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THE

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

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(SEE OPPOSITE PAGE.)

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MALTINE with Cod Liver Oil and Pancreatine.
MALTINE with Hypophosphites.
MALTINE with Phosphorus Comp.
MALTINE with Peptones.
MALTINE with Pepsin and Pancreatine.
MALTINE with Phosphates.
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THE CANADA LANCET,

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MEDICAL AND SURGICAL SCIENCE, CRITICISM AND NEWS.

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Original Communications.

PLACENTA PRÆVIA, CHLOROFORM POISONING AND PEURPERAL SEPTICÆMIA.

BY G. H. COBURN, M.D., FREDERICTON, N. B.

Was called May 21st at 3 a.m., to see Mrs. E. P——. She had had sharp pains at intervals of fifteen minutes, for some hours, and quite a show of bright blood. Os uteri not dilated enough to admit the finger. Ordered rest in bed. No more pain nor hemorrhage until evening, when pains came on feebly for a few hours, accompanied by a slight show, os not dilating appreciably. All was now quiet until evening of 22nd, when pain and hemorrhage re-commenced. I was not informed of this, and she lost, through the night, 6 or 8 oz. of blood. On the morning of Tuesday, 23rd, I found os the size of a quarter dollar, a vortex presentation could be made out, and an edge of the placenta extending half way across the os uteri could be distinctly felt. The pains were not severe nor frequent, but with each a flow of blood occurred. I now separated the placenta from the uterus as far as my finger could reach, and ruptured the membranes, with the affect of increasing uterine contraction, and stopping the hemorrhage. Pains continued during the day, the os slowly dilating as it did so. I extended the separation of placenta and no blood was lost. At 11 p.m. the os was pretty well dilated, and as the patient was much exhausted and the *vis a tergo* poor, I decided to apply the forceps and deliver. Anæsthesia was produced by chloroform, and the towel given to an assistant. The first blade was adjusted without difficulty, but while applying the second the hemorrhage came on to an alarming extent. I supposed the instrument had separated the placenta, and, the patient being profoundly anæsthetized, the uterus failing to contract, allowed the flow to come on. The forceps failing to lock readily, owing to the oblique position of the head, and the hemorrhage being profuse, I decided to deliver by version.

I introduced my hand into the uterine cavity, (I may here state that at no time had my hands touched the genital organs until they were soaked in a solution of carbolic acid), and reached the feet without difficulty. Some trouble was experienced in turning as the liquor amnii had been evacuated a long time. I had just brought the feet and legs into the vagina, the head not yet having reached the fundus, when chancing to look up, I, to my horror, saw that my patient was in extreme danger from the chloroform. Before I could reach her side, the breathing had stopped, and the pulse at the wrist was imperceptible. Artificial respiration was at once begun, and I injected hypodermically a syringe full of alcohol, neither whiskey nor brandy being at hand. For a short time I feared my efforts would be fruitless, but after two or three minutes perseverance and the aid of another injection, (of brandy this time), she gave a gasp or two, and respiration was established. Not caring to trust the anæsthetic to unskilled hands any longer, I sent for a friend who took charge of it, ether being substituted for chloroform. During this delay some blood had been lost, not very much, however. Upon examination I found that the feet had slipped up into the uterus again, necessitating the introduction of my hand. Version and delivery were now accomplished in a few moments. The child was not breathing, but a few smart slaps soon set it to crying lustily. Not wishing the patient to lose any more blood, ergot was given hypodermically, and in a few moments I delivered the placenta and got good contraction. Placenta and membranes were examined and found apparently intact. Ordered vaginal injections of carbolized water, 1 to 30, three times a day, and carbolized oil 1 to 10 on napkins. Some swelling of external organs followed, which subsided in twenty-four hours. Catheter used for two days. All went on well without an ache, pain or elevation of temperature until Saturday morning (fourth day,) when the temperature was found to be 102° F. Thought this might be due to the establishment of the lacteal secretion. On this evening there was a slight chilly sensation, but on Sunday morning

(fifth day,) the temperature was again normal, breasts full of milk, and patient felt well. At noon visit I was surprised to find the temperature 104.6° F. Examined napkins and found them smelling badly; no tenderness over uterus, and milk flowing freely. Thinking that the carbolic injections might not have been thoroughly used, I, myself, washed out the vagina. Prescribed quinine, ten grains to be taken daily in divided doses. At 9 p.m. I was gratified to find the temperature normal. Quinine was discontinued, temperature now kept below 99° F., and everything was in all respects normal until Thursday (9th day.) On this day I gave her permission to sit up for an hour in an easy chair beside the bed. She had not been up ten minutes when she was seized with an agonizing pain in the right utero-ovarian region. Brandy was given, and hot applications made. Upon my arrival I injected in the arm one-third gr. morphine and 1.120 gr. atropia. Pain was soon relieved, but much tenderness was left at lower right part of abdomen. Pulse 120, temperature 103° F. Hot applications continued and quinine recommenced, morphine to be used p. r. n. if pain returns. June 2nd, 9 a.m., pulse 100, temperature 101° F. Tenderness not so great; no morphine required during the night. 12 m., temperature 102° F.; much thirst and distaste for food, but no vomiting; tenderness decreasing, but feels a bearing down upon attempting to sit up in bed. There is evidently septicæmia, and more or less pelvic peritonitis. Quinine continued, and to have as much nourishing food as she will take. Lochia about stopped, but ordered carbolic injections to be kept up. 6 p.m., temperature 103° F. Prescribed two minims tinct. aconit. rad. every four hours. No diminution of lacteal secretion.

June 3rd, 9 a.m.—At one o'clock this morning she had a chill, followed by profuse perspiration, which continued several hours; pulse 96, temperature 99.5° F. Ordered two teaspoonfuls of brandy in milk every two hours; abdominal tenderness nearly gone. 12.30 p.m., temperature 99° F., pulse 90. Takes a fair amount of nourishment, but does not crave it. Aconite not to be given so frequently; pulse 88, temperature 98.5° F.; feels better. Had a bowl of chicken broth for dinner, also a few strawberries. 8 p.m., pulse 95, temperature 100° F. Feels quite comfortable; food tastes natural again, and tenderness only felt on deep pressure. Gave a dose of aconite. 10 p.m., pulse 90, temperature 101° F. Had a good stool after enema; no pain nor chills; to have aconite at 11.30 p.m.

4th—9.30 a.m.—Feels much better this morning, and looks brighter; pulse 85, full and strong; temperature 100° F. Did not sleep very much, but was not restless; no soreness nor pain. Nurse said, that in washing out the vagina this morning a shred of membrane about an inch long, came away. Gave a dose of aconite. 1.30 p.m.—Pulse 90, temperature 101.5° F.; has had quite a sleep. A little bloody discharge came on to-day, smelling perfectly sweet. Gave a dose of aconite, and ordered another at 6 p.m. 8 p.m.—Pulse 90, temperature 102° F. Still patient said she did not feel very uncomfortable. Aconite to be given at 10 p.m.; quinine and brandy as usual.

5th—9.30 a.m.—Did not rest very well; felt very hot about midnight, and perspired freely after it; was hungry for breakfast and enjoyed it; milk flowing in abundance; legs ache badly; pulse 80, temperature 100° F. As pulse was down, and not full, I discontinued aconite for the present. A slight discharge contiuues, which smells sweet; no soreness nor pain; vaginal injections now to be used twice a day; food relished, and a fair quantity taken. 2 p.m—Has had a good sleep and feels well, but pulse and temperature still keep up, the former being 100 and the latter 102° F. As all along the range of temperature had been higher than the symptoms would indicate, I had my thermometer compared, and found it to be correct. Her strength keeps up wonderfully. Ordered a dose of aconite mixture. 7 p.m.—Pulse 92, temperature 102° F. Gave aconite. 9 p.m.—Pulse 88, temperature dropped to 100.5° F. No vaginal discharge; complains of a little pain after urinating. Ordered a teaspoonful of sweet spirits of nitre. As patient did not sleep much last night, I prescribed 10 grains chloral and 12 grains bromide of potassium, to be repeated in an hour if sleep be not produced.

6th.—9 a.m.—Slept well without any chloral, and feels much refreshed; good appetite; still some pain after passing urine; to repeat nitre. Pulse 95, temperature 98.5° F. 2.30 p.m.—Pulse 95, temperature 100° F. Relished dinner of chicken, baked potatoes and prunes. 9 p.m.—

Feels tired and worn ; pulse 104, temperature up again to 103° F. Possibly I allowed too hearty a dinner. Gave aconite.

7th.—9 a.m.—Pulse 90, temperature 99.5° F. Slept well last night ; good appetite and feels well. A small shred of membrane came away again to-day, while washing the vagina. If the temperature rises again to-day I propose to wash out uterine cavity. 11.15 a.m.—Temperature 98.5° F. Gave permission to move from the bed to a lounge, for a short time. Bowels moved by enema. 1.30 p.m.—Was lifted from bed to the lounge, and enjoyed the change. Pulse 100, temperature 101° F. 3 p.m.—Pulse 104, temperature 102° F. I gently introduced a catheter through the os uteri, and slowly injected two pints of carbolized water, 1 to 30. No pain was caused ; water flowed back very slightly stained. 6 p.m.—Sent for. She had had a slight chill ; pulse 108, temperature 104.5° F. Frontal headache. Gave an extra dose of quinine, and ordered aconite every half hour, for the present. 7.30 p.m.—Still burning hot, and headache severe ; pulse 116, temperature 104.5° F. Thinking it well to have the responsibility shared, I suggested a consultation, and Dr. Atherton saw the case with me at 8 p.m. Temperature had by this time dropped to 103.8° F. Dr. A. could discover no fixation of the uterus, nor evidence of any local trouble whatever. Hoping that the high temperature might have been partly caused by the very free use of carbolic acid, we decided to suspend the vaginal washings. It hardly seems possible, however, that such can be the case, for the acid has been constantly used while the fluctuations of temperature have been great, it having been for many days normal ; moreover, the urine has shown no sign of carbolic acid poisoning. Upon Dr. A's suggestion the aconite was discontinued, the dose of quinine reduced to one grain three times a day, and the diet somewhat lowered. 11 p.m.—Has had another chill, lasting half an hour. Pulse 120, temperature 105° F. Gave a dose of nitre. To have milk to drink throughout the night.

8th, 3 a.m.—Sent for ; had not slept any, chilly sensations down arms and legs every few moments, much headache and very tired. Pulse 120 ; temp. 105° F. Gave a dose of chloral and bromide mixture with directions to repeat if necessary. 8.30 a.m.—Slept about two hours after a second dose of chloral. No more chilly feelings, but perspired profusely. Pulse 120 ; temp. 104.2° F. Feels very worn and tired. No diminution of lacteal secretion. 10.30 a.m.—Pulse 104, temp. 103° F. Has been dozing most of the time since. Takes plenty of milk ; to have brandy and egg, as usual, once a day. 1 p.m.—Still very drowsy, no chills ; pulse 106, temp. 100° F. Prescribed potass. citratis. gr. vi., tinct. opii. camph. m. v., spts. æther. nit. ʒss., to be taken every four hours ; not so much pain after micturition. 2.30 p.m.—Pulse 100, temp. 100° F. 5 p.m.—Pulse 90, temp. 100-2° F. 7.45 p.m.—Just having a chill, pulse 108, temp. 101°F. Feels rather despondent at having chills again Gave an extra dose of brandy, and used hot bottles, etc. 8.30 p.m.—Chill lasted half an hour, pulse 112, temp. 102-4°F. 11 p.m —Has had another chilly or rather creepy sensation, lasting nearly an hour. Pulse 120, temp. 104-2°F. To have chloral if necessary.

9th 8.45 a.m.—A better night. Several slight chills, but did not feel as hot after them. Slept several hours without chloral. Pulse 110, temp. 102°F. Some little discharge again this morning, but it is perfectly sweet. NOTE—It is evident that the carbolic acid, had no part in producing the symptoms. Her condition is bad, but not as desperate as the range of temperature would indicate. The question seems to have resolved itself into one of keeping the patient alive, until the poison has exhausted its virulence. 1.30 p.m.—Temp. 102°F. Complains of a pain in right side of chest, upon deep inspiration. Mustard applied and ¼ gr. morphia given. 8.30 p.m.—Pain in side better, temp. 104°F. ; no chills, vaginal discharge ceased. 10 p.m.—Pulse 120, temp. 103.8°F., pain troublesome.

10th, 9.30 a.m.—Slept well, until 3 a.m. when pain in side grew very severe. Pulse 108, temp. 103.5° F. Pleurisy seems probable, though I cannot detect any friction sounds. Ordered hot applications to side, and gave ¼ gr. morphia and 1-150 gr. atropia. 1 p.m.—Pulse 100, temp. 102. Pain easier, no cough. 6.30 p.m.—Pulse 112, temp. 103.5° F. Has had one or two fits of coughing without expectoration. Friction sounds now detected. Hot applications continued, opiates p. r. n. 9.30 p.m.—Temp. 103° F. ; cough troublesome ; to have flaxseed tea *ad. lib.* Takes plenty of nourishment.

11th, 9.30 a.m. Better, slept nearly all night,

cough looser and pain much less severe; pulse 106, temp. 100-5° F. No chills for 48 hours. 2 p.m.—A very fair day, but little pain, expectorates quite freely a frothy mucus, tinged once or twice, with blood. It is probable, that some pneumonia exists, in connection with the pleurisy, pulse 112, temp. 102° F. As a vaginal discharge again showed itself to day I ordered an injection of carbolized water. 5.30 p.m.—Pulse 110, temp. 101-8° F. 8.30 p.m.—Pulse 98, temp. 100-5° F. Temperature has not been as low for three days. 10.30 p.m.—Pulse 106, temp. 102-5° F.

12th, 9 a.m.—Slept fairly well, but had two or three hard coughing spells, pulse 108, temp. 102° F. Ordered Morph. Sulph. grs. ij. Spts. Chloroformi, ʒij. Vin. Xerici. ad ʒiij. M. Sig. ʒi. p. r. n. 12 m.—Pulse 108, temp. 102° F. Cough much easier. 6 p.m.—Pulse 104, temp. 101° F. 10 p.m. —Pulse 104, temp. 102° F.

13th, 10 a.m.—Pulse 96, temp. 100° F. Babe was fretful and patient did not rest well, one or two hard spells of coughing this morning. Port wine substituted for brandy, only a small quantity taken. 12.30 p.m.—Temp. 100-5° F. Expectoration more free, still a trace of blood now and then. 9.30 p.m.—Pulse 100, temp. 101° F. Has coughed but little.

14th, 10 a.m.—A good night, with cough decidedly better; pulse 96, temp. 99-5° F.

15th, 11 a.m.—Pulse 100, temp. 100-6° F. Has just been informed of the expected arrival of her mother from Toronto; this has likely run the temperature up, symptoms otherwise improving. An enema was given this morning followed by a good motion. 2.30 p.m.—Pulse 96, temp. 98-5° F. 9 p.m.—Pulse 96, temp. 98-5° F. Has coughed scarcely any, and feels well.

16th, 10.30 a.m.—Pulse 96, temp. 100° F. 2.30 p.m.—Temp. 100° F. More cough to-day and feels tired. Examined chest, no friction sounds, no effusion; rough breathing over upper portion of right lung, and absence of sounds, with some dullness over lower lobe indicating consolidation. 8.30 p.m.—Pulse 92, temp. 100° F.

17th, 9 a.m.—Temp. 98-5° F. Slept fairly well, cough easier. 3 p.m.—Temp. 99° F. 9.30 p.m. —Cough troublesome, and temp. up again to 102° F. I fear some new complication.

18th, 9 a.m.—Slept well, with but little cough; pulse 90, temp. 98.5° F. Perhaps the high temperature of last night was due to an error of diet. 2 p.m.—Pulse 80, temp. 98 5° F. Allowed to lie on lounge a few hours. 8.30 p.m.—Pulse 88, temp. 101° F. Can discover no extension of lung trouble. Feels very well, but strength gains very slowly; ordered stimulants to be used more freely.

19th, 9 a.m.—Pulse 88, temp. 98-5° F. Prescribed Elix. Calisaya, Iron and Bismuth, (Wyeth). A teaspoonful three times a day.

20th, 10 a.m.—Temp. 98 5° F. Cough improving very much and feels better in every way.

21st, 10 a.m.—Temp. 98 5° F. From this time the temperature never rose above the normal point, and improvement was constant, cough grew less and less, chest sounds cleared up and became normal.

July 6th—Went out for a drive, and on this day bowels first moved spontaneously. Toward the last of July, she went on a visit to relations in Toronto. At present writing (Sept. 13th) there is no cough, she has regained her flesh, and is, to all intents and purposes as well as ever.

REMARKS.—The points worthy of notice seem to me to be the following; and this paper has already reached such proportions, that I can only indicate them.

1st. The success attained in stopping the hæmorrhage, by separating the placenta as the os uteri dilated.

2nd. The, almost fatal, accident from chloroform, during an accouchement.

3rd. The sudden rise of temperature on the 4th and 5th days, followed by an absolutely normal temperature until the 9th day. I cannot doubt that the first rise of temperature was due to blood poisoning, and it would seem as if the second must have been produced by a fresh dose. I attributed it, whether correctly or not, to an escape of septic fluid through the right Fallopian tube, upon the patient first assuming the erect position.

4th. The effect of the aconite. A reference to the text will show that its administration was always followed by reduction of the pulse rate, and in most instances this was accompanied by a corresponding fall of temperature. In suitable cases, I am inclined to think it a valuable drug.

5th. The fact that the constitutional symptoms were not as severe as the high temperature would indicate.

6th. The occurence of pleurisy on the seventeenth day. As there was no exposure, this was looked upon as a result of the septic poisoning.

DISLOCATION AT THE ELBOW OF BOTH RADIUS AND ULNA BACKWARDS, SUCCESSFULLY REDUCED AFTER THE LAPSE OF SIX WEEKS.*

BY THOS. R. DUPUIS, M.D., F.R.C.P.S.K. AND M.R.C.S.E.

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This case was admitted to the Kingston Hospital on the 7th of January last, suffering from a backward dislocation of the bones of the forearm at the elbow-joint, produced by a fall which he received over five weeks previous to that time. He was a large, muscular, well-developed man of about 25 years of age, and had every appearance of robust health

Symptoms on admission.—The usual symptoms were present on admission: His arm was nearly straight, there being only slight flexion at the elbow; there were shortening of the forearm, projection of the trochlea in front and olecranon behind, the hand occupying a position between pronation and supination, but inclining more to the latter, and widening of the distance between the condyles of the humerus and the head of the olecranon. There was still considerable swelling about the elbow, and complete immobility of the joint.

By careful examination I diagnosed dislocation of both bones of the forearm backwards; but after having satisfied myself of the nature of the injury, the more difficult question arose, namely, Can I reduce it after the lapse of nearly six weeks?

Gross states that he has met with many cases where all efforts to reduce proved unavailing after the third week, and sometimes after the second; and he further states that three weeks' duration always renders the reduction of this dislocation very difficult, although he has met with some cases that have been reduced after two months' standing.

Sir Astley Cooper is said to have succeeded in reducing this dislocation after three months; Malgaigne at three and a-half; Blackman, Brainard and Westmoreland after five months' standing, and Gerdy and Drake even at six. But such cases as these are extremely rare, and the danger of injuries to the parts, followed by violent inflammation, suppuration, and gangrene, is too great to justify a surgeon in making violent and protracted efforts to reduce, where the dislocation has been of several months' duration. Velpeau is reported to have lost a case from this cause.

In cases where reduction seems to be impossible, breaking off the olecranon process by forcible flexion of the arm has been suggested, and there is no doubt that such a measure is perfectly justifiable when we consider how completely useless a straight or nearly straight arm is, and how useful one in a semi-flexed position may be, although the joint may be entirely anchylosed. Re-section of the joint would scarcely seem necessary, except in cases of old standing, when other methods of procedure have all proved unavailing, as in a case which I have in my mind at present.

As my patient was a healthy young man, and stood in need of a useful arm, I decided after due consideration to attempt reduction. The methods of reduction recommended and practised, as you all know, are somewhat various in their modes of execution, but precisely the same in principle; that is, they aim at the same results, namely, to pull the ulna from the articular end of the humerus and to lift this latter backwards over the coronoid process into its sigmoid cavity again. Placing the operator's knee in the bend of the elbow and bending the forearm around it, while pressure downwards is made with the knee; counter-extending by a band around the patient's chest while extension is made by an assistant; bending the arm around a bed-post while the surgeon himself makes extension by pulling upon the hand; placing the heel instead of the knee in the bend of the elbow and with that for a fulcrum attempting flexion and extension by the surgeon himself; and by using pulleys with a band around the chest if the patient is very strong and muscular; or finally, by adopting the method practised in this case with success, and which I shall here detail: The patient was placed upon the operating table and brought fully under the influence of chloroform. He was then placed near the edge of the table, and turned partially upon his side, so that the arm hung free beyond the edge of the table. The middle and upper part of the humerus and the patient's body were grasped and firmly held by two strong assistants, while the hand and lower part of the forearm were seized upon and held by two other assistants. Equable and persistent traction was made, and pressure

* Read before the Ontario Medical Association, June, 1882.

exercised upon the upper part of the forearm in such a manner as would tend to lift it away from the trochlear surface of the humerus, at the same time that extension was being made. I also made pressure downwards and forwards upon the projecting olecranon process with one hand, while with the other I grasped the forearm near the elbow to assist in pulling the ulna from the humerus, and also to direct, at the proper time, the necessary flexion of the arm. After a few minutes of steady effort in the manner here stated, I distinctly felt the joint begin to yield and the bones to separate, the act being accompanied by a sensation as of something tearing. I then directed the assistants who held the forearm and hand to slowly and cautiously flex the limb, without relaxing their hold or lessening the traction they were making upon it. I also continued to bear downwards and forwards upon the olecranon and the upper part of the forearm close to the joint. As flexion was gradually produced, I had the pleasing satisfaction of feeling the olecranon glide forwards, and the trochlea of the humerus assume its wonted position in the vacant sigmoid cavity. The limb was then flexed until the fingers of that hand were placed upon the top of the opposite shoulder; and after extending and flexing it several times to make sure that any new adhesion would be broken up, and that the bones were in proper position, the arm was flexed at a right angle, put up in an adjustable elbow splint well padded, and suspended high up across the breast in a sling.

For the first twenty-four hours there was severe pain, which required to be relieved by morphia; there was also considerable swelling and redness, to control which we kept a lotion of acetate of lead and laudanum constantly applied. All the urgent symptoms, however, gradually abated and in a few days the patient was able to walk about the wards of the hospital, apparently free from suffering, and greatly pleased at the new position in which he found his arm. At the end of eight days we began to make passive motion of the joint, which yielded without difficulty, though, of course, not without some pain.

On the 1st of February, thinking himself well enough, and being able to move the joint to some extent voluntarily, he left the hospital, since which time I have heard nothing from him.

In calling attention to the report of this case, I do not expect to instruct my brethren in the profession in the diagnosis and treatment of dislocations of the elbow-joint, nor have I entered minutely into details; for I feel that, to assume the position of an authority before so large and learned a body as this is, would be to tread upon dangerous ground, and to reiterate facts with which you are all perfectly well acquainted. Nevertheless, there are some thoughts suggested by the subject which it may not be amiss to discuss, and which might be profitably pondered over by some of the younger members of our profession.

First, then, as regards diagnosis.—The diagnosis of injuries of the elbow-joint are admittedly difficult. The complicated nature of the joint, the number of epiphyses about it which may be separated from their bones, especially in childhood, and the swelling which generally so quickly supervenes, all conspire to obscure the real nature of the injury, and to leave the inexperienced surgeon in doubt as to the character of the lesion before him, and hence unable to pursue the proper line of treatment.

There is no class of cases in which an accurate knowledge of anatomy is so requisite as in dislocations, and none which puts the real knowledge and skill of the surgeon to so crucial a test; and it is a thorough acquaintance with the anatomy of the joints—bones, ligaments, and muscles surrounding them—which alone can qualify the practitioner to become successful in this department of surgery. Several times has it been my lot to see dislocation of the head of the humerus into the axilla, treated as a sprain or bruise by an M.D. until the time for any hope of reduction had past; and the case here reported is the third one ot the kind that has come under my care in which treatment by another surgeon had been unavailing; and doubtless many of you, gentlemen, have had similar experiences. This man had been for the five weeks previous to his coming to the hospital, that is, from the receipt of his injury, under the care of another medical man, who not only honestly stated that he could not remedy the deformity of the man's arm, but that he could not satisfactorily decide upon the real nature of the injury. Another case occurs to my mind at the present, which will serve to illustrate the ease with which a mistake may be made, and the effect which such may have upon the reputation of the surgeon.

About eight years ago a little girl æt. 10, but who is now a young lady with as fine a pair of arms as one could wish to see, was brought to my surgery for the purpose of having me examine her elbow, which had been hurt three weeks previously. On examination I found the characteristic symptoms of backward dislocation of radius and ulna—partially flexed arm, hand between pronation and supination but inclining to the latter, prominence of the trochlea in front and shortening of the forearm, projection of the olecranon process backwards, and increase of the distance between the internal condyle of the humerus and the tip of the olecranon. The arm was still considerably swelled, but yet all the necessary diagnostic points could be made out. I explained the nature of the case to her parents, and with their consent and assistance chloroformed the child, and reduced the dislocation without the least difficulty. The arm was properly bandaged and in a few weeks all traces of the injury had disappeared. Now the medical man who had charge of the case before I saw it, had pronounced it a sprain and had been treating it with fomentations, liniments, etc., to the damage of the child and the great vexation of her parents. I explained to them the difficulty frequently experienced in ascertaining the exact nature and seat of injuries about joints; but although they listened to me with attention, and no doubt believed me, yet this could not take away their feeling of distrust, yea, almost enmity, towards the other medical man; for they thought that if I could detect the true nature of the injury and remedy it so quickly, the gentleman they had been employing could not be up to the mark as a skilful and reliable surgeon. The consequence was, that he lost not only the practice of that family, but of all the families in the neighborhood which they could influence.

But knowing the difficulties which beset this and some other injuries and dislocations, we should protect each other as far as possible; and any one of us when in doubt should not hesitate to seek the opinion of some competent professional brother. To set this matter before you in a most elegant and emphatic manner, permit me to quote from Skey: "A surgeon is justly responsible to society for the entire restoration of *many* forms of injury to their condition of health, provided no extreme or unusual difficulty exists in the nature of the accident, or arises in the course of treatment, and is justly chargeable with the consequences of failure; and the records of the law unhappily teem with examples of a compulsory retribution as the award of ignorance or neglect. But in the case now under consideration which sets at naught the knowledge and the foresight of the most experienced, a surgeon can only render himself responsible for the result by the assumption of power which he does not possess, or by volunteering an unguarded pledge of his ability to restore the joint to its former condition of health. This is obviated by a candid avowal of the difficulties of the case, and his willingness to avail himself of the co-operation of others, who can at least lighten his burden by sharing his responsibility."

Secondly, in looking at the *legal aspect* of joint injuries, we should never forget that the elbow-joint offers one of those intricate problems which are too often presented to the surgeon for solution.

In the case of Hoban v. Parker, tried twice at the Kingston assizes (the last time in September, 1881), the patient in some kind of a row received a severe kick upon the elbow-joint. The case was diagnosed by the attending surgeon to be a fracture, and treated as such; for some reason, however, gangrene ensued, and the result was that the arm had to be amputated above the elbow. Upon examination of the joint after amputation, the bones entering into it were found to be entire. The plea set up by the plaintiff was ignorance on the part of the surgeon in not detecting the true nature of the injury, and improper treatment by bandaging the limb too tightly. After two trials at court, which must have been a source of great expense and vexation to the surgeon, the jury disagreed as to a verdict, and the case was dismissed; but another emphatic lesson was taught thereby, of the necessity of knowledge and care in elbow-joint injuries, and of the propriety of calling in another surgeon, at least, to share the responsibility in all doubtful cases.

We may here again quote the impressive words of Skey: "The penalties of the law are justly enforced on those who play a single-handed game, by which they deprive their patients of the advantages to be derived from the experience of others; whereas they should rely on the well-known adage, which under no circumstances is more pertinent than when applied to a medical man placed in this critical position, that 'union is strength.'"

Thirdly, we may notice the *causes that render this dislocation so difficult of reduction after a few weeks' standing.*

Dr. Samuel D. Gross, in the fifth edition of his masterly work on surgery, states that he was not prepared to assign any reason why a luxation that is so easily rectified if properly managed in its earlier stages should so soon become utterly irreducible, resisting and defying all the best directed efforts of the surgeon when allowed to remain for a few weeks.

It seems to me, however, that if we carefully consider the construction of the elbow-joint, and duly appreciate all the displacements that occur in backward dislocation of both bones of the forearm, we cannot be at a loss to assign a good and sufficient reason for the quickness with which this luxation becomes irreducible. Of the four ligaments surrounding the joint, the anterior would in all probability be torn loose from the coronoid process of the ulna; the posterior being loose might escape injury, but on account of its thinness some of its fibres might be broken through; the internal lateral ligament would have its posterior portion which is attached to the inner magin of the olecranon torn through, and the external lateral ligament would suffer laceration in some of its anterior fibres. As regards the muscles, the supinator brevis would have some of its upper fibres torn through, and the remainder put upon the stretch, to be accommodated by supination of the hand. The anconeus would be relaxed, but from its shortness and the projection of the ulna backwards, might be more or less lacerated; the powerful triceps muscle would be relaxed from the approximation of its points of attachment. All the remaining muscles of the forearm, both anterior and posterior, that arise from the internal and external condyles of the humerus, would be relaxed by the projection of the lower end of the humerus forwards towards their points of insertion. The biceps muscle would be put upon the stretch, but this would be partially compensated by the supination of the hand; and the brachialis anticus alone would be the only muscle that would suffer severe stretching and have a tendency to restore the trochlea of the humerus to the sigmoid notch.

Now if we consider that, in three or four weeks, new adhesions will form smongst the lacerated fibres of the ligaments, and of the muscles, and that all the strong muscles of the forearm and the powerful triceps will have become contracted, shortened and accommodated to their new condition, we can readily perceive that the bones will be held in their new position as firmly as they were previously in their natural one. Thus, the force required to lift the trochlea of the humerus backwards over the coronoid process of the ulna must be sufficient to break up all new adhesions, and to stretch the triceps and all the muscles of the forearm to the same length they were when the luxation occurred. This we know is no easy task, for a muscle requires a great force to stretch it suddenly; and hence the force required to reduce a dislocation of the elbow backwards must be fully equal to that which produced it.

The anatomical and physiological aspect of this dislocation fully accounts, I think, for the difficulty experienced in reducing it after a few months standing, and afford us a clue to the means required for its successful treatment.

Now if we regard injuries of the elbow-joint in any of their phases—whether as to the difficulties attending them—the consequences of improper diagnosis and treatment of the patient—the inevitable results to the surgeon's character and reputation—the legal vexations and expenses that may follow—and the nice anatomical and physiological details which they involve, we must, I think, agree that they form a class of cases that are well worth our careful and intelligent study.

THE CAUSES AND CONSEQUENCES OF DEFECTIVE VISION DURING SCHOOL LIFE.*

BY L. L. PALMER, M.D., TORONTO.

It was not my intention to take up the time of this Association this year with a paper, until about a week ago, our worthy President suggested to me that I write up the subject of hygiene of schools, which in its importance so commended itself to my judgment, that I have undertaken to consider at least one phase of the question which may form a nucleus for further thought—a phase by no means the least important of all the conditions that affect early life—viz., The Causes and Consequences of Defective Vision during School Life.

* Read before the Ontario Medical Association, June, 1882.

It is now admitted by all who study ophthalmology, that the pressing danger of the eye during early life is myopia, or shortsightedness, the organic cause of which is too great a depth of the crystal, which causes the sharp image of an object to form in front of the retina instead of upon it. It is commonly observed by teachers and parents that school work is often associated with, and even hindered by impaired vision; but that it is an evil much to be guarded against and a danger, in many instances truly alarming, has not appeared to them. If an ounce of prevention is worth a pound of cure, and this more valuable prevention in the light of present science and research is more easily possible; if the children of to-day are the men and women of twenty years hence, then it becomes us to turn our scientific labor and much thought to the well-being of children, and see that their physical, as well as their mental health, be properly guarded against dangers unobserved. Delicate as is the eye, it will when emmetropic, and in a state of health, bear any amount of use; but when it has lost its balance, or its normal proportions, its work is done with effort and but imperfectly, and it rarely can be brought back to its original perfection of action, but is prone to lapse into still greater disability of function, or even into actual disease.

It is found from the collected statistics of well-known scientists, such as Enissman, of St. Petersburg; Conrad, of Königsberg; Loring and Darby, of New York; Cohn and Just, of Germany, and others, that myopia is congenital only in a small proportion of cases, that most children, up to 5 or 6 years of age, have normal vision, and from this age up to 15, or according to Donders, 20 years is the period of development of myopia; that few are myopic before this period, and fewer still, if any, become so after; and this is the age when children are pressed into school and are forced to endure all the pains and penalties of the cramming system, in these days too common, which aim at intellectual development at the cost of impaired vision, and sometimes almost of complete loss of sight, if indeed it does not defeat itself in gaining the end it seeks. While these years, from six to twenty—the school life of children—is the period when myopia becomes developed, it is also established by careful and extensive statistics from the examination of over 20,000 school children, that the defect increased numerically as the pupil advanced through the different grades of the schools. Cohn, of Breslau, found 6.7 per cent. of myopia in the elementary, 10.3 in the intermediate, 19.7 in the high schools, and 26.2 in the gymnasia.

Other authorities quoted above have made similar investigations with like results; and among the causes assigned for this uniform development of it are imperfect light, impure air, bad construction and arrangement of desks and seats, badly printed books; all these conditions are found acting, not alone in the school-room, but at home, when the child returns with a task to perform, which taxes the eyes to a late hour, or after the preparation for the next day is completed. How often do we find the young person engaged with a thrilling story, or a fascinating romance, willing to sit in any remote corner of the room, and strain over a badly-printed and badly-illumined page, conditions unfavorable to the strongest eye, but most damaging to one pre-disposed by heredity, or otherwise, to myopia. In addition to the above facts it is found that it is more especially proper to cultivated nations, while uneducated people and barbarous tribes are almost entirely free. The Germans are said to show a greater number of myopias than any other country. So much is this the case, that any passing traveller through the states of Europe must observe that spectacles form a notable feature in the German physiognomy. This points at once to their high intellectual status, to their indefatigable labor in intellectual pursuits, and the bad hygiene of their schools and school system, conditions existing in unchecked operation through all their history. There is a general agreement among authorities that a great development or increase of it takes place during school life, and the result is largely due to preventable causes. Brudenell Carter says: "There is no longer any room for doubt, that badly-lighted and badly-fitted schools form a great machinery for the development of myopia. And it is possible that this machinery where, as in Germany, it has for a long time been in unchecked operation, may have an important influence upon the form of the eyeball, which will be inherited by large numbers of the population."

Other authorities make similar statements. Ribot urges that, "Since constant study creates myopia and heredity most frequently perpetuates, the num-

ber of shortsighted persons must *necessarily* increase in a nation devoted to intellectual pursuits"; and Dr. Loring goes still further by saying, that "If by a nation devoted to intellectual pursuits, we mean that compulsory education shall be carried out in the full extent of its original meaning, and applied to every child that is born, be it male or female; and if Germany is going to be taken as the type, and every other nation desirous of intellectual progress be compelled to follow her lead as an example, then I am of the opinion that not only the educated classes, as the term is commonly understood at present, but that the world at large will, in time, become near-sighted." If such views, original and startling as they appear, are near the truth, it becomes a matter of national importance to see wherein the school and its hygienic and architectural conditions act as a cause of near-sight, aud discovering the cause, if possible, to remove it.

It is not my intention to construct a model school-room, much less a model home; this can be better done elsewhere. But I may be permitted to mention in brief a few of the conditions causing myopia that are common to both school and home life of the young.

(a) A bad light is one of the most certain causes, situated as it too often is in front of the pupil or at his side, shining with a glare on a level with the eye, producing great irritation, which is the precursor of a progressive myopia.

(b) Anything favorable to congestion of the head, as a bad position of the body, whlch is too often a necessity from badly constructed desks and seats, or which is perhaps a matter of choice when the pupil of studious habits gets in the corner at home, and with a book in the lap and bent trunk he pores over it till a late hour. Under this head might be included heat of room, wet feet, cold floor, indigestion, excessive length or intensity of study without interruption.

(c) Excessive tension of the eyes for near objects, as when a book is brought too near the eye for hours daily throughout an educational career.

(d) "Peculiarities of food, indifference to ventilation, disregard of other hygienic requirements, want of out-door exercise, and a peculiar tendency toward a sedentary life, all of which are provocative of a certain *laxity of tissue* and want of resistance in the investing membranes, which finds its expression in the eye, in a distension which is in fact myopia."—*Loring.*

We need not go far to show that all these conditions are largely present during school life, and it has been abundantly shown that the rapidity of development of myopia is in proportion to their presence and to the early age at which children are pressed, either by authority or natural inclination with studious habits, regardless of their optical condition. Alarming as the fact appears to the ophthalmic surgeon, and important as is the eye in its intellectual, apprehensive, and discriminating powers, yet there is no organ in the body guarded with so little care, and strange to say, its greatest weakness is popularly counted its strength. We often see myopes comfort themselves by saying that short-sighted eyes are strong, or *healthy* eyes; on the contrary, a short-sighted eye is a *sick* eye, a *diseased* eye, and is very likely, from the habits it engenders, to make a sickly body; quite as much a diseased condition is it as an hypertrophied heart and as little able to perform its functions, and we watch a case of myopia with as much interest and anxiety as you do first an hypertrophied and then a dilated heart subsequent to repeated attacks of asthma. It affects the physical, mental, and moral development of the child. The ordinary sports or plays of the campus are quite too much for him. The cricket, the base-ball, or the lacrosse have requirements beyond his range of vision, and in these he is unable to compete successfully with his fellows; so with a sense of incapacity he retires from the field where the mind gets its recreation and the body its health, and seeks his pleasure and his recreation in his books. This, though at first a pastime, soon become a passion and he becomes a book-worm, engorged with much that an age of rapid printing can supply, without taking time to reflect or digest what he has received. He therefore suffers a kind of mental dyspepsia, which is, to say the least, no evidence of mental strength —a condition as foreign as possible to a true educational process, which is the application of thought or the development of the processes of reason.

A fond parent encourages these so-called studious habits, which become more a habit than a desire for the acquisition of knowledge, and entertains a strong hope that the future will realize brilliant literary accomplishments; but the defect of sight is operative at all times; he becomes retiring, diffident, hesitating, and cautious. His means of acquiring knowledge through outward objects have

been limited to a very narrow field, his own small field of vision. He can see all the beauty of a rose or a violet, but a beautiful landscape or the autumn tints of the forest are all a blur to him, and he knows nothing of the inspiration that comes therefrom. He can see and deal with the minutest mechanism of a watch and delight in it, but finds no pleasure in architecture; he becomes a man of details and intricacies, at the expense of unity and comprehensiveness. He also judges men by their intentions, at quite a disadvantage, and forms wrong opinions of character. Our English language—all language—is so constructed as to be susceptible of ten times of opposite meanings by a few changes in the lines of countenance. Hence, across the table, or in a room, he loses the ever-varying shades of expression that come most directly from the heart, and trusts to the ear, by which he is often misguided. Now all this must have its effect upon the general disposition, upon the character, and the health; and though it may not affect to such an extent every degree of myope, yet the majority, I am satisfied, of those who remain uncorrected, suffer more or less of these disabilities.

There are other optical defects, such as hypermetropia and astigmatism, which affect the individual's comfort, his health, mental attainments and character quite as much; and on these it might be of interest to dwell, as they affect the manhood in an entirely different way; but I will not prolong my paper. Enough has been said to show the gravity of abnormal vision. The attention it should command from both teachers and parents, and the importance of submitting every child to a careful examination of his optical condition before urging him into a long educational career, not only to see whether he is capable of pursuing such a course without danger, but to see that he is supplied with properly-fitting spectacles which, happily for either the myopic, the hypermetropic, or the astigmatic, may now be so given, as to reduce the eye by their help to the condition of a far-seeing eye, and thus permit the individual to cultivate the same tastes and pursue the same occupations as if the eye was naturally a normal eye.

And finally, Mr. President, as you and your confreres are taking such an interest in your duties on the Board of Health for Ontario, and your labors, which will be of inestimable value for the public weal, are to be expended largely in discovering and applying the valuable ounces of prevention, I may be permitted to entertain the hope that the question that I have but briefly brought before you may not be deemed unworthy your consideration, and that the hygiene of our schools, which is at the very foundation of future society, may receive that attention which it so much demands, and which our science is so eminently calculated to bestow.

Correspondence.

INTERNATIONAL CONGRESS OF HYGIENE.

To the Editor of the CANADA LANCET.

SIR,—I have not written to you before, because England's hospitals would be no subject for remark, as there are few Canadian members of our profession who are not thoroughly acquainted with their extent and excellence, but here I am quite on other ground, certainly not to the profession a *terra incognita*, nevertheless a country the medical institutions of which are comparatively little known, I will therefore give you a very brief description of my visit to the Hospital "Cantonal" and University of Geneva prior to the opening of the Congress.

The grounds around—probably not quite so large as those surrounding our Toronto Hospital—are kept with much taste, the flower-beds well cared for, and the parterres had a very gay appearance. At the porter's lodge we were, on announcing ourselves members of the "Congrés International," cordially received, my companion, a visiting surgeon of the Hospital of Bordeaux, taking the lead in making the request for inspection. At the doors we were most courteously met by the Internes, and by one of them taken all over this very admirably appointed and excellently kept hospital, every comfort, convenience and scrupulous attention to cleanliness being noticeable, whilst the manner in which the patients received their medical attendant, sufficiently testified to the thoroughly friendly relations existing between them. Having gone through the wards of the main building, our Cicerone introduced us to the Surgeon who had charge of the five large tent wards, commencing at a distance from the build-

ing of two or three hundred yards, and distant from each other about fifty yards. Each tent ward is entered by a flight of three or four steps, about therefore three feet from the ground. The polished floors are of narrow flooring, tongued and grooved, and apparently quite air-proof; the shape is a parallelogram of about fifty or sixty feet in length by thirty wide, the walls are of canvass tightly stretched, perpendicular, in height fourteen feet; at that height the sloping canvass roof commences. The bedsteads are of iron, and covered with bright-colored counterpanes. The beneficial effect of these tents in all cases after operation, where there is danger of erysipelas, or any form of septic poisoning, or in cases of ovariotomy, you will readily imagine. The surgeon informed me that they had long abandoned the performance of ovariotomy in the main building. I hope some of Mr. Worts' richly endowed relatives will take it into their heads to furnish our hospital with similarly attractive tent wards. They are occupied here from April until the middle of October, usually.

In the afternoon at two o'clock we repaired to the very handsome and commodious Convocation Hall of the University, a very large Grecian building with heavy Corinthian columns, occupying three sides of a square, ground floors reached by flight of stone steps, main building with very lofty and wide corridors containing very numerous lecture-rooms and Convocation Hall. The large hall was decorated with French taste, the centre of the amphitheatre occupied by delegates to the Congress; around this, and on the level with the highest range of seats broad foyers as at an opera, running completely around the semicircle on which were placed rows of comfortably-cushioned seats for the ladies or male friends of members of the Congress; above, another wide gallery encircling the amphitheatre, for the general public. This attempt at a "*mise en scene*" may probably suffice for a description. Dr. Lombard, Provisional President, invited Dr. Schenk, delegate of the Federal Council, to welcome the members. Space will not permit an attempt at even an epitome of this speech or those which followed by Messrs. Heredier and Le Counté, Legislative and Executive Officers of the Federal Government of Switzerland; suffice it to say that they were in spirit and delivery all that could be desired. M. Lombard, President of the Congress, and former President of that of 1880, then addressed the assembly. I may here remark that this gentleman is a most admirably preserved specimen of a "boy" of eighty-two, with the vivacity and agility of a young man of twenty. What better illustration could the public desire of a long life passed, I have no doubt, under the influence of hygienic impressions, of the advantages to be derived by a strict adherence to the laws we attempt to illustrate, and in time hope generally to enforce. Dr. Lombard's speech sufficiently displayed that with the "corpore sano" he rejoiced in the "mens sana," being both eloquent and appropriate.

Mr. Dunant, Provisional Secretary, read a report of their labours relative to the organization of the Congress, and a list of delegates who had enrolled themselves as members. Mr. Lombard, the then Provisional President, declared their labour at an end, but on the vote of M. Pacchiotti, President at Congress of Turin, the President and members of Provisional Committee were confirmed in their several offices. M. Lombard then appointed the following :—

Presidents d' Honneur.—For Present Congress : France—M. M. Fauvel, Pasteur, Bonardel; Italy—Conade, Bodis, Pacchiotti; Germany—Eulenberg, Goltz and Varentralop; Spain—Monlego and Purlegas; Canada—Covernton : United States—M. Formiento, of New Orleans, etc., etc.

A magnificent reception was accorded to the Congress by the Mayor and Municipal Officers of the city. This took place in the Foyers of the Grand Opera. This splendid building is on a smaller scale, the model of the Grand Opera of Paris, erected at a cost of six millions of francs, which, with a very handsome and commodious Ecole de Medicine in the Grecian style of architecture, near the Cantonal Hospital, a large addition to the University, the Museum I think, and the gorgeous cenotaph surmounted by a bronze equestrian statue of the Duke of Brunswick in the Jardine Anglais, pretty nearly exhausted the twenty eight millions of francs left by this diamond-loving Duke to the city of Geneva. These said Foyers are not, you understand, the large passages giving entrance to the different tiers of boxes, but two very spacious and exquisitely furnished salons in the front of the building. I will not further attempt to describe them than to say, such evi-

dences of magnificence, good taste and advanced knowledge alike in painting, sculpture and frescoes on ceilings, as are so remarkable in the palace of the Tuilleries, Louvre, and Versailles, are here to be found. In the second salon a very fine band of musicians from the Conservatory of Geneva, delighted the very large assembly by their admirable performance of pieces from the operas of the great masters. In addition to the immense number of delegates from all parts of the world, in the somewhat sombre black evening dress, there was a fair sprinkling of ladies in ball costumes, the bright and varied colors of which offered a contrast to the dark array of the gentlemen. There were exceptions, however; the representatives from Spain, Portugal, Servia, Roumania, Brazil and South America, must, I presume, have been highly distinguished, as the various orders on the lappels of their coats, and the collars of purple or scarlet velvet with pendants attached, must surely have indicated valuable services at different times performed, either in the civil or military service of their respective governments. On Tuesday morning the members repaired to the various sections they had elected as most in conformity with their tastes and line of study. I selected the third, on drainage, sewerage, disposal of sewage, etc., etc., thinking erroneously that all these questions would be treated from a general sanitary point of view, not exclusively from a sanitary engineer's standpoint, and when on Friday I read a short paper on the system pursued in Canada, having perhaps too wide a range, I was immediately brought to order, the President declaring that sewers and nothing else could be there treated of. Accordingly I gave a very brief account of the method employed, or recommended to be employed by our engineers in Canada. The members of the section permitted me to read and speak in English, on the understanding that a resumé should afterwards be given in French, and as I had not a sufficient knowledge of technical terms in that language, my friend, Mr. Adolphe Smith, the very able travelling correspondent of the London *Lancet*, obligingly undertook, and admirably performed the service. I may here remark that a great debt of gratitude is due to Mr. A. Smith, for the admirable manner in which he has represented sanitary engineering, as practised not only in Great Britian but in Canada ; he is equally able and fluent in addressing a French as in speaking to an English audience, and without his presence very many present in the section might have returned with the idea that only in France and Germany have any advances in the science been made. The contrary in everything practical, and best calculated to subserve the object of removal of the excreta as fast and as far as possible, so that it may not return to poison us in our dwellings in the form of noxious gases, or by filtering through the soil, find access to drinking water supplies, and thus convey the germs of various diseases, is I believe the case, for instance the present epidemic of typhoid fever in Paris. In the first section this question of typhoid was taken up by a Hungarian physician, the burden of his discourse being the advocacy of the necessity for an International Convention on the subject. The second section received several reports on the disinfection of schools and hospitals. The exclusive subjects in the third section I have already dwelt on. In the fourth section were various papers concerning school hygiene. In the fifth section the papers were exclusively on demography (statistics). At two o'clock the general meeting took place in the Convocation Hall. The first paper by M. Pasteur, was on the discovery of a new specific micrococci. Pasteur's deserved reputation had attracted a great crowd of the citizens in addition to the members of the Congress, and his discourse was listened to breathlessly. His discoveries pointed to a general method for the attenuation of specific virus by exposure to the oxygen of the air.

Yours truly, C. W. COVERNTON.

Geneva, Sept. 4th, 1882.

NASO-ORAL RESPIRATORS.

To the Editor of the CANADA LANCET.

SIR,—Having read several articles lately on the antiseptic treatment of phthisis, and wishing to try this plan of treatment, I induced a patient to order one of McKenzie's Naso-oral Respirators. The Kingston druggists not having them on hand, one of them kindly sent to Mr. Mills, of Brantford, the agent for the Dominion, who immediately forwarded one. I confess I was somewhat surprised at the simple construction of the little instrument, which, however, seemed very well adapted for the

purpose. But I confess that I was much more surprised, and also indignant, when I was told that the retail price of the little article was four dollars. I really did not know how to put a face on to tell my patient that such was the case, so I compromised the matter by concluding to pay for it myself, and loan it. Let me describe it in a few words for the benefit of those who have not seen it. It is about the size of a small coffee-cup, made out of a bit of light stove-pipe iron, bent somewhat in the shape of a small coal-scuttle, with a little perforated lid in one end, for receiving a small piece of sponge. The thing is so simple and cheaply got up that it might be sold for fifty cents, and then pay 100 per cent. profit. In fact the article as it stands before me might be made of silver plate for one half the price it is sold at. Whether Mr. Mills, the Dominion agent, wishes to make a fortune by selling inhalers, or whether the Edinburgh maker is a rogue I know not, but certainly the price is exorbitant. I have been in practice for 16 or 17 years, and it caps anything I have met, and I wish to call Mr. McKenzie's attention to the fact.

Yours, etc,, MEDICUS.

[The regular retail price of the inhalers is $3.00 each, or $2.50 by the half dozen. The Kingston druggist no doubt added $1 for his profit on the transaction].—ED. LANCET.

Reports of Societies.

HURON MEDICAL ASSOCIATION.

A meeting of the above association was held at Clinton, on the 2nd ult. The following members were present:—Drs. Stewart and Hurlburt of Brucefield, Scott and Campbell of Seaforth, Graham of Brussels, Sloan of Blyth, Macdonald of Wingham, Hyndman of Exeter, Hutchinson of Bluevale, and Worthington of Clinton.

Dr. Taylor of Goderich showed a lady 50 years of age, who has regurgitation, both through the mitral and aortic orifices. There is marked pulsation in the episternal notch.

Drs. Stewart & Hurlburt of Brucefield showed a case of well marked peliosis rheumatica. The patient is a man of 52 years of age. The disease is of three years standing, of an intermittent character. Regurgitation through the mitral orifice and commencing degeneration of the heart. The disease so far has been uninfluenced by salicylic acid, iron and the alkalies. There is no change detected in the blood.

Dr. Hutchinson, of Bluevale, showed a case of epithelioma of the clitoris. Dr. Worthington of Clinton, gave a report of a long standing case of catarrh of the bladder, continuing 27 years and gradually getting worse.

Dr. Graham, of Brussels, exhibited some very good specimens of tubercle bacilli stained according to Erhlich's method. He had tried Baumgarten's method but failed to make them visible. The sputa was taken from a patient well advanced in phthisis.

After the usual routine, the following very pleasant incident took place, viz: The presentation of a very handsome gold watch to Dr. Stewart of Brucefield, on the eve of his departure for Vienna. The *souvenir* was accompanied with the following address, which was read by Dr. Worthington:

DEAR DR. STEWART,—Your professional brethren, both in and out of this Association cannot help feelings of regret at your intended departure from among us. It is possible that not all, or any of us, may meet you again, and we desire before you leave, to express in some degree our appreciation of your unvarying courtesy and kindness—of your enthusiasm in and devotion to medical and surgical science—and of your entire unselfishness and willingness to render all the aid in your power to the members of the profession. Mainly through your efforts this association has arisen from a dormant state to be a successful and well known institution within and even beyond the boundaries of Ontario. Our desire is that our memories may be stored away in your heart, so that you can occasionally commune with us in your absence. In the name of, and by the wish of your professional coworkers we beg to present to you this memento as an indication of our regard. We wish you a happy and prosperous journey and entire success in the line of study you intend to pursue, and more than all we wish your safe return, that we may again see your face. Dr. Stewart made a very appropriate reply.

Dr. Graham of Brussels was elected Secretary of the Association in the place of Dr. Stewart.

The editor of *Walsh's Retrospect* having started a vaccine farm has found the new calling so successful as to necessitate a temporary suspension of the journal. He promises that he will take it up again in January.

Selected Articles.

SEVERE INJURY TO THE HEAD.

Clinic by ROBT. JOHN GARDEN, M.D., C.M., *Aberdeen Royal Infirmary.*

GENTLEMEN.—The first case I bring under your notice to-day is the man I now show you, who has been under observation for some time in the wards. His history is as follows: He was admitted on October 16th—that is, fully three weeks ago. The account given of him was that when drunk he fell down a stone staircase, lighting on the back of his head with considerable force. He was brought to the hospital, and his condition was found to be this: On the back of the head there was a contused wound of the scalp, running cross-ways, and about one and a half to two inches in length. The bleeding was considerable. The wound extended in depth to the bone, the peri-cranium being laid bare. On examining with the finger there was no slit or depression in the bone. Blood was issuing in moderate quantity from the nose and left ear. Generally, the patient was insensible and lay on his back with the muscles of the extremities relaxed. The face was pale, the skin generally blanched, with the surface cold (temperature lowered). The pupils were regular, rather dilated, acting slowly to light. The breathing was shallow and quiet, with occasional sighing. The pulse was 60, small, empty, and uneven. The treatment adopted was simply application of warmth to the surface of the body, and attention to the wound, which was washed with a solution of carbolic acid and dressed with antiseptic dressings.

October 17th; Pallor on left face and skin; patient beginning to be restless; insensibility not so deep; can be more easily roused; is irritable when disturbed, especially if his eyes, which are kept firmly closed, be opened, speaks incoherently when roused. Retention of urine, catheter had to be used. Pulse 100, fuller, quicker, and more even; temperature 101°. Wound doing well.—18th: Patient still restless and irritable; lies on his side with legs and arms flexed; face flushed and head hot. Pulse 102; temperature 102°. Cold applied to head. Wound doing well.—19th: Patient still restless, irritable, confused, and incoherent. Pulse 108; temperature rose in the evening to 103.5°. Patient had an enema of house medicine and soap. Use of catheter no longer necessary. The high temperature continued for several days, and gradually subsided; the patient gradually regained consciousness and became rational. Pain in the head was complained of and deafness. He is now as you see him, almost well. He complains occasionally of pain in the head, and feels dizzy when he stands up. His memory is somewhat defective, and his manner generally is peculiar, Temperature and pulse are normal. On the left ear he is very deaf. On examination with the speculum, there is a raw line extending across the membrana tympani, pointing to a rent having been present.

The second case I shall relate is a most interesting one. About two years ago I was called to see a youth, aged seventeen, who had sustained a severe injury to the head. The history I got was that the lad was standing with his hands in his pockets near some companions who were throwing the hammer. His back happened to be to the thrower. The hammer swerved from a straight course, and made directly for the boy's head. He was called to, ducked his head, but only so far as to bring it exactly athwart the parabolic course of the weapon, which felled him bleeding to the ground. When I saw him he was lying on the flour of a house into which he had been carried. On the upper and back part of the head to the left side there was a wound surrounded by a considerable swelling of a soft, doughy nature with hard edges. Generally he was insensible, or could be roused slightly when spoken to very loudly; the face was pale, and the surface of the body cold; the breathing was shallow, quick, and tolerably regular with occasional sighing; the pupils were unaffected, sensitive, though somewhat slowly, to light. On consultation with Dr. Rodger it was resolved to enlarge the existing wound, and evacuate the blood effused into or below the scalp. This was done in order to examine the state of the bone. On doing so, and getting rid of a large quantity of effused blood, there was found a large deep, circular depression of the skull, with a diameter of at least three inches, and corresponding to the globular hammer which struck it. The outer table of the skull was shattered, several large fragments were removed, and these I now show you. The inner table was depressed, but regularly, that is to say, there appeared to be no spicula projecting into the brain likely to give rise to irritation. As the symptoms were solely those of concussion, and no signs whatever of compression manifested themselves, the edges of the wound were brought together, except at the centre, where a sufficient opening for the escape of any discharge was left. Cold water dressings were applied. Sometime after this the patient vomited. Now, gentlemen, it would but weary you to detail the course of this case. Suffice it to say that it ran uninterruptedly towards recovery. Under the influence of warmth to the surface of the body, the symptoms of collapse gradually wore off. The mental symptoms disappeared, and consciousness was slowly recovered. There was no great reaction. The temperature at no time rose much above 100°. From first to last there was no unequivocal sign of compression. The wound healed slowly by granulation. The

youth is now in perfect health, bodily and mental, bereft, it is true, of a large piece of the outer table of his skull, and having a permanent depression of great depth and size of the inner table.

The third case is that of a dyer, aged fifty-three, who was admitted into Jacob's Ward on the forenoon of Saturday the 22nd of May last. The account was that when drunk he had, that forenoon about 10 o'clock, fallen down a stone staircase and alighted on the top of his head. At the visit at 12 o'clock his condition was as follows :—He was lying on his back, insensible but not profoundly so, for he could be roused when spoken to loudly, but only roused. His face was pale, surface of body cold. The pulse was about 80, small and empty. The breathing, though slow, was shallow. The pupils were slightly contracted but regular. On the top of the head, on the right parietal and frontal bones, there was a slight swelling, but no wound or depression. That was at 12 o'clock. In about an hour and a quarter—that is, about three hours and a quarter after the receipt of the injury, matters had very much changed. The insensibility had increased and developed into profound coma. The pupils were now irregular, the left was much dilated and right still contracted. The breathing was slow, deep, stertorous, with puffing of the cheeks. The pulse was fuller and slower. The left arm and leg were rigid as compared with the right. The urine was retained and contained albumen. The swelling on the top of the head was much more distinct. Rapid intracranial effusion of blood was diagnosed. A consultation was held to consider the propriety of an operation. It was concluded not to operate on the grounds that the patient appeared to be moribund, and it was impossible to say in what part of the brain the bleeding was taking place, whether on the surface or at the base. This decision I afterwards had reason to regret. Meanwhile the symptoms progressed. The rigid muscles of the left side became paralysed. The face became flushed, and perspiration poured from it. The pulse was now full and very slow, but immediately before death small and quick. The temperature rose, and immediately before death was 104°. The patient died thirty-eight hours after the receipt of the injury. At the post-mortem examination there was extravasion of blood in the scalp over the right frontal and parietal bones. There was simple fissure of the skull, at the interior part, being separation of the inter-parietal suture, and, as it extended backwards, diverging into the right parietal bone. There was no depression. The upper surface of the brain was lacerated, and a large quantity of blood effused below the dura mater. The kidneys were granular.

Injuries to the head have always had and always will have a peculiar interest to the surgeon. In the literature of surgery, affections of the head and brain occupy a very prominent place. Since the classical writings of Pott and Abernethy much has been written on these, as they have received the most careful attention from all surgeons of note. For this there are many obvious reasons. Extremely liable to injuries of various degrees of severity, from a slight cut or bruise of the scalp to severe compound fracture of the skull and laceration of the brain, it falls to the lot of every surgeon, nay, every practitioner, to treat many of these, and on the judicious or other management of even the apparently most trivial cut may depend to the patient consequences of the gravest kind. In these the possible dangers immediate or remote are very many, and in these more than in any other affections that I know of is the unexpected wont to take place. A patient comes to you with a slight cut on the head the result of a fall or blow. You, thinking the matter trivial, assure your patient that the injury is of no moment, and dismiss him after a two minutes' consultation, occupied mainly with general remarks. You hear nothing of him for a few days, when you are sent for to see him and find him in bed. A rigor and it may be sickness have seized him. The wound looks angry, a suspicious redness surrounds its edges. Great general depression characterizes your patient, and despite all your precautions your patient, especially if he be an elderly and debilitated individual, is dead within a week of receiving his injury from erysipelas of the most malignant type. On the other hand, you are called to a case where very severe injury has been received. You find severe contusion to the scalp and soft parts, unmistakeable fracture to some part of the skull, and with it very great depression, while the general appearance of the patient is alarming in the extreme. You rapidly form and express a prognosis of the worst kind. Notwithstanding this the patient may take a turn, reaction set in, and complete recovery take place. Now these are no fancy pictures, they occur in practice every day, and the fact that they do teaches these two lessons. In the first place think not too lightly of any injury to the head, however slight it may at first sight appear ; warn your patient of the possibility of serious mischief accruing if the wound be neglected, and if serious consequences follow—as they may do in any case—then you are commended for your foresight. On the other hand, however desperate the case may appear, do not too rashly volunteer a bad or fatal prognosis, as you may find yourself very unexpectedly in the wrong. Hippocrates it is, I think, who, with his usual sagacity, has a remark to this effect, that no wound of the head is too trivial to be neglected, and no injury too severe to be beyond hope; and Hippocrates undoubtedly is right.

Now, with these general remarks, let us look a little more closely at the cases I have brought under your notice. These are very fair examples of

(LIQUID.)

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Rumford Chemical Works, Providence, R.I.

☞SEND FOR DESCRIPTIVE CIRCULARS.☜

the conditions known as "cerebral irritation," "concussion," or commotion of French writers, and "compression." Now, the first remark I would make is that one of the difficulties we, as clinical teachers, have to contend with is that students straight from systematic lectures, or from reading books, are apt to expect to find cases much more typical, so to speak, then they usually are. For example, take "concussion" and "cerebral irritation," two conditions, each presenting a certain series of symptoms, with which you are familiar in your systematic lectures. Now, you find, and this is only a necessary condition of the systematic exposition of a subject such as the one under consideration, certain symptoms given as characterizing the one, and certain symptoms as belonging to the other of these states. From this you would expect to find in actual practice each example of the one condition or of the other sharply defined, so that you would be enabled to say categorically this is "cerebral irritation," or this is "concussion," as the case may be. This is far from what you will really experience. The science of clinical surgery is of the most concrete kind, each case forming a problem to be solved in itself, generalizations, being only to a certain extent applicable.

Of the cases I have cited two recovered and one proved fatal. Look particularly at the symptoms of the early stage, and you will be struck with the similarity of these in all three cases. In all there had been a severe blow to the head. In all three there was immediate insensibility; in all three there were paleness of face and pallor of body; in all three there was shallow breathing; in all three there was small, rather slow, empty pulse; in all three the pupils were neither dilated nor contracted, but regular and acting slowly to light. These lasted for a longer or shorter time in all three. Now, what do these symptoms point to? Well, they are just the symptoms of "concussion"—that is to say, they are the symptoms which you find after a severe blow to the head, when either recovery takes place, or death may quickly follow, and the post-mortem examination may show neither depression of the skull, nor laceration of the brain, nor effusion of blood. In other words, there was in all three, disregarding meanwhile the termination of the cases, a first stage of "concussion." This is what, I believe, happens in the great majority, if not in all, cases of severe injury to the head; indeed it is difficult to conceive of the possibility of force sufficient to cause fracture or laceration of the brain and hæmorrhage being applied to the skull without causing this "concussion," especially when it is remembered that a mere blow from the fist often suffices to cause stunning, which is no other than slight concussion with temporary effects. From this statement it follows that it is, strictly speaking, incorrect to compare or contrast "concussion" with "cerebral irritation" and "compression"; for, as we shall afterwards see, these belong to different stages although of the effects of a blow.

Now what is this "concussion?" What is this obscure, mysterious condition which is accompanied by symptoms so severe, and which may be so transient? Much has been written on this subject, and the older writers were greatly in the dark about it. They were therefore left to assumptions which recent investigations have clearly proved to be untenable. Before referring to the explanations which have been offered, I should like to point out that the one outstanding symptom common to these cases is insensibility of greater or less profundity and of longer or shorter duration. This points to a suspension of the functions of the cerebrum, and the question is, "How does a blow, how can a blow effect this? The answer to this resolves itself into an account of what pathology and physiology have taught us on the matter. It must be remarked that the pathological changes in the brain are often remarkably slight to appearance and may be overlooked. This it was that misled Pott and writers of his time, and drove them to the first assumption in regard to the condition of the brain—viz., that as a result of the blow vibrations occurred; these reverberated from the side of the skull opposite to that receiving the blow; and thus, by a series of reverberating vibrations, there was caused molecular displacement of the minute elements of the brain Now, gentlemen, consider for one moment, and do you think it at all probable, having regard to the extremely fine constitution of the brain, that all this shaking can take place without producing laceration and consequent hæmorrhage? But apart from this, is there reason to believe that a blow, however severe, can, in the conditions in which the brain is placed—viz., in a cavity with unyielding walls, and completely filling that cavity—I say is there reason to believe that a blow can produce such a through and through shaking and misplacement of molecules as this theory supposes? Experiments of a very interesting kind come to help us here, and, to my mind, s ttle the question in the negative. Alquié and Cama took a glass vessel, filled it with material with the consistence of brain, suspended in it a number of fine dark threads, and then concussed the vessel. No motion of the threads what ever was observed, showing that, although there may have been motion of the whole mass, the individual particles did not move. Similarly skulls filled with sand, in which an opening covered with a membrane had been made, and into which a long needle with paper on the end had been sunk gave entirely negative results, There is, in fact, no evidence that such molecular changes as supposed by Pott to take place occur, and his theory consequently falls to the ground.

Another theory is that based on the discovery

of Rokitansky and Nélaton—viz., a number of minute extravasations of blood in the brain. The theory was that the pathology of concussion was just a confusion of the brain with small extravasations. Unfortunately for this theory, it is an undoubted fact that cases occur where these apoplexies are entirely absent; and all, therefore, that can be inferred from their presence is that concussion and contusion occasionally co-exist.

I come now to the third and by far the most feasible theory of concussion—viz., that propounded by Fischer of Breslau. It is shortly stated thus: The blow to the head produces reflex paralysis of the vessels of the brain. Serious interference with the nutrition of the cerebral ganglia is produced, and this it is which give rise to the symptoms of concussion. In this connexion it is necessary to state that the one constant condition found post-mortem in fatal cases of concussion is an empty state of the arteries and a congested state of the veins. This is the pathology of concussion. Looking at the question from a clinical point of view, and without going minutely into the matter, which would be impossible now, it will suffice to ask, and if possible answer two questions—viz., 1. Can a blow applied to the head produce this paralysed state of the vessels? 2. Given this condition of the vessels, does it account for the pathological appearances found after death and the symptoms during life? In regard to the first question, there is evidence that a blow can produce such a condition. It is well known that irritation applied to the skin may produce a marked reflex effect on the vessels of the brain and elsewhere. Nothnagel irritated by electricity the skin in the neighbourhood in rabbits, and thus produced reflex contraction of the vessels of the pia mater. This contraction, however, was always of very short duration, and as Fischer points out, does not explain the duration of the symptoms of concussion. Other experiments, however are more to the point. Goltz has shown in his well-known experiment of giving a blow to the belly of a frog, that paralysis of the heart and vessels can be produced, and that symptoms very similar to those of concussion, accompany it, while Koch and Filehne, by concussing the skulls of dogs and rabbits by a series of rapid blows with a hammer, produced the same results. These experiments go very far to answer in the affirmative the first question. In regard to the second question it is sufficient to say that an empty state of the arteries and a congested state of the veins is the only condition which is found constantly to accompany the symptoms which clinical observation discovers to be those of concussion, and that this condition is that which results from paralysis of the vessels, and, it may be, a partly paralyzed state of the heart. So much for what I have called the first stage of all the three cases, and its explanation. In all three the symptoms were identical; the cases differed only in the duration of this stage.

On following the cases further, they are now found to diverge. What is called reaction sets in. The paralyzed condition of the vessels and heart begins to wear off. The tide of stronger circulation sets in. In the first case the symptoms I have described manifested themselves. They were—(1) Patient extremely irritable; (2) patient lying on side, with legs drawn up; (3) eyelids firmly closed; (4) quick pulse and fever, temperature reaching 103°; (5) mental symptoms lasting two or three weeks. Now what do these symptoms indicate? They are fairly marked symptoms of a condition which has been called "cerebral irritation," and what is that? I believe it to be no other than a variety of the stage of reaction, or more properly perhaps a degree of reaction. It is probably due to a hyperæmic state of the brain, more particularly of the meninges, as evidenced by considerable rise of temperature and of febrile symptoms generally. The symptoms of this condition have always appeared to me to be very similar to those found in non-traumatic cases where inflammation of the membranes of the brain is believed to exist. But what of laceration of the surface of the brain? Is that not the pathology of cerebral irritation? There is no positive evidence to show that it is. Experiments on animals prove that the cerebrum can be cut or torn to a considerable extent without giving rise to marked symptoms. Clinical experience points to the same conclusion. In a remarkable case which happened in this hospital, under the charge of the late Dr. Kerr, where a man bending forward in front of a circular saw in motion, had his forehead ripped open, and the brain so lacerated or torn that a considerable quantity of brain substance escaped, recovery took place without any marked cerebral symptom whatever. It is extremely doubtful if laceration *per se*, and apart from hæmorrhage and secondary changes, does give rise to any symptoms other than those that would result from destruction of the part of the brain lacerated. It is certainly not rational to ascribe the symptoms of cerebral irritation to superficial laceration. Be the exact pathology of cerebral irritation what it may—and our knowledge of matters cerebral is anything but complete—what I wish to point out is that, looked at clinically, it belongs to the second reactive stage of concussion, and it is therefore as unscientific, as inconsistent with observation and fact, to contrast it with this as if it were a distinct condition *ab initio*. One other symptom in this case calls for remark—viz., bleeding from the ear. What did that indicate? In this case probably only rupture of the membrana tympani. There was no escape of clear fluid, and therefore nothing to point to fracture of the base of the skull.

The second case was a more typical one of

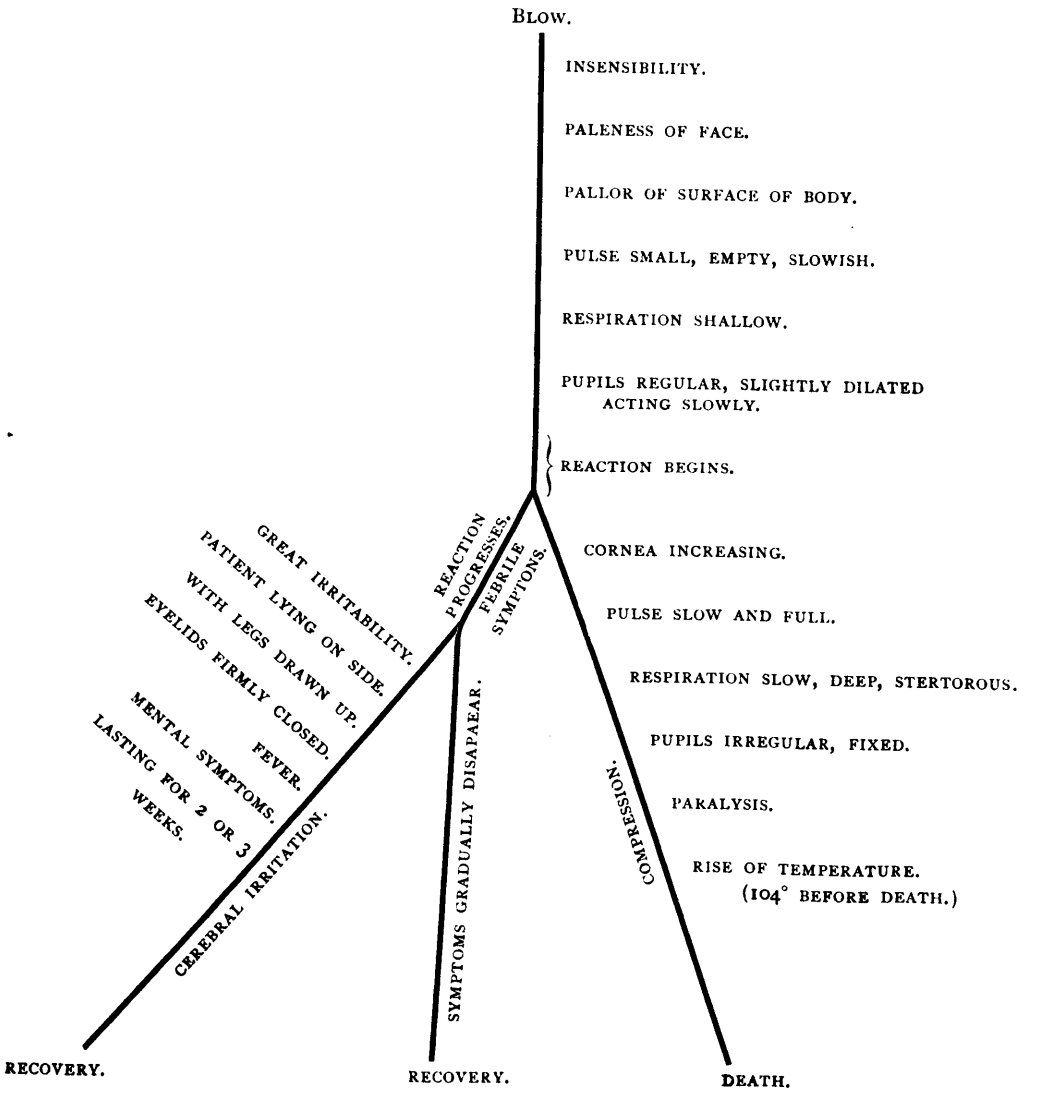
concussion, where the symptoms gradually subsided, the general paleness disappeared, the pulse recovered, and consciousness gradually returned. Vomiting took place as reaction began. The reactive febrile symptoms were moderate. Perfect recovery took place. The interest attaching to this case was the depression of the skull. In this case there was about as much depression as well could be, and yet from first to last there was not a single symptom of compression. Now, this raises the important question. Can depression of a fragment of bone, acting as it does on only a comparatively small part of the brain, and apart from any secondary changes which may take place as the result of the blow and depression, give rise to symptoms of compression? If this case teaches anything at all it indicates that it is exceedingly doubtful if it can. Now, gentlemen I do not wish to speak dogmatically or infer too much from one case, but a case such as this, admitting the possibility of such a thing, forms a very staggering exception, and, I think, has great value attaching to it when weighing facts and evidence *à propos* of this question. When it is remembered that previously, symptoms were ascribed to compression which belong to concussion simply because depression was present, and when the fact is taken into account that experiments on animals performed by Pagenstecher and others (which I need not detail) show that distinct symptoms of compression come on only after a large quantity of fluid is forced into the skull and produces great pressure on the brain, then it is extremely difficult to see how a depressed piece of bone, exerting at most a comparatively slight degree of pressure and existing only on a very limited part of the brain, can determine symptoms so marked as those of real compression.

If, then, depression of bone does not produce symptoms of compression, what does? Our third case, I think, goes far to answer this question. Here we had a first stage of concussion, and here, too, reaction set in, but with a very different result. There being considerable laceration of the brain and rupture of vessels, with the recovering circulation hæmorrhage took place. There was found post mortem a very large effusion of blood. Now, apart from an effusion or abscess formation that may occur later in the history of any given case of injury to the brain, it is highly probable that this is the constant cause of real compression occurring early. What, then are the symptoms of these conditions? Our case gives us them. They are:—(1) Coma increasing in profundity; (2) pulse becoming slow and full; (3) respiration becoming slow and stertorous; (4) pupils uneven; (5) paralysis; (6) temperature rising as symptoms increase. These are unmistakable symptoms, and they come on after symptoms of concussion; and, like cerebral irritation, compression is an outcome of concussion. Instead, then, of putting the symptoms of these conditions, as is usually done, in parallel columns, I have arranged the symptoms in diagrammatic form (see next page), showing at a glance the course any given case of injury to the head may take. Of course this table has not reference to any secondary complication that may arise, such as abscess formation, and it should be remembered that all the stages vary much in duration in any given case. If death takes place from concussion *simpliciter*, as it may do, then it is likely to occur very early. So much for the symptoms. As to *diagnosis*, our cases did not present any great difficulty. In the third case, at one stage the question "Drunk or dying?" might have occurred; but the very rapid course of the symptoms very soon made the real state of matters clear.

Now, gentlemen, what do these cases teach us as to the *treatment* of severe injury to the skull? In other words, suppose you were called to see a case similar to any of these I have described; what would you do? and why? In the first stage the indications would be to restore the enfeebled circulation. This is effected by applying warmth to the surface of the body by means of hot bottles, etc. If the collapse be profound, friction to the surface of the body, or the application of an irritant, such as mustard, will do good. It is no use being too officious at this stage, as time must be allowed. During the reactive stage, if there be symptoms such as those we have in the first case —viz., those of so-called cerebral irritation, then cold to the head, shaving the hair, darkening the room to obviate the irritating effect of light, will be beneficial. If there be insomnia bromide of potassium, alone or combined with chloral, will be found useful. In all cases attend to the bladder and bowels, keeping the latter tolerably freely open. In cases such as the second the indications for treatment are few beyond attention to the bowels. But this case and the third case suggest very interesting questions as to local treatment, and more particularly as to when and what operative procedure should be employed. What are the conditions that render early trephining necessary? This is the great question that has divided surgeons. Pott laid down the law very strongly that this operation should be done in all cases of fracture of the skull with depression, and, after describing the operation and various measures to be employed, he complacently indicates that the surgeon who has adopted these may say to himself, in the words of Pope,—

"Thus far was right; the rest we leave to heaven."

Heaven, however, was not in many cases too propitious. This dictum of Pott's was followed by surgeons at the time blindly. Thus it has been too often in the history of surgery. Many a *hereditas damnosa* has been handed down in this way. Abernethy, however, put a check on it; and from the observation of cases where he found that frac-


BLOW.
INSENSIBILITY.
PALENESS OF FACE.
PALLOR OF SURFACE OF BODY.
PULSE SMALL, EMPTY, SLOWISH.
RESPIRATION SHALLOW.
PUPILS REGULAR, SLIGHTLY DILATED
ACTING SLOWLY.
REACTION BEGINS.
REACTION PROGRESSES.
FEBRILE SYMPTONS.
CORNEA INCREASING.
PULSE SLOW AND FULL.
RESPIRATION SLOW, DEEP, STERTOROUS.
PUPILS IRREGULAR, FIXED.
PAKALYSIS.
RISE OF TEMPERATURE.
(104° BEFORE DEATH.)
COMPRESSION.
DEATH.
SYMPTOMS GRADUALLY DISAPEAR.
RECOVERY.
GREAT IRRITABILITY.
PATIENT LYING ON SIDE.
WITH LEGS DRAWN UP.
EYELIDS FIRMLY CLOSED.
FEVER.
MENTAL SYMPTOMS.
LASTING FOR 2 OR 3
WEEKS.
CEREBRAL IRRITATION.
RECOVERY.

ture with depression did not of itself in every case or in the majority of cases, prove fatal, advised waiting for symptoms. He simply used his own judgment, and he was right. What do our cases teach us on this point? If there be anything that our second case proves at all, it is this, that fracture of the skull with marked depression is not an indication for trephining. But it teaches more; it shows that compound fracture with depression is not an indication for operating. This is just exactly what would be expected from what I have already said when discussing the symptoms as to depression being a cause *per se* of compression. Depression of a part of the skull, it was argued, cannot give rise to symptoms of compression. Elevation, therefore, is no use. But what of our third case? In this case there were indications for trephining; and I regretted that the operation was not done, although the reasons for not doing it were quite valid. There were distinct indications of compression, although without depression, and it would have been interesting to have seen if these would have been relieved by opening the skull. Here, again, we have corroborated what we have previously said as to the cause of symptoms of depression coming on early—viz., that they are probably due in all cases to rapid intra-cranial hæmorrhage. What, then, are the indications for trephining early in severe injury to the skull? They may be, I think, arranged under the two following heads:—

1. When there is reason to believe that there is rapid intracranial hæmorrhage going on with or without depression. This fact will generally be indicated by such symptoms as I have described in the third case, but a presumption may be afforded in favour of bleeding from the exact situation of the injury. For instance, if there be a fracture at the interior inferior angle of the parietal bone, it is quite possible that the middle meningeal artery may be injured. This does occasionally happen and should be kept in view.

2. When a foreign body has penetrated the skull and is lodged in the brain, and cannot be removed without enlarging the opening. These are the indications for early trephining. But what, you will say, of stellate fractures, do these not present absolute indications for operating? In answer to this I would say that it is extremely questionable if they do. But granting that they do they come under this second head, for in these the presumption is that the inner table of the skull being shattered the fragments are driven in upon the membranes and are thus for all practical purposes foreign bodies which sooner or later will by their irritation cause inflammation of the membranes of the brain.

Gentlemen, I have touched upon various points of great interest in connexion with injuries to the head. It has not been possible to discuss these fully within the limits of one lecture. I have endeavoured to explain the more salient symptoms of the cases I have described to you and to draw what practical conclusions the facts fully warrant. I trust that what I have said will in some measure stimulate you to the study of these all-important affections.—*Lancet.*

SURGICAL CASES.

BY L. BAUER, M.D., M.R.C.S., ST. LOUIS, MO.

CONTRACTION OF THE KNEE-JOINT AND ITS RELIEF.

The patient is a well-built, well-developed, and muscular individual, thirty-seven years of age, used to work requiring strength and endurance. Until he met with an injury in March last, in the St. Louis Tunnel, his health had been good. The injury consisted in a blow upon the right knee-joint. Pain and swelling ensued. Nevertheless, he continued to work for about eight weeks, pain gradually increasing. At last, he had to lay up, and remained helpless for several months. During this time, his limb became flexed, and all efforts at extension were so painful as to prohibit their renewal. Thenceforward he resorted to crutches.

FIG. I.

In July he presented himself at our clinic. The knee-joint was virtually sound and painless. Its motion, within a limited range, free; the patella in place and movable; but extension could not be effected without painful resistance on the part of the inner hamstring muscles. Their contraction could not be, even temporarily, subdued by profound anæsthesia. Fig. No. 1 represents the condition of the patient on admission.

It would seem as if at no time the integrity of the articulation had been disturbed. Probably a concussion at the internal condyle of the femur, lays at the foundation, explaining the unusual contraction of this muscular group.

After myotomy of the contracted muscles had been performed, the limb could be extended without force, and held in straight position by a plaster of Paris bandage. The case is not recorded as something extraordinary, but as an encouragement for younger practitioners, who, not infrequently, exaggerate the obstacles in dealing with such cases. If placed in charge of recent injuries to the knee, a prompt immobilization of the joint is a sure preventitive of deformities.

SUPPURATIVE COXITIS—EXSECTION—RECOVERY.

The history of this little patient is painful to relate. Once he was a healthy, vigorous, and lively little chap. A fall upon the trochanter major excited coxitis with its concomitant malposition of the extremity. A professional neighbor scented dislocation of the femur. But when he had done with the little sufferer, the inflammation had advanced to suppuration, and the apparent elongation of the limb had given way to apparent shortening. Another son of Æsculapius gave him the benefit of weight and pulley, and the answer was an abscess in the groin.

Then our clinic had a chance. Admitted to the hospital department, we had ample opportunity to elicit the entire complex of symptoms. The clinical records of the institution relate briefly as follows: "General attenuation and debility; fever, with daily exacerbations; no appetite; thirst prevailing; tongue coated, its margins moulded by the teeth; bowels either sluggish or loose; sleep frequently broken by that peculiar pain in the affected extremity, so characteristic in coxitis, and obviously excited by reflex spasms; pelvis elevated; extremity flexed—adducted and inverted; abscess in Scarpa's triangle; group of adductor-muscles and the tensor vaginæ femoris rigidly contracted; limb more reduced in circumference than its fellow; shorter by two and a half inches." The case is obviously of traumatic origin; but the pedigree on mother's side shows pulmonary tuberculosis; father fine specimen of physical perfection.

From the records, the case is a grave one, admitting of no favorable prognosis. Moreover, a malarial country surrounds the patient's domicil, and has made some impression upon liver and spleen, both being enlarged. Notwithstanding unfavorable circumstances, the patient rapidly improved under treatment: 1. Division of contracted muscles; 2. Immobilization of the affected articulation, both securing its absolute rest. Thenceforward, undisturbed sleep. Internally: Quinine, to subdue the fever; generous diet, with Trommer's extract of malt (Fremont preparation), alternately in combination with iron or cod liver oil. It will be seen that the abscess was not touched. In renewing the plaster bandage, the abscess was found diminishing in size, and entirely painless. Very likely, the healthy surroundings and the hygienic advantages of the college building, had something to do with the rapid amelioration of our patient, at least as far as the malarial infection was concerned. When the warm season set in, we permitted the patient to return home, not before, however, we had the plaster-bandage replaced by Thomas' splint, raised the healthy extremity by an iron frame two inches in height, and provided a pair of crutches. Occasionally the patient was brought to town and submitted to our inspection. He was doing well, and fast assuming a healthy outlook.

In August of the same year (1881), the measles broke out in the neighborhood. The patient wa promptly removed to a farm, but unfortunately too late to escape the scourge. The attack was rather mild, and terminated without any unfavorable occurrence, except that it most disastrously compromised the progressive convalescence of the articulation. During the supplementary crisis of the measles, the joint became painful. The abscess, which had by that time, entirely disappeared, refilled, and by the inflammatory condition of its environs manifested the irritant character of its contents. When forced to be opened, it discharged matter of two distinct and separate periods; one part semi-solid, caseated, in a state of fatty degeneration; and another fluid somewhat decomposed, encompassing organic detritus, obviously of recent date.

The constitution reflected the effects of this state of things. Fever returned, and extensive decay of organic tissues became obvious. On motion of the joint crepitus was discovered. Exsection was recognized as the ultima ratio, and consequently executed, the head, neck, and part of the trochanter major, being removed on account of caries. The acetabulum was carefully scraped until the instrument disclosed bleeding bone structure. As soon as the dead structure had been separated from the living, the child rallied even faster than he had depreciated, and a month after the operation, the patient could be removed to his home. A year has since passed by. He has been as healthy and as sprightly as a lark. The wound

has long since firmly cicatrized, and half a dozen fistulous tracts have likewise closed. The present weight of the child is enhanced by thirty pounds; the former vigor has returned; the joint allows no inconsiderable motion in every direction, and defect in the length of the extremity is not great.

Up to a certain date, the patient has used crutches, the splint of Mr. Owen Hugh Thomas, of Liverpool, which exceeds, in its utility, all other mechanical means and measures, and had his extremity suspended by the other being mechanically raised. Lately, however, we have made an attempt at using the extremity for locomotion, without artifice, and have thus far received no rebuke. Fig. 2 illustrates the present status of the patient, from which the normal position of both pelvis and left extremity may be readily deduced.

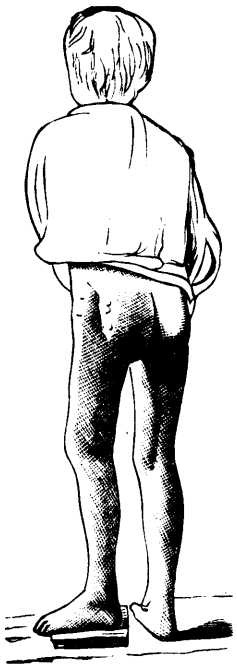


FIG. 2.

During the last five years, we have performed but three exsections of the hip-joint, which, like the last, were unavoidable. The treatment of coxitis has been so materially improved, and rendered effective, that the contingency of exsection does not occur as frequently as in former years, particularly if the cases are submitted to proper treatment at an earlier stage.

FRACTURE OF THE NECK OF THE SCAPULA.

The last case is of more than ordinary interest. The right shoulder appears, on comparing with the left, flatter, the deltoid muscle being wasted, or, as it were, stretched, and below its insertion at the humerus there is a deep and longer fold, or furrow, different in direction, length and depth on the opposite side. In measuring the distance of either shoulder from the spine, we notice that the right approximates more by about one inch, much more readily noticed in the gentleman than in the illustration. This change in the symmetry of the person was brought on by a fall, either upon or with the shoulder against some prominent object. The physicians called pronounced the case dislocation of the shoulder, with which its symptoms corresponded, reduced it by the ordinary methods, bandaged the arm to the chest, and kept the hand in a sling. Strange to say, the patient did not feel relieved; but on the contrary, the pain increased steadily along the brachial plexus. When, at last, the restraint was removed, the patient was unable to use the arm. Every attempt was accompanied by intensified pain, and even when at rest the extremity felt numb, and exhibited a different temperature. These symptoms had not perceptibly changed in six months, when the patient consulted us about his case. The symptoms indicated pressure upon the brachial plexus. The axillary cavity was materially diminished by swelling and intumescence; but no foreign substance could be discerned. The deltoid muscle is flat, and the acromion somewhat prominent; but the joint is intact, and moves normally, of course under pain; the extremity is, moreover, attenuated and almost powerless.

Now, it is evident that such symptoms do not follow a promptly reduced simple dislocation. We, at least, have never observed them, nor have others. Yet, we have no doubt that the physicians in attendance had palpable evidence of dislocation. Now, the question arises: "What anatomical derangement exhibits the same signs with dislocation, without its being the same? We can find no other than *fracture of the surgical neck of the glenoid cavity o the scapula.* In this fracture, the entire joint drops, and thus presents the exact symptoms of dislocation of the humerus into the axillary space, etc., viz.: Prominence and apparent protrusion of acromion; depression below the same; filling of the axilla by the head of the humerus and glenoid cavity; loss of function and pain. Very few surgeons think of anything else under such circumstances, and relieve the displacement. They are rather surprised at the speedy reduction, but give no heed to it; but when the pain persists, they gradually grow skeptical as to the correctness of their diagnosis. We have, ourselves, passed through this ordeal, and have learned by disappointment and sad experience, to be more careful in our diagnosis of dislocation. This candid admission of our own error will protect us against the suspicion of sinister intrusion. It is with a view of aiding our fellow-practitioner in the correct diagnosis, that we refer to this subject. Some surgeons have never met

with a fracture of scapula at its surgical neck, and naturally enough, deny their occurrence in toto. They are, indeed, rare; and when occurring, may be mistaken for dislocation. We had, altogether, four cases, including the present one. In one, we failed in the diagnosis, and when, at last, the actual truth dawned upon us, it was as in the present case, too late for correction. In two cases, we recognized the nature of the injury, and averted the otherwise inevitable consequences.—*Medical Brief.*

THE ONTARIO BOARD OF HEALTH.—The new Provincial Board of Health has already shown itself in earnest. It has issued a series of notices to municipalities and public bodies calling attention to its own and to their powers in health matters. It has circulated amongst school-teachers, ministers of religion, and others, very valuable advice on the prevention of epidemic disease, and it has asked for information from the various authorities as to the existence within their respective districts of by-laws as to the position and construction and position of wells, privies, water-closets, drains, etc., as to scavenging and other matters. So desirous is the Board of acquiring all available information as to disease prevalence, that it has prepared a series of cards on which medical practitioners are asked week by week to fill in the sickness records of their practices together with certain other information. This information, like that relating to infectious disease, will, it is evidently expected, be given without any fee, and we are bound to confess that in this respect the Board is expecting too much of the medical profession. That the information asked for is wanted in the interests of public health we do not for one moment doubt; indeed the lack of proper sickness returns is now universally recognized as a serious want in connexion with sanitary administration. But a public want should be met out of the public funds, and it is clearly unreasonable to ask that members of a busy profession should at the sacrifice of much valuable time, and without any fee or reward, supply a public body with information which will need to be carefully compiled. In England, medical officers holding Poor-law appointments are required, in virtue of their official position, to supply such information, but it has never been as much as suggested that a similar demand should be made of private practitioners. Indeed we know of no other profession to whom any such request would be made. One other very important initial step has been taken by the Provincial Board. It has deputed Dr. Covernton to visit this and other European countries with a view of learning the experience of the older established State Boards of Health. Dr. Covernton has spent some time in this country; he will attend the International Congress of Hygiene at Geneva in his official capacity, and it is evident that he will carry back with him abundant materials for aiding his Board to arrive at decisions with regard to their future course of action. It would be well if our own Central Health Authority were in this respect to follow in the wake of the new Canadian Board. The experience of other countries, and especially that of some of the National Boards of Health of the United States, would, if it were acquired and properly compiled by skilled officers with a view to its being made use of in this country, afford in many respects most valuable aid to efficient sanitary administration.—*The Lancet.*

RESECTION OF THE HIP-JOINT.—Mr. George Cowell reported at the meeting of the Section of Surgery of the British Medical Association his experience in sixty-five cases of excision of the hip, in which his percentage of deaths amounted to ten per cent. His conclusions are:

1. Resection should be restricted to cases where there is distinct grating in the joint, accompanied by either pain or profuse suppuration, or failure of health.

2. It should be performed without loss of time, as soon as these conditions are recognized.

3. It is inadmissible in patients over eighteen years of age. All three of my older patients died with more or less prolonged suppuration, and without the slightest attempt at repair. I have never seen an adult patient recover from excision of the hip.

4. The younger the patient (my youngest patient was three and a half) the more satisfactory the result, and the more rapid the repair.

He now performs the operation antiseptically, and always removes the great trochanter with the head of the bone. By not postponing the operation, the acetabular mischief is usually slight. Both ends of the wound are closed with two silver sutures, a tube being inserted so as to keep the centre of the wound, opposite the acetabulum, open. He prefers Bryant's splint, and fixes the limb operated upon one inch shorter than the other. This extension is a matter of great importance, as he is convinced that the muscular contraction forcing the shaft of the femur against some part of the acetabulum is a frequent source of subsequent failure, and of undeserved discredit of the operation. In the last few cases, when possible, he has placed the children for the first few weeks in the prone position (face downwards), so so as to avoid soaking the bandages with urine. He has tried this plan for too short a time to express any positive opinion with regard to it; but it answers its purpose exceedingly well, and is marvellously tolerated by the little patients.—*British Medical Journal*, August 26, 1882.

THE CANADA LANCET.

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

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

AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Bateliere, Paris.

TORONTO, NOVEMBER, 1882.

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

CANADA MEDICAL ASSOCIATION.

In an article in the October number of the *Canada Medical & Surgical Journal*, our contemporary, after taking credit to itself for having "always advocated the necessity of maintaining this society in an efficient condition, and rendering it thoroughly representative of medical progress throughout all sections of our country," affects great surprise that the LANCET "in its last issue uses expressions equivalent to saying that, up to the present time, the Association has been governed by those belonging to McGill College." Our contemporary has entirely misunderstood our meaning and misquoted our language; we never gave utterance to any such statement as the above quotation would seem to imply. What we did say was, "that owing to a feeling, *with which we have no sympathy whatever*, that the Association is being manipulated by McGill professors and their friends, the majority deemed it wiser to meet in Kingston," and concluded by expressing the hope that under Dr. Osler's skilful management the number of members would soon be doubled or even trebled—when it would have so outgrown its present proportions that it could no longer be said to be under the wing of McGill or any other college.

We venture to say that our contemporary will not deny that such a feeling as above alluded to, unfortunately does exist among certain members of the Association, and that it found public expression in the discussion that took place in regard to the next place of meeting. We yield to no one in our loyalty to the Association, or in our desire to promote its highest interests and maintain it in an efficient condition, and would refer the reader to the past volumes of the LANCET in regard to our attitude in relation to it. But we are not deaf to the fact, much as we deplore it, that not a few have remarked, from time to time, that the Association was "run by McGill men," as it was tersely expressed. There can be no question "that, for several years past, Montreal men, and those connected with McGill especially, have been diligent in their attendance and have taken an active part in the proceedings;" and it is greatly to their credit that they have done so. They have performed what they considered a public duty, and we agree with our contemporary "that they should not be subjected to remarks calculated to render them so misunderstood as actually to appear to desire to control the Society in any way." We would also take this opportunity of saying that there is very little danger of the action of McGill College being misunderstood so long as no tangible ground is left for their opponents to base an accusation upon, and that no comments in the LANCET or any other journal can give existence to a feeling which is not founded upon fact. As we have already said, we have no sympathy whatever with the feeling expressed at the recent meeting. We do not believe that the McGill professors or their friends have any desire to control the Association but, in their zeal for its welfare, they may possibly, sometimes forget what is due to others who are equally interested in its prosperity, and thus their actions may be liable to be misconstrued. If we were disposed to be captious, we might, for example, point out that our contemporary, in its commendable zeal for the welfare of the Association, has taken upon itself, unsolicited, and without the sanction of the printing committee, the self-imposed task of printing the most important papers read at the recent meeting. These papers are the property of the Association, and are at the disposal of the printing committee; but this committee was never consulted, so far as we are aware, in regard to the disposition of the papers. Now, this may be zeal, but it is not discretion, and some one, "not well informed," might be imprudent enough to say that because our contemporary publishes the papers read at the meeting, it aspires to become the organ of the Association; and might give currency to the remark that not only were McGill professors endeavoring to

control the Association, but were also trying to make their "organ" the organ of the Canada Medical Association.

We also find our contemporary, of this city, with its usual bumptiousness, again obtruding its opinions *ex cathedra*, in the name of the profession of Ontario, "for whom we profess to speak." It seems anxious to pursue its congenial work of stirring up jealousy between rival schools. We repudiate entirely the insinuation that there is any jealousy between Trinity and McGill College ; and so far as the Association is concerned, Trinity Medical College has not been disposed to hold itself aloof from contributing to its advancement. We would also take this opportunity of saying that whatever view may be taken of the statements in the LANCET, it is a gratuitous assumption to maintain that Trinity Medical College is in any way responsible for them.

TORONTO MEDICAL SCHOOLS.

The two Medical Schools in Toronto were reopened for the winter session on the 2nd and 3rd ult. The opening lecture of the session in Trinity Medical College, was this year delivered by Dr. Grasett, Professor of Medical Jurisprudence and Toxicology. After the usual preliminaries the lecturer gave a succinct account of the history of the school, tracing its lineal descent from the old Medical Faculty of Trinity University, and referred in eulogistic terms to some of the old professors, long since gone over to the majority, viz., Drs. Bovell, Hodder and Beaumont. He also alluded to the fact that medical science had advanced so much in a few short years, that while seven professors were sufficient then, thirteen are now required to do the work. A good general education was, he said, a prime qualification for the student, and all who could afford it, should avail themselves of a college course before commencing the study of medicine. He also advocated the establishment of a three month's course in the summer, for the study of the minor branches. He alluded to the appointment of an additional demonstrator of Anatomy (Dr. Teskey), and congratulated the Faculty on the selection of the lecturer on Physiology (Dr. Sheard), who had made this subject a special study. He emphasized the importance of clinical work at the Hospital, and paid a high compliment to the Board of management of that Institution for its efficiency and its facilities for affording clinical instruction. He inculcated self-culture, and careful observation, citing as an incentive such examples as Jenner, Galvani, and others. He also cautioned them against the evil of intemperance, and defended them from the unkind sapersions sometimes cast upon them. In the practice of their profession he counselled diligence, industry, honesty of purpose, and correct habits, and especially the cultivation of sympathy for their patients. He concluded an excellent lecture by reminding them that they must not expect too much at first, but be content to toil on, and success would ultimately crown their efforts.

In the Toronto School of Medicine a new departure was inaugurated by the delivery of an opening lecture by Dr. Barrett. We have not space to do anything like justice to his address. The lecturer began by welcoming the students and friends who honored them with their presence. He then alluded to the high calling of the profession they were about to enter, and reminded them that wealth was almost unknown to those in the ranks of the medical profession, but a competency might be confidently looked forward to. Yet it had its allurements; these were the privileges of relieving suffering and of saving life. In the pursuit of the profession many opportunities were afforded for the manifestation of that mercy that is "twice blessed." He next spoke of the requirements necessary for those who embark in the study of the healing art. These were, a desire for knowledge for its own sake, mental culture, a high sense of morality, and the true instincts of a gentleman. He then passed in review as ensamples the lives and works of such men as Harvey, Wm. and John Hunter, Jenner and Simpson, and concluded a most eloquent address in the following words:—"You cannot have failed to notice that the prime discoveries thus hastily brought before you, viz., the circulation of the blood by Harvey, the greatly extended knowledge of anatomy by William Hunter, the ligation of arteries by John Hunter, the protective power of vaccination by Jenner, the use of anæsthetics by Professor Simpson, have all been achieved by sons of Britain. Surely as Englishmen, and the descendants of Englishmen, we may take a just pride in the honors gained by our an-

cestors, and may further trust in the belief that the energies, industries, and mental powers possessed by them have not been lessened in her sons simply by the fact of our having transplanted England's institutions, her laws, and her language to this western continent.

McGILL MEDICAL COLLEGE SEMI-CENTENNIAL.

The fiftieth anniversary of McGill College, Montreal, was celebrated on the 4th and 5th ult. by a coversazione and grand banquet tendered by the Dean and members of the Faculty to the graduates and friends of the Institution. The conversazione was held in the Redpath Museum, and was the occasion of the opening of the winter session of the Medical School. The grounds were brilliantly illuminated with Chinese lanterns, and the Museum and Lecture Hall were filled to overflowing with the youth and beauty of the city. The chair was occupied by the Hon. Charles Day, and beside him, the Hon. the Lieut.-Governor of Quebec—Dr. Robitaille, Principal Dawson and Ven. Archdeacon Leach. The opening address was delivered by the Dean, Dr. R. P. Howard, in which he entered upon a review of the Faculty since its inception fifty years ago. He sketched the lives of the four men who were the founders of medical teaching in Montreal, viz., Dr. Andrew Holmes, Dr. John Stephenson, Dr. William Robertson, and Dr. William Caldwell, and also paid a fitting and eloquent tribute to the memory of the late lamented Dean, Dr. Geo. W. Campbell. He concluded his very able lecture with a reference to the success which had been attained by the graduates of the College, and spoke of the needs of the Faculty, such as enlargement of the building, increased accommodation for the medical library, etc. He suggested the establishment of a fund in memory of the late Dean, to be called the "Campbell Memorial Fund," as a graceful tribute to the memory of a good man and an able physician

The audience then repaired to the upper hall, and the conversazione opened. It was a most brilliant reunion, all the professions being fully represented.

The banquet which took place the following evening at the Windsor Hotel, was the crowning event of the occasion. About 200 guests were present. Dr. R. P. Howard occupied the chair, while the vice-chairmen at the six smaller tables were Dr. Gardner, Dr. Roddick, Dr. Osler, Dr. Ross, Dr. Girdwood and Dr. Hingston. On either side of the chairman were his Honor. Dr. Robitaille, Lieut.-Governor of the Province, and Principal Dawson. Besides these, there were seated at the principal table representatives from all the leading Colleges in Canada, and many other prominent individuals. During the evening the 65th band added to the pleasures of the occasion by performing choice selections of music.

After the *menu* had been thoroughly canvassed the chairman called the meeting to order, and Dr. Osler, the Secretary, stated that he had received a number of letters and telegrams expressing regret that the senders could not be present.

Messages of congratulation were received by telegram from the College of Physicians and Surgeons of Chicago, and from the Professors and Students of Trinity Medical College, Toronto. The latter especially was received with the most enthusiastic applause. The usual loyal and sentimental toasts were then proposed and enthusiastically received. The toast of the "Lieut.-Governor" was responded to by his Honor, Dr. Robitaille, who is a graduate of the College; "The Principal of the University" by Dr. Dawson, the "Sister Universities by Dr. Chadwick, for Harvard; Dr. Buckham, for Vermont University; Dr. Rottot, for Laval; Dr. F. W. Campbell, for Bishop's University; Dr. Workman, for the Old Medical School of Toronto; Dr. D'Orsennes, for Victoria Medical School, and Dr. Covernton, for Trinity Medical College, Toronto. "Our Graduates" was ably responded to by Dr. Grant, of Ottawa. "Our Sister Professors." "The Medical Faculty of McGill." "The Four Founders." "The Montreal Hospital," etc., completed the list of toasts, and a very pleasant entertainment was brought to a close.

We congratulate the Faculty of McGill College upon the substantial evidence of success which has attended their labors in the past, also upon the eclat of their semi-centennial celebration, and heartily wish them a still greater degree of prosperity and usefulness in the second half century upon which they have entered.

College of Physicians and Surgeons, Que. —The semi-annual meeting of this College was held in Quebec on the 27th of September. Dr. R. P. Howard, of Montreal, President, in the Chair. There was a large attendance of governors present. After reading the minutes of last meeting, a resolution was passed respecting the death of Dr. Geo. W. Campbell, one of the original members of the College. The following gentlemen were admitted to the study of medicine :—J. H. Darey, L. V. Benoit, A. Kinloch, H. Hervieux, J. D. Fontaine, L. S. P. Normand, P. W. Garneau, A. Mallett, J. Legault, A. St. Amour, A. Laval, D. McNamara, G. B. Tanguay.

The application of Dr. Keyes, of Georgeville, Que. for registration was refused, on account of his being an Eclectic.

The following graduates received the licence of the College :—Drs. A. Herbert, E. Laberge, J. V. Cotè, G. A. Casgrain, T. W. Mills, W. DeMoulpied, C. O. Brown, and L. J. Lennox.

Certain statements having been current to the effect that private examinations were given by professors of a medical school in the Province of Quebec, recognized by the College, and that on these examinations certificates were issued purporting that the bearers were entitled to a diploma, and were, in fact, medical practitioners, a committee was appointed to make an investigation into these statements, and report at the next meeting of the Board. The reports of the Treasurer, and the Detective Officer were received, and a new medical tariff was submitted.

Ontario Board of Health Map.—We have received weekly editions of a map published by the Ontario Board of Health. In this map the Province is parcelled out for purposes of comparison into ten districts, represented in different colors, the comparisons being based upon differences in geological formation and meteorological conditions. The names of the diseases and their degree of prevalence in the different districts are given in printed spaces. For our own part we do not see the necessity of issuing weekly editions of this map. It is very well in its way for reference, but a weekly issue is certainly a most useless and extravagant waste of money. The information given is necessarily of the most meagre description, being chiefly confined to an enumeration of six of the most prevalent diseases in each district. It would be infinitely better and cheaper, to issue printed slips every week giving more complete information in regard to prevalent diseases. It is deeply to be deplored, that while there appears to be plenty of funds for the publication of weekly maps, there is not a farthing to expend for the information received from the members of the medical profession, without which data, the map would be of no service whatever—a mere daub of colors without either geographical correctness or artistic beauty.

A Well-Merited Recognition.—The following address was presented to our esteemed confrère and fellow citizen, Dr. Workman, by the Medico-Chirurgical Society of Montreal, at a meeting held on the 6th of October, 1882.

Dr. Joseph Workman,

Sir,—The members of the Medico-Chirurgical Society of Montreal, in session this evening, cannot allow the opportunity to pass of expressing to you the pleasure your visit has been to them. They feel that to you the Medical Societies of Canada owe much ; your zeal and ability having always been liberally expended in promoting their welfare, and they desire to express the hope that you may be spared for many years to give them the benefit of your wisdom and counsel.

A. Henderson, M.D., *Secretary.* Geo. Ross, M.D. *President.*

We congratulate the Dr. upon this substantial token of recognition of his valuable services in the direction indicated, and heartily join in wishing him long life. and much happiness in his labor for the benefit of the profession.

Personal.—Dr. Phelan, of Kingston, is about to visit the hospitals of Europe to further pursue his medical studies. He expects to be absent about a year. It will also be seen by reference to the Report of the Huron Medical Association, that our friend Dr. Stewart, of Brucefield, is going to Vienna to spend some time in professional pursuits. We commend the action of these gentlemen to all who have the means and leisure to avail themselves of so agreeable and beneficial a holiday trip. There is much valuable information to be gained by an occasional trip to the old world.

Mr. J. Knowsley Thornton, of London, Eng., the ovariotomist, was in Toronto during the first week of October, and was present at the opening lecture of Trinity Medical College.

We are glad to be able to announce that Dr. J. C. Tache, Deputy-Minister of Agriculture, who was seriously injured in March last, is again able to be about. It is said he contemplates withdrawing from the service shortly.

We are also pleased to learn that the Hon. Dr. De St. George, of Quebec, has so far recovered from his serious illness as to be able to resume his practice.

Dr. M. Sullivan, of Kingston, is mentioned as the probable successor to the late Hon. John Hamilton, senator of the Dominion of Canada.

MALPRACTICE SUIT.—Some time ago we stated in these columns that a malpractice suit had been instituted against Prof. McLean, of Ann Arbor, by one of his patients. This case was tried recently at the United States Court in Detroit, Mich. The Plaintiff, a Mrs. Hayes, consulted the Dr. for the cure of a recto-vaginal fistula. He advised and performed the operation of incision, as in fistula in ano, but the parts did not unite, and subsequent operations to restore the perineum also failed, owing to the bad health of the patient. Three experts were called to testify on each side, and, as is too frequently the case, each took a one-sided view of the question. The judge, in his charge, said that notwithstanding the defendant had promised to cure his patient, he could not be held accountable for failure, as the law did not recognize a promise to cure. He could only be held accountable for ordinary skill. The jury disagreed, eight being for the defendant, and four for the plaintiff. Dr. McLean, in this case, had the active support and sympathy of the most eminent medical men in Detroit. His many friends in Canada will also be pleased to hear of his verdict of acquittal.

HORSFORD'S ACID PHOSPHATE.—This Acid Phosphate recommends itself to the profession, particularly in all cases arising from a debilitated condition of the system in nervous diseases, and where the waste of the phosphates is greater than the supply. The importance of such a remedy to the profession has been clearly established by such competent authorities as Prof. Wm. A. Hammond, Drs. Fordyce Barker, W. H. Van Buren and others. Prof. R. Ogden Doremus states that the greater proportion of phosphates in urine after excessive mental labor has been clearly established by chemical analysis, and to repair this waste Dr. Hammond affirms that he habitually uses phosphoric acid and the phosphates. There are few preparations that perform the work more thoroughly, and at the same time are so pleasant in administration as the Acid Phosphate.

THORACO-PLASTIC OPERATION.—Dr. Fenger, of Chicago (*Med. News*), has recently performed Estlander's operation of exsection of some of the ribs, to allow of collapse of the chest-walls in a case of empyema. The patient, a girl 16 years of age, had suffered from empyema for three years, and there remained a fistulous opening which refused to heal. The empyema cavity was two inches long, one and a-half inches high and about an inch deep. The 4th, 5th and 6th ribs were removed opposite this cavity to the extent of six centimetres in length. This permitted of closure of the cavity and the patient made a good recovery.

TURPETH MINERAL IN CROUP.—The use of the yellow sulphate of mercury (Turpeth Mineral) in cases of inflammatory croup has come to be regarded as the most satisfactory remedy yet employed in this affection, especially when administered early. Dr. Fordyce Barker, of New York, insists upon the early administration of the drug, and states that for twenty years past he has not lost a case when seen sufficiently early—in the incipiency of the attack. He advises the families of which he is the medical attendant, to keep Turpeth Mineral powders in three grain doses always at hand, and to give one as soon as the earliest symptoms manifest themselves.

TENDON REFLEX IN LOCOMOTOR ATAXIA.—Dr. James Leslie, of Hamilton, Ontario, gives an account (N.Y. *Med. Record*) of a case of locomotor ataxia in which the patellar tendon-reflex was very distinct. The patient was a shoemaker, aged 45 years. There were no fulgurating pains, but the symptoms of inco-ordination without loss of muscular power were well marked. Daily forcible flexion of the thighs upon the abdomen was attended with much benefit.

PERMIT TO PRACTICE IN ONTARIO.—A correspondent asks "if the President of the College of Physicians and Surgeons of Ontario can give a permit to practice medicine to one who is not registered either in Great Britain or Ontario." In reply we would say that former Presidents have granted permits in certain cases, but the legality of such may be called in question. There does not appear to be any power given in the Act to grant permits, and so far as we are aware, the present incumbent has not granted any.

REMOVAL WITHOUT CAUSE.—We regret very much to learn of the removal of Dr. F. P. Taylor from the position of surgeon to the Marine Hospital, Charlottetown, P. E. I. Dr. Taylor has been for nine years surgeon to this institution and was a most competent and economical officer. His removal was occasioned by some change in the Governmental arrangements in regard to the Hospital, and casts no reflection upon the Dr.'s efficiency or qualification for the position.

E PLURIBUS UNUM.—A Chicago physician recently delivered a woman of a fine healthy baby. The mother was on her way from Boston to her home in St. Louis when she was taken ill. In the form for return of births enforced by the board of vital statistics for Illinois, the physician is required to state who is the father of the child. This it appears was a puzzler for both mother and physician, but the latter satisfied his conscientious scruples by filling in the blank with *E pluribus unum.*

TORONTO HOSPITAL IMPROVEMENTS. — A new convalescent department is now in course of erection in the grounds of the Toronto General Hospital. The building is two storeys in height with a large verandah on the south, and a conservatory on the west side. This addition has been in contemplation by Dr. O'Reilly for some time past, and mainly through his efforts the funds have been secured from private citizens. We congratulate the worthy Superintendent upon the success which has attended his efforts.

INSUFFICIENTLY PREPAID.—Mr. Hazen Morse of this city, desires us to state that through some misunderstanding, a number of circulars were mailed to members of the profession which were insufficiently prepaid. He regrets very much that this occurred, and begs to apologize for having caused annoyance and unnecessary expense, to those to whom the circulars were addressed. It is needless to say that it was entirely unintentional on his part.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.—At the annual meeting of the above-named Society, held on the 6th ult., the following gentlemen were elected officers for the ensuing year: *President*, Dr. R. A. Kennedy; *1st Vice*, Dr. T. G. Roddick; *2nd Vice*, Dr. T. A. Rodger; *Secretary*, Dr. Henderson; *Treasurer*, Dr. W. A. Molson; *Librarian*, Dr. D. F. Gurd; *Council*, Drs. F. W. Campbell, Osler and Geo. Ross.

THE LONDON MEDICAL COLLEGE.—The newly es ablished Medical Department of the Western University of London, Ontario, opened its first session on the 2nd ult. The attendance of students though not large is considered satisfactory as a commencement. Fifteen students enrolled themselves at the opening and the number is probably increased by this time to 20 or 25.

REMOVAL.—Dr. Henry Harkin, of Guelph, Ont., has removed to Montreal, to enter upon practice. Before leaving he received a handsome testimonial from his many friends in Guelph.

Dr. W. Young has returned to Montreal, Que., after a residence of several years in Hong Kong.

Dr. C. M. Stevenson has removed from Barnston to Coaticook, Que.

APPOINTMENTS.—Dr. R. P. Howard has been appointed Dean of the Medical Faculty of McGill College, Montreal. We congratulate the Dr. upon his elevation to the highest office in the Faculty.

W. D. Morrison Bell, M.D., of Ottawa, has been appointed assistant surgeon to the Governor General's Foot Guards, *vice* Dr. W. R. Bell, who was recently appointed surgeon to the Ottawa Field Battery.

Dr. F. W. Campbell has been elected acting Dean of the Medical Faculty of Bishop's College.

Dr. J. Leslie Foley has been appointed attending physician to the Montreal Dispensary.

CORONERS.—Andrew Grant, M.D., of Beaverton, Ont., has been appointed Coroner for the Co. of Ontario. Dr. Gray, of Perth, Ont., has been appointed Coroner for the Co. of Renfrew.

DEMISE OF THF U. S. HEALTH BULLETIN.—The *National Health Bulletin* of the United States has been discontinued, Congress having refused to grant the appropriation needed to defray its expenses. In future *The Sanitary Engineer*, New York, will print weekly, the information heretofore published in the *Bulletin*.

A RARE CASE.—Dr. Hingston, of Montreal, recently removed an ovarian tumor from a child two years of age. Such cases are sufficiently rare to render them most interesting from a professional point of view. The little patient was doing well at last account.

It is rumored that Dr. Lett, Assistant Physician to the Insane Asylum, Toronto, and Mr. Langmuir, formerly Inspector of Asylums for Ontario, are about to establish a private asylum for insane in Guelph, Ont.

The death of Mr. J. T. Clover, F.R.C.S., of anæsthetic fame is announced in our British exchanges.

Dr. Oliver Wendell Holmes is about to resign the professorship of anatomy in Harvard Medical College, which he has so long adorned.

Books and Pamphlets.

THE POPULAR SCIENCE MONTHLY for November, 1882. New York: D. Appleton & Co. Fifty cents per number, $5 per year.

The number of this popular Magazine for November is to hand. Dr. Frank H. Hamilton opens with a valuable article on the important subject of "Sewer Gas." He says, "What has been called 'sewer-gas' is composed of air, vapor, and gases in constantly varying proportions, together with living germs—vegetable and animal—and minute particles of putrescent matter." He indicates the only safe ground to take in regard to it, and quotes Dr. Willard Parker, as saying, "if he were to build a house, he would not have it connected in any way with a sewer but would construct a sort of annex into which he would gather all the pipes and fixtures, water-closets, baths, and wash-basins." The following excellent papers will also be found in this number—Professor Du Bois-Reymond, on "The Science of the Present Period"; Dr. Nathan Allen on "The Law of Human Increase;" "Science in Relation to the Arts," an address by Dr. Siemens, President of the British Association for the Advancement of Science; Dr. Oswald's second paper on "Physiognomic Curiosities;" "Scientific Farming at Rothamsted," by Dr. Manly Miles; "Who was Primitive Man?" by Prof. Grant Allen, and several others of equal interest.

ON SLIGHT AILMENTS, THEIR NATURE AND TREATMENT, by Lionel S. Beale, M.B., F.R.S., King's College, London. Second edition, enlarged and illustrated. Philadelphia: P. Blakiston, Son & Co. Toronto: N. Ure & Co. Price $1.35.

This new revised edition is published simultaneously with the London edition. The author in his introductory chapter on tact and treatment, gives his readers a very good article on quackery and medical humbug, in which he points out the proper conduct of the intelligent and honest physician in the face of such opposition. He specially emphasizes the importance of paying careful attention to the slight ailments, the treatment of which should be conducted on the same principles as that of serious diseases. The author gives many useful hints and directions in the treatment of ailments of every day occurrence, that are not to found in the ordinary text books. We cordially commend the work to our readers, feeling certain they will be pleased and benefited by a perusal of its contents.

THE INDEX CATALOGUE of the Library of the Surgeon-General's Office. Vol. III. Washington: Government Printing Office.

This volume, which is uniform in size and appearance with its predecessors, brings down the alphabet through D. It contains 9,043 author titles, 8,572 book titles, 28,846 journal articles, and 4,335 portraits under the heading of collection of portraits. One of the most striking features of the volume is the very large number of pages covered by the subject of Asiatic cholera—148 pages. Cinchona and its derivations cover five pages and a-half. The labor entailed upon the preparation of these volumes is something enormous.

JOURNAL OF CUTANEOUS AND VENEREAL DISEASES. Issued monthly at $2.50 per annum. Edited by Henry G. Piffard, A.M., M.D., and P. A. Morrow, A.B., M.D. New York: Wm. Wood & Co., publishers.

We have just received the first number of this new and interesting periodical. It gives promise of great usefulness and value. The present number contains 32 pages of reading matter of excellent character and variety. Among other articles may be mentioned an interesting case of Trichophytosis Cruris, by Geo. H. Fox, M.D., accompanied by a beautifully executed colored plate, illustrating the case in question.

NITRO-GLYCERINE AS A REMEDY FOR ANGINA PECTORIS. By Wm. Murrell, M.D., M.R.C.P. Lond.; Lecturer on Materia Medica, etc., at the Westminster Hospital, London, Eng. Detroit: Geo. S. Davis, Medical Publisher.

The object of this work is to give directions for the administration of nitro-glycerine as a remedy for angina pectoris. The principal points are illustrated by reference to cases under the author's care. Some of these cases have already been published in the London *Lancet*.

A PRACTICAL LABORATORY COURSE IN MEDICAL CHEMISTRY. By John C. Draper, M.D., LL.D, Prof. of Chemistry in the University of New York. W. Wood & Co., publishers.

This little volume will be found exceedingly useful and convenient for the student of practical chemistry. It is so arranged as to be useful also as a note book, having every alternate page blank for this purpose. All the various tests for organic and inorganic poisons and animal fluids are given in full, also those for the examination of impurities in water, milk, etc., besides a section on sediments and calculi. It is of convenient size for carrying in the pocket.

THE PHYSICIAN'S VISITING LIST FOR 1883, (Lindsay & Blackiston,) 32nd year of publication. Philadelphia: P. Blackiston, Son & Co.

We gladly welcome the new edition of this Visiting List. It has been before the profession for nearly a third of a century, and notwithstanding the issue of a number of works of a similar character, it still holds its ground as a convenient and useful pocket companion. It has many imitators, and but few, if any, superiors.

TRANSACTIONS OF THE AMERICAN GYNECOLOGICAL SOCIETY. Volume VI. for the year 1881. Philadelphia: Henry C. Lea's Son & Co., 1882.

This volume of 542 pages is a most substantial work, and attests the high status of gynecology in America. It contains nineteen excellent papers, with accompanying discussions, and an index to the gynecological literature of all countries for 1880. We commend it to our readers.

A MARVEL OF SURGERY.—Dr. Roswell Park, writes from Prague: I have had the pleasure of a rather extended interview with a patient whose larynx and epiglottis Prof. Gussenbauer removed over two years ago. Six weeks after the operation, he began to wear part of the artificial larynx, and, after accustoming himself to this, he gradually learned how to introduce and use the reed which takes the place of the vocal cords. This apparatus was made for him by Rothe, who has also done some work for the Reese Hospital. The patient is a riding teacher, is reputed the best rider in Prague, is busy from morning to night, talking all day, and suffers not the slightest inconvenience or pain. His voice is, of course, very monotonous, but his enunciation is excellent, his speech perfectly intelligible, and he eats and drinks with perfect facility. Three intralaryngeal operations had been previously made, before Gussenbauer attempted his feat. This case is said to be the best living example of what the art of the surgeon and the mechanician can accomplish for such a terrible disease as cancer of the larynx.—*British Medical Journal.*

A century ago John Hunter divided all skin diseases into three classes; one of which is cured by mercury and the iodides, a second by sulphur, and a third class which the devil himself can't cure. Dr. L. P. Yandell, who quotes Hunter as above, is given credit for a much less complex classification than even this. He attributes all skin eruptions to malaria. Quinine is a specific for malaria, ergo, quinine is the remedy for all skin eruptions.—Q. E. D. —*Michigan Med. News.*

The Sultan of Turkey has given a site in Jerusalem for the purpose of erecting a hospice and ophthalmic dispensary, under the auspiees of the English branch of the Order of St. John.

Births, Marriages and Deaths.

In St. John, N.B., on the 9th ult., W. F. Coleman, M.D., to Mary Winniett, youngest daughter of the late J. Hammond Hartt, Barrister-at-Law.

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

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CITY OF NEW YORK.

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THE COLLEGIATE YEAR in this Institution embraces the Regular Winter Session and a Spring Session.

THE REGULAR SESSION will begin on Wednesday, September 20, 1882, and end about the middle of March, 1883. During this Session, in addition to four didactic lectures on every weekday except Saturday, two or three hours are daily allotted to clinical instruction. Attendance upon two regular courses of lectures is required for graduation.

THE SPRING SESSION consists chiefly of recitations from Text-Books. This Session begins about the middle of March and continues until the middle of June. During this Session, daily recitations in all the departments are held by a corps of Examiners appointed by the Faculty. Short courses of lectures are given on special subjects, and regular clinics are held in the Hospital and in the College building.

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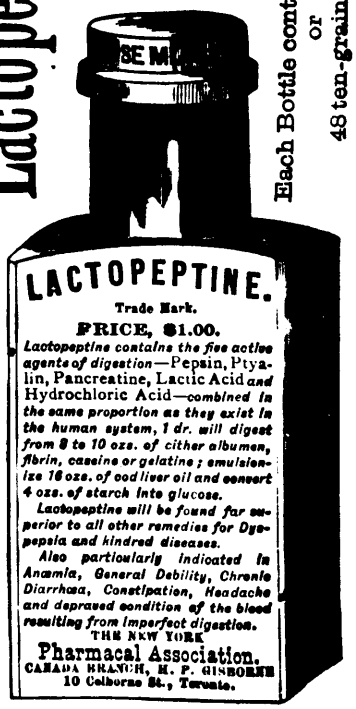

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