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THE CANADA LANCET,

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Original Communications.

MALPOSITION OF THE TESTICLE, COMPLICATED WITH INGUINAL HERNIA, REQUIRING CASTRATION.

BY V. A. BROWN, M.D., L.R.C.S., ENG., LONDON.

The subject of hernia is, always has been, and ever will be, one of interest and anxiety to the practical surgeon; its various forms and occasional anomalies, as in the case I am about to describe, all tend to invest it with the gravest importance.

An imperfect descent of the testicle complicated with hernia, I need hardly say is an unpleasant complication. What to do in each case is still a *questio sub judice et vexata*. What is the course to be adopted with regard to the testicle? Is it to be left there, and an appropriate truss (if such a one could ever be properly made) to be worn over the seat of the hernia? Or, should it be removed, in order that the formidable obstacle which it presents to the application of a proper truss might be removed, and thus the future safety of the patient secured?

These were the points which suggested themselves to my mind, when I came to the consideration of what was to be done in the following very interesting case, which has lately come before me. The subject is a young man *æt.* 25. stout and healthy, lately married. When four years old he was ruptured on the right side, for which he was trussed for more than two or three years, when the truss was discontinued as he was considered cured. Such, however, did not prove to be the case, as the hernia recurred when he grew up, sometimes requiring considerable trouble in its reduction. It was noticed also, that the testicle was not in its natural situation in the scrotum. He often tried to wear a truss, but never could, on account of the severe pain and sickening sensation it invariably

caused. He went on for some years in this way, the hernia occasionally coming down, but always being capable of being reduced until a few days ago. March 14th it descended, and he could not succeed as usual in putting it back. He remained in this state for two days, when he came to consult me. On examination I found a direct inguinal hernia, with the right testis behind and outside, lying in the inguinal canal opposite the external ring. The hernia was about the size of a hen's egg, very tense and very tender. The testicle could be distinctly made out; it appeared to be considerably atrophied (not half the size of its fellow), and could be pushed up the inguinal canal as far as the internal ring, where it was brought to a stop. I reluctantly tried the taxis for a short time, but the parts were very tender, and as other symptoms were not very urgent, I determined not to persist but to try the application of a cold evaporating lotion, composed of muriate of ammonia, *spts. vin. rectificat.* vinegar and water, and await results.

In the meantime I had to arrange what course should be followed in case of a reduction being unsuccessful. The conclusion I came to, was to remove the testicle at the time of the operation for the relief of the strangulation. The following reasons influenced me in this:—1st. It was atrophied, and consequently useless. 2nd. Paget says undescended testicles are very prone to cancer. 3rd. Its removal ensured the proper application of a truss, without which he was always carrying his life in his hand. Indeed, I extended the reasoning further, and determined to propose castration, even if the hernia became reduced.

The lotion was sedulously applied for eight hours, when I again visited him. I then found that the hernia had disappeared, but that the testicle was still *in situ*. The inguinal region was still very tender; accordingly he was directed to continue the lotion. The following day his bowels were moved, and in a few days more he became convalescent. When he was thoroughly recovered I broached the subject, and laid before him the narrow escape from a strangulated hernia he just had, and that at any time a similar danger might again arise. He was always going about with his life, as it were, in his hands. The great danger arose chiefly from the abnormal position of the undescended testicle, which prevented a truss from being worn; as long as it was there he never could

wear one with any comfort or safety. The testicle was all wasted, and consequently incapable of functional activity, and its loss would not render him impotent. According to the opinion of the best and latest authorities, undescended testicles were especially prone to cancer, and although its removal would be attended perhaps with danger, still, taking everything into consideration, the wisest course for him was to take the risk and have it removed. After hearing and considering these several reasons he consented.

The operation was performed on the 18th of March. I was assisted by Drs. Niven and Harper, of this city; the latter administered the chloroform. The testicle lay in the inguinal canal, opposite the external ring, and was about the size of a small marble. Alongside its inner border, and firmly attached to it, was a thick piece of tissue, very similar to a piece of intestine; this had to be very carefully separated from the testicle and its coverings, before the cord could be made out and secured. When this was done it was cut across, the usual precautions being first adopted, and tied *en mass.* The tissue, when examined, was found to be the sac of the hernia in a thickened condition; a ligature was necessary on the cut portion of it, on account of troublesome hemorrhage. When the testicle was removed, the vaginal sac came very plainly into view, and a broad director could easily be passed up as far as the internal ring, where it was stopped. The wound was stitched up with silver wire sutures, and a compress of lint soaked in carbolic oil, 1 to 16 laid over it, and the whole enclosed in a spica bandage.

In two hours a good deal of secondary hemorrhage occurred, which was arrested only after an enlargement of the incision upwards, so as to get at the cord which had retracted up the canal, in order to apply a second ligature above the first. This effectually stopped the hemorrhage. Cold iced-water was then applied over the wound, which was not restitched. He was then given some brandy and beef tea, as he was very weak, and at night pul. opii gr. j. was ordered.

19th. Had a tolerable night; pulse, 100; no sickness; considerable tenderness and tumefaction over the part; no hemorrhage; abdomen above Poupart's ligament all right. Cold water dressing to be continued. Ordered pul. opii gr. i., calomel gr. i. every four hours; low gruel diet, and to be kept very quiet.

20th. Going on well; pulse, 90; tongue rather coated; bowels not yet opened; tenderness and swelling not so great; no abdominal pain above Poupart's ligament; no tendency to nausea; continue treatment.

21st. Much the same; suppuration commencing; spongio-piline dipped in water, was substituted for cold water dressing; bowels still confined; no nausea. Pul. cal. et opii every six hours.

22nd. Had a good night; pulse, 94; wound discharging well; spongio-piline too heavy; lint and oiled silk was substituted. An enema of gruel, salt, and castor oil was administered in the morning, and, although repeated in the middle of the day, had no effect. He was then ordered two pills of pil. col. et hydrarg. at bedtime, to be followed by a dose of castor oil in the morning if necessary. Abdomen is soft; voids urine well. Omit pul. cal. et opii.

23rd. Bowels opened this morning without oil; pulse, 80; wound discharging well, and swelling much reduced: considerable fetor; all danger of peritonitis over. Lotion of permanganate of pot. ash, grs. v. ad. ʒi to be applied.

24th. Is better this morning; pulse, 80; had several passages from the bowels yesterday. Pul. opii gr. i. to be taken.

25th. Same; cataplasm of linseed meal to be applied; no passage from the bowels to-day.

26th. Same; had a good motion this morning; feels much better; wound granulating; no fetor.

27th—28th. Improving; wound contracting; bowels open every day; continue lotion.

30th. Much the same; if the ligatures were away the wound would soon heal.

April 5th. Ligatures came away on the 3rd inst., the sixteenth day after the operation, and the wound healed in a few days.

Remarks.—There are many points of interest in this case. First, it is to be noticed that the hernia was not congenital—not having been discovered until he was four years of age. Had it been congenital, the vaginal would then have been the hernial sac, a contingency which would have been so much the worse for the operation, as there is much greater danger of peritonitis in such cases on account of the communication with the abdominal cavity being enclosed. It is important, therefore, in forming a diagnosis, to be clearly satisfied whether the hernial protrusion is congenital or not

—from it a fair prognosis easily becomes recognizable—and with many, perhaps, the propriety of an operation justifiable.

2nd. It is very necessary to be clear, that there is both a hernia and a testis contained in the tumor, prior to any attempt at taxis. Sometimes the swelling contains only an inflamed testis, in this case it was unmistakable that it contained both.

3rd. At the operation it is expedient that great precaution should be exercised during the separation of the cord, prior to its ligation; to be thoroughly satisfied which is the sac and which the testis, and then to take care not to open the sac, which would render the operation as dangerous as if the hernia was congenital.

4th. As to the mode of treating the cord. This is a matter of choice; many, no doubt, would prefer the old plan of separation of the spermatic arteries, and then ligation, as being safer, and say that perhaps no secondary hemorrhage would have taken place in this case had it been done. Still, although it caused me a good deal of annoyance, and a considerable thrombus arose in consequence, I should always tie the cord *en masse*. It certainly is much quicker, and I think quite as safe. I have often performed the operation, and have always secured it in this manner without any trouble.

In conclusion, what is the probability of a radical cure in this and similar cases? Is it justifiable on the part of the surgeon, to hold out this as one of the reasons for the patient's consent to an operation? In answer, I would say that there is every reasonable chance that the inflammatory action which, more or less, always attends these cases, may possibly close the communication with the abdominal cavity. I shall particularly watch the case, and report accordingly, as I consider this a very important point.

INTRA-UTERINE MEDICATION

BY J. CATTERMOLLE, M.D., L.S.A., ENG., LONDON, ONT.

Braithwaite's Retrospect of July, 1873, contains a very able and instructive paper by Dr. Loombe Atthill, read before the Medical Society of Dublin, on intra-uterine medication, which relates more particularly to the topical application of fuming nitric acid to the uterine cavity. The doctor very justly regarded it as the best and most efficacious

remedy, in the treatment of several affections common to the interior of the womb, and for his strong advocacy of this invaluable aid in the face of much vituperative and determined opposition, he is entitled to the thanks of the profession.

It is also due to Dr. Atthill to state that he devised a very handy little speculum, by which, after dilatation with tents, sufficient cauterization may be effected in many cases. How long diseases of the womb have been treated by strong caustics is somewhat uncertain, but for the last quarter of a century in America, the British Islands, and other parts of Europe, it is well known that practitioners have applied these remedies to the interior of the uterus, and usually by means of a swab, or in a diluted form by injection. The latter method is sometimes productive of unpleasant symptoms, whilst the former, if carefully done, is generally safe, seldom followed by anything more than a little uneasiness, not often amounting to pain. It must be admitted, however, that by passing a swab charged with its medicament quickly through the cervical canal much of the remedy must be rubbed off before reaching the part intended for its reception. Many years ago, impressed with the necessity of more complete application of the caustic material, I utilized open-ended catheters for the purpose, fitted with stilette-swabs, formed by attaching to their ends lint or cotton wool. This was certainly an improvement on the old plan, but resulted in the destruction of too many instruments.

About four years ago, it occurred to me that tubes of strong glass might be advantageously substituted, as not being likely to be chemically acted on by the material conveyed through them.

A clever chemist in this city prepared three or four of different calibre, varying from two-eighths to five or six-eighths of an inch in diameter, and about nine inches in length. Common catheter stillettes, rigged up with cotton wool or lint, nicely and securely attached to their ends, can be made to act as piston-swabs. On the whole, I find these tubes very far superior to any other contrivance for the purpose. There possibly may be better, if so, I am unacquainted with the fact. Glass tubing is generally kept in great variety by druggists. By means of heat it may be readily converted into almost any shape and form desired. Their ends should be rendered smooth, and each tube may be gently bent at about an inch and a

half from the end to facilitate introduction, which, after due dilatation with sponge or laminaria tents, can be accomplished easily and with the most perfect safety, by any one with a moderate amount of manipulative tact; and in cases where the os uteri and cervical canal are patulous, one of the smaller sized tubes can, without difficulty, be passed without the previous use of tents, and thus the cavity can be mopped ad libitum.

For the treatment of subacute and chronic endometritis, granular and congested conditions of the mucous membrane of the womb, uterine catarrh, and carcinomatous growths above the inner os, where topical treatment is demanded, these little instruments answer an excellent purpose. In post-partum, and other forms of uterine hemorrhage, when solutions of the perchloride of iron are had recourse to, as the dernier ressort, their simultaneous efflux will be rendered certain by using one of the larger sized tubes. I need hardly state that solids can be applied to the uterine cavity with equal facility by the same means.

These little operations may be conveniently managed by placing the patient in the usual obstetrical position, on her left side; a large vaginal speculum may then be passed well up to the os tinæ, and the transit tube, previously warmed and well oiled, slipped through the cervical canal into the uterine cavity. In a few special cases the process may be more readily accomplished by transfixing the anterior lip with a fine tenaculum, and making sufficient traction to straighten the cervix; sometimes instead of an ordinary large, plain speculum the duck-bill instrument of Sims may be more advantageously employed.

POISONING FROM CARBOLIC ACID.

BY J. H. RYAN, M.D., SUSSEX, N.B.

As we do not often meet with cases of poisoning from carbolic acid, I beg leave to submit the following.

Hugh Burns, a laborer, æt. about 40 years, while under the influence of intoxicating liquor, drank from a tin cup, a solution of carbolic acid, which was sitting on the stove in a drug store, May 7th, 1878. The cup contained a strong solution of acid, about $1\frac{1}{2}$ ozs., to water xii, which had been placed there by the druggist for disinfecting

purposes. After drinking the acid, the unfortunate man replaced the dish on the stove, and taking a flask of liquor from his pocket, he deliberately proceeded to drink the contents. He then made his exit, and walked to the opposite side of the street, where he sat down, and in twenty minutes' time was comatose. The druggist, who was absent when the acid was swallowed, was quickly summoned by the boy left in charge of the store, and he proceeded at once to inject into the man's stomach half a pint of olive oil, by means of a common rubber syringe and gum elastic catheter. I was summoned to attend, and arrived after the oil had been injected. I immediately injected, by the same means previously used, a solution of sulphate of zinc, which, however, did not produce emesis or any indications of such action. The breathing was rapid, probably forty times per minute, and spasmodic. Pulse beat rapidly and feebly at 160 per minute. Face much congested and livid. On examining the fauces I found they were much affected by the acid, as well as the mouth, presenting an appearance not unlike a diphtheritic sore throat. Coma profound. Not the slightest audible articulation. He rapidly grew worse. No signs of vomiting being likely to take place, I proceeded to reverse the syringe, as no stomach pump was at hand, so that I might be able to empty the stomach of its contents. However, it would be of no material benefit, as the injury had all been done long before I reached the patient. He expired before I had the apparatus adjusted, having lived only forty-five minutes after drinking the acid.

Remarks.—Had the druggist been at his post, or any equally qualified person to attend to the business, and administered a strong solution of saccharate of lime, and an emetic at the same time, the chances of a favourable result would have been much better. But, instead of this being the case, we find the druggist absent, and a boy, who knew nothing of the drug business, left in charge. No solution of saccharate of lime was prepared, and not procurable in time to save the man's life. All things considered, the druggist did well, I think, to inject the olive oil. The druggist, moreover, was reprehensible for leaving a strong solution of carbolic acid exposed in so accessible a place. As regards the immediate cause of death, I do not pretend to give a positive opinion.

Carbolic acid is well known to be a powerful

irritant when locally applied. The whiteness of the fauces was, no doubt, attributable to the coagulation of the albumen. There was no apparently marked stricture of the larynx from its caustic effect. Excessive cerebral congestion was very apparent, and probably death was produced by over-stimulation, combined with its toxic effect upon the nervous system.

For further references in regard to carbolic acid poisoning see *Medical Times and Gazette*, August, 1866, and *Chem. News*, September 7th, 1866.

SALICYLIC ACID IN RHEUMATIC FEVER.

BY W. F. SAVAGE, M.D., ELORA, ONT.

A. G., female, aged 16, had an attack of rheumatic fever eighteen months ago, which lasted three weeks. She has been well since and has grown a great deal; family history good. Her mother called on the 25th of April, wanting medicine for her daughter who was complaining of a little pain in some of her joints. I sent her a mixture of pot. bicarb, and vin. colchici. On the 29th I was called to see her; found both feet and knees swollen, red and painful; pulse, 90; temperature, 102°; no sweating. I increased the dose of alkali and gave a Dover's powder at night.

28th.—Breathing rapidly, 48 to the minute; great pain over the cardiac region; dyspnoea and great distress; pulse, 140, jerking and irregular; friction sound over the heart; temperature, 105°; hands affected; feet a little better. I applied a cantharidis blister over the left side and gave the following:—

℞—Acidi salicylici,	ʒ ij.
Ext. verat. vir., fl.,	m xx.
Aquæ ad.,	ʒ iv—M.

SIG.—Two teaspoonsful every three hours, and discontinue alkaline mixture.

29th.—Temperature, 104°; pulse, 120; less dyspnoea and pain; sweating profusely. Though a mistake of the attendant a tablespoonful of the mixture was given a few times, causing irritation of the stomach, vomiting, and nausea; less pain and swelling of joints.

30th.—Temperature, 103; pulse, 100; regular and quieter; can move both hands and one leg; breathing, 36 to the minute; slept for a few hours during the night; vomiting stopped.

May 1st.—Temperature, 102°; pulse, 80; inspirations, 30 per minute. dyspnoea almost gone; can move all the limbs. I decreased the dose of acid to four grains, and veratrum to one minim.

2nd.—Temperature, 101°; pulse, 68; pain all gone; no swelling; says she is well; appetite good.

4th.—Temperature, 100°; pulse, 70; rested well at night; no pain; can take a deep inspiration; to keep her bed for a few days; did not see her again, but heard she made a good convalescence.

Correspondence.

To the Editor of the CANADA LANCET.

SIR,—I observed in your valuable journal for June 1st, a notice of the late action of the Michigan State Medical Society, in which is the same error that I have several times seen, and which it is very natural should be made, viz., that the proposed amendment consists in the addition of the last clause, commencing with the words, "or who has," etc. The proposed amendment consisted of the entire paragraph, and was as follows:—"That no person shall be admitted to membership who practices or professes to practice in accordance with any so-called party or sectarian school of medicine, or who has recently graduated from a medical school whose professors teach or assist in teaching those who propose to graduate in or practice irregular medicine." This proposed amendment was voted down, and no division of the question was asked for. A large number of respectable physicians are very much ashamed of the Society for such action.

I think it is also an error to say that the proposed amendment was "chiefly" intended "as an indirect censure upon the medical faculty of the Ann Arbor University for its relations with homoeopathy." It was designed, as its language plainly set forth, to keep out from the State Society recent graduates from any such "mixed" college as was described in the proposed amendment, until by a year or two of practice the graduates had shown whether they were or were not regular practitioners of medicine, the Society having heretofore required upon all applications for admission endorsements by two members of the Society to the effect that the applicants were worthy practitioners of medicine.

The censure of the medical faculty of Ann Arbor had not been "indirect." In the American Medical Association charges had been preferred against the State Society because of allowing professors at Ann Arbor to represent the Society, and at the late meeting of the State Society charges were preferred against the professors, thus making the censure direct, though it seems to be the desire to have the question, whether the profession will sustain such mixed schools, settled by the American Medical Association.

Very respectfully,

HENRY B. BAKER.

Lansing, Mich., June 3, 1878.

Selected Articles.

TWO UNCOMMON FORMS OF DISLOCATION.

Mr. A. W. Mayo Robson lately reported in the *British Medical Journal* the following cases, one is a dislocation of the jaw during an attack of hysteria; the other is a dislocation of the sternal end of the clavicle upwards. The first is interesting on account of its cause; the second, on account of its rarity.

I was called to see a woman, aged 30, said to be in a fit. On arriving at the house, I found her in an hysterical attack, and ascertained that she had received news of a severe family trouble a few hours previously. A curious symptom in this case was, that she violently worked the jaw, and would persist in doing so despite being sharply spoken to and treated freely with cold water. Whilst I was observing her, the jaw suddenly became fixed widely open and displaced obliquely towards the right side. She instantly began to scream violently, and applied her hand to the injured part. I need scarcely say that the hysteria vanished, as if by magic. I replaced the jaw in the usual manner, and applied a four-tailed bandage. After being put to bed, she had a return of the paroxysms, and again worked the jaw; but this time the bandage prevented displacement. The next day, beyond a considerable degree of stiffness, nothing abnormal was found. I then ascertained that she had never had dislocation of the jaw, on any previous occasion. My reasons for recording the case is, that I find no mention made of any similar one either in Hamilton on "Fractures and Dislocations" or in Holmes's, Erichsen's, or Bryant's works on surgery.

The history of the second is as follows. I was called on September 27th, 1877, to see a grammar-school boy aged 15; the messenger telling me that he had put his shoulder out, having fallen under-

most in a scrimmage at football. On arrival, I found him leaning towards the left side and supporting that arm with his right hand, any change of position giving great pain. On stripping the chest, the first sign that attracted my attention was a marked flattening of the left infraclavicular region. I then noticed a depression of the same shoulder; a very distinct prominence in front of the trachea just above the sternum; an absence of the natural projection of the left sterno-clavicular articulation, its place being taken by a depression in which could be felt the empty sternal socket. The tendon of the left sterno-mastoid was stretched tensely like the string of a bow, and the distance between the shoulder-tip and the middle line was an inch less on the affected side than on the sound one. There was no dyspnoea, and an entire absence of crepitus. My diagnosis was dislocation of the sternal end of the clavicle upwards, as the only accidents which might have simulated it were separation of the epiphysis and fracture; the latter being negatived by the absence of crepitus, and the former by the fact that ossification does not take place in the epiphysis till the eighteenth or twentieth year. Reduction was easily effected by drawing the shoulders backwards and raising the arm. I tied a handkerchief round each arm near the shoulder, and looped them together firmly behind; placed a pad in the axilla; pressed the elbow inwards by means of a bandage round the chest, enclosing the arm; and supported the elbow and forearm in a sling; after which the symmetrical appearance of the chest returned. In the after-treatment, there was a great tendency for the sternal end of the clavicle to slip upwards, as the boy, being unusually active, always contrived to romp about and loosen the bandages as soon as his attendant's back was turned. Although the appliances were continued for three weeks, and a figure-of-eight bandage for a fortnight longer, yet at the end of that time the sternal end of the clavicle remained about half an inch above its usual level; but the functions of the limb seemed to be in no way impaired. The only cases I can find on record of a similar nature are four quoted by Malgaigne, two by Bryant, one by Dr. Rochester of Buffalo, and one by Hamilton.

BONE FORMATION AFTER RESECTION OF THE LOWER JAW.

The following is by B. von Langenbeck, in the translation of the "German Society of Surgery," Sixth Congress.

GENTLEMEN: I am permitted to make this brief communication through the (as I may well say) exceedingly great attention which Prof. J. R. Wood, of New York, has shown, in sending this preparation here from New York by his assistant, Dr. Wiggin, in order to allow it to be demonstra-

ted. Dr. Wiggin must return again to-morrow to New York, and, although our allotted time is very brief, nevertheless I have deemed it necessary to present this demonstration, because otherwise our distinguished American colleague would have sent us this really grand work in vain.

Prof. Wood, Surgeon to Bellevue Hospital, in New York, had the kindness to send me the photograph of this skull last fall—a skull of which the entire under jaw has been extirpated on account of phosphorus-necrosis, and of which the whole lower jaw, has, in the course of a brief time, formed itself anew; and when, in my surgical lecture, I had showed and explained this photograph, *I did not believe that a corresponding preparation really existed anywhere*, he had the courtesy to send us this skull with the newly-formed lower jaw. I will quite briefly present the history of the operation, which is described in a short article by Dr. Wood in the "New York Journal of Medicine" for May, 1856, as the "Removal of the entire Lower Jaw, for Necrosis caused by Phosphoric-Acid Gas."

A girl—Cornelia S.—sixteen years of age, formerly always healthy, had worked in match-factories for two years and a half, one of which was very badly ventilated. She was occupied eight hours daily in packing matches, but *enjoyed the best of health until May, 1855*. At that time there took place, along with toothache, a swelling of the lower jaw, with suppuration. The patient, however, continued her work up to December, 1855.

Upon her reception into Bellevue Hospital, total necrosis of the right, and partial of the left, lower jaw existed, with profuse suppuration. The pus poured for the greater part into the cavity of the mouth, and outward through a fistulous opening in the lower border of the mandibula. Notwithstanding this, her general health had remained good, and her appetite good, only chewing was very much impeded.

On the 19th of January, 1856, Dr. Wood made a resection of a part of the right lower half of the jaw, with most careful saving of the periosteum, and with preservation of the chin-portion of the lower jaw. Healing resulted without interruption, but it soon became evident that the entire remaining under jaw was diseased also, and this had likewise to be removed on the 16th of February, 28 days after the first operation. Excepting the retraction of the tongue ensuing upon the removal of the jaw, and the choking symptoms induced thereby, the good effect of the operation and the healing of the wound remained uninterrupted, and in March, 1856, the patient was able to be discharged, recovered.

The re-formation of the bone was *complete*, and the function of the new lower jaw left nothing further to be desired. In the photograph taken at this time, you observe the admirable contour of the lower jaw, of which the chin-portion only recedes

slightly. Some years later, Cornelia S. died of abscess of the brain, and so Dr. Wood acquired the possession of this skull, which stands before you, and upon which you observe the entire lower jaw, with extremely complete form, only a very little smaller than the original must have been.

Formerly, cases of phosphorus necrosis came into the clinic here not infrequently, and scarcely a term passed in which some jaw-resections were not performed. Thanks to the better ventilation in factories since 1864, scarcely any cases have come under observation, and it appears that phosphorus-necrosis will, at no very distant time be eliminated.

I have performed subperiosteal resection of the entire lower jaw six times—four times in consequence of phosphorus-necrosis, and twice in consequence of acute osteo-periostitis. In all these cases re-formation of new bones was observed, and, indeed, as in the case operated upon by Dr. Wood, with most complete restoration of the function.

When one extirpates the entire lower jaw from under the periosteum at one sitting, the chin must invariably recede. The room for the formation of the new lower jaw is restricted by muscles, namely, by the *genio-glossi*; the contour of the new lower jaw develops imperfectly, and the chin-portion of it retreats more or less perceptibly. In order to obviate this evil, I have, like Dr. Wood, made the operation at *two different times*, and at first cut out from the periosteum the smaller portion of the mandibula—which was, however, most diseased—leaving the chin and larger portion alone, and then, after four or six weeks, resected the remainder. But even then, as this photograph and the description given by Dr. Wood indicate, *the lower jaw is always smaller*, and the normal prominence of the chin is lacking.

This evil is almost completely avoided, if, as Billroth has recommended, one leave behind in position, osteophytes from the necrosed bone, in immediate contact with the periosteum. This photograph shows you such a case. I cut out first the smaller part of the necrosed jaw-bone, and, after new bone could be distinctly felt—six weeks later—I cut out the greater part, with the chin-portion. The resected jaw here shows you that osteophytes were left almost completely around. The photograph, which is taken half in profile (August Matthe's;) shows you that the contour of the lower jaw is very complete, and that the chin stands out in the normal manner.

The skull sent to us by Dr. Wood settles at once the question of the durability of the newly-formed bone. It has, indeed, been repeatedly maintained, that the newly-formed bone, after subperiosteal resection, cannot be of a durable kind, but that it subsequently must be reabsorbed. At all events, this may happen, and I have myself seen it in the case of a woman suffering from phosphorus-necro-

sis of the lower jaw, much reduced by long suppuration, whose lower jaw, newly formed after resection, was, after a twelvemonth, almost entirely reabsorbed. Such an absorption of bone is, however, a rare occurrence in my observation, and I can testify to the unchanged persistence after years of the new bone-formation, after subperiosteal extirpation, as well in the lower jaw as in long bones tibia, radius, os metacarpi pollicis.

Dr. Wood's patient died some years after the operation, and yet you see the new lower jaw preserved in all its parts, although a trifle smaller than was the original jaw.—*N. Y. Med. Four.*

ON PUERPERAL FEVER, BY G. W. WOOD, M.D., FARIBAULT, MINN.

For upwards of two years I have used the medicine, or combination of medicinal plants, introduced to the notice of the profession by Dr. Kerr of Galt, Canada, in this Journal, 1865, 1867, and 1870; and afterwards by himself and others in numerous papers in the *Canada Lancet*, 1873, 1874, 1875, and 1876.¹ Adhering to the principle laid down by Dr. Kerr, that the medicine has a curative power over tenderness or ulceration of the mucous membrane, I have employed it in dysentery, diarrhoea, scarlatina, and measles. My experience has been chiefly in dysentery; from this disease every patient has recovered; and in many a severe illness it has helped me to save life, so that I have great cause to be satisfied. More recently, in consequence of a request from Dr. Kerr, who called my attention to a case in the *Canada Lancet*, by Dr. McDonald, Wingham, Ontario, I have given it in well-marked puerperal fever with the most gratifying results.

CASE I.—Mrs. A., aged 28, mother of several children, delivered, after an easy and quick labour, by my partner, Dr. Rose, on the night of the 26th of May 1876. For several months previously she had been threatened with miscarriage. Dr. R. left her comfortable at 2 a.m., but, on calling during the day, found rigors frequent, small pulse, tympanitis, and all the symptoms of a severe attack of puerperal fever.

I visited her in consultation near midnight of the 28th. She was lying on her back, knees drawn up, abdomen very tympanitic, and exquisitely painful to the touch; slight delirium, peculiar anxious expression of the countenance; pulse small, thready, and very rapid; skin hot and dry; urine scanty and high coloured; lochia had not entirely stopped; no

diarrhoea. She had taken opium freely by the mouth and also hypodermically; but notwithstanding, the disease had rapidly increased in severity. We were both of opinion that, unless a favourable change occurred very soon, the patient had not long to live. We resolved to give six and a half grains of the digitalis combination, without opium, every four hours, with an occasional hypodermic injection of morphia as the case might require. In twelve hours the symptoms were considerably improved, recovery dating from the first dose; indeed, the benefit resulting from each, could be plainly seen. The recovery was so rapid that by the 31st of May she was entirely out of danger, and on the 5th of June we ceased to attend. After the digitalis combination was commenced, only two hypodermic injections were given.

CASE II.—Mrs J., delivered in the country of her first child on August 5th. On the 12th was doing well, and moved into this city, a distance of twenty-three miles. On the 14th was seized with a severe chill, great pain, tympanitis, &c. Dr. R. was sent for, who gave opium and quinine very freely, but she continued to get worse. I was called at 4 a.m., August 17th, and found all the symptoms of a severe attack of puerperal fever. She had intense pain in the abdomen; tympanitis was not so excessive as in last case, but she had profuse diarrhoea unchecked by the doses of opium and quinine. We gave her six and a half grains of the digitalis combination without opium every four hours. In twelve hours, pain had nearly ceased, and in twelve more, diarrhoea having terminated, she was out of danger. By the 21st she was greatly better. The recovery was so rapid that seven visits comprised my attendance. From the hour I first saw her, no opium was given, but the digitalis combination was continued for some time in the same doses as at first.

CASE III.—Mrs R., aged 30, had early in pregnancy such severe and persistent vomiting that it induced uterine contractions and a tendency to miscarriage, with occasional floodings, which occurred throughout her entire pregnancy. She was so reduced in strength as to be obliged to keep her bed more than three-fourths of the time. These unpleasant symptoms were only controlled by morphia given hypodermically. She was delivered at 6 a.m., on 5th December, after an extremely severe labour lasting twelve hours; during six of these, she was under chloroform. The child (her first), which weighed nine and a half pounds, had a large and unusually firmly-united head. Thirty-six hours after delivery a very severe chill ushered in puerperal fever. She had intense pain, increased by the slightest pressure, tympanitis, bad facial expression, cold sweats, slight delirium, and all the symptoms mentioned in Case I., diarrhoea being likewise absent. We decided to give six and a half grains of the digitalis combination without opium

¹ The components are dulcamara, stramonium, sium lineare, cicuta maculata, conio-solum CanaJense, and either digitalis or squills; the former being styled the Digitalis, the latter the Squill Combination. Experience having shown that these are not suited to some exceptional cases, Dr. Kerr has introduced a third combination (*Canada Lancet*, July 1874), styled the Strychnine.

every four hours. In twelve hours she began to improve; in four days was thoroughly convalescent, and made a good and rapid recovery. Prior to the administration of the digitalis combination, morphia was freely given hypodermically, the unfavourable symptoms, apparently unretarded, all the while developing rapidly, and leaving no room to doubt that a fatal termination was fast approaching. After thirty-six hours' use of the powders she was so much better that the nurse omitted to give them—an error which in twelve hours brought on an aggravation of symptoms, but recurrence to the medicine soon checked this, and recovery again went on.

CASE IV.—Mrs D., mother of several children, residing in the country, about ten miles from where the other cases occurred, was delivered by a midwife on the 15th November, and on the 18th was seized with a chill, followed by well-marked symptoms of puerperal fever, accompanied by colliquative diarrhœa. My first visit was at 10 p.m., of the 23rd. By this time, however, there was no pulse at the wrist, collapse having occurred. She was given the digitalis combination, with opium and brandy, freely, but died in eight hours. I learned that the symptoms were very similar to those of the preceding patients. As will be perceived from the dates, all the cases were sporadic. The three who recovered began to sleep within twelve hours from the commencement of the use of the digitalis combination, and sleep became natural and sound in twelve to twenty-four hours more.

I have noted the hypnotic effects of the medicine in children, especially in dysentery and scarlatina, and also in sleepless crying babies. I may add that after-pains are far more speedily relieved and cured by the digitalis combination with opium than by opium alone. Might not this medicine be tried in hydrophobia with a reasonable prospect of success, at least if this disease has its chief seat in an inflamed or ulcerated mucous membrane?—*Edin. Med. Journal.*

UNORGANIZED FERMENTS.

This is a term (Dr. Gamjee, in the *British Medical Journal*), applied to such ferments as those which occur in the animal body to distinguish them from certain elementary organisms, which, possessing the power of setting up certain decompositions in bodies with which they are in contact, are termed *organized ferments*. Unorganized ferments are chiefly distinguished from organized: 1. By the fact that they may be dissolved in certain menstrua without any impairment of their ferment action; thus ferments of the animal body are soluble in glycerine and in water. 2. By the fact that their action is not prevented by many agents, such as chloroform and salicylic acid, which at once arrest

the action of organized ferments. Examples of unorganized ferments:

- (1) Ptyalin in saliva.
- (2) Pepsin in gastric juice.
- (3) Pancreatic juice—three ferments.
 - (a) Proteolytic, capable of converting albumen into albumenose.
 - (b) Amylolytic, capable of converting starch into sugar.
 - (c) One capable of decomposing fats into fatty acids and glycerine.

Although pepsin transforms albumen into albumenose, the action of pancreatin is more profound. Thus Kuhne has shown that when albumen is dissolved by pancreatic juice, not only is albumenose formed, but also leucine and tyrosine. The former of these bodies is closely related to the fatty acids, and the latter to the group of aromatic bodies.

To these facts, already old in science, there have been made some important additions. First Heidenhain has shown us that in the pancreas, as also in the salivary glands and stomach, there are structural differences to be observed which correspond to the various states of functional activity of these organs. During rest the secretory cells of the pancreas enlarge, and there accumulates within them granular matter, which disappears when the gland enters into activity and the gland cell shrinks. Further, the secretory cell of the pancreas at the time of secretion does not contain ready formed ferment, but a body which under suitable circumstances yields the ferment, and which he terms ferment generator or *zymogen*. Heidenhain has shown that the *zymogen* yields the ferment when it is present in a watery solution, more rapidly still when it is treated with weak acids. His careful studies of the conditions of the activity of the fully formed ferment, show that alkalies are as essential to its activity as are acids to the activity of pepsin, a watery solution of sodium carbonate of one per cent being as favorable to the activity of the proteolytic ferment of the pancreatic juice, as is a watery solution of hydrochloric acid containing two-tenths per cent to that of the proteolytic ferment of the gastric juice.

Kuhne has made important additions to these discoveries. To the proteolytic ferment of the pancreatic juice Kuhne applies the name of *trypsin* (to break up). Trypsin differs from pepsin in that it appears to be proteid in nature. Its activity is increased by alkalies and alkaline fluids such as bile, but is prevented by acid fluids. Trypsin has no power of digesting pepsin, but pepsin in acid solution has the power of destroying trypsin. Remembering this, we see an important function of bile. It helps to neutralize the acid chyme and brings peptic digestion proper to a close, and in this way induces the condition most favorable to pancreatic digestion.

The researches of Thiry and others have shown

that the secretion of the intestinal canal contains : 1. A ferment capable of dissolving certain of the proteids as boiled fibrin. 2. One which possesses in a singularly high degree the power of converting cane and milk sugar into grape sugar. Claude Bernard has lately reinvestigated this ferment and finds that it can be dissolved and precipitated by the reagents which dissolve and precipitate the other unorganized ferments of the body. To it he gives the name of *inverting ferment*.—*Detroit Lancet*.

CHLORATE OF POTASH IN CATARRH OF THE BLADDER.

Prof. G. Edlefsen, of Kiel, publishes in the *Deutsch. Archiv. Klin. Med.*, xix., 1, 1877, an essay on the treatment of catarrh of the bladder by chlorate of potash. The view lately advanced that the best method of treating cystitis, even acute cases of it, consists in the introduction into the bladder, through the urethra, of water or medicated fluids, is not in accordance with his observation. The remedy he recommends is chlorate of potash, which never damages the stomach or any other organ, and substitutes turpentine perfectly in cases where turpentine cannot be given.

That the chloric acid salts, when administered internally, pass into the urine, was demonstrated in 1856 by Lambert. The value of the chlorate of potash in affections of the mouth and pharynx leads the author to their administration in affections of the bladder, the epithelium being in both cases alike of the pavement variety. The action of this remedy seems confined to this variety, as it has no effect upon the trachea or bronchial tubes. Its action is not to be explained by simple contraction of the muscular coat of the vessels, as it not only reduces the hyperæmia and catarrh, but also closes ulcers over quickly as if it exercised a specific action in the reproduction of epithelium. The author's results were extraordinary, still there are cases in which he failed with it, and was compelled to resort to turpentine and copaiba. He orders for adults usually : Potass., chlorat. 15.0, aqua dist., 300.0, of which a tablespoonful every two or three hours. He lays stress upon the prescription because it is necessary to bring the patient under the influence of the remedy quickly. Should the taste of the drug after long administration become insipid or sickening, it may be corrected by using cherry laurel as a vehicle (10.0—300.0); any syrup should be avoided. The pus begins to disappear from the urine after its use very quickly—an important difference from the action of salicylic acid—and the subjective distress is lessened or disappears even before the pus has entirely vanished.—*The Doctor*.

FATAL HEMORRHAGIC SMALL-POX.

BY L. D. BULKLEY, A.M., M.D., NEW YORK.

Two years ago I reported a case of unrecognized, fatal hemorrhagic small-pox in the mother, and fatal small-pox in the new-born child, and within a year later I was called in consultation by another physician to see a similar case, which had been previously seen by one physician of New York of some eminence without recognizing its nature. This case was also followed by a case of ordinary small-pox in the person of the husband, who recovered. From these cases having passed unrecognized by several physicians, I deem that the existence of this rather rare form of the disease is not a well-established fact in the minds of all practitioners, and therefore think the subject worth presenting again by means of this second fatal case. This appears to be the more necessary because there is no good description of these peculiar features in the text-books on general medicine or dermatology.

Mrs. E., aged 39, a good-sized and previously healthy lady, five days previous to my seeing her, was seized with a chill, which was not very severe, followed by nausea and vomiting, with some fever. Two days after the chill she began to get flushed in the face, the flushes being of a purplish and rather livid hue, and on the third day some ecchymotic spots appeared on the neck and chest. During this period there was some pain in the back, but this was not severe, and the nausea and vomiting had yielded soon to bismuth. During these first few days there was no sign of a papular eruption, nor at any time was there an amount of any lesion which would be considered as distinctive of small-pox. Hemorrhages began from the mouth on the third day, and soon extended to other localities, persisting until death.

When I saw her, April 24, 1877, the face presented an evenly distributed, purplish, livid hue, with few if any blotches, but scattered over the purple surface, a few minute papules could be discovered on close examination. The neck and chest were covered with a thickly set eruption of petechiæ, confluent in some places; on the abdomen, where a mustard-plaster had previously been placed, there was an evenly formed ecchymotic surface; the back was pretty well covered with petechiæ. On the thighs the hemorrhagic spots were separate and distinct, of an irregularly roundish shape; they were more thickly set upon the buttocks. The legs were more sparsely sprinkled with them, they reaching even on to the toes. The arms were affected in like manner, the eruption of hemorrhagic maculæ of various sizes and shapes extending on to the hands, and even to the fingers, mainly on their backs.

On many of the petechiæ very close inspection

with a pocket lens of moderate power, showed minute pustules, although but a comparatively small number of the hemorrhagic spots exhibited them. On the roof of the mouth there were several fairly developed pustules with ruptured summits.

The eyes were intensely ecchymotic, the tissues of the right eye were raised up in a circular ring around the iris, which appeared as a great depression in the centre; the left eye was less affected than the right, but was the seat of considerable bloody effusion.

The mouth and nose were pouring forth blood, blood was passed by the bowels, there being also considerable pain through the abdomen, and the urine was seen to be loaded with blood in streaks and clots.

The pulse was 120, full and throbbing, temperature, 105°; tongue dry and parched; the bowels had been previously moved by ten grains of blucmass, and she was having loose, bloody stools.

She was conscious, answering questions clearly, and assisted somewhat in the examination, which was very brief, but she complained much of great general distress. She was bled to about twenty ounces, the blood flowing with some difficulty and being of a very dark color. Twenty-five minims of fluid extract of ergot were injected hypodermically into the arm, and this was directed to be repeated every two or three hours. Brandy was to be administered tolerably freely, and to be given by hypodermic injection if vomited.

The patient expressed herself as experiencing the very greatest relief from the bleeding; the pulse became more natural, and she slept. I have not received from the attending physician the promised details of the case after I left her, and only learned that she sank and died within twelve hours after my visit. The family were ordered to be vaccinated at once, but the husband took the disease, as before stated, and was severely affected; I believe all the others escaped.

The interesting points attached to the case are: the peculiar variety of the disease, the small-pox poison manifesting itself almost entirely in the form of the hemorrhages, and the consequent difficulty of the diagnosis; the almost surely fatal nature of this variety of variola; and the necessity of a correct diagnosis for the sake of those around the patient.

In regard to the diagnosis, I need only say that the entire group of symptoms as detailed in this case can be presented with no other disease, purpura hemorrhagica which it most resembles, would not have the initial chill, nor the fever and throbbing pulse of 120, nor the papules on some ecchymoses and the vesicles or pustules on the others. Black measles, or black scarlet fever, the hemorrhagic varieties of these diseases would also never give the pustular element, moreover would not be

so rapid in progress or so violent in character: and would possess other features characteristic of each, as the catarrhal symptoms of measles and the throat disease of scarlatina.

As to the treatment, little if anything has ever availed; the cases are almost surely fatal, and that generally within from three to five days. It was my painful duty to tell the husband that his wife could hardly, by any possibility, live. The treatment followed was such as I should be inclined to again advise, except that it should be resorted to much earlier in the disease. The bleeding was indicated, inasmuch as the throbbing pulse was already seeking relief by hemorrhages from the mouth, nose, kidneys, and bowels, and by thus opening a vein an impression was made on the circulation, and the patient was certainly very much relieved. I should hope most from the hypodermic injection of ergot, which was immediately given; but the disease had progressed too far, and it was possibly not absorbed. In an earlier case I should expect something from it. Too much care can hardly be exercised in recognizing cases of this terrible form of small-pox, as, if undetected, they may give rise to very serious consequences, as in this and the other instance which I have previously reported.—*Medical Record.*

NEW YORK ACADEMY OF MEDICINE.

FALLOPIAN PREGNANCY.

Dr. Laurence Johnson reported (*New York Academy of Medicine*) a case of Fallopian pregnancy occurring in a woman æt. 29 years, married, and the mother of two children aged respectively four and a half and two and a half years. She had always been healthy. Her last menstruation commenced on the 11th of February, 1878, and continued the usual length of time—three or four days. There was no evidence of pregnancy except the non-appearance of the menses on March 11th. On March 23rd, at about noon, she suddenly began to suffer from pain referable to the pelvic region, became faint, and was put to bed. Small quantities of brandy were given at intervals, and she partially regained her strength, but in the evening there was a return of the faintness. She vomited once or twice, and had an evacuation from the bowels. The doctor saw her for the first time soon after the attack of fainting in the evening; found her very pale, with a feeble pulse, 140, but there was no discharge of blood from the vagina.

March 24th.—Patient appeared somewhat brighter; pulse somewhat stronger, but rapid. Utination without pain; abdomen somewhat tympanitic; tenderness all around the uterus, but especially upon the right side. Pain was not a promi-

nent symptom at any time during the entire history of the case, although at no time was she markedly under the influence of narcotics.

March 25th.—Patient sank rapidly, and was thought to be dying. She rallied, however, so that on March 26th she was comparatively bright. On the night of the 26th she sank and died, *four days* from her first attack of faintness.

Autopsy, twenty-four hours after death.—Pelvic cavity filled with blood. Ruptured cyst in the right Fallopian tube, close to the uterus, and probably not larger than a hickory nut. Right ovary contained a recent corpus luteum. Uterine decidua very apparent. Little or no evidence of peritonitis.

Dr. Johnson raised the following important question:—*Would not an operation, with the view of securing blood-vessels, have been feasible and justifiable immediately after the occurrence of the first hemorrhage on the 23rd of March?*

METHOD OF TREATMENT SUGGESTED BY DR. EMMET.

Dr. T. Addis Emmet, in the light of a case reported by Dr. McBurney, and which was seen in consultation by Dr. Thomas and himself, believed it to be a feasible operation, as soon as the Fallopian pregnancy was recognized, to first dilate the uterus, then dilate the tube, and in that manner remove the *fœtus*. Dilatation of the uterus took place when only a moderate quantity of fluid was enclosed in its cavity, and at the same time the fluid backed into the Fallopian tubes. He, therefore, was perfectly satisfied that with proper instruments, the uterus could be safely dilated, and also the Fallopian tube, and, as the cyst was usually near the body of the uterus, its contents could readily escape into the cavity of the uterus when such dilatation was effected. Dr. Emmet then exhibited an India rubber cot, such as he had been in the habit of using during the last ten years for the purpose of dilating the uterus. The dilator was manufactured by Shepard & Dudley, and consisted of an India rubber cot containing a tube into which a sound could be introduced, so that it could be carried to the fundus of the uterus; an additional fixture permitted the attachment of a Davidson syringe, by means of which the cot could be distended to any degree required. When the uterus had been dilated, a curved sound could be used, and the cot introduced into the Fallopian tube, and the dilatation produced as in the former instance.

FEASIBILITY OF A SURGICAL OPERATION.

Dr. Emmet was of the opinion that as soon as rupture of the cyst occurred it was a proper operation to immediately open the abdomen and secure the bleeding vessels; for in comparison with such operations as ovariectomy, opening the abdomen for that purpose was a simple affair.

Dr. Post referred to a case reported to the International Medical Congress by Dr. —, of Georgia, in which laparotomy was performed for that purpose, and with good results.

Dr. Sell approved of the operation.—*Medical Record.*

A NEW FUNCTION OF THE LIVER.

Prof. Schiff and Dr. Lauterbach bring to general knowledge, a new function of the liver, and the 283 experiments which are made the basis of the work, were carried out by the latter in the laboratory of the former, under his direction. It is known that ligation of the portal vein in an animal, produces a condition similar to that caused by morphine; sensitiveness to touch, diminished sense of pain, retarded pulse, pressure of blood in the arterial system, first increased, then diminished, slow stertorous respiration, and the animal dies without convulsions. Dogs hold out about four hours, cats and puppies succumb sooner. A new hypothesis is presented in the work before use, in explanation of this phenomenon. Many animals produce in their organism a powerful poison, under normal conditions, which is eliminated by special glands; in others, as in dogs and cats, a poison is formed under pathological conditions, such as hydrophobia. It is possible that a poison is formed in the organism of all animals, and that they would sometimes perish by self-infection if they were not provided with an organ in which this poison is destroyed. The organ to which this function belongs is the liver, and the symptoms which result from ligation of the portal vein have their origin in a collection of the toxic products in the blood. Thirty-four frogs were injected with the blood of a dog which died after ligation; all of them presented symptoms similar to those of the dog, and died after three hours. In order to prove whether the liver, which destroys the toxic principle in the organism, exercises the same influence on other poisons, Lauterbach made the following experiments: he ascertained the dose of nicotin which was sufficient to kill a large dog if injected into the general circulation; the same dose injected into the small intestines and mesenteric veins of other dogs produced only feeble symptoms of poison, which quickly disappeared; a double dose is not sufficient to kill a dog when the poison passes through the liver before it goes into the general circulation; an injection, five times diluted, killed a dog whose portal vein was tied. A further series of experiments showed that the direct contact of the liver-substance with the nicotin, was sufficient to deprive the latter of its poisonous qualities. If the liver of a puppy is injected with 10 cc. of water and a triple dose of nicotin, and the fluid obtained is injected into the subcutaneous cellular tissue of

a dog, only a few symptoms of poison are observed, and the animal quickly recovers, but if the maceration is made with another organ, *e. g.*, the kidney, all the symptoms of poison are seen, quickly followed by death.—*Gaz. Med. de Paris*, 51. 1877.

TO CONVERT A WARM INTO A COLD-BLOODED ANIMAL.

Claude Bernard made the handsome discovery in 1855 that warm could be made cold-blooded animals at will, so that their muscles, nerves, etc., would remain alive a long time by cutting through the spinal cord at definite places or by withdrawing from them oxygen, *i. e.*, by putting them under a bell-glass jar and allowing them to remain nearly to suffocation. Schiff in 1869, took up these investigations and extended them by alcoholising animals, varnishing them, poisoning them with curara and conium in connection with artificial respiration accomplished the same effect as Bernard, but like him, not describing the conditions of the operation nor giving details as to the experiments. These details have now been furnished by Dr. Oscar Israel in a paper on Artificial Pœkilothermia relating his experiments on rabbits, the only animals he examined. A very good method of operating is that of Claude Bernard, *viz.*, section of the spinal cord between the fifth and sixth cervical vertebrae. To obtain the desired effect completely, the section must be made neither higher nor lower than this point. The first effect of the operation is, as Claude Bernard has already shown, sharp excitement, with great increase of the pulse and respiration, but in from five to ten minutes a reduction commences which soon brings the pulse, the respiration and the temperature down to normal grades. The reduction of the temperature stands in direct relation to the length of time employed in the operation.

The alcoholisation of animals to effect reduction in temperature acts with uncertainty, according to Schiff. Sometimes the animal only becomes drunk, again it perishes too soon with symptoms of toxic convulsions. It is best to first inject 10 to 20 ccm. of a 20 per cent. solution of alcohol absolutus in distilled water into the peritoneal sac and to follow it up with smaller doses, 6 to 12 ccm., subcutaneously whenever the temperature rises to the normal grade. Mostly more than 100 ccm. must be thus injected, but with this quantity a uniform low temperature is secured. Irrigation of the peritoneum with a trocar having numerous fine openings and a drainage tube to carry the fluid off (Wagner's method) is also very effective. The temperature may be very thoroughly regulated in this way so that in ten or less minutes it may be depressed one or several tenths of a degree. The reduction, by whatever method, must not be too little (not above 30° C.), as else the maximum survival of the tissue

is lost, or too great (not below 21° C.), else the animal may die. But the maximum survival of tissue is reached at 21° C. The sinking of the temperature must also not take place too rapidly, as in two hours; or must not go too slow, as in 81 hours. The longest exhibition of life is attained if the temperature be reduced to about 20° in 6 to 10 hours. The excitability of the nerves remains then 3 to 3½ hours, of muscle 6 to 8 hours after the death of the animal. The heart reacts also several hours after death and contracts of itself, if kept full of blood from one to two hours. The muscles may then be tetanised from the nerves (as in cold-blooded animals). The loss of excitability after death now takes place slowly, not suddenly, as in warm-blooded animals.

The explanation which Israel gives for the phenomenon of artificial pœkilothermia is that the cooling in warm-blooded animals effects an insufficient oxidation of the tissues.—*Arch. f. Anat. u. Physiologie*, 1877.

PROLONGED RECTAL ALIMENTATION.

There were certain points of interest worthy of note in the case of a married female patient, æt. 26, who entered the hospital on the 5th of January, 1877. Her family history was good, and there was no evidence of syphilis or intemperance. Through life she had had poor shelter, little food, and much abuse. During her first pregnancy an abortion occurred; had not carried a child to full term; had three abortions in all, the last being the second application. In the third and fourth cases one application was sufficient, although the fourth case was one of the most harassing and persistent cases that ever came under his care. The stomach rejected everything taken into it, and the patient grew feeble, and became so emaciated that she was scarcely able to leave her bed. The caustic was in this case applied very freely to the os and vaginal cervix. In all of his cases all the usual remedies had been faithfully tried before the caustic was resorted to.

Dr. Sims adds notes of a case occurring in his practice, in which this treatment was marvellously successful. His first application of the caustic in solution of two drachms to the ounce was followed by great improvement. At the end of five or six days there was some nausea, which was, however, not distressing. The pencilling of the neck of the womb with pure carbolic acid until it was completely enveloped in a whitish film, relieved the nausea, and the day following she was perfectly well.—*Michigan Medical News*.

MIGRATION OF WHITE CORPUSCLES IN MAN.—Prof. Collin, of the Vale de Grace (*Le Progrès Médical*) gives the result of his studies on the

migration of leucocytes in man, showing that clinical observations and pathology confirm in this respect experimental physiology. It has been known for some years that, when a fine-coloured powder like carmine is injected into the vascular system of an animal, the white corpuscles seize on the small granules, envelope them, and carry them through the vessels. They can readily be followed through the circulation, and it is easy to show their passage through the walls of the vessels, and their extravasation into the cellular tissue. In malarial fever and the resulting melanæmia, pigmented deposits are found in different tissues, particularly in those most in contact with the blood, such as the vascular walls. These deposits are derived first of all from the red blood corpuscles, which are destroyed in the spleen. The white corpuscles take up the debris of the red ones, and form with this the pigmented masses found in the walls of the vessels and different tissues. This migration is very active. In countries where malaria is common the yellowish earthy tint which is due to general pigmentation of the tissues, and consecutive to a migration of the white globules filled with pigment, sometimes appear after only two or three attacks of fever.—*The Doctor*.

BRITISH DEGREES AND COLONIAL PRETENSIONS.

Just now, when we are very properly arranging to give privileges of practice in Great Britain to colonial graduates, may be the proper time to secure the like privileges for our own graduates, who in some colonies suffer from the application of a strictly protectionist system by indigenous examining boards. The *Canada Lancet* points out:

"If, however, we ask for our graduates the privileges enjoyed in England by home-graduates, we must at least be prepared to concede something in return. It seems that there is amongst our Ontario Medical Council a feeling of jealousy that makes them resent a man's going over to Great Britain and obtaining his qualifications there rather than here. It is looked on as a slight to the College, and as an attempt to set it at defiance, and is punished by a refusal to register his British qualifications without further examination here, on the ostensible ground that these qualifications are conferred by irresponsible close corporations, instead of, as here, by a body chosen by the profession and responsible to it for the proper performance of its duties."

The assumption of superiority which covers the special pretension of the Ontario Medical Council is not a little amusing; nor is it altogether unconstructive to note how the exaggerated talk which is sometimes heard anent "irresponsible close corporations" is taken *au grand sérieux* by our

colonial offspring, who delight to flout their grandmother with her supposed shortcomings, on however slender evidence. The fact is, that there is no such thing in the three kingdoms as an "irresponsible close corporation" of medicine, so far as we are aware; no one which is not responsible to its own Fellows, to the General Medical Council, and to Government. But, in any case, the joke of a Canadian board turning up its nose at English diplomas, and refusing to admit them to registration, is too funny to be serious, and too nearly serious to be treated as altogether humorous. We are surprised that this "want of reciprocity" was not mentioned lately at the Medical Council, when the subject of colonial degrees was being discussed.—*British Med. Journal*.

DIRECT METHOD OF ARTIFICIAL RESPIRATION FOR THE TREATMENT OF APNŒA FROM DROWNING, ANÆSTHETICS, STILL-BIRTH, ETC.

BY BENJ. HOWARD, A.M., M.D., M.R.C.S. ENG.

RULE I.—*For Ejection and Drainage of Fluids, &c., from the Stomach and Lungs.*

Position and action of Operator.—Place the left hand well spread upon base of thorax to left of spine, the right hand upon the spine a little below the left, and over lower part of stomach. Throw upon them with a forward motion all the weight and force the age and sex of patient will justify, ending this pressure of two or three seconds with a sharp push, which helps to jerk you back to the upright position. Repeat this two or three times, according to period of submersion and other indications.

RULE II.—*To perform Artificial Respiration.*

Position of Patient.—Face upwards; the hard roll of clothing beneath thorax, with shoulders slightly declining over it. Head and neck bent back to the utmost. Hands on top of head. (One twist of handkerchief around the crossed wrists will keep them there.) Rip or strip clothing from waist and neck.

Position of Operator.—Kneel astride patient's hips; place your hands upon his chest, so that the ball of each thumb and little finger rests upon the inner margin of the free border of the costal cartilages, the tip of each thumb near or upon the xiphoid cartilage, the fingers fitting into the corresponding intercostal spaces. Fix your elbows firmly, making them one with your sides and hips; then—

Action of Operator.—Pressing upwards and inwards towards the diaphragm, use your knees as a pivot, and throw your weight slowly forward two or

three seconds until your face almost touches that of the patient, ending with a sharp push which helps to jerk you back to your erect kneeling position. Rest three seconds; then repeat this bellows-blowing movement as before, continuing it at the rate of seven to ten times a minute; taking the utmost care, on the occurrence of a natural gasp, gently to aid and deepen it into a longer breath, until respiration becomes natural. When practicable, have the tongue held firmly out of one corner of the mouth with thumb and finger armed with dry cotton-rag.

APPLICATION OF THE DIRECT METHOD TO CASES OF STILL-BIRTH.

The child lies along the left hand of the operator, the ball of whose thumb takes the place of the hard roll of clothing. Over this the shoulders decline, the head falling back with arms, if convenient, on either side of the face. The buttocks and thighs are supported by the operator's fingers. Thus, the operator has the prominent little thorax completely within the grasp of his right hand, with firm counter-pressure behind, enabling him to apply, locate, distribute, direct, and alternate his pressure as he pleases.

Case which first suggested this application of the Direct Method, other methods being, under the circumstances, inapplicable.—I was called to apply the forceps in a primiparous labour, which had already lasted nearly three days. It was a seven months' child, and, as I had apprehended, it presented when delivered no present sign whatever of life, and from its colour no future prospect of it. Cold air, spanking, hot and cold water, &c., naturally proved useless. Division of the cord, I was sure, would be final to any lingering possibility of hope. Tethered between the thighs of the mother, the methods of Marshall Hall and of Silvester were alike impracticable. Holding the child in my left hand, I proceeded, however, with the Direct Method, as described above, stopping now and then, and making, quite unaided, mouth-to-mouth insufflation. In about twenty minutes the child commenced to breathe, and she is now one of the most vigorous girls I know. During the entire procedure, with the exception of the head and shoulders, there was no exposure either of the mother or child.

THE ORIGIN OF THIS METHOD.

Notwithstanding more or less of the experiences just narrated, in my lectures in the University of New York, as also at the Long Island College Hospital, I allowed myself to teach only the authorized methods of Marshall Hall and of Silvester. An event, however, occurred which unexpectedly compelled me to consider the entire question from a new standpoint. From a report I had prepared, it appeared that, of the (I think) 244

deaths from drowning during the previous year within the metropolitan district of New York, not one appeared to have been reached by a medical man in time for an attempt at resuscitation.

Under the auspices of the New York Board of Health, I endeavoured to solve the problem whether it was not possible for the harbour police, who more generally rescue these unfortunates, to be made competent also to do something for their resuscitation. Ordered to headquarters in squads for the purpose, I took for my guide the published Instructions of the Royal Humane Society and of the National Lifeboat Institution of England, and endeavoured to teach them to these men accordingly. To make these methods understood I certainly tried most earnestly and faithfully, but as certainly did I most signally fail. These men had but little notion of gravitation, less of respiratory muscles, and the relation between the motions taught them in either of these methods and the motions they could see in simple natural breathing they somehow always failed to comprehend. They learned, therefore, accurately, little or nothing of either method, and in the excitement of a subsequent emergency their notions and motions were more confused than ever. My only inclination was to abandon the whole matter. The responsibility, however, was a serious one, and I accordingly undertook to see how far the methods in question could be stripped of superfluous motions; how the essential feature of alternate thoracic compression and expansion, common to both and all methods, could be presented in the nakedest simplest form. The result was that, instead of throwing the men a nut to break their teeth upon, I was afterwards able to give them simply the kernel; this kernel was the Direct Method. This name I gave it at once, because, in contradistinction to the indirect ways of the other methods, by these rules the two or three things to be done are simply done—done as they would be in any other matter of daily life. The tongue is to be brought forward; it is pulled forward. The chest is to be pressed,—it is pressed;—and that without waste of time, strength, or motion. The result of the change was to all concerned very gratifying. The first day I ventured to teach the Direct Method, Rule I., was made to explain itself in a way I did not intend, the volunteer subject having but just had his dinner.

In explaining Rule II., having put a comrade patient in position, with black ink I described by continuous outline the lips, trachea, apex and conical contour of the bony walls of the air-chest, and with red ink marked the line of the diaphragm at its base. Besides this a amateur patient I placed an old-fashioned pair of kitchen bellows kept widely open by a spiral spring at its base. I need hardly say the nozzle, windpipe, hard conical sides, pliant leather base, presented sufficient similarity,

to the ink outlines I had made on the patient to be quite amusing. But in illustrating simultaneously the action of the operator, both upon the one and upon the other, side by side, the manifest compression, rebound, and audible gasp, presented an analogy so complete, all I had to say about the steady increase of pressure ending with a short push, about the rhythm, the persistence, the gentleness to be employed, as in reviving a dying ember, was entirely anticipated, and each man I found on the first lesson to be as competent as he was impatient to "blow the bellows," as he called it, of his comrade. The lectures were henceforth anticipated by the men as much as for the entertainment as for the instruction. It so happened the next morning one of this first squad fished out an unfortunate man who had sought relief by drowning near Catherine Ferry; and though for twenty minutes after rescue he gave no sign of life, this policeman succeeded in establishing respiration, and within two hours the man was able to return to his lodgings.—*The Lancet*.

ELECTROLYSIS OF SCROFULOUS LYMPHATIC GLANDS.

Mr. Golding Bird has contributed a paper on the treatment of scrofulous lymphatic glands, by the electrolytic caustic. He referred to the growing disuse of caustic. He divided cases of scrofulous glands into three classes: 1. The glands free, though enlarged. 2. The glands matted together, or to the skin, or presenting hardened nodules, or encapsuled (lymphoma). 3. The condition of active inflammation. The first-class was met by general treatment. In the second it was better to use the knife. In the third the best operation was by caustic; and the least painful of any mode of applying it, was the one now described. A small arrow of sheet zinc, one inch and a half long by half an inch wide, sharp at one end, had a copper wire ten inches long attached to the other. The other end of the wire was soldered to a plate of thin sheet silver or copper, three or four inches square: The latter was firmly strapped upon a piece of lint, wet with salt and water, on to the skin somewhere near the spot to be destroyed. Over it was placed some oiled silk or waterproof strapping. The zinc point was then thrust through the fungating mass to be destroyed; a small shield of gutta-percha, or cork, regulated the zinc point. Some cotton-wool and a bandage were placed over all. The gland was gradually disintegrated by the formation of chloride of zinc at the expense of the metal inserted, and came away in four to six days. When all the gland had come away, the wound rapidly closed, with very little scar. The lint must be wetted with salt and water, night and morning. Mr.

Spencer Wells was employing this method for the removal of uterine cancer. He referred to two cases, in which, though the results were very satisfactory, much pain was complained of. In the latter, the total weight of slough was four hundred and thirty-three grains. He narrated the history of one case in which he applied the zinc in the form of a flat disc to necrosed bone with good result.—*British Medical Journal*.

AGENCY OF WHITE CORPUSCLES IN THE COAGULATION OF THE BLOOD.—Professor Schmidt has shown us that there is no fibrine in the circulating blood, and that the fibrine of the clot is represented by the fibrinoplastin and fibrinogen of the liquor sanguinis. Later it appeared that, in order that these factors should unite, it was necessary that a third substance should be present. This third substance has been traced to the white blood corpuscles; but in order that it may act in producing fibrine it must be set free by the disintegration of these corpuscles.

What are the reasons for believing that the white blood corpuscles contain the ferment necessary to coagulation of blood? These are well stated by Dr. Burden Sanderson in the *British Medical Journal*, January 12th, 1878. First, he shows that certain white blood corpuscles disintegrate from the moment they leave the blood stream. The experimental proof of this is as follows: Blood from an artery or vein is caught in a tall jar in which it is rapidly cooled. The jar is now surrounded by ice, the blood remains uncoagulated, the red blood discs sink to the bottom, the white ones rise to the top, and serum separates the two. If the colorless liquid at the top be collected with a pipette, almost immediately it will be found to contain numberless colorless corpuscles, and if the observation be continued it is seen that a certain number of the leucocytes rapidly undergo disintegration. In the process of disintegration the corpuscle breaks up into granules, which hold together for a time in the liquid, but eventually disappear. Prof. Schmidt has seen the first formed filaments of the fibrine originate from the heaps of granular debris which the corpuscles leave behind them. Further, if the white blood corpuscles be withdrawn coagulation is arrested. Proof of this is rendered possible by the fact that leucocytes, at the temperature of freezing, acquire such firmness and consistence that they are held back by the ordinary method of filtration. This being the case, the physiologist can obtain uncoagulated plasma free from leucocytes. The filtrate thus obtained is absolutely transparent and deprived of its power of coagulation. If now we wash the white blood corpuscles collected on the paper filter and add them to the decoperculated plasma, the latter is restored to its original coagulability.—*Droit Lancet*.

TYPHOID FEVER OF RENAL FORM.—In *Le Progres Medicales* of March 9, 1878, is a brief notice of a little work having this title, by Dr. Charles Amat, of Val-de-Grace.

Dr. A. states that typhoid fever is divided into different forms, as different organs or systems are most prominently affected; for example, the central, cerebro-spinal and thoracic forms have been especially described. The renal form, he states, has been neglected thus far. He expresses his views in the following summary:

1. The typhoid poison may affect principally the kidneys, just as the brain, spinal marrow or lungs may be the organs chiefly affected.

2. Although mentioned by Gubler, Robin and Hardy, no complete description has yet been given of this form of the affection.

3. It possesses a special symptomatology—slight diarrhoea, extreme debility, ashy paleness of the skin, copious epistaxis, morbid delirium, and very high temperature. There is but little eruption. The special symptoms connected with the urinary organs are, the bloody appearance of the urine, the presence of a sediment formed of red and white blood corpuscles and tube casts, and also the presence of albumen in considerable quantity.

4. The ordinary form of typhoid fever is differentiated from the renal form by the greater intensity of the abdominal symptoms, a more copious diarrhoea, by the delirium being less marked, the temperature lower, the eruption more confluent. The urine in the ordinary form is of an orange color; the sediment is not constant, and, when present, consists chiefly of urates and phosphates. The albumen is in very small quantity, if present at all.

5. In the renal form but few of the intestinal follicles are affected. The kidneys are enlarged, and present the alterations of interstitial nephritis.

6. The renal form may be confounded with ordinary typhoid fever, and in certain cases with simple nephritis.

7. The course and duration of the affection are variable; the termination is generally in death.

8. The condition of the urine is important with respect to prognosis; a diminution in the amount of sediment and albumen in the urine being of favorable import.

9. The patient should be subjected to a milk diet, and cold baths are to be scrupulously avoided.

—*Cin. Med. News.*

HOW DOES QUININE INFLUENCE THE EMIGRATION OF WHITE BLOOD CORPUSCLES IN CASES OF INFLAMMATION?—The question, whether the stopping of the emigration of white blood corpuscles by quinine was simply the result of its influence upon the protoplasm of the white blood corpuscles, or was caused also by disturbances in the circulatory apparatus, induced Dr. J. Appert to

make some new researches in this line. He operated with blood from the *Rana temporaria* and the *Rana esculenta*, and found that the amoeboid motions of the white blood corpuscles cease, and that they assume a granulated appearance in the course of 10 to 90 minutes when brought into contact with solutions of quinae mur., having a strength of from 1-200 to 1-2000. Even weaker solutions (1-2500 to 1-3000) influence the motions of the white blood corpuscles. But a solution of 1-3500 causes no perceptible changes of them. Upon the other elements of blood, quinia has no effect.

When in cases of inflammation quinine was locally applied, the doctor found that continued irrigation of a 1-10th to 1-5th per cent. sol. upon a wound (of the tongue) limited the emigration, dilated the vessels and hastened the circulation.

Hypodermic injections had the following results in cases of inflammation: Single doses of quinine, amounting to from 1-3500 to 1-4000 of the frog's weight, not only stop the emigration of white blood corpuscles but also hinder their attachment to the inner walls of the vessels. Besides, the cells turn darker, their amoeboid motion is arrested, and the pulse as well as the circulation is slower. Doses of 1-444 of the frog's weight, injected within three or four hours, limit the emigration of cells and those within the vessels appear darker.

When the doctor compressed the arteries (of the tongue) he found after the application of quinine a retardation of the circulation, a contraction of the vessels increasing with the strength of the solution, an intermittent current of blood in the larger arteries, a decrease in the calibre of the axis of the red current in favour of the broadness of the plasmatic current of the margin, and numerous attachments of the white blood corpuscles to the walls of the vessels. In the veins there was observed a retardation of the current, a broadening of the red current to the walls of the vessels, and no tendency to attachments to the walls of vessels on the part of the white corpuscles. At last, no emigration was observed for hours.—*Virchow's Archives, Vol. 71, 1878.*—*Detroit Lancet.*

WHOOPIING COUGH.—M. Dervieux believes he has found a preservative means in aconite, associated with ipecacuanha and cherry-laurel water. This mixture is either a veritable prevention, or simply an abortion. His formula is as follows:

Extract of aconite,	.05 grammes	= $\frac{1}{2}$ grain nearly.
Cherry-laurel water,	4.00	= 1 drachm
Syrup of ipecac,	3.00	= $\frac{3}{4}$ “
Mucilage,	200.00	= 6 $\frac{1}{2}$ ounces

This is given as soon as the characteristic cough presents itself, in doses of a teaspoonful every hour to young infants; two teaspoonfuls to those more than three years of age: and a tablespoonful to adults every hour.—*Lyon Medical.*

DELAYED LIGATURE OF THE FUNIS.—Dr. Budin, while *interne* at the Maternité, came to the conclusion from his investigations that it is better not to tie the funis till one or two minutes after the complete cessation of the pulsation. By tying it immediately after birth we in fact prevent the child deriving about ninety-two grammes of blood from the placenta. Now, as Welcker, Bischoff, and others have shown that the weight of the blood of a new-born infant amounts on a mean to 270 grammes, or about a thirteenth part of the weight of the body, abstracting ninety-two grammes may be considered as equivalent to bleeding an adult of the weight of sixty-five kilogrammes to the extent of 1,764 grammes. Dr. Hélot, Surgeon to the Hospice at Rouen, has since examined the subject with the intention of showing whether the infant really acquires this blood, by counting the globules of blood by Hayem's method and by weighing the infant immediately after birth before dividing the cord, and then again when the cord has ceased to beat. By these means he found that there was an increase of 209,632 globules, and an addition to the weight of the child of fifty-three grammes. He therefore thinks that in normal cases rapid ligation of the cord should be entirely rejected, this operation not being performed till some instants after respiration has been completely established.—*London Med. Times and Gaz., from Gaz. des Hôp.*

PURE DIALYSED IRON.—"A year since, when Dialysed Iron was a novelty, I commended it in the *News*, as a most valuable addition to the *Materia Medica*. Twelve months of additional experience have confirmed my faith in its excellence. The object of this note is to call attention to the great variety of *spurious* preparations sold under the name of Dialysed Iron. In this city I have found nine varieties of so-called Dialysed Iron. Some of these were manufactured here, but most of them where made elsewhere. Genuine Dialysed Iron is nearly tasteless. It has the faintest possible saline flavor and a mere suspicion of roughness. Slightly diluted, its taste recalls that of fresh blood. It is not in the least unpleasant, and does not blacken the teeth or tongue. It seldom or never produces any gastric disturbance or headache, and very rarely constipation. It is exceedingly reliable and rapid as a tonic.

"The *spurious* forms of this drug are without the characteristics of taste and efficacy above enumerated, and chemical analysis readily detects their deficiencies. One of the *spurious* specimens before alluded to, was little less unpleasant than the tincture of muriate of iron, another was excessively acid, another was decidedly saline, another was exceedingly astringent, another was sweetish, another was bitter, and another was seemingly only colored water; another more nearly approached correctness, but only a single specimen possessed the peculiarities of the true article.

"My attention was first directed to this matter through the failure or misbehavior of the Dialysed Iron in practice. It is but just to say that the good specimen is from Wyeth & Brother, the original manufacturers of this medicine in America. Wyeth's Dialysed Iron sells at about a dollar a pound. Other makes may be bought at fifty cents."—*Dr. L. P. Yandell, Louisville, Med. News.*

TREATMENT OF ENLARGED PROSTATE.—It has been found desirable in the Dispensary practice to adopt a method of treatment for enlarged prostate, obviating the use of any instrument, as the patients are usually unable to buy one. A certain amount of relief is obtained by the fluid-extract of buchu or of *triticum repens*, when the secretion is turbid or acrid; but their efficacy is of course, slight when unaccompanied by the introduction of the soft catheter. It was my good-fortune to try the effect of the fluid-extract of ergot in large doses for those cases, and was tempted to do so by the success I obtained from it, in treating a case of simple incontinence without enlarged prostate. The treatment proved successful, and is now a standard one with us in the surgical department. The following case will illustrate the way in which it acted:

W. M., aged twenty, laborer, came to the Dispensary May 10, 1876. He stated that for some 10 or 11 years he had suffered from dribbling of urine. On May 3rd his troubles were much aggravated, and he came for relief. A catheter was introduced, relieving his bladder. The patient was then at once put upon the fluid-extract of ergot in tea-spoonful doses, to be taken three times a day. Previously he had passed water with extreme pain and difficulty seven or eight times a day, and from four to five times at night. He experienced great relief from the ergot.

May 23rd.—He reported that his water was now passed only five times a day, and twice at night. The water is clear, and there is little pain in passing it. In cases where the patient can buy the soft, elastic catheter (Nelaton's), it is recommended, with directions to use it twice or three times daily. This treatment may be combined with the use of ergot; but ergot alone has been found of great advantage, the patients returning at regular intervals to have their medicines renewed.—*Dr. Satterthwaite's N. Y. Med. Journal.*

A DELICATE MEDICAL QUESTION.—A letter from Paris recites this event:—A young widow, whose aged husband had died, becomingly appeared two months afterward at the Paris Marie, to announce her forthcoming marriage to her cousin. "Pardon me, madame," observed the clerk, "but the law peremptorily forbids a woman to marry within ten months of her husband's death." "Yes, truly," replied she, "but are not those eight months of paralysis to be taken into consideration?"

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TORONTO, JULY 1, 1878.

MORTALITY AMONG CHILDREN.

From the mortality returns of the Boards of Health of cities in this country it appears that about 40 per cent. of all the children born, die during the first year; that 20 per cent. die before the fifth year, and that 65 to 70 per cent. die before the tenth year, or more than half of all the children born are dead before the end of the 1st decade! Such frightful mortality among the young of the human race must surely be due to some explicable cause, or causes, for among the young of no animal, native or domestic, is the mortality amongst the young so great.

If we refer to the tables of mortality in England we will find that it has been estimated that out of 100,000 children born alive, 15,000 only, or a little less than one-seventh have died during the first year; 9,000 in the second year, or 1-17, and by the end of the 5th year nearly 26,000 or upwards of $\frac{1}{2}$, have perished. During the next five years the children are left more to themselves, exercise more, and although during these years, they run the gauntlet of most infantile diseases as measles, scarlatina, whooping cough, &c.; yet only 5,000 die during this period and so on, less during each successive year up to 15, when it begins to increase. In Montreal, the mortality among infants has been excessively large, as compared with any other city in the world, and the Health Officer, Dr. Larocque, finds it necessary to apologize for this, by referring to the fact of the large birth-rate which, owing to the prolific character of the French portion of the population, is greatly in excess of any other city. The infant mortality has also been very great in Toronto and other large cities.

We will here quote from the elaborate report of Dr Larocque, to confine ourselves to published

facts, and figures, where we find that the total death rate of the City of Montreal during 1876 was 4,557, an increase of 229 over that of 1875. The greatest mortality rate occurred during July and August, owing to the meteorological state of the atmosphere promoting diarrhoeal diseases among infants, while in September the mortality rate continued high, owing to the prevalence of small-pox.

The following comparison of death rate between Montreal and other large cities is given in the report: In Montreal the death rate under 1 year was 39.78 per cent., under 5 years 62 per cent; in New York (1867 to 1873), under 1 year was 30.5 per cent., under 5 years 50 per cent; in Cincinnati (1867 to 1873), under 1 year was 25.5 per cent., under 5 years 48.1 per cent; in Cleveland (1874), under 1 year was 37 per cent., under 5 years 54 per cent; in Boston under 1 year was 25.26 per cent., and under 5 years 44.34 per cent; in Philadelphia (1875), under 1 year was 22.11 per cent., and under 5 years 41.39 per cent.

In Montreal the birth rate is 49.53 per 1,000 of population; in Philadelphia, 24.07 per 1,000; in Boston, 32.23 per 1,000; in Cleveland, 22.32 per 1,000; in New York, 24 per 1,000. Boston has the highest quoted; but that of Montreal exceeds it by 17.30 per 1,000.

The report says very tersely and forcibly, "The total number of deaths among children, under 10 years of age, during the year, was three thousand and ninety-seven, giving a percentage of 67.46 to total mortality; under 5 years 62.71 per cent. Over one-third of the annual number of deaths occurred among children under 1 year, more than one-half under 5 years, and two-thirds under 10 years. Small-pox, measles, diphtheria and scarlatina, to which we owe the excess of mortality under 10 years, cause comparatively few deaths among children under 1 year, the excess during that period being due more especially to infantile debility and diarrhoeal diseases."

Further the report ascribes to diarrhoea, dysentery and cholera infantum 658 deaths among children under 10 years of age, 456 of which were under 1 year, and these diseases were almost wholly confined to the third quarter. "The highest mortality occurred among the French-Canadians. Mostly

all the deaths occurred under 1 year, and from 1 to 5 years," and the high death rate is ascribed "chiefly to the excessive heat of summer and improper alimentation among the poorer classes." From convulsions there are recorded 122 deaths, and most of these occurred from errors in diet. The four diseases accounting for the greatest number of deaths respectively were as follows in their order as they stand: Infantile debility, under 1 year, 435; under 5 years, 50; under 10 years, 3, from diarrhoea, under 1 year, 230; under 5 years, 55, and under 10 years, 1; from cholera infantum, under 1 year, 204; under 5 years, 33, and under 10 years, 3; from small-pox (not necessarily an infantile disease), under 1 year, 160; under 5 years, 367; under 10 years, 77.

Estimating the population at 133,000, the death rate is 29.09 per cent. or 34.26 per 1,000, while the excess of death rate among children, under 10 years of age, in Montreal is 13 per 1,000 over Philadelphia and 10.28 per 1,000 over Boston—or estimated, according to Dr. Farr's valuation of human life of from 1 to 5 years \$225—the annual loss over Boston in money value in children is \$2,250 per annum, and over Philadelphia \$5,175 per annum; the average value of life, according to Farr, being for a child, under 1 year of age, \$20; from 1 to 5 years \$225, at 10 years \$461, at 20 years \$936, at 25 years \$984, at 55 years \$552.

Now if we add to the annual loss by deaths among children actually born, an additional number, say one-fourth as many more that have never been allowed to be born, by the new fangled notions respecting the prevention of conception, in defence of which these people argue that an excess of population always means an excess of pauperism, it represents a money value of large amount. Parents constantly raise the cry against the city, of bad drainage, &c., all true enough to a certain degree, entirely overlooking the errors in nursing and private management of infants, by which, in the matter of diet alone, an enormous amount of mortality, is occasioned among the little ones. Indeed, so gross is the ignorance, neglect or carelessness often manifested in the care of infants, too often left as they are, almost entirely to the charge of an ignorant nurse, or to the care of the older children—that the mortality rate among infants can scarcely be wondered at.

In regard to the general cry of unhealthiness of cities, the thousands of healthy children teeming the numerous public schools attest the contrary, where there is not homicidal nursing, or bad management of the children at home. What may be presumed to be the reason of the high mortality rate in all foundling institutions, over that of private nursing, but the difference in the manner of feeding—that is between natural and artificial nursing; therefore, we take it that in cities all children starting on equally fair conditions from birth, with the same nursing and home management, should have equally the same chances of living, or expectation of life, leaving aside the chances of death arising from the danger incurred to all in running the gauntlets of children's diseases, which to many, may be rated among the accidents of life.

PHYSICAL CULTURE.

An exchange has an article from which we take a few extracts, on the "Limits of Physical Culture" which is well worthy the consideration of members of the profession. We can recall several instances during our own experience in practice in which cardiac affections were directly attributed to violent or excessive bodily effort. One notable instance of aortic valvular disease of the heart in a young man of giant proportions is a remarkably direct case of injury to this organ from the over exertion of hard rowing, and the sudden death of the English oarsman during the race with the St. John's crew, is another instance of the danger of excessive exertion.

"We have frequently had occasion to dwell upon the fact that, while moderate physical culture is a great benefit—indeed a necessity, to insure a proper balance of mental and bodily powers, and consequent health and longevity—physical over-culture is a great evil, leading to results diametrically opposite to those sought to be attained. At one end of the series is a constitution, weak, and unfitted to resist disease or the effects of labor, on the other an organization strained to its utmost and ready to yield under the slightest addition to the stress. Obviously between these extremes there must be a mean, up to which all culture is beneficial, and beyond which all is over-culture. The question is, whether that mean is

in the nature of a personal equation for every one, differing for each individual constitution, or whether it is possible to formulate general laws, true for all systems." In the case of physical culture the point specially to be determined by actual physiological investigation is, to what extent the body may be benefited. This known, any one may easily discover for himself when the limit is reached, and will understand that to carry his training still further is a positive disadvantage and injury. Such an investigation has lately been made by Dr. Burey, of Paris, in the *Ecole de la Faïssanderie*, a gymnasium where the soldiers are drilled who are destined to be the gymnastic instructors of the French army. No better set of men could be selected for examination, for the reason that each individual is virtually a model for others, and, therefore, his physical culture is brought to the best possible state. Dr. Burey continued his investigations with the utmost care and minuteness for six months, during which period the progress of over a thousand men was closely watched and criticised. As a general result, he states that gymnastic exercises, 1st, increase the muscular forces up to 25 and even up to 38 per cent., at the same time tending to equilibrate them in the two halves of the body. 2nd. Increase of the pulmonary capacity at least one-sixth. 3rd. Increase in the weight of men up to 15 per cent., on the other hand diminishing the volume. This augmentation exclusively benefits the muscular system, as is demonstrated by its elevated dynamometric value. During the first half of the course of six months, the increase of force was most markedly noted.

M. Eugene Paz also, has for a long period been observing the results produced by methodical physical exercise in certain invalids, and in a large number of people of various callings, notably artists, literary and business men, and others, whose muscles are normally less voluminous than those of picked soldiers. By means of a variety of ingenious mechanical apparatus, and by a course of investigation wholly different from that of Dr. Burey, M. Paz has reached precisely the same results. He notes especially the three results referred to by Dr. Burey, viz., increase in weight, decrease in volume of the body, and also augmentation of the pulmonary capacity. Three operatic singers, who were vigorously trained for a year,

obtained a maximum lung power, corresponding exactly to an increase of one-sixth. It follows, therefore, that Dr. Burey's results may be considered in the light of a general law, and likewise as a guide to what is correct physical culture.

The lacrosse playing of Canada is developing a few instances of the evil effects of over-training in athletic sports.

LIQUEFACTION OF OXYGEN.—The *Chemical News* of the 4th of January contains a full account of Mr. Picquet's brilliant discovery of the liquefaction of oxygen, contributed by the discoverer himself. Docter Andrews long ago proved that for every gas there is a certain "critical temperature," above which it is impossible to liquefy the gas, and he pointed out that the reason why all Faraday's attempts to liquefy the so-called permanent gases had failed, was probably that the experiments had been made at temperatures above the critical point. Dr. Andrews himself had subjected atmospheric air to a pressure exceeding 500 atmospheres, at the temperature of melting ice, without the slightest approach to liquefaction becoming apparent, and Faraday had previously submitted both air and its constituent gases to the lowest temperature then known— -140° C.—with like negative results. Mr. Picquet's success is due to a cleverly constructed apparatus, which enables him to make use, at the same time, of pressures up to 800 atmospheres, and of the lowest temperatures attainable.

He says that his object in undertaking the experiments which led to this discovery, was to prove that molecular attraction is a universal law of matter. Under the intense degree of refrigeration attained by the sudden expansion of its highly compressed oxygen, a portion of the gas must either have been reduced to the absolute zero of temperature, and have fallen as an impalpable powder, or it must have submitted to the law of attraction and formed liquid globules. The result proved that the latter alternative was the true one. Since the liquefaction of oxygen, Mr. Cailletot, of Paris, has succeeded in liquefying the only remaining gases, hydrogen and nitrogen, thus demonstrating that the gaseous condition is not essential to any substance, but only an accident, depending upon the relations of temperature and pressure. These results may, therefore, be fairly said to constitute the keystone of the arch of the dynamical theory of heat.

REMEDY FOR POISONS.—It is stated by an American exchange that sweet oil introduced into the stomach is a neutralizer of all poisons of an acrid or corrosive character. The remedy is harmless, nearly always at hand, and is worthy of a trial.

OWNER WANTED.—We received from a subscriber, by post, on the 5th ult., the sum of six dollars in payment of subscription to the *Lancet*. As no name was attached to the enclosed slip we are at a loss to know from whom it was received. The money is perfectly safe, but we owe somebody a receipt for it.

SCIRRHUS CANCER OF THE BREAST IN THE MALE.—Mr. Christopher Heath, of University College, London, reports in the *London Lancet*, a case of scirrhous of the breast in the male. The patient was about 47 years of age, of healthy parentage, and no family history of cancer. He first noticed it four years ago. He attributed his disease to a habit he had of striking his hand against his chest. The cancer was removed and also some enlarged glands in the axilla.

LONGEVITY.—The average of human life is about thirty-three years. One quarter die before the age of seven. Of every one thousand persons, one rarely reaches the age of one hundred years, and not more than one in a hundred will reach the age of eighty. There are on the earth 1,000,000,000 inhabitants. Of these about 38,333,333 die every year; 91,824 die every day, 7,789, every hour, and sixty every minute. The married are longer-lived than the single. Tall men live longer than short ones.

BRITISH DIPLOMAS.—The following gentlemen have successfully passed the required examination, and were admitted to membership in the Royal College of Surgeons, England, in May last:—D. H. Dowsley, M. D., of Clinton, and G. T. McKeough, M. D., (Trinity College) of Chatham.

The following gentlemen have also passed the examination at Edinburgh for the double qualification L.R.C.P., L.R.C.S., Edin:—J. E. Eakins, M.D., of Newburgh; A. E. Mallory, M. D., of Cobourg; W. D. Robertson, M.D., of Montreal, and A. T. Somerville, M.D., of New Brunswick.

BRAIN HYGEINE.—The brain that is not habituated to steady hard work, is liable to be more or less injured by any spasmodic strain. In a healthy condition, however, supplied by pure blood, so as to insure the true balance between destruction and repair, the organ will bear almost any amount of tasking. So long as an intellectual worker can sleep, eat and exercise fairly, he is master of the situation; and the number of hours he devotes to his labors is much at his option. When sleep becomes fitful and disturbed, and appetite fails, let him beware; to persist in labor despite these warnings is to unsettle the system and either suddenly or gradually to break it down. Where there are extra cares and worries, whether connected with the daily occupation or otherwise, the difficulty of fulfilling the conditions of a healthy brain is increased tenfold.

A LADY WITH TWO HEADS.—As will appear from the following notice in the daily press, the double headed child, noticed in a previous issue is not altogether unprecedented. The "Two-headed Nightingale," is with other interesting specimens of humanity, to give a series of entertainments in Alloa, Scotland, early in April. This lady possesses two heads on one body, with two chests and four arms. Such combinations of foetal development as these cases illustrate are difficult of explanation, and only serve to show how little we really know of the mysteries of nature's operations.

THE HOMŒOPATHS IN DIFFICULTY.—The members of the New York Homœopathic Society, have lately discovered that they are liable for damages at law, if they swerve from the practice of the principles which they publicly profess. According to high legal authority, which has been confirmed by the opinion of Judge Davis, of the supreme court of the United States, when a physician undertakes to treat according to the principles and practice of any particular system, he must conform to that system in his treatment, and a failure to do so would be a violation of his contract, so implied by the law, and he would be held responsible for such violation. It is therefore proposed to so alter the Constitution of the Society, as to make it legal for them to practice on any system. This seems like lowering the homœopathic flag.

ROYAL COLLEGE OF SURGEONS.—Sir Joseph Fayer, Mr. Oliver Pemberton, and Dr. Norman Chevers are among newly-elected Fellows.

CASCARA SAGRADO.—This is reputed to be the best remedy for chronic constipation of the bowels yet discovered. The dose is from a teaspoonful to a tablespoonful of the fluid extract, three times a day. It is prepared by Parke Davis & Co., Manufacturing chemists, Detroit.

PAPER LINT.—This substance which is now being introduced and used instead of ordinary lint possesses some most excellent features. It is lighter, cheaper, and as an absorbent, far superior to cotton or linen. It can be readily impregnated with carbolic acid, salicylic acid, thymol or other antiseptics, and used wet or dry.

A MONUMENT TO CLAUDE BERNARD.—The Paris Société de Biologie has appointed a committee to solicit subscriptions for the erection of a suitable monument to perpetuate the memory of the illustrious savant, of whom the whole French nation is justly proud.

Reports of Societies.

MICHIGAN STATE BOARD OF HEALTH.

The regular annual meeting of this Board was held at Lansing, Tuesday, April, 9th, 1878, the following members being present: Dr. R. C. Kedzie, President, Hon. Le Roy Parker, Rev. D. C. Jacokes, and Henry B. Baker, Secretary.

It being the annual meeting, President Kedzie presented his annual address, entitled "The Work of the State Board of Health," in which he gave an account of the past work of the Board, and outlined its work for the immediate future. Among the many duties which the Board had performed since its organization, about the first effort was for the establishment of well organized and effective Boards of Health, in every township, city, and village throughout the State, securing the appointment of a Health Officer, by every Board of Health, and then bringing the State Board of Health into communication and active co-operation with all these local Boards of Health, thus gaining two important objects; (1) having an effective

channel for imparting information, (2) having organized bodies through which the statistics in regard to public health could be gathered from all parts of the State. Besides this the Board had secured the assistance of many physicians throughout the State, receiving from them many valuable reports, communications, and replies to circulars regarding the cause and progress of various diseases. He referred to the general plan of work within the Board, by distributing the duties to regular committees on different subjects, and claimed that every State Board of Health subsequently organized, had approved of the plan by adopting it. In speaking of the efforts to impart information, and gather statistics bearing on the public health, he said the results were most gratifying. Not only sanitarians, but the people at large, are grasping that very important and revolutionary idea, the possibility of the prevention of disease and death; that many diseases may be prevented altogether, or that when they do appear, they may as certainly be stamped out as a forest fire may be extinguished, or they may be walled in like an inundation. A people who fully grasp the idea that half of their sickness and death may be avoided, as truly and really as they may prevent the destruction of their crops by cattle, by proper fencing, have taken a long stride in state medicine. This fact ought not to be lost sight of, that each person is in the broadest and fullest sense healthy and safe only as every person about him is healthy and safe. In outlining the future work of the Board, the Doctor said that the law now says that the Board shall from time to time recommend standard works on hygiene, to be used as text books in our common schools. He recognized the fact that public health measures, have their foundation on vital statistics, and it becomes therefore a matter of necessity as well as of law that we should study these records, in order to promote the health and safety of the people. In his opinion the question of food and its preparations for human use, has more vital relations to the public health and welfare than all other physical causes combined. If our people can be taught to preserve and prepare their food so as to secure the best dietetic results, preventive medicine will have won a grand victory. It could then no longer be said, that "our appropriate monument would be a frying-pan and our epitaph saleratus."

Dr. Baker made a report of the work done in

the office during the quarter just ended. Blanks and circulars of instruction for annual reports of health officers and clerks of local boards of health had been sent out, and 1,189 documents of this kind had been received, examined and filed. Dr. Kedzie was asked to attend the meeting of the American social science association at Cincinnati May 18 to 24; and Dr. Baker was asked to attend the coming meeting of the American public health association.

ONTARIO MEDICAL COUNCIL.

MINUTES AND PROCEEDINGS.

The Council of the College of Physicians and Surgeons of Ontario met in Toronto on the 11th ult. Dr. Daniel Clarke, President in the chair. The minutes of the previous meeting were read, and confirmed.

The following new members took their seats; Dr. W. L. Herriman, and Dr. E. M. Spragge in the place of Drs. Dewar and Hodder deceased.

The President then delivered his retiring address. After thanking them for the support they had awarded him during the past year, he said it was with great sorrow he had to report the decease of Dr. Dewar and Dr. Hodder. He paid a feeling tribute to the high professional standing of Dr. Dewar, and made an acknowledgement of the services he had rendered the Council. The name of the late Dr. Hodder was familiar wherever medical literature had a place, and his loss would be keenly felt by the profession and the Council. He then referred to the necessity of providing a suitable building for examining students this year, the University Convocation Hall having proved to small for the purpose, and suggested that the building in the Queen's Park at present occupied by the Registrar should be fitted up for the purpose, or that a piece of property should be purchased in a central part of the city and a suitable registrar's office and examination hall erected thereon. He reported that about eighty quacks had been prosecuted during the year, and while on this point alluded to the remark made by Dr. Hingston, in an address before the Canada Medical Association, to the effect that Dr. Jenks, of Detroit, had been threatened with prosecution for practising medicine on the Canada side of the line. His explanation was that while the Ontario Medical Council did not object to distinguished men from the States coming over to consult with Canadians, it was but doing justice to our own medical men practising along the frontier to refuse to permit Americans to take patients of their own in Canada, unless they took out a license here and passed the regular examination. He had endeavoured to have the penal clauses of the Act

enforced in all instances except in the case of graduates who gave valid reason for not taking out a license last year. The representatives of the Council had introduced into the Legislature amendments to the Medical Act, but, although they were in principle approved by both sides of the House, they were not passed, owing to the lateness of their introduction. He suggested that the Council might, out of their surplus funds, establish three bursaries of \$20, \$40 and \$60, for competition by medical students.

After a vote of thanks to the retiring president Dr. Campbell was elected president for the ensuing year and Dr. Allison vice-president.

The PRESIDENT elect, in returning thanks, said that he felt great pleasure at his election, not from motives of gratified ambition, but because the Council had done an act of justice. He had always worked hard in the interests of the Council, and not in the interests of a particular School. He assured them that this impartiality he would still maintain in his position as President.

STANDING COMMITTEES.

The Committee appointed to draft Standing Committees for the year reported as follows, which was adopted:—

Registration.—Drs. Bethune, Bogart, Henwood, Lynn, Vernon, Spragge.

Printing.—Drs. Cornell, Carson, Macdonald, Morden, Muir, Lynn.

Finance.—Drs. Hyde, Herriman, Henderson, Irwin, Ross.

Rules and Regulations.—Drs. Brouse, W. Clarke, Berryman, D. Clark, Bogart, Edwards.

Education.—Drs. Brouse, Aikins, Berryman, Geikie, Wm. Clarke, Edwards, Grant, Lavell, Logan, MacLaughlin, Morrison, D. Clark.

Several communications and petitions from medical students and others, were received and referred to the respective Committees.

NOTICES OF MOTION.

Dr. Allison—To ratify the by-law regulating the proceedings of the Council, as adopted by the Executive, leaving it open to any member to offer amendments during the present session.

Also, that all appointments to the office of medical examiner be made among members of the profession outside the Council.

Dr. Campbell—Three resolutions upon reciprocity of registration with the General Medical Council of Great Britain.

The Council then adjourned.

SECOND DAY'S PROCEEDINGS.

The Council met at 10 o'clock, the President in the chair.

REPORTS.

The report of the Board of Examiners was received and referred to the Education Committee.

The report of the Medical Prosecutor was read and referred to the Registration Committee. It stated that he had during the year visited every county in the Province of Ontario, and had found a large number of unregistered practitioners. The enforcement of the Act gave general satisfaction, the public being favourable to it; but many who openly violated the Act had escaped because evidence could not be obtained without great expense and loss of time. Out of seventy-five cases tried all had been fined, but in twenty cases the fines had not been paid.

Dr. DANIEL CLARK, seconded by Dr. EDWARDS, moved the appointment of a Committee composed of the President, Dr. Wm. Clarke, and Dr. Berryman to draft a suitable memorial of condolence with reference to the late Drs. Dewar and Hodder, to be forwarded to their respective families. Carried.

The PRESIDENT, on behalf of Dr. O'Reilly, Medical Superintendent of the Toronto General Hospital, extended an invitation to the members to visit the General Hospital and see the improvements which have taken place there.

The REGISTRAR read the minutes of the various meetings of the Executive Committee held during the year, which were referred to a special committee.

The By-laws to regulate the proceedings of the Council was next brought under discussion, but on motion of Dr. Bethune it was agreed to postpone them till to-morrow.

Dr. ALLISON moved, that in consequence of the extreme dissatisfaction that exists among the members of the profession with the manner in which the examiners are appointed, it is expedient that in the future no member of the Council shall be appointed to the office of medical examiner, but that all appointments to that office shall be made from among the registered members of the profession outside the Council.

He was ably supported by Dr. Herriman who said that in his constituency it was made a test question and because of his views he was elected by a large majority. It was opposed by other members of the Council who argued that the council should have the right to appoint the best men wherever they could be found. The motion was lost.

Dr. AIKINS, seconded by Dr. W. CLARKE, moved:—

That a deputation, consisting of the undernamed members of the Council do wait upon the Honourable Attorney-General, at his departmental office,

this day at 4 o'clock, to request aid from the Government of Ontario towards the erection of a proper building for the College of Physicians and Surgeons of Ontario:—Drs. Aikins, D. Clarke, W. Clarke, Geikie, Brouse, and Ross, with the official members.

Dr. AIKINS presented the Treasurer's report for the past year, which was referred to the finance committee. The leading features were:—

RECEIPTS.—Balance on hand last year, \$5,208-14; Dr. Pyne, Registrar, \$1,319 75, matriculation examination fees, \$861 40; professional examination fees, \$5,910; interest, \$79 64; sundries, \$50; total, \$13,428 93.

DISBURSEMENTS.—Expenses of last meeting of Council, \$1,208 30; accounts, \$1,111 29; expense of Executive and sub-Executive Committee Meetings, \$534 30; salaries, \$1,000 00; expense of April examinations, \$1,151 23; balance in bank of Commerce, \$8,423 81; total, \$13,428 93.

It was recommended that the number of members on the Executive Committee be reduced, and that members at a distance be not placed on.

The case of Dr. Chaffey was next considered. He was not notified at the proper time, to enable him to appear before the special examiners appointed for the purpose of examining certain persons for the License. It was moved by Dr. Logan and seconded by Dr. W. Clarke, that Dr. Chaffey's case be referred to a special committee consisting of Dr. W. Clarke, Clark, Edwards, Morrison and the mover.—*carried.*

Dr. ALLISON, seconded by Dr. McLAUGHLIN, moved,

That leave be given to bring in a by-law to amend the electoral by-law of 1874, by abolishing the requirement, that those voting at elections for members of the Council shall be compelled to make their declaration before a Justice of Peace. The motion was carried, and the by-law was passed through every stage and became law.

Dr. GRANT, seconded by Dr. BROWN, moved,

That an humble address be presented by the College of Physicians and Surgeons of Ontario to His Excellency Lord Dufferin, on the occasion of his departure from Canada; and that a Committee consisting of Drs. D. Clark, W. Clarke, McDonald, Berryman, with the mover and seconder, be a Committee to frame the same.

The PRESIDENT reported the result of the interview with the Government. The leader of the Government did not promise them to grant their wish; but there was strong reason for hoping it would be acceded to. The Minister of Education especially appeared to be in favour of the erection of a building. He recommended that a Special Committee be appointed to continue the negotiations. The ATTORNEY-GENERAL promised to give

the matter his serious consideration, and to consult with the Senate of the University about the proposal.

Dr. BROUSE, seconded by Dr. GRANT, moved :—

That in the opinion of this Council the time has arrived to secure a permanent building for its use; that a Committee be appointed to take the necessary steps for such, and that any arrangement the Committee may make shall be binding on the Council; the Committee to consist of Drs. Allison, Aikins, D. Clark, W. Clarke, Ross, Berryman, and the President.

Dr. HENWOOD presented a statement containing a schedule of fees to be charged in the counties of Brant and Haldimand; referred to the Registration Committee.

Dr. McLAUGHLIN presented the report of the High School Committee appointed to consider the advisability of adopting the intermediate examination in lieu of the matriculation examination. The report, which recommended the Council not to make the proposed change, was adopted.

A number of accounts were presented and referred to the various committees, after which the Council adjourned.

THIRD DAY'S PROCEEDINGS.

The Council met at ten o'clock.

Dr. BETHUNE, on behalf of the Registration Committee, presented a report, which was adopted, recommending that the tariff of fees for the counties of Brant and Haldimand be adopted; that the requests of S. G. Robinson, J. B. Baldwin, and J. S. Campbell for permission to practice be not granted, as contrary to the Medical Act; that the case of Dr. Bomberry, an Indian, and a graduate of McGill College, who desired registration in Ontario, receive the favourable consideration of the Council; that Dr. Mallory's request for registration be not granted until he comply with the requirements of the Medical Act; that Dr. Drummond, of Jamaica, West Indies, who applied for registration in the Dominion under a misapprehension of the terms of the Medical Act, be communicated with by the Registrar, and be furnished with a copy of the Medical Act; and that the report of the Public Prosecutor be referred to the Finance Committee.

The Council went into Committee on the report on Dr. Bomberry's case.

Dr. BETHUNE explained that the Dr. only desired to practice among the Indians, and that he desired to be protected from prosecution. He had been prevented from attending the last examination by illness.

On motion, it was agreed that Dr. Bomberry be granted a special examination.

At a subsequent sitting it was recommended that

Drs. Ryerson, Nevitt, Comfort, and Chaffey be also allowed a special examination at the same time.

The PRESIDENT stated that he had received a letter from the Registrar of the General Medical Council of Great Britain, embodying a copy of the minutes of that Council, a copy of the British Medical Act, and other documents. He inferred from the communication that the British Council would be quite ready to interchange registration with Canada. The communication was referred to the Registration Committee.

The PRESIDENT, having left the chair, moved a series of resolutions regarding reciprocity in medical registration.

1. *Resolved*—That the President of the College of Physicians and Surgeons of Ontario be authorized to inform the Registrar of the general Medical Council of Great Britain that his certificate of registration to practice both medicine and surgery in Great Britain will be accepted by the Council of the College of Physicians and Surgeons of Ontario, as constituting a sufficient title to registration in the Ontario Medical Register whenever the Registrar of the General Medical Council of Great Britain notifies our Registrar that he is prepared to accept the certificate of registration in the Medical Register of Ontario as a sufficient title to registration in both medicine and surgery in the Medical Register of Great Britain; and that such registration shall be allowed in Great Britain upon the same terms of payment as required in Ontario, namely, two pounds sterling.

2. *Resolved*—That the Council of the College of Physicians and Surgeons of Ontario recognize the force of the principle enunciated by the "Medical Acts Committee" of the General Medical Council of Great Britain, that "while freedom of choice as to places of study ought to be open to all, the Committee would think it inadmissible that British students, intending to practice in the United Kingdom, should have the option of undergoing in any other country than their own the examinations which are to test their fitness for practice;" therefore, applying the same principle to Ontario students as is applied by the General Medical Council of Great Britain to British students, the Council of the College of Physicians and Surgeons of Ontario consider it inadmissible that Ontario students, intending to practice in Ontario, should have the option of undergoing in any other country than their own the examinations which are to test their fitness for practice, and that the recognition of registration in the British Medical Register, shall not be held to exempt from the examinations established by the Council of the College of Physicians and Surgeons of Ontario any one who had begun his medical studies at any of the medical schools in Ontario, or who could have been properly considered as a resident in

Ontario before the commencement of his medical studies.

3. That all such students from Ontario as are referred to in the foregoing resolution, shall be required to pass at least the "final" examination of this Council, and shall pay the usual examination fees therefor.

4. That the President be authorized to request the Directors General of the Army and Navy Medical Department of Great Britain to recognize registration as a member of the College of Physicians and surgeons of Ontario as constituting a sufficient qualification for candidates to present themselves for examination as surgeons before their respective Medical Boards.

After some discussion it was decided to leave the matter over until the passing of the British Medical Act.

Dr. DANIEL CLARK moved, That no registration of persons alleging to have been practitioners before 1850 shall be permitted to take place until the credentials of such applicants have been examined by the Council or Executive Committee, and the sanction to register given by the same to the Registrar.

At one o'clock several of the members of the Council drove to the General Hospital, and were received by Dr. O'Reilly, the resident medical officer of the institution. His Worship the Mayor was also present. Dr. O'Reilly conducted the members through the various wards, and although time did not permit of a critical and minute examination being made, it was generally conceded by the professional gentlemen that the hospital was in a satisfactory condition. The wards were clean and well-ventilated, perfectly free from offensive effluvia, the bed linen and all the general appurtenances in excellent order, and really a credit to those who have the administration of the internal arrangements of the institution.

During the visit Dr. Aikins applied the galvanic cautery for the removal of a melanotic tumor, of a semi-malignant character from the region of the umbilicus.

The Council re-assembled at 3 o'clock.

The question as the admission of graduates from the Province of Quebec came up for discussion notably the case of Dr. Frecette, who sought to be admitted by passing the final examination of the Board in Ontario. It was decided to refuse the application of Dr. Frecette, unless he chooses to comply with the terms of the Ontario Medical Act.

Dr. GRANT then moved, seconded by Dr. McLAUGHLIN,

That it is the opinion of the members of the College of Physicians and Surgeons of Ontario that the matters pertaining to medical education should, as far as possible, be reduced to one uni-

form basis for the entire Dominion in order to simplify rules and regulations and set aside any Provincial jealousies which may exist, and thus make our profession a unit from the Atlantic to the Pacific; also that in consultations the greatest possible latitude should be extended to professional gentlemen of well recognized ability in the neighbouring Republic, thus exercising that known liberality which is in keeping with the progress and scientific advancement of the present time.

He moved the present resolution to place on record his conviction that the best interests of the medical profession would be subserved by the formation of a "Dominion Board," in order to simplify the work of the profession. The best interests of the profession are now clashing, and difficulties exist which by a greater degree of uniformity in medical matters might be very much benefited. The subject of sanitary science is now under the same difficulty—medical and sanitary matters are purely under the control of the Local Legislatures. The powers granted by the Dominion Act are not to be disturbed without serious consideration, yet he felt satisfied that if an expression of opinion emanated from the whole body of the profession an influence for good in the direction indicated might be exercised. No doubt some time must elapse prior to carrying into operation a central medical examining body and sanitary bureau at Ottawa. The interests of the various Provinces are the interests of the Dominion as well, and such measures should be advocated as will at the same time simplify and strengthen the operation of medical and sanitary legislation.

Dr. ALLISON objected to the terms of the resolution, as it involved too much of a free trade principle, and one he did not think would act in a satisfactory manner as applied to medicine.

After some discussion, Dr. AIKINS moved, seconded by Dr. BERRYMAN. "That the consideration of the resolution be deferred for six months."

Dr. CLARKE expressed his opinion that that was the best course to adopt.

Dr. BROUSE then pointed out the importance of establishing a Bureau of Health, and spoke of the efforts he had put forth in the House of Commons towards getting an appropriation for that object. He thought Dr. Grant deserved credit for bringing forward the resolution. The motion was lost.

Dr. ALLISON moved, seconded by Dr. McLAUGHLIN,

That with a view of lessening the expenses of the Council and the Executive Committee it is deemed expedient that not more than seven members of the Council do constitute said Committee.

Dr. EDWARDS moved in amendment, seconded by BETHUNE, that the Executive Committee consist of nine members, two of the nine to be *ex-officio* members. The amendment was carried.

Dr. AIKINS moved, seconded by Dr. BROUSE, That Drs. Campbell, Allison, Daniel Clark, Wm. Clarke, Berryman, Macdonald, Aikins, Lavell and Geikie be members of the Executive Committee. Carried.

It was moved by Dr. BERRYMAN, seconded by Dr. BROUSE,

That the members of this Council having proceeded to the Toronto General Hospital, in accordance with an invitation of the House Surgeon, Dr. O'Reilly, would report by resolution—That they found the wards and all their appurtenances in most excellent and efficient order, the improved condition of ventilation being remarkable. While expressing our deepest sympathy and heartfelt interest in the general welfare of such a valuable institution, we, as a body corporate, would, by this resolution, beg to express our thanks on behalf of the profession to the donating Trustees and others who have so nobly assisted this institution, and further the efforts of those so kindly assisting have been so ably carried out by our present efficient resident officer, Dr. O'Reilly. This Council would at the same time earnestly press on the attention of the Ontario Government the necessity of their immediate or earliest assistance in such a noble work—by which an enactment as may to them seem best—for the relief of the poor, the sick, and distressed, thereby emulating the voluntary and handsome donations of private charity. Carried.

It was moved by Dr. Ross, seconded by Dr. CLARKE,

That in the opinion of this Council the time has now arrived when the General Hospitals now in operation in Ontario, and such as shall hereafter be established, should be placed upon a Governmental basis similar to that provided for our Insane Asylums, so as to give an assurance to the sick poor in our midst that their wants and applications are duly respected, and also to equally distribute the onus of their support over the whole community, and that we do earnestly recommend our professional brethren throughout the whole country to urge upon the individual legislators, and through them upon the Legislature, the absolute necessity which does exist for such provision being made. Carried.

FOURTH DAY'S PROCEEDINGS.

The session opened at 10 o'clock.

Dr. GRANT, on behalf of the Special Committee appointed to draft an address to Lord Dufferin, on the occasion of his departure from Canada, reported a form for adoption by the Council.

The address was adopted, and on motion ordered to be engrossed, and Drs. Grant and Brouse were appointed a deputation to present it to His Excellency.

Dr. Logan on behalf of the Special Committee in the case of Dr. Chaffey, recommended that he be allowed a special examination at any time before the Board of Examiners. Carried.

Dr. AIKINS moved: That the following be the Examining Board, Dr. Clarke, surgery and surgical pathology; Dr. Ross, midwifery; Dr. McLaughlin, anatomy; Dr. Morrison, chemistry; Dr. Macdonald, medicine; Dr. Berryman, materia medica; Dr. Edwards, physiology; Dr. Logan, medical jurisprudence. Carried.

Dr. CORNELL presented the report of the Printing Committee. It simply recommended the payment of sundry accounts, and was referred to the Committee on Finance.

Dr. HYDE presented a report of the Finance Committee. It stated that the Committee had found the Treasurer's book to correspond with the vouchers; and that a balance of \$8,425 81 stood to the credit of the Council in the Canadian Bank of Commerce. The Committee was gratified to report that the Registrar had strictly complied with the instructions given for his guidance. He had collected on the assessment of registered practitioners only \$281, and the committee recommended that active steps be taken to collect the arrears. Mr. Wood, of Kingston, the matriculant examiner, it was reported, was still in arrears to the extent of \$225 97, and the Committee recommended that the matriculation fees should be hereafter paid to the Treasurer, and that the other accounts in connection with the examinations should be sent directly to him. Several accounts were recommended to be paid. "Dr. Campbell's accounts for preparing by-laws, register, annual announcement, &c., amounting to \$282 50, we also submit for your consideration, as we can find nothing in the minutes of the Council, or the Executive Committee, or any President's order, authorizing him to do the work. We are of the opinion that the above is part of the duty of the Registrar."

The Council went into Committee on the report, and took up the different clauses *seriatim*.

On the clause regarding the collection of assessments, some discussion took place as to whether it was the duty of the Registrar or the Public Prosecutor to collect the money.

The item of Dr. Campbell's account, occasioned considerable discussion as it was alleged that the expenses were incurred without the authority of either the Council, Executive Committee, or the President's order.

Dr. W. CLARKE moved, seconded by Dr. D. CLARK, that the report of the Finance Committee be amended by the payment of \$170 to Dr. Campbell in lieu of all claims by him against the Council, and this is paid as a testimony of the services rendered by him to this Council. Carried.

Dr. W. CLARKE moved that the Treasurer be authorized not to pay any money without the bills of the same having been presented to and passed at the annual meeting of the Council. Carried.

Dr. D. CLARK moved, seconded by Dr. McLAUGHLIN, that no debts shall be contracted nor money spent on behalf of the Council without the consent of the Executive Committee, and that this Council will not hold itself responsible for any debts contracted without the consent of said Committee. Carried.

The report of the Education Committee was then submitted to the Council in Committee of the Whole, Dr. Macdonald in the chair. It was discussed clause by clause and adopted. It provided that the examinations should take place in Toronto and Kingston alternately in April and August—in Toronto in April and in Kingston in August. The remainder of the report was a mere matter of detail with reference to medical education generally, fixing the time of study to forty-eight months from the date of matriculation, this arrangement to come into effect after the 1st of April, 1879.

The Examiners appointed were;—Materia Medica and Sanitary Science, Dr. Berryman; Anatomy, Descriptive and Surgical, Dr. Sullivan; Medicine, Medical Pathology, and Medical Diagnosis, Dr. Kenneçy; Midwifery and Diseases of Women and Children, Dr. Thorburn; Chemistry, Theoretical and Practical, Dr. Morrison; Surgery and Surgical Pathology, Dr. Malloch; Physiology; and Histology, Dr. Pickup; Medical Jurisprudence and Toxicology, Dr. Henderson; Homœopathic Examiner, D. Vernon.

Dr. BETHUNE presented the report of the Registration Committee, and the Council went into Committee of the Whole to consider it. The tariff of the St. Lawrence and Eastern Division was objected to by the Committee as being too high. Some of the items were read, and characterized by the Council as being excessive. The tariff was sent back to the Association. The report went on to recommend, that the name of the Rev. Jas. Edgar be not placed on the Register on the ground that the certificate testifying to his having practised before the year 1850, was not signed by the whole of the members of the Eclectic body.

A long discussion took place upon the matter, and it resulted in Dr. McLAUGHLIN moving that Mr. Edgar's name be expunged from the Register.

Dr. W. CLARKE moved in amendment that the removal of Mr. Edgar's name from the Register be postponed until the law officer of the Council had been consulted. Carried.

The other items in the report were adopted.

Dr. CAMPBELL then addressed the Council *in re* the tariff, and moved the following resolution, which was seconded by Dr. LAVELL.

That every member of the College of Physicians and Surgeons of Ontario, if summoned to give professional evidence at any inquest, criminal trial, or investigation of a criminal nature, shall, upon the Coroner, Judge, Police Magistrate, Justice of the Peace, or other judicial officer presiding at such inquest, trial, or investigation, certifying that the evidence of such member was important, or likely to have been important, at such inquest, trial, or investigation, be entitled to charge the sum of five dollars for giving such professional evidence, together with five dollars for each day's, or part of a day's necessary attendance, or detention during the time such inquest, trial, or investigation was held, including among such days the time necessary for travelling from and to his usual place of residence, to and from the place where such inquest, trial, or investigation was held, and twenty-five cents for each mile of distance so travelled; and that a copy of this resolution be forwarded to the Chairman of every territorial division in Ontario, with instruction that every member of the College in their division be guided by this scale of fees.

The general impression was that the resolution was premature, and, on being put to the meeting, was lost.

It was moved by Dr. D. CLARKE, seconded by Dr. HENWOOD, "That all the new Register, except the list of names of medical men said to be registered, shall be sanctioned by the Council, but that the new Register shall not be published until this list has been revised and examined at the first meeting of the Executive Committee." Carried.

It was then moved by Dr. ROSS, and seconded by Dr. HYDE, "That that portion of the resolution proposed by Dr. Morden and seconded by Dr. Edwards in June, 1876, and passed by this Council, which refers to the Public Prosecutor, directing that he should collect the annual dues, be cancelled, inasmuch as it is contrary to the intent and meaning of clause 27 of the Ontario Medical Act." Carried.

The report of the Finance Committee was then read and adopted. It recommended the payment of sundry accounts, but disallowed an item of \$10 for cab hire for Dr. Campbell during the present session.

On motion, Drs. Berryman, Kennedy, Morrison and Thorburn were appointed to conduct the examination of the candidates who may present themselves, the Board appointed in the morning to be cancelled, the examination to take place in the City Hall, and to commence at ten o'clock a.m., to-morrow.

It was decided to take legal steps to defend the Council in the appeal brought against it by the electro-therapeutic practitioners.

The question of Dr. Campbell's claim again came up.

Dr. Wm. Clarke said that the sum of \$170 was in full satisfaction of all claims against the Council.

Dr. Campbell declined to accept the \$170 granted him. He had paid more than that out of his own pocket, and he considered that he should be paid his full account. He firmly declined to accept the money.

A vote of thanks was passed to the Senate of the University of Toronto and Queen's College, Kingston, for the accommodation afforded the Council.

On motion of Dr. Berryman, seconded by Dr. Bethune, a vote of thanks was passed to the Mayor and Corporation for their kindness in allowing the Council the use of the City Hall for its meetings, and the President and Dr. Berryman were appointed a deputation to present the same at the next meeting of the City Council.

Dr. Aikins was again appointed Treasurer, and Dr. Pyne, Registrar, for the current year.

In regard to the salary of the Registrar it was mentioned that the amount was inadequate to the duty performed, and suggested that \$1,000 be appropriated instead of \$750.

The Registrar stated that on condition that an assistant be appointed to aid him during the Examinations he would desire his stipend to remain as heretofore.

After disposing of some routine business the Council adjourned *sine die*.

COUNTY OF BRANT MEDICAL ASSOCIATION.

A special meeting of the above Association was held in the Kerby House, Brantford, on Monday June 16th.

The members present were:—Dr. Philip (President), Burt, (Vice-President), Harris, (Secretary-Treasurer), Dickson, Dee, Digby, Marquis Clarke, Henwood, Sinclair, Griffin, Corso, R. G. Healy and Healy.

Dr. Griffin moved, Dr. Clarke, seconded, that Dr. Dee be requested to prepare a paper for the next regular meeting; and that the consideration of Dr. Sinclair's paper be then taken up.—Carried.

Dr. Griffin moved, Dr. Marquis seconded, that the Brant Co. Medical Association are of the opinion that the establishment of a Provincial Medical Association for Ontario with City and Country branches, similar to the State and County Medical Associations in the United States, would be attended with many benefits to the profession and to the public, and express the hope that the initiatory action taken recently by the Erie and Niagara Divisional Association in the matter will lead to the establishment of such an Association.—Carried.

Dr. Griffin moved, Dr. Sinclair seconded,

That in the opinion of this Association "Contract Practice," except in so far as it relates to Government situations and Charitable Institutions, is not expedient in the interests either of the profession or the public.

It is therefore further resolved that the members of this Association will not hereafter engage in such practice except for such time as may be necessary to terminate any existing engagements.—Carried.

Dr. Dee moved, Dr. Healy seconded, that this resolution be published in the "CANADA LANCET" and "*Canadian Journal of Medical Science*."—Carried.

The society then adjourned to meet at Brantford on the first Tuesday in September.

Books and Pamphlets.

REPORT OF VITAL STATISTICS OF THE STATE OF MICHIGAN FOR THE YEAR 1872, by H. B. Baker, M. D., Supt. of Vital Statistics, Lansing, Mich.

HAND-BOOK OF OPHTHALMOLOGY, by Prof. C. Schweigger, University of Berlin—p.p. 546. Philadelphia: J. B. Lippincott & Co., 1878. Toronto: Willing & Williamson.

A COURSE OF ELEMENTARY PRACTICAL PHYSIOLOGY by M. Foster, M.D., F.R.S., Cambridge, assisted by J. N. Langley, B.A. Third Edition, pp. 260. London: McMillan & Co. Toronto: Willing & Williamson.

A COURSE OF PRACTICAL INSTRUCTION IN ELEMENTARY BIOLOGY, by T. H. Huxley, LL.D., assisted by H. N. Martin, B.A., M.B., Prof. of Biology in Johns Hopkins' University, Baltimore; third edition, revised, pp. 270. London and New York: McMillan & Co. Toronto: Willing & Williamson.

This is an admirable little work on the subject of Elementary Biology and will be found of great value to the student.

LECTURES ON CLINICAL MEDICINE, by Dr. McCall Anderson, Prof. of Clinical Medicine, University of Glasgow. London: McMillan & Co. Toronto: Willing & Williamson.

The author of this work has been long and favorably known in the ranks of medical literature, as an able writer and successful teacher. The book contains 18 lectures, and the various topics are discussed with freshness and originality, and also in a pleasing and interesting manner. It will repay a careful perusal.

A TEXT BOOK OF PHYSIOLOGY, by M. Foster, M.A., M.D., F.R.S., Cambridge; with illustrations; second edition, revised and enlarged; 1878. London: McMillan & Co. Toronto: Willing & Williamson.

This work was favorably received from the first, and the present edition, issued so soon after the first, is evidence of increased and increasing favor. It is fully abreast of the most recent advances in this important subject. A large section of the work is devoted to the discussion of the contractile tissues and the vascular mechanism. Digestion and respiration are also treated of in a most exhaustive manner. Other subjects, such as blood, secretions, nervous and glandular systems, are not discussed as fully as the above mentioned, but they are all treated of in a thoroughly original and practical manner. The book is one which we can fully recommend as a work of reference for the student and practitioner.

THE SOURCE OF MUSCULAR POWER. By Austin Flint, Jr. M. D., Prof. of Physiology in the Bellevue Hospital Medical College. New York: D. Appleton & Co. Toronto: Hart & Rawlinson.

The author in this little brochure of about 100 pages octavo, gives arguments and conclusions drawn from his own observations, and those of others, upon the human subject under conditions of rest and of muscular exercise. In the introductory chapter he combats the statement of Dr. Pavy in the LANCET for Nov. 25th 1876; "That food may be looked upon, not simply as so much ponderable matter, but as matter holding locked-up force, and that by the play of changes occurring in the body the force becomes liberated, and is manifested as muscular action, nervous action, assimilation, secretory or nutritive action, etc." He then treats of the nutrition and development of muscular tissue, and its relation to the elimination of nitrogen. He gives the experiments of Liebig, Lehman, Fick and Wislicenus, and Parkes; also the experiments of Dr. Pavy and himself on Weston the pedestrian, during his feats of walking, and concludes that food is not directly converted into force in the living body, nor is it a source of muscular power, except that it maintains the muscular system in a proper condition for it.

HOW WE RAISED OUR BABY: By a Benedict.

This is a most interesting and instructive book. In the form of a novel it gives in a most attractive style, important and valuable rules and suggestions

for the care of infants. It bears internal evidence of having been written by a medical man, and many if not all the statements contained in it, will be fully endorsed by the medical profession in Canada. It is cleverly written and cannot fail to interest, amuse and instruct. The busy bodies and old nurses "whose only recommendation is that they have raised a large family of children themselves," come in for a fair share of attention. The author's idea is, to educate women for nurses, pay them living wages, and hold them responsible. Every mother should read this book, and every father too, as on the thread of the story is strung a large amount of useful and practical information, not only what to do but how to do it.

AMERICAN EDITION OF FARQUHARSON'S GUIDE TO THERAPEUTICS. New York: H. C. Lea. Toronto: Willing & Williamson.

We have much pleasure in introducing to the profession a very useful and compendious little work entitled a "Guide to Therapeutics and Materia Medica, by Dr. Robert Farquharson, lecturer on Materia Medica at St. Mary's Hospital. The volume, although small in bulk—which by the way we consider a great recommendation both to the busy practitioner and student—treats on the general actions, therapeutical and physiological of medicinal agents. By a convenient arrangement, the corresponding effects in health and disease of each drug are represented in parallel columns, thus rendering reference easier, and impressing facts strongly on the minds of the reader. The first chapters devoted to rules for prescribing combination of drugs, form of administration, proper time for exhibition, dosage, intervals between doses, individual peculiarities, idiosyncrasy, constitutional or toxic effect from small doses, chemical and physiological incompatibilities, prescribing for children, prescription writing, weights and measures, observations upon doses, general rules for doses. As before remarked the balancing of the therapeutic action with the physiological is arranged by corresponding columns in diagrammatic form, having regard to external action, influence on the brain and spinal and sympathetic system of nerves, on the heart and blood vessels, on respiration and temperature, on alterations of secretion in the order, urinary, intestinal, salivary and cutaneous. The various modes of elimination from body, antidotes, contra-indication, best modes of prescribing, and illustrated prescriptions. Dr. Farquharson says on the subject of balancing the physiological against the therapeutic action of a drug, that it cannot always be accurately done either from want of sufficient knowledge or from an excess of facts more or less of a conflicting nature. "We must remember that our therapeutical evidence is derived from clinical observation on man, and that experi-

ments on the lower animals has supplied us with most of our knowledge respecting the action of medical agents on the healthy organism. Fallacies may readily creep into both these methods of investigation, and it is evident how the clinical method may be hampered by our want of full knowledge of the natural history of disease." Dr. Farquharson shows the objects in view in prescribing, in the combination of medicines, and points out the faults which frequently occur. The work contains a large collection of prescriptions appropriately arranged according to effect. We have derived much pleasure from a perusal of this work, and would strongly recommend it to practitioners and students.

WYETH'S DIALYSED IRON, BY LUNSFORD P. YANDELL, M.D. Professor of Therapeutics and Clinical Medicine in the University of Louisville.

"A year since, when Dialysed Iron was a novelty, I commended it in the *News*, as a most valuable addition to the *Materi Medica*. Twelve months of additional experience have confirmed my faith in its excellence. The object of this note is to call attention to the great variety of *spurious* preparations sold under the name of Dialysed Iron. Some of these were manufactured here, but most of them were made elsewhere. Genuine Dialysed Iron is nearly tasteless. It has the faintest possible saline flavor and a mere suspicion of roughness. Slightly diluted, its taste recalls that of fresh blood. It is not in the least unpleasant, and does not blacken the teeth or tongue. It seldom or never produces any gastric disturbance or headache, and very rarely constipation. It is exceedingly reliable and rapid as a tonic.

"The *spurious* forms of this drug are without the characteristics of taste and efficacy above enumerated, and chemical analysis readily detects their deficiencies. One of the *spurious* specimens before alluded to, was little less unpleasant than the Tincture of Muriate of Iron, another was excessively acid, another was decidedly saline, another was exceedingly astringent, another was sweetish, another was bitter, and another was seemingly only colored water; another more nearly approached correctness, but only a single specimen possessed the peculiarities of the true article.

"My attention was first directed to this matter through the failure or misbehavior of the Dialysed Iron in practice. It is but just to say that the good specimen is from Wyeth & Brother, the original manufacturers of this medicine in America. Wyeth's Dialysed Iron sells at about a dollar a pound. Other makers may be bought at fifty cents."

TRAUMATIC HERNIA OF THE LUNG; LIGATURE AND EXCISION; RECOVERY.—A man, aged 24, received a stab wound in the ninth intercostal space (left), penetrating the pleural cavity, with slow and

small pulse. No vesicular respiration at the base of spiration and coughing did not affect its volume nor form. Ligature applied and tumor cut off. The wound healed in 28 days. Seven months later there was no trace of the lesion beyond the cicatrix in the skin. M. Cauvy, who reported the case, considers this accident a fortunate complication of penetrating wounds of the thorax. It prevents bleeding, and the entrance of air, and transforms a penetrating into a non-penetrating wound. Fatal consequences have followed the reduction of the lung. Ligature and excision effect a more prompt cure than an expectant method of treatment.—*Gaz. Hebd.*, 1878, No. 8.—*N. Y. Med. Journal*.

NEW REMEDY.—It seems as though Australia is to give us another valuable medicine besides that derived from the Eucalyptus tree. The leaves of the so-called cork wood (*Du'rcisia myoporoides*) yield a powerful extract similar in its action to atropine and belladonna, but more speedy and energetic. In New South Wales and Queensland, where these properties have recently been developed by experimentation upon animals, the new drug is already considerably used in place of atropine.

BLACK LIST.—'Black list' is proposed to be prepared by the physicians of Toronto & Hamilton to protect them from that class of persons who, though able to pay, go about from one to another, getting the services of each as long as possible without paying. It is proposed to report the names of such people, by printed lists and a copy will be supplied to each physician, for mutual protection.

REMEDY FOR SEA-SICKNESS.—A new remedy is said to have been discovered for sea-sickness, viz.; apomorphia, a very small dose of which taken once an hour in water will remove the qualms. It is also said to be useful for beasts, the suffering of which are often extreme.

SPECIAL EXAMINATION, COLLEGE OF PHYSICIANS AND SURGEONS, ONTARIO.—The following gentlemen passed before the special examiners appointed by the council at its late meeting, viz.: Drs. Comford, Ryerson, Nevitt & Bomberry.

APPOINTMENTS.—Dr. F. G. Slack, M.D., has been appointed Prof. of Surgery, and Dr. Armstrong Lecturer on Anatomy, in Bishops College medical School, Montreal.

Births, Marriages, Deaths.

At Harriston, on the 6th of June, the wife of S. M. Henry, M.D., of a son.

In Toronto, on the — of June, the wife of E. J. Barrick, M.D., of a son.