire cali-

bre of the cord was softened and disintegrated in this spot. Fracture also of spinous process and arches of the eleventh dorsal vertebra, cord quite healthy beneath.

Reviews and Notices of Books.

History of Medicine, from the Earliest Ages to the commencement of the nineteenth century. By ROBLEY DUNGLISON M. D: LL.D; Late Professor of the Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia, &c., &c. Arranged and edited by RICHARD J. DUNGLISON M. D., Philadelphia; Lindsay & Blakiston.

This work, as we are informed by the editor in his preface, is an embodiment of the course of lectures delivered by the Elder Dunglison, many years since at the University of Virginia. At this time, it appears, the "history of the progress and theories of Medicine" formed one of the subjects which he regularly taught to his students—and it is with truth remarked that "it was a wise provision that thus incorporated with the other features of a didactic course a knowledge of Medical Literature which, however valuable, is generally considered as an accomplishment rather than as an indispensable necessity." The present work is stated to have been issued to supply a want very generally felt for some congenial convenient work for lack of which this study has been almost entirely neglected. The first chapters are devoted to a description of the very earliest known proceedings which can be supposed to bear the semblance of medical procedure, and at some length it treats of the various mythological and superstitious rites practised amongst the ancients, under the pretence of curing the sick and tells how in old times the word "*Abracadabra*" hung around the neck as an amulet would be used to chase away the ague, an hexameter from the Iliad to allay the agony of gout and a verse of the lamentations to cure the Rheumatism. The glimmerings of attempts to arrive at rules for the treatment of disease are then traced successively as witnessed amongst the Jews, the ancient Romans, the Hindoos, the Chinese, Scythians, Celts and the ancient Greeks. This occupies the first ten chapters after which we arrive at the time of Hippocrates B. C. 470, who was the first to introduce some entirely new teaching into the science of medicine then in its very infancy. He taught what was quite opposed to all then preconceived ideas that "nature was the first

physician," and impressed the necessity of observation of her workings. He also was perhaps the very first to endeavor by hygienic or rather disinfectant means to check the spread of an epidemic which was rapidly extending. He caused fires to be burnt as well as aromatics over the whole city in order to purify the atmosphere, which measures are related to have been entirely successful. His immediate successors and the so-called dogmatic school are next reviewed, when we come to the great philosopher Aristotle who made many discoveries in Natural History and some in Anatomy and was the first to locate the origin of all the vessels in the heart. The next marked advance was the separation by Praxagoras, who lived shortly after Aristotle, of the arteries from the veins, although he was in gross error as regards their real purpose in the economy, for he supposed that the arteries were always filled with air. We are then introduced to the Alexandrian School foremost amongst whom was Herophilus, whose name is still retained in modern anatomy in the torcular Herophili, and whose nomenclature of the fissure on the floor of the fourth ventrile is still extant as the Calamus Scriptorius. Another name closely associated with his is that of Erasistratus who attempted some physiological theories such as: that digestion was performed by attrition, &c., and who described the tricuspid valve. Next come the Empirics who despised anatomy and professed to act solely upon the result of experience. "The Empirical School terminates the most ancient period of the history of medicine, and that which gives a type to the healing art of the subsequent ages." We have then a description of the state of medicine during the early Christian eras, including the works of two great men, Celsus and Galen, a delineation of the different sects into which physicians were at this time divided and a description of the various abuses to which they subjected their art. At the time of the appearance of Galen, it is said that "the schools of medicine were a prey to the most pernicious dissensions, the partizans of the schools of Erasistratus, of Hippocrates, Herophilus and of the Empirical, methodical, eclectic and pneumatic sects, divided in their opinions, agreed in one point, that of converting medicine into a tissue of frivolous subtleties and useless discussions. In the midst of this disorder, Galen appeared, and led back to the safer road of patient thinking and accurate observation which so much distinguished the Hippocratic school." It is pointed out, how at and after this period the progress of medicine was still retarded by the admixture of a strong religious and partly superstitious feeling in all medical education and procedure. Following further, we find explained how the annihilation of medical education was begun by the super-

stitious and intolerant orthodoxy of the Christian Emperors of the East and completed by the dismemberment of the Roman Empire and the destructive invasion of the barbarians of the North. We then learn how the Arabians retained what little was still known of the medical art which they had obtained from the Nestorians, who had it in safe keeping, and from the Athenian philosophers expelled from their country by Justinian. We then pass by the 7th century, which contained Paulus Ægineta, called the first man-midwife, and during which we find the first attempts at Chemistry and Pharmacy amongst the Arabians and the very first description of the small-pox given by one Aaron Ahran. We are thus brought, after the 6th century, to the period of the Monks of the West, who almost exclusively exercised medicine as a work of piety and charity, and as a duty attached to their divine calling. They however neglected the study of science, having recourse, to a great extent, to prayers, relics of martyrs, holy water and other ceremonials of the Romish Church, "In the 14th century medical instruction experienced in European countries, a revolution of the highest importance and one to which Medical Science is indebted for its subsequent progress." By this reference is made to the public practising of dissection of the human frame and consequent insight into anatomy and physiology: but notwithstanding this important step, the progress of medicine was retarded by the extensive study of astrology, and the implicit faith placed in its teaching by the ignorant public. In the 16th century all the different branches of medicine were studied and many books written which are still extant. From this time dates the gradual awakening of the world to the importance of the science of medicine and many familiar names begin to appear, names which in some cases have not even now lost all the authority which they once possessed. Arriving at the 17th century, we have the great discovery of the real nature of the circulation of the blood, the days of the Humoral theory and amongst many well-known names, those of Willis, Malpighi, Sydenham, Wharton and Boerhaave. After this period the medical sciences began fairly to assume the important place in literature and the extensive practical influence which they occupy and exert at the present day. It is indeed hard to properly estimate how closely the welfare of this entire universe is interwoven with subjects intimately connected with the art of preserving and maintaining health. Every day we find fresh signs of the interest taken by the public in purely medical concerns so fully are they being convinced that it is only by the diffusion of general knowledge upon these subjects that an enlightened public opinion will be enabled to combat the causes of disease and death. We refer

more especially to what is now known as the Science of Hygiene, and it is strange to think how long it has taken to arouse anything like a proper feeling in the civilized world as regards these all important matters—and it is extremely interesting to note the gradual progress of medical enlightenment, as depicted in the volume before us, leading up by insensible degrees from the first dawning discoveries of the nature of disease, to the period of the present day, when we have succeeded in discovering the causes, or rather modes of origin, of many contagious and other affections, and now endeavour to *prevent*, if possible, the occurrence of disease rather than have to cure it when it has occurred.

We have perused this volume with much pleasure and recommend it to all as a very useful and really instructive book, and one which we hope may have a large circulation, for we are sure that its study by all thinking men—both students and practitioners of medicine—cannot but be productive of great good and much pleasure of an instructive nature.

It is well printed on tinted paper and is got up in a manner very creditable to the publishers.

The present edition is issued only to subscribers, but it is a work, we think, of such merit, and so generally useful that we trust its pages may in future be thrown open to the general medical public.

Earth as a Topical Application in Surgery; being a full exposition of its use in all cases requiring topical applications admitted in the Men's and Women's Surgical Wards of the Pennsylvania Hospital, during a period of six months in 1869. By ADINELL HEWSON, M.D., one of the Attending Surgeons to the Pennsylvania Hospital. Philadelphia: Lindsay & Blakiston, 1872.

The greater part of this work is taken up with the histories, in detail, of a number of surgical cases, ninety-three in all, which were treated by Dr. Hewson in the Pennsylvania General Hospital three years ago. It is satisfactory to find that *all* the cases have been reported without exception or selection, and consequently, as the author justly observes, since there were numerous and constant witnesses of the cases, and the details of *all* of them being given, he has avoided the suspicion of suppressing anything which could have then led him to other conclusions. The idea of using dry earth as a dressing for foul wounds in surgical practice, is one which has naturally arisen from the consideration of the undeniably useful purpose which the same substance has been found to subserve in the deodorizing of fœcal and other disagreeable matters,

as established by the extensive use of Moule's patent earth closets. It is from this source that the author acknowledges to have first drawn his idea of this novel surgical dressing. He quotes, however, a letter from an eccentric individual named Minshall Painter, of Delaware County, written in 1857, which, he says, contains the germs of the very idea he is attempting to develop; but it seems to us Minshall Painter is a long distance ahead of his successor in his admiration of the *mud* system, for he actually contends that a free supply of honest dirt kept pretty constantly applied to the outer covering of the human frame is rather conducive to health and longevity than otherwise, which, we must say, is somewhat opposed to the old adage still, we are happy to think, universally regarded, that "Cleanliness is next to Godliness." "For instance," he says, "children that crawl on earth and play in the dust, and occasionally fill their mouths with it, provided their nurses occasionally clean them, are generally healthy." And again, "we have heard of savages who eat largely of some varieties of clay, and some families, not over-tidy, enjoy good health, while those more scrupulous do not enjoy the best."

The earth or clay used in all the experiments was the same, viz., "from deep diggings, well dried (but not roasted) and sifted through a fine flour-sieve; the yellow subsoil, rich in ferruginous clay, and entirely free of all sand, grit, or foreign matter." It is applied, according to circumstances, either dry or moistened with water in the form of paste. Besides this, he frequently makes use of "gauze and collodion" supports to the wounds, in place of ordinary plaster.

"The gauze is a strong silken tissue, with meshes large enough to allow the collodion to penetrate and dry on the skin beneath. I have been in the habit of using, as a less expensive but equally efficient article, the tarletan much employed by old ladies for caps in our plain city. Its mode of application is this: Strips are to be cut from such tissues along its woof or lengthwise, and of convenient width, as we cut the ordinary or adhesive plaster. The end of one of these strips is to be placed at some distance on one side from the edges of the wound, and there secured by painting collodion on its meshes. When the collodion becomes dry we have the strip so firmly fixed that it will bear any degree of traction necessary, and far more than the adhesive properties of any form of plaster will permit. By traction on its free end it is then to be drawn across the wound, and being satisfied that it gives all the support required, it is to be secured by the collodion at this free end, and at a point similarly remote from the edges of the wound." Over this is applied the earth.

The cases treated include, amongst them, the most formidable accidents and injuries which it is possible to meet with in the whole range of surgery; such, for instance, as severe compound fractures, extensive and sloughing cellulitis, large and deep burns and scalds, amputations, bad forms of chronic ulcer, abscesses and diseases of bones, &c.; and a considerable measure of success, on the whole, is claimed for this special treatment. Dr. Hewson is not, however, unwilling to admit his non-success in those cases which did not progress in a satisfactory manner. In some instances he refers his failures, however, to the great difficulties experienced in enforcing a fair and honest application of the dressing, and in ensuring the due rest of the patient in his bed, owing both to rebellion on the part of the nurses to whom it was troublesome, and to objections on the part of the patients who thought they were being experimented upon.

The principal result claimed to have been obtained by these earth-dressings is *deodorizing*. The power of dry earth in this respect is undisputed, and we think that the author has fully sustained the proof of its efficacy in this respect, after a most rigid trial, especially in some cases of extensive cellulitis, accompanied by very profuse discharge of fœtid pus. The beneficial effect here obtained, by the removal of all offensive odor, was, doubtless, very great; but, though agreeing to this, we cannot admit that we do not possess other chemical substances, such as carbolic acid and the permanganate of potash, which are found just as effectual in removing odor, and, at the same time, furnish more cleanly and less troublesome dressings than the earth.

Application of earth, such as has been described, is shown not to be accompanied by any feeling of pain or irritation; but, on the contrary, the dressing has, generally, been pronounced by the patients themselves as cool and agreeable. When pain is present it is claimed that the earth generally serves to allay this; but, we can hardly agree that that point has been satisfactorily demonstrated. Instances, such as those quoted, where, under its use pain was not felt where we might have expected it to be present, are, perhaps, just as often met with under the application of plain cold water.

This mode of dressing wounds is further believed to prevent, to some extent, the occurrence of inflammation, and to favor the healing process. To what extent it can really accomplish these desirable ends, we think, must remain to be decided by further and more extended series of experiments. A theory of the *modus operandi* is attempted to be constructed on purely chemi-

cal data; but, as it is wholly hypothetical and of no practical utility we decline to enter into the discussion of this point.

To conclude, this book is, from its very novelty, worthy of perusal, and may, perhaps, lead to something more; but we do not think that the system recommended is one at all likely to come into general use.

The Physician's Prescription Book, Containing Lists of the Terms, Phrases, Contractions, and Abbreviations used in Prescriptions, with Explanatory Notes; to which is added a Key, containing the Prescriptions in an Unabbreviated Form, with a Literal Translation. By JONATHAN PEREIRA, M.D., F.R.S. Fifteenth Edition. Philadelphia: Lindsay & Blakiston. Montreal: Dawson Bros.

This little hand-book of the art of prescribing has made its appearance in a fifteenth edition, which fact shows that it must be used and appreciated by some class of the drug-handling fraternity. It goes fully into an explanation of all the Latin medical terms which have ever been in general use amongst the profession, explaining the different shades of meaning between different Latin words, and teaching how to express in Latin the same thing in different ways. It contains, also, a complete Latin syntax for the proper arrangement of sentences in prescriptions in good medical Latin, upon the model of Celsus, who is here truly styled "our greatest and almost only authority in everything relating to medical Latinity." We fear that the book is not one which is likely to be practically useful either to the medical student or the practitioner of the present day owing to its having reference entirely to the writing of prescriptions in the Latin tongue, which has been wholly given up, both by the late British and American Pharmacopœias. It is admitted in the introduction to the work that it is on many grounds preferable to write the directions for the compounder in the vernacular, and yet nearly the whole book is devoted to teaching (what it requires considerable study to master) how to elegantly express the same in Latin. The author confesses that the latter language is not now-a-days fully understood by many who prescribe medicines, and in a foot-note relates how he once, with great surprise, heard an eminent hospital surgeon confess his inability to write in Latin the directions to the patient. We know many eminent hospital surgeons in the same predicament, but we hardly think that at the present day that ignorance of the old-fashioned curt and sometimes pedantic Latin would in any way detract from their ability to understand disease and prescribe

for it in their own mother tongue. To the pharmaceutical student, however, this little manual may be useful, as serving as a guide and help to him in pursuing his studies amongst old authors, or in understanding the directions of those who still make use of the dead language in their prescriptions.

Dr. Rigby's Obstetric Memoranda: Fourth Edition, Revised and Enlarged. By ALFRED MEADOWS, M.D., Physician to the General Lying-in Hospital, and to the Hospital for Women; Author of a "Manual of Midwifery," &c. Philadelphia: Lindsay & Blakiston. Montreal: Dawson Bros.

This small manual is one which most especially commends itself to the junior practitioner and to student-pupils who take charge of midwifery cases for their preceptors. It contains a succinct *resumé* of what it is absolutely necessary to know concerning the female pelvis and generative organs; concerning pregnancy and the accomplishment of natural labour; together with the duties of the medical attendant at every stage. It reminds, also, of the various complications and dangers which may arise during the pregnant condition or during the act of parturition; at the same time mentioning the modes of procedure found most useful in combating or subduing these. It concludes with a few words upon puerperal fever. The whole is well and conveniently arranged for reference, and is expressed in language at once concise and intelligible. It carries out fully the object expressed by its title, for it contains all those "things to be remembered" whilst practising the obstetric act.

PERISCOPIC DEPARTMENT.

Surgery.

AN ADDRESS ON ENGLISH RECOLLECTIONS OF A GERMAN SURGEON.

BEING A SPEECH DELIVERED AT ST. THOMAS' HOSPITAL, MAY 23, 1872.

By Dr. STROMEYER, of Hanover.

GENTLEMEN,—I suppose I may leave it to the kind care of my youngest English friend, Mr. William McCormac, to account for the liberty I take in addressing you. Let me ask your indulgence

for spoiling the Queen's English, which is not my native language. This is the first time that I speak to an English audience. As a surgeon, I dare say, I am not quite a foreigner, having got a sprinkling of English surgery even by inheritance. My father, who was a member of the Royal Medico-Chirurgical Society in London, and well known in his ti ne, by having introduced vaccination in Germany, was a regular pupil of St. Thomas' Hospital, from 1792 to 1793, under Mr. Cline, at a time when Sir Astley Cooper was a demonstrator of anatomy there. He had a very high opinion of English surgery, and used to say that the best surgeons in the universe were to be found in London; that during a twelve-months' presence there he witnessed only a very few cases in which his opinion was different about the propriety of the operations which he daily saw performed. He was able to judge for himself, being already thirty years old when in London, and having been a pupil and assistant of Professor Richter in Gottingen. I followed my father's example, and have been a pupil myself at St. Thomas' Hospital in 1827 and 1828. Mr. Henry Green introduced me there, and made me acquainted with the splendid circle of surgeons then living in London—Benjamin Travers and John Tyrrell, of St. Thomas' Hospital; Bransby Cooper, Aston Key, and Mr. Morgan, of Guy's Hospital; William Lawrence and Henry Erle, of St. Bartholomew's Hospital; Sir Benjamin Brodie and Mr. Rose, of St. George's Hospital; Sir Charles Bell, of Middlesex Hospital; Mr. Guthrie, of Westminster Hospital; Mr. Wardrop, of Westminster Eye Infirmary. Sir Astley Cooper had already retired to the country. I have only seen him on an occasional visit to St. Thomas' Hospital, where he used to come from time to time when he was tired, as he said, of looking after the ewes. It was highly gratifying to see how his presence used to be hailed. The same scene took place when old John Abernethy appeared in St. Bartholemew's Hospital. The students flocked around him, and he generally gave them a speech, in parting, in the open court of the Hospital, ending by quoting Shakespeare. Being very partial myself to the great poet, I liked these quotations, which reminded me of Sydenham recommending to read "Don Quixote." For a surgeon, nothing is so injurious as dulness; he must always be in good spirits when his services are required. Sir Astley Cooper used to say that a surgeon ought not to read too much; but this, I suppose, meant dull authors, not Shakespeare or Cervantes, who are both of them very accurate observers of human nature, like Dickens, Sterne, and Fielding, whose "Tom Jones," I daresay, you may happen to know.

I could speak for hours if I were to say what influence the

surgeons in London whom I have named had on my mental development. First of all, I admire the truly noble character of the profession, the good feeling of its masters to each other, their candour, their humanity in the treatment of severe cases. I can only repeat what my father said fifty years ago—the operations which I saw were, all of them, necessary, well planned, and, in most cases, executed with great dexterity. Manual dexterity was considered as a quality which scarcely deserved to be mentioned; it was only spoken of where it shone by its absence in a bungling operator. Every operation was executed with the sole view to save the patient's life or to diminish his sufferings, not to show the dexterity of a *virtuoso*. Circular amputation was preferred to the more showy flap amputation. This I had not forgotten when I had some influence in recommending the circular amputation in times of war, where it is of greater importance still than in chronic cases of civil practice. In 1827 I examined the invalids in Greenwich Hospital, on whom amputation had been performed by the flap method, and found that the fleshy cushion had disappeared entirely. Besides this, I admired English surgery for the simplicity of its application. The great conformity of principles resulting from simplicity struck me as highly valuable, because it makes a deep impression on the mind of a younger member. This conformity gives English surgery a national character. It is not the same in other countries, where only your very particular friends admit that you are right in saying that two and two make four, or that a severe gunshot fracture requires amputation.

I was well satisfied with the great caution of English surgeons in adopting innovations. I saw no resections then, and there was no trace of lithotripsy yet. It is better to begin slowly, and then to go on steadily. This is otherwise in Germany and in France, where surgeons are fond of novelties. At present you may witness the effect of greater caution. Sir Henry Thompson has eclipsed the inventor of lithotripsy, Civiale himself, whose instruments, indeed, were not worth trying till Heurteloup had found the right ones for him. Sir William Fergusson, by his articular resections, has surpassed most Continental surgeons. Mr. Spencer Wells, in ovariotomy, all living surgeons.

From what I had observed in London, I came to the conclusion that the beneficial influence of surgery and the high standing of the profession depend chiefly—(1) on the good feeling of its members towards their patients and towards each other, not excluding those of a former time; (2) on simplicity; (3) on a total abnegation of selfishness in planning and executing surgical operations.

You may ask me, gentleman, why I could not have learned that just as well in Germany. There is no place there which can boast of such a number of great surgeons at the same time. Our greatest capitals have but a few surgeons of eminence in comparison. Whatever may be their merit, their example is not so striking as that of a whole body acting the same principles. In Paris the number of surgeons is greater than in our German universities of Berlin or Vienna, but not to be compared to London, which I consider is a central point of surgery for the whole globe. This, gentlemen, you may consider as the sincere opinion of a man who has watched the progress of surgery during half a century. I wish it may remain so for centuries.

After having been in London, I happened to be in Paris at a time when Lisfranc was thundering against Dupuytren, whom he used to call "le barbare de la Seine," as a sample of the good feeling amongst the profession there. It is one of the great advantages of travelling, and of seeing eminent men of other countries, that, by observing them in their activity, one may acquire a better notion of their character. Their writings excite greater interest, because we are inclined to give them greater credit. I always admired the simplicity of style in English authors in general, and of surgical writers in particular. Sterne ridicules the pompous style by mentioning the expression of his French barber about the solidity of a new wig, "You may immerse it into the ocean." An Englishman, says Sterne, would have preferred a pail of water. To avoid the barber's style, I took precious good care never to say ocean when I meant a pail of water.

After sketching these general impressions, permit me, gentlemen, to give a few particulars of the manner in which some of my English teachers have influenced me. Having so lately seen one of the greatest battle-fields of modern history—that of Sedan, where I met Mr. William MacCormac, who, from over-exertion, did not look so well as to-day—and the siege of Paris afterwards, let me speak of Mr. Guthrie first. I cannot say that I liked him personally quite so well as many of the others; but I admired his energy in maintaining the great principles acquired in the Peninsular War—the necessity of early primary operations, of tying a wounded artery, if possible, on the wounded spot itself. I have done all in my power to keep his doctrines, those of the admirable Hennen, and of old Baron Larrey, in fresh memory since 1848, when the time seemed to approach that Germany must go war for its own development. For a man of sense, there can be no doubt about the necessity of early primary operations; but in military practice there are difficulties in which it is the duty of

every medical man to maintain the sacred cause of humanity. The sentiment was appreciated even by a conqueror like Napoleon I., who said of Larrey that he was the most virtuous man he had ever known. It was one of Mr. Guthrie's best qualities that he always gave very positive reasons for what he did; so another person could easily find out whether his own views must be in accordance with Mr. Guthrie's opinions. There was no fickleness about him. I differed from him in one essential point—that of his preferring amputation for gunshot-fractured thigh to conservative treatment. Guthrie places too much stress upon the imperfections of conservative treatment, the result of which is often a very disabled limb, whose possession does not make the patient very comfortable. But these imperfections admit of improvement, while a high amputation gives no prospect of better chances: it will always remain a very dangerous operation. Our first object is to save a man's life, and the second to make him comfortable, but not in his grave. My results of conservative treatment in gunshot-fractured thigh, during the first three campaigns of 1849, 1850, and 1866, did not go beyond 50 per cent. healed. I saw the reasons of our failures, tried to avoid them, and went on with conservative treatment. In the two campaigns of Schleswig-Holstein (1849 and 1850) the patients had to be carried to considerable distances. After the battle of Langensalza, in 1866, I was unable to prevent many cases from being spoiled by an injudicious use of plaster bandages. It was in Floing, near Sedan, where we succeeded in saving 77 per cent., twenty-seven amongst thirty-five patients, who have been carried to no great distance, and were treated without putting much restraint on their shattered limbs.

From my own father I had learned the advantages of Percival Pott's position, which may be employed during the first period in most cases; in others or later the double inclined plane, or a straight wire basket, will suffice. According to my opinion, the great principles to be followed in compound fractures in general are—(1) dressing the wounds without lifting the limb; (2) avoiding constriction; and (3) not irritating the muscles in straining them by mechanical contrivances. A gunshot-fractured thigh permits a weight to be suspended to it, keeping the limb a little at rest, like the hand of an assistant, but not an extension by weight or other contrivances, that gives the limb its proper length, except in very few cases, as mentioned by Mr. MacCormac in his "Notes and Recollections," which healed without difficulties and without any perceptible shortening. The most common case is, that for some time after the accident the muscles retain a ten-

dency to retract, which is increased by opposition, and ceases by-and-by in a favourable position of the broken limb. The idea of subduing muscular action by constant extension, even in compound fracture, is not new; but it had not been tried before by contrivances so dangerous as a plaster of Paris bandage. This is applied under chloroform, which relaxes the muscles; the limb is made straight, and as long as its fellow. When the action of chloroform has ceased, the muscles recover their activity, and are kept in extension in spite of their violent efforts to contract, which often break the plaster bandage. The tension, which is kept up by mechanical means, makes the sensibility rise to a high pitch, and severe inflammation follows. If the plaster bandage be loosely applied, by putting wadding and a flannel roller between, it is often well borne, but the limb is as short afterwards as if no bandage had been employed. While I was writing this in Hanover, on May 1, a young captain came to me, from whose gait no one would have thought that he had had a gunshot fractured thigh in 1870. A plaster bandage had been applied on the third day; he could not bear it. The surgeon who took it off next day told him that the fragments had taken a bad position under the bandage. From this time he was treated without restraint, and cured in six weeks, his limb lying in a wire basket. The shortening was one inch of his left lower extremity. His brother met with the same accident at the same time, but was healed with a shortening of five inches. Large splinters came away by suppuration, some of them being three inches long. The captain came to consult me about his brother. He is in service again long ago.

The danger of early plaster bandages on other parts of the skeleton is less than in the thigh; but it exists and is very great in the humerus, where pressure is very liable to stop the venous current, or to drive a splinter of bone into the brachial artery. I treat these fractures by letting the arm lean on a soft cushion, which is tied to the thorax, the forearm being suspended in a sling. In Schleswig-Holstein I had twenty-four successful cases amongst twenty-nine. One of the German surgeons who took part in the late war—Dr. Rapprecht, of Munich—prefers the plaster bandage; but amongst the three cases which he had to treat there was one which proved fatal on the seventeenth day by hæmorrhage, a splinter of bone having opened the brachial artery.

I differ from Mr. Guthrie, besides, in his appreciation of trephining the skull, which I have tried to exclude entirely from military practice, as useless in some and unnecessary in other cases. I consider a state of coma, from depressed skull, no more

as an indication for applying the trepan than a comatose state in typhus as an indication to rouse the patient from it by any other means but those which are in accordance with his general state—cold, for instance, but not stimulants. As soon as the fragments of skull become detached by suppuration, the comatose state ceases by itself.

The greater difficulty in settling this skull question consists in this—that some patients survive the use of the trepan, or of an early extraction of splinters, and that some recover their senses very soon after the operation. This seems to be a conclusive proof of the legitimacy of active interference. But there is no depending upon it; the patient may die just as well after having recovered his senses completely, and, as experience has shown, more easily than if you let him continue comatose by not disturbing the splinters. This might have been expected, from very solid physiological reasons. By taking away the splinters at an early period, in cases where the dura mater is wounded, you open the arachnoid cavity; air and acrid matter can enter it. Brain substance, when bruised, thus becomes putrid, while it might have been eliminated by reabsorption without access of air. Subcutaneous operation practised in modern times have done a great deal to put more stress on excluding air; but even before their time, Dease and Sir Benjamin Brodie came to a conclusion that access of air was to be avoided in cases of fractured skull, and that no interference ought to take place for depression unless it was warranted by cerebral symptoms. John Hunter was not yet arrived at this degree of caution when he said in his Lectures (Palmer's edition, vol. i., p. 493)—"All fractures of the skull may be called compound; for if not so naturally, they are made so by the removal of the scalp."

In the retrograde tendency of surgical interference with a broken skull it was an important step not to remove the scalp; but other steps were to be argued. An open scalp wound over a broken skull does not produce a great change in the danger of the case. Spreading inflammation of the membranes of the brain or deep-seated suppuration does not necessarily follow from it; but these are very likely to take place if you open the arachnoid cavity by removing the splinters which have kept it closed. When the splinters come away by a very limited suppuration at a later period, the arachnoid cavity is closed by adhesions of dura mater to the brain. It is is often impossible to say, beforehand, whether the dura mater has been open or not. If it is open, the danger is rendered much greater by removing the splinters. The *Medical Times and Gazette* of 1860

contains a list of eighty-three cases in which the trepan had been used, fifty-one of whom died, and thirty-two recovered. Amongst those who did well the dura mater had been wounded; but in three cases the others as well were such that, according to my experience, they might have recovered without using the trepan or early extraction of splinters. Gunshot fractures of the skull are always compound; their successful treatment without active interference deprives this of one of its strongholds—the presence of an open wound, which formerly seemed to permit further violence. During the two Schleswig Holstein campaigns of 1849 and 1850, I had to treat forty cases of gunshot-fractured skull, thirty-three of whom recovered, and seven died. We had one case of trephining with happy result, but it was of that description that it might have done well without interference. The others were subjected to an antiphlogistic treatment by ice, bleeding, purgative medicines, and low diet. The splinters were not removed before being quite loose. I have been blamed by Mr. Pirogoff and others for totally excluding active local interference in gunshot skull fractures; many others have followed my example. You will admit, gentlemen, that there is no knowing of what use a thing may be before having tried it. My object was to know how far we might get without active interference. The result was not unsatisfactory. It was the same thing with the treating typhus patients without stimulants. By trying it on physiological principles, derived from morbid anatomy, I found it very successful. What has pleased me most, from a medical point of view, during the late war, was to find two hospitals in Rheims and on in Versailles where the number of deaths from typhus was not above 8 per cent. Weak broth and some ounces of very sour wine were all the stimulants employed till the fever was over. The wine which I tasted was so sour that it must have contained more acid than common vinegar does, as I know from comparative experiments with potash. So it probably did the same service as phosphoric acid, which I prefer, with a well-boiled water-gruel for diet during the febrile stage. The two hospitals in Rheims were close to each other; in one, the patients were cooled by immersion—in the other, by active ventilation in tents, while the results were quite the same in both. In other hospitals the mortality from typhus amounted to 25, even to 50 per cent. Nothing shows the great value of the medical art and science better than such striking differences in the results of treatment under the same circumstances in regard to constitution, causes, and symptoms.

During the great part of my presence in London I used to see

the surgical patients at St. Bartholemew's Hospital under the care of that clever and highly accomplished surgeon, Mr. W. Lawrence, whose kindness and very instructive conversation I shall never forget. I saw a great number of patients under him with phlegmonous inflammation, who were treated by incisions at an early stage, before suppuration had 'set' in. This bold practice was at that time little known in Germany, where it was spread afterwards, and is generally employed up to this day. Cases of this description do not permit hesitation, and show the use of the treatment very evidently. The effect of an antiphlogistic treatment is not so striking in many other cases. It is only by a longer experience that a surgeon is enabled to say whether a case of fractured skull, or a compound fracture of the limb, has been greatly benefitted by a venesection, which has been made, not in a late period when suppuration is forming, but early, when reaction is taking place, when the face becomes flushed, and the pulse full and hard. Amongst the many wise things which Sir Astley Cooper has said, was the advice to visit a patient with a broken skull three times a day, in order to find the proper time for bleeding him. This does not produce a similar effect like an incision in phlegmonous inflammation; it does not restore the patient's consciousness, but it keeps him alive. That this really takes place can only be judged from other cases in which bleeding at a proper time has been omitted. But bleeding is out of fashion now in Germany as well as elsewhere. The discovery that pneumonia can be cured without bleeding has been the first cause of this antipathy. I have treated pneumonia myself without bleeding, and had very good results. I lost but 5 patients out of 558 during ten years in the general military hospital of Hanover, from 1853 to 1864. Our patients were cupped at once, and took phosphoric acid. I never allowed this to be proof that venesection was equally unnecessary in surgical cases, which have no typical course like pneumonia. It was a mistake of former times that pneumonia might be subdued by repeated bleeding—it runs its course in spite of that. I have tried in vain to maintain its use in surgical practice; there is no swimming right across a mighty stream; one must wait for the proper time of low water to cross it. It must be some years ago that Mr. Syme said bleeding-lancets were to be found in Great Britain no more. This, I suspect, has been the acme of antipathy to bleeding. From that moment it was no more a distinction not to bleed. Bleeding ventures to show its head again in the *Medical Times and Gazette* now rather timidly—recording cases which would have been fatal without venesection. Lancets can be easily supplied again, and a few cabbage-leaves, as Dickens

says, will be sufficient to give a little practice before opening a vein in man. Perhaps I am mistaken in my expectation that bleeding will soon have its turn again. Perhaps I shall be damned in a future time for having been the last of the Mohicans recommending venesection. At all events I would in that case meet very good company—all my old friends in London.

On July 6, 1827, I witnessed the first case of hæmorrhage from thrombosed vein, in St. Thomas's Hospital, under Mr. Tyrrell's care. A shoemaker had been stabbed by his own wife, with an awl, in the right upper-arm. The wound appeared trifling to him —he did not notice it for some days: then an immense swelling of the upper-arm took place; the forearm became gangrenous. Mr. Tyrrell amputated close to the axilla. In examining the separated limb, it was found that the brachial vein had been freely opened by the instrument; that a large hole, filled with coagulated blood, had formed near the vessels. The brachial vein was thrombosed to a considerable extent above the puncture. It struck me that the internal bleeding must have taken place after the obstruction of the brachial vein, and that gangrene had been produced by stagnation. I remembered this case many years later, when I found, in military practice, that secondary hæmorrhages in open wounds take place from similar causes. I described them under the name of phlebostatic hæmorrhages. Other prefer to call them pyæmic, putting little stress upon the venous obstruction. But pyæmia does not always exist in these cases, and the influence of venous obstruction is evident. You will see this if you should happen to bleed again, which must be done by stopping the venous current above the place where you open the vein. Every open wound would bleed under a similar contrivance. Let me observe here, what I have forgotten to mention elsewhere, that capillary thrombosis, of some extent, below an injured vessel must have the same effect as thrombosis of the main vein, because it increases the degree of pressure which the column of blood exerts in entering the limb. The quality of the blood in it must become altered by impediments of either kind, and healthy nutrition cannot be kept up.

These observations are of great interest in military surgery: they teach us to be very cautious in treating wounds which may have affected vessels of considerable size, whose bleeding has been arrested by bruising or by coagula. The injured vessels may heal without hæmorrhage, if the reflux of venous blood remain free; but if there be any obstruction, either by capillary or venous thrombosis, secondary hæmorrhage can occur. Before this takes place the wound often changes its aspect from altered nutrition.

Mr. Guthrie's plan of tying a wounded artery on the spot often does very well in minor vessels, but it often fails in the femoral artery. The large vein accompanying it has often been torn or bruised by the same ball. After tying the artery on the spot, the vein often becomes totally impermeable, and then hæmorrhage recurs, or the limb becomes gangrenous. It may be proper in some cases to gain time by putting a ligature above the wounded spot; before new hæmorrhage occurs, the vein may have undergone a favourable change. In other cases, it is better to amputate at once.

I cannot dismiss Mr. Tyrrell's name here without mentioning how I used to admire his cataract operations. He did them generally by a superior corneal incision of the greatest regularity. I adopted his method of sitting behind the patient's head in operating on the right eye. I had seen Graefe, the elder, in Berlin; Jaeger, the elder, in Vienna, and Roux in Paris, perform extraction as well with the left as with the right hand, but I preferred the more cautious English way. I often thought of Tyrrell's beautiful operations and their results when the time came that iridectomy seemed necessary for the great majority of cataracts before extracting them. I have hailed Dr. Liebreich's innovation as a candid acknowledgment that modern oculists had gone too far in this respect, and that the iris ought to be spared if possible or reasonable.

To Sir Benjamin Brodie I feel very thankful to this day for what I have seen of him in treating diseases of the urinary organs, but chiefly for his skill in diseased joints. He was the first surgeon who enjoined the doctrine of keeping diseased joints at rest by putting them on a splint. The leather splints which he recommended had been partially superseded by starch or plaster bandages, but I use the leather splints constantly in my chronic cases, when the patient is to go out to bathe, or to use other local applications. Sir Benjamin Brodie's influence on the treatment of articular diseases has been great in Germany. His work on the subject has been translated, in 1821, by Dr. Holscher, of Hanover. It had to fight its way in Germany against Rost's authority, who had introduced the red-hot iron as a general remedy for most chronic cases. It is used no more now. The great principle which Mr. Hilton has so ably advocated, of keeping diseased parts at rest, either by mechanical or by physiological means, has done away with the red-hot iron. It was Sir Benjamin Brodie's farther merit to point out cases where articular disease is spurious, and where rest proves hurtful. I consider Brodie's work on local nervous affections, published in 1837, as one of the greatest value on account of the

number of persons who may be benefited by his doctrines. I had given a short extract of it in my "Manual of Surgery," but this had no effect in rousing the public attention. My German countrymen imagined that local nervous affections were a particular gift of nature to English young ladies. Not a month passes but I see a striking case in Hanover. My son-in-law, Professor Esmarch, who travels a great deal during his vacations, has been able to pick out a number of cases in different parts of Germany, and to extricate them from the spider's web of injudicious treatment. Perhaps I ought to have written myself about this subject more at large, but I despaired of doing it better than Sir Benjamin Brodie. Professor Esmarch published a small volume last year on "Articular Neurosis," which, I hope, will go far in spreading Sir Benjamin Brodie's doctrines, whose German translation has failed to produce the desired effect. This subject is intimately connected with the exertions of that great genius, whose discovery of the different roots of motor and sensitive nerves has spread a lustre on our century.

Perhaps no man has given so much to think of to his contemporaries as Sir Charles Bell. He did not live long enough to witness the wide expanse of studies derived from so simple a source as that of the different roots. Bell's researches on paralysis of the facial nerve alone were sufficient to create a number of similar ones. The connection of this illness with rheumatism; the liability which persons have for it who are subject to abdominal affections; to impediments in the circulation of the abdominal viscera, pointed to other diseases with diminished nervous energy —in the organs of sight and of hearing, for instance.

In following the hints given by Sir Charles Bell, I found that every local affection originating from violence, or spontaneous inflammation, was influenced in its course by an enlarged liver or spleen, and that for a cure it is necessary to reduce their size. This accounts for the very general, but more empirical, use of blue pill and bark, and advises us to examine the size of the liver and spleen by percussion, especially in chronic cases which show very little tendency to heal—in secondary or tertiary syphilis, for instance.

Marshall Hall's discovery of the reflex function gave a new stimulus to think on the great importance of Bell's discovery, from which it had taken its origin. This doctrine of the reflex action of the nervous system can only be compared to the discovery of the blood circulation. It gave an idea of the manner in which the nervous action is kept on day and night, and reflex action following the other. Trying to understand this action, I

was led to assume a second principle, which is ultimately blended with reflex action. I found that immoderate reflex action in muscles, or muscular organs, was generally combined with painful feelings, sometimes in the neighborhood, sometimes remote from the seat of spasm. As a similar train of combined sensations must take place during healthy action of the muscles or muscular organs, I guessed that the action of the muscular system was necessary to maintain the nervous energy.

Sir Benjamin Brodie, in his work on local nervous affections, opposes the popular use of the name of spasm for painful feelings. This is the case in Germany. People make no difference between *Krampfe*, spasm, croup, and *Schmerz*, pain. There is some reason for it; where there is spasm there used to be pain, but often in remote parts. Instead of pain, spasm is often combined with altered sensibility, partial or general. The German name for hysteria is "mutterkrampfe," mother cramps. The uterus being a muscular organ, it may well be that hysteria partially consists of habitual spasm of the uterus, as a reflex action from the ovaries, or from other parts of the system. This idea was well known in former times. You can find it in Shakespeare's "King Lear," who is made to say, "How this mother swells up towards my heart."

One of the most striking examples of pain originating in spasm, is that of the glans penis, from contractions of the bladder around a stone in it. Another well-known example is pain in the knee, arising from reflex spasm of the flexor muscles of the hip-joint, from inflammation of its bones, sometimes from other causes.

In a particular case, where there was no inflamed hip-joint, I succeeded in doing away with the knee-pain by dividing the rectus and pectineus muscles. I have pointed out sensations, combined with muscular action, in all the organs of sense and in many cases of disease. I have written on my theory of combined motor and sensitive nervous energy; first, in Hanover, 1837, in the *Gottenger Gelehrten Anzeigen*, an article which I reproduced in Latin, after having become Professor of Surgery in Erlangen. I have followed up this subject no farther, because it would have cost me the exertion of a whole life to carry it to a degree of perfection equivalent to a clear demonstratian by physical evidence. But the fact that every pain, which evidently does not depend upon local alteration of texture, depends on spasmodic action of some muscular organ, has been of great use to me in practice, and I can advise you to put this question to yourself in every case of that description—where is the seat of spasm? Remember that it is as well in the voluntary as in the involuntary ones that spasms can

take place. Perhaps you little suspect that the liver is an organ whose muscular energy is of great importance. But if you had felt the pain in passing a biliary calculus, you would think otherwise. I have felt it myself, and took six grains of opium in one night for it.

Pains in remote parts of the body are very frequent in liver complaints, in the shoulder, in the head, or in other parts. I could tell a great number of cases in which local nervous affection of an extremity proceeded from the liver, others from the accumulation of hard fæces in the large intestines, keeping up spastic action for their expulsion. It is very easy to cure them, after having found the real cause, without any topical application whatever to the affected limb.

After having spoken of such a variety of things and for such a length of time already, let me bid you farewell now, gentlemen, and thank you heartily for the kind attention with which you have been listening to me. I wish you may remember your studies in London with the same feelings of gratitude and satisfaction as I do after forty-four years of practical life.—*Medical Times and Gazette.*

Medicine.

THE TREATMENT OF SMALL-POX BY VACCINATION AND THE INJECTION OF LYMPH.

By R. C. Furley, L.R.C.S.

The doctrine universally held, that vaccination will be of "no use" if delayed till five days after the inhalation of the germ of variola, I think, is erroneous. For some time past I have been in the habit of vaccinating every case of small-pox that has come under my care; and the result, as I show, is very encouraging, and seems to indicate that vaccination is not only prophylactic but *curative.* I have found, however, that, although the ordinary process of vaccination by scratching the arm is sufficient to modify the disease in infants, it is almost inoperative in adults. After having discovered that the ordinary process was almost useless in grown-up persons, I adopted the method of injecting lymph by means of Dr. Wood's hypodermic syringe. This instrument I also found occasionally to fail, because, on passing the wire through the needle after the operation to keep it clear, I have found it eject the lymph which I had hoped had been in the blood. This, I am afraid, has been the cause of two otherwise unaccountable failures

out of sixty cases. How to obviate this source of fallacy occupied my thoughts for a considerable time. At last, however, I succeeded in inventing an instrument that promises to transfer lymph directly from the tube in which it is contained into the circulation. It consists of a hollow needle with a bore sufficiently large to admit of the introduction of a vaccine tube. The process consists in passing the point of the needle, charged with a tube of lymph, under the skin, and blowing the lymph directly into the blood. I have purposely described this minutely, in order that, if any of my brethren do me the honor of verifying the results of my treatment, they may not commit the errors which experience has pointed out. It would occupy too much space to describe many cases; I shall therefore only give three to illustrate the effect of the treatment at the different periods of life—infancy, childhood, and manhood.

Case I.—Baby C., aged one month, and unvaccinated. When first seen, the papular eruption was over the face, hands, and legs. There had been three cases of small-pox in the house. One had been sent to the Small-pox Hospital, where the mother had visited him. I ascertained that this was really the case from the resident physician, Dr. Saxby. I vaccinated the child at once. Next day, when I called, the eruption had entirely disappeared, with the exception of two papules on the face, which were now more prominent. On the third day these two papules disappeared, and a fresh crop of four-and-twenty, chiefly over the head, made its appearance; and these became hard, and did not fill like ordinary vesicles. In three days these had also disappeared. The vaccination itself did not show any signs of taking till the tenth day, and was matured on the thirteenth.

Case II.—M. E., aged thirteen years, vaccinated in infancy, and whose sister had died of small-pox a week before. I was called in on a Saturday, and found her face considerably swollen, and the papular eruption on the hands and forearms. I at once *injected* two tubes of lymph into the arm. On Sunday the eruption had disappeared from the hands and arms, and appeared on the feet. On Monday it had spread up the legs and trunk. On Tuesday it had entirely gone away, and there was nothing to be seen but the inflamed areola at the point where I had injected.

Case III.—J. W., aged thirty-four, a stableman of dissipated habits, and never vaccinated. I saw him on the second day of the eruption, and injected two tubes of lymph. The case, instead of being confluent, as might have been expected, was discrete, except at the alæ of the nose. He went on very favorably, and the eruption began to desiccate on the ninth day instead of on the fif-

teenth, eighteenth, or twentieth. There was no areola at the point of injection.

I think these cases, selected from a number of such, show that there is, at least, a germ of truth in my statement that vaccination is curative of small-pox. I find that the treatment is much more successful in the youthful than in the adult period of life; and I am beginning to think that this arises from adults requiring, as it were, more of the remedy. It is also more effectual the earlier the operation is performed. I have usually found that the vesicles did not attain the size they do when the disease is allowed to run its course; they do not often become pustular, and desiccated earlier.

No doubt I have had failures and deaths; the latter five in sixty cases, in three of which I did not look for recovery from the first on account of other complications, and two were unlooked for: all were females—a fact of itself of some significance. I reserve for a future communication a detailed summary of all my cases; meantime I trust I have said sufficient to encourage my brethren calmly to investigate the subject.

I should have mentioned that the instrument I employ for transferring the lymph directly into the blood was made for me by Mr. Young, cutler, North-bridge.

LAURISTON PLACE, EDINBURGH, May, 1872. —*The Lancet.*

ACTION OF DIGITALIS.

M. Gourvat (*Gazette Médicale*, 1871, Nos. 29, etc., and 1872, 1, 2, 4, 5,) finds that moderate doses of digitaline given to the frogs paralyze the motor nerves of voluntary muscles; and larger doses destroy the irritability of the muscles themselves. Involuntary muscular fibres appear to be stimulated by it. Moderate doses cause a transient contraction of the arterioles; large doses cause a longer contraction. In both cases the contraction of the arterioles is succeeded by paralysis and dilatation. The contraction is caused by the action of the digitaline on the vaso-motor nerves, and not on the walls of the arterioles themselves. The beats of the heart are rendered stronger, slower, and more regular, by moderate doses. The arterial tension is increased. The retardation of the pulse is due to the increase in the arterial tension, and is proportioned to it. The contraction of the arterioles lessens the secretion from the skin, mucous membranes, and glands, except the kidneys, the urine being increased.—*Med. and Surg. Reporter.*

CANADA

Medical and Surgical Journal.

MONTREAL, JULY, 1872.

THE CANADA MEDICAL AND SURGICAL JOURNAL.

For the past eight years we have conducted the *Canada Medical Journal*, and it is not for us to state how far that periodical has given satisfaction, nor what amount of influence for good it has done amongst the profession generally. We did endeavor to make it a scientific periodical, and we feel proud at the thought that many important papers have appeared for the first time in its pages. A change has taken place in its management, inasmuch as the editors determined to separate, because of reasons personal to themselves, the details of which would be uninteresting to our subscribers.

The present periodical, under the editorial charge of the senior editor of the old journal, is a separate and distinct work. We shall endeavor to conduct it on the same broad principles which guided us in the management of the old journal. It is not the special organ of any school, and although we are connected with McGill University, yet we will endeavor to give equal justice to all the teaching bodies of our country. The present number will be sent to all the subscribers to the old journal, and we solicit a continuance of their patronage.

We issue this periodical on the first of the month, and no exertion will be wanting on our part, to make it a regular and welcome visitor. We will endeavor to extend the circulation, and should the support given us by the profession warrant it, we will either reduce the price of subscription or else add to the amount of reading matter.

In commencing this work, we do so feeling the responsibility assumed, as we have added to our editorial charge the risk of publication at our own expense. We trust, therefore, that those of our friends who desire to see an independent periodical prosper, will not only continue their subscriptons, but will aid us in giving it a truly Canadian character, by sending to our pages, for publication, a record of their observations, which will be serviceable in

the best interests of our profession. It becomes every man's duty; a duty he owes to himself and to his profession, to carefully note the record of all cases of general interest. All observations, however trivial they may appear at the time, have a direct bearing on the advancement of the healing art; perfection is alone to be attained by practical observations, and each case is of importance to record, as forming a part of the general history of disease. We trust, therefore, that these few observations will be looked upon favorably, and that each professional brother will consider himself bound, by a sacred tie, to the general brotherhood of earnest workers and independent thinkers, and will regard it as a duty to observe carefully, and record accurately and truthfully, the cases which may come before him. There are those who, through diffidence, neglect to publish a report of their observations. There are others who regard the cases of every-day observation as unworthy of record; but, we must remark that the phenomena of diseased action cannot fail to be of interest.

We remember some years ago, in accompanying a friend of high scientific attainments round the wards of our hospital, remarking that we regretted that the cases of interest were so few. "Ah,', he replied, "every case however trifling, should possess deep interest to the scientific observer." We felt justly rebuked by the force of the observation, and have endeavored, since that time, to feel and take an interest in watching the operations of nature in the course of disease. It is, indeed, the entire business of our professional career; it becomes our duty, as it should be our earnest wish, to do all things well, and do them with our might.

This journal will be devoted to the record of cases from purely Canadian writers on several occasions. We have received letters from medical men, requesting to know on what terms their papers would be published; to such we would observe that this is to us a labor of love. The present position of the journal does not warrant the expenditure of money to secure communications which might be of very questionable value. We think that the publication of papers should be regarded as sufficiently remunerative to the writers, as, if they possess merit, the extended circulation which these papers receive, through the medium of the journal, is sufficient in itself, or should be regarded as such by the authors, as they will without fail, reach the eye of the profession generally, as well in our own country as abroad. Literary pursuits are well known to be unremunerative, and it requires a genius with the imagination of a Dickens to secure by his pen a competency for his retiring years. The worst paid of all literary men are physicians and surgeons, when they do enter the lists.

THE "CANADA LANCET" AND CANADIAN GRADUATES.

At the risk of exciting the ire of our cotemporary, the *Canada Lancet*, and of again being called "vulgar and intemperate," we refer to an article in the June number of that periodical, although we did intend to pass it by in silence. We certainly did oppose the Ontario Medical Act, and we do still, as we think our friends in the West have considerably lowered their dignity by amalgamating with persons whom they cannot regard as legitimate members of the profession.

In Lower Canada all practitioners have to hold the license of the College of Physicians and Surgeons, and a similar law could have been procured in the Western province had the profession been true to itself. We remember well the time when a similar Act to our own was sought for, and also the political juggling which was practiced by some Upper Canada members of the Legislature on that occasion to upset the Bill, which opposition was, unfortunately, successful. This, in a great measure, was the result of a want of concerted action on the part of the profession. There was no harmony, no apparent desire to secure a general Act, which would have been beneficial, and when the irregulars sought for Legislative powers they were unopposed, because the profession thought that by permitting them to become incorporated they would strengthen their own position in securing a Bill which had received the six month's hoist. The profession of to-day, are suffering the consequences of the want of watchfulness on the part of their former representatives, but we think that their present position is worse than before the passing of the Ontario Medical Act.

They have legalized and given professional status to men who held no such position before the passing of the Ontario Medical Act; nay, more, these persons possess greater powers and larger representation at the Council Board than do members of the regular profession. The *Canada Lancet* may rely upon it that there still remains a large mass of the old leaven, and that this fresh outburst, as it is termed, is merely a repetition of views we have always held, and which, we fear, will continue to be maintained by us. We have watched the course of medico-political changes, and we see, in the action of our Western brethren, many moves which are, to say the least, questionable. We fear there is trouble ahead; still, by united action the profession, undoubtedly, will overcome their difficulties. We do not, however, think it wise to hold out inducements to any set of men to enter the profession, save through one portal. Since the profession in Ontario hold that position at present, let them guard the portals and admit none but those fully prepared with the watchword and passes.

We have seen the attempts of the irregular men to wriggle themselves out of the position; they seek emancipation. It would be our idea to break the bond of union, and erase every name from the register, and allow them freely to flood the country, if they wish, with fellows of their kind. We have faith and confidence in the truthfulness of our art. There are scientific facts which come home to the people of a country, and although they may be led astray by the glitter of tinsel, they will sooner or later discover for themselves that it is base metal.

MEDICAL AND SURGICAL REPORT OF THE MONTREAL GENERAL HOSPITAL FOR THE YEAR ENDING APRIL, 1872:

DISEASES, ACCIDENTS, &c.

Diseases, &c.	Discharged.	Died.
Abscessus Var.	35	..
Adenitis	1	..
Ambustio	9	1
Amenorrhœa	1	..
Anæmia	14	..
Anchylosis	5	..
Aneurism Aortic	2	2
" Abdom	..	1
Anthrax	1	..
Arthritis Ch	1	..
Ascites	1	1
Ataxia Locom	1	..
Atroph. Testis	1	..
" Optic	1	..
Balanitis	1	..
Bronchitis Ac	39	..
" Ch	9	..
Bubo	13	..
Bursitis	4	..
Calculus Vesicæ	3	..
Carcinoma Axillar	1	..
" Facies	1	..
" Mammæ	4	..
" Recti	1	..
" Uteri	..	1
" Ventric	3	2
" Var	1	1
Caries Femoris	4	..
" Humeri	2	..
" Maxil. Sup	1	..
" Os Nasi	1	..
" Os Tarsi	1	..
" Phalangis	2	..
Cataracta	8	..
Cellulitis	4	1
Cephalagia	1	..
Cerebritis	2	..
Chlorosis	1	..
Cholera Canadens	1	..
Chorea	1	..
Cicatrix	4	..
Cirrhosis Hepat	1	..
Condylomata	3	..
Conjunctivitis	3	..
Constipatio	11	..
Contusio	42	..
Cystitis	9	..
Debilitas	28	2
" Senilis	3	1
Delirium Tremens	..	2
Diabetes	2	..
Diarrhœa	17	..
" Chron	..	1
Dysenteria	14	..
Dysmenorrhœa	3	..
Dyspepsia	19	..
Ebriositas	1	..
Ecthyma	1	..
Eczema Ac	2	..
" Ch	5	..
Emphysema	..	1
Empyema	..	1
Endometritis	2	..
Enteritis	5	8
Entropion	2	..
Epilepsia	6	2
Epistaxis	2	..
Epithelioma	8	..
Erysipelas	24	3
Erythema Nodos	14	..
Favus	1	..
Febricula	44	..
Febris a Potu	15	..
" Intermit	9	..
" Post partum	5	2
" Typhoides	41	8
Fissura Ani	1	..
Fistula in Ano	1	..
" Ureth	3	..
" Vesic Vagin	1	..
Fractura Calvic	4	..
" Costar	11	..
" Cranii	1	1
" Cruris	12	..
" Cruris Co	5	2
" Femoris	12	..
" Femoris Co	..	2
" Fibulæ	5	..
" Humeri	10	..
" Maxil Infer	2	..
" Metacarpi	1	..
" " Co.	1	..
" Metatarsi	2	..
" Patellæ	2	..
" Pelvis Co	1	1
" Phalang Co	5	..
" Radii	7	..
" " et Ulnæ	5	..
" " " Co	1	..
" Vertebræ	1	..
Furunculus	5	..
Gangræna	1	..
Gastrodynia	8	..
Gelatio	12	..
Glaucoma	1	..
Gonorrhœa	14	..
Hæmoptysis	1	..
Hæmorrhoides	1	..
Hemicrania	1	..
Hepatitis	1	..
Hydrocele	5	..
Hypochondriasis	1	..
Hysteria	15	..
Icterus	3	..
Impetigo	1	..
Infiltratio Urinæ	2	..
Insolatio	2	..
Iritis	1	..
Keratitis	8	..
Laryngitis Ac	8	..
" Ch	1	..
Lepra	4	..
Leucoma	1	..
Leucorrhœa	2	..
Lichen Ruber	1	..
Lupus	4	..
Luxatio Clavic	1	..
" Humeri	2	..
" Rad et Ulnæ	1	..
Mania	1	..
" Puerperal	1	..
Mastitis	1	..
Meningitis	..	1
Menorrhagia	2	..
Metritis	1	..
Morbilli	10	..
Morb Brightii	7	8
" Cordis	11	3
" Coxæ	3	..
Myelitis	1	..
Necrosis Femoris	5	..
" Humeri	2	..
" Phalang	1	..
" Tibiæ	1	..
Nephritis Ac	2	..
Neuralgia	18	..
Onychia	1	..
Ophthalmia Gonor	3	..
" Scrof	1	..
" Tarsi	5	..
Orchitis	10	..
Otitis Ac	2	..
" Ch	1	..
Oxaluria	1	..
Palati Fissura	1	..
Paralysis Var	2	1
" Partial	1	..
" Vesicæ	1	..
Paraphymosis	1	..
Paronychia	7	..
Parotitis	1	..
Periostitis Ac	4	..
" Ch	2	..
Peritonitis	2	2
" Pelvic	1	..
Phthisis Ac	..	2
" Ch	36	18
Phthiriasis	1	..
Phymosis	1	..
Pleuritis Ac	4	..
" Ch	1	1
Pleurodynia	9	..
Pleuropneumonia	12	1
Pneumonia	20	5
Polypus Nasi	1	..
Prostatitis Ch	1	..
Prurigo	2	..
Pyæmia	..	3
Pyelitis	1	..
Ranula	1	..
Retinitis	2	..
Rheumatism Ac	40	1
" Ch	15	..

DISEASES, ACCIDENTS, &c.—*Continued.*

Diseases, &c.	Discharged.	Died.	Diseases, &c.	Discharged.	Died.	Diseases, &c.	Discharged.	Died.
Rheumatism Musc.	17	..	Synovitis Ch.	2	..	Tumor Max Sup.	1	..
Rupia	1	..	Syphilis Ac.	47	..	" Palati	1	..
Scabies	1	..	" Ch.	13	..	" Testis	1	..
Scarlatina	5	..	Tetanus Traumatic.	..	1	" Uteri	2	..
Sciatica	5	..	Tonsillitis	15	..	Ulcus Corneæ	10	..
Scrofulosis	3	..	Torticollis	1	..	" Recti	4	..
Sinus	1	..	Toxicatio	1	..	" Uteri	9	..
Staphyloma	1	..	Trachoma	19	..	" Var	58	1
Strabismus	3	..	Trichiasis	2	..	Uteri Antiflex.	1	..
Stricture Recti	1	..	Tumor Abdom	1	..	Varicella	3	..
" Urethræ	8	..	" Adipose	4	..	Variola	34	33
Subluxatio	4	..	" Axil.	1	..	Varioloid	47	..
Sycosis Menti	1	..	" Colli	1	..	Vulnus	30	..
Symblepharon	2	..	" Cystic	2	..	" Oculi	1	..
Synovitis Ac.	10	..	" Fibrous	2	..			

Discharged ..... 1,356 Died ..... 123 Total 1,479

MAJOR OPERATIONS.

Amputation of Arm	3	Brought forward	25
" Breast	3	" Elbow-joint	3
" Leg	5	" Knee	1
" Thigh	3	Extraction of Cataract	6
Excision of Tumor Axil.	1	Extirpation of Eyeball	1
" " Epith. of Lip	1	Ligation of Interosseous Artery	1
" " " Palati	3	" Radial "	1
" " Gland. of Neck	2	Paracentesis Abdominis	4
" " Fibrous	1	" Thoracis	3
" " Fibroid	1	Perineal Section	5
" " Malignant	2	Staphylorrhaphy	2
Carried Forward	25	Total	52

MINOR OPERATIONS.

Abscision of Uvula	4	Brought forward	546
Amputation of Fingers	23	Operation for Fistula in Ano	3
" Toes	8	" Entropion	2
Catheterisms	162	" Lachrymal Fistula	1
" of Nasal Duct	8	" Strabismus	2
Cauterization of Cystic Tumor	7	" Bowman's	1
Epilations	15	Paracentesis Oculi	12
Evulsion of Aural Polypus	4	Reduction of Paraphymosis	6
" Nasal "	1	Removal of Foreign Bodies	8
" Nail	6	" " " from nose	4
Excision of Epithelioma	2	" Sequestrum	8
" Cystic Tumors	12	Skin Grafting	12
" Fatty Tumors	2	Tapping in Hydrocele	12
" Fibroid Tumors	3	Teeth Extracted	207
Extraction of Bullet	1	Tenotomy	4
Incisions, Various	289	Vaccinations	116
Iridectomy	1	Wounds Dressed	515
Carried forward	546	Total	1,366

Total Major Operations 52
" Minor " 1366

Grand Total 1418

FRACTURES.

IN-DOOR.

Simple	76
Compound	18
Total	94

OUT-DOOR.

Fracture of Clavicle	5	Brought forward	37
" Humerus	6	Fracture of Radius & Ulna	6
" Lower Jaw	2	" Ribs	2
" Phalanges	2	" Scapula	1
" " Co.	2	" Ulna	2
" Radius	20		
Carried forward	37	Total	48

Grand Total 142

DISLOCATIONS.

IN-DOOR.

Dislocations of Shoulder	3
" Elbow	1
Total	4

OUT-DOOR.

Dislocations of Elbow	1
" Shoulder	8
Total	9

Grand Total 13

We publish above the Annual Medical and Surgical Report of the Montreal General Hospital, this being the Fiftieth Anniversary of that excellent charity. In looking over the financial statement we find that there was a surplus after all liabilities were paid. This is very encouraging, and is a further proof of the interest taken by our citizens in the success of this noble institution.

When we compare the medical reports of to-day with those of a few years back, we notice the great increase of the surgical cases which are submitted for treatment. This can be accounted for from the fact that Montreal is fast developing her factory facilities. We doubt not that in a few years the city will so extend in every direction that it will be found necessary either to add to our Hospital accommodation or, possibly, provide other institutions of a kindred character.

We trust that the Governing Board will, this year, see the urgent necessity of removing the present small-pox hospital to a more suitable locality, as it is unjust to the occupants of the General Hospital to submit them to the danger of contact with so fearful a malady.