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THE
BRITISH AMERICAN JOURNAL
 OF
MEDICAL & PHYSICAL SCIENCE.

EDITED BY

ARCHIBALD HALL, M.D., L.R.C.S.E.,

Lecturer on Materia Medica and Pharmacy, University of McGill College; Member of the Board of Governors of the College of Physicians and Surgeons of Lower Canada; one of the Physicians to the Montreal General Hospital; one of the Consulting Physicians to the University Lying-in-Hospital, &c.

VOL. V.]

APRIL, 1850.

[No. 12.

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THREE DOLLARS PER ANNUM IN ADVANCE.

THE ANATOMY, PHYSIOLOGY, AND PATHOLOGY OF THE EYE,

BY HENRY HOWARD, M. R. C. S. L.,

Surgeon to the Montreal Eye and Ear Institution.

THE SUBSCRIPTION LIST to the above work is still open; and Members of the Profession desirous of subscribing to the same, are requested to furnish their names without delay. The work has been put to press and will be delivered to Subscribers about the first of May.

Montreal, January 30, 1850.

COLLEGE OF PHYSICIANS AND SURGEONS OF LOWER CANADA.

THE REGULAR SEMI-ANNUAL MEETING of the BOARD OF GOVERNORS of the COLLEGE OF PHYSICIANS AND SURGEONS, for the purpose of examining Candidates for License, as well as those about to enter upon the Study of Medicine, will be held at the School of Medicine, in the City of Quebec, on Tuesday, 14th day of May next, at 10 o'clock, A.M.

Candidates are required to deposit their Credentials with either of the Secretaries, at least ten days before the meeting, and to fill up a Schedule of their Education; forms for which can be obtained from the Secretaries.

Graduates of Universities in the United States, who may have been practising in Lower Canada for a period of not less than ten years, can, under certain regulations, in accordance with the Act 12 Vic. chap 52, obtain Licenses to practise at this meeting.

J. E. J. LANDRY,
Secy. Dist. of Quebec.

Quebec, 1st April, 1850.

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THE SUBSCRIBERS have just received a supply of their Genuine Cod Liver Oil, which the Profession can depend upon for purity. It will be found to stand any test. Its efficacy in Consumption and Scrophula, both in England and on the Continent, have been clearly proved.

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Montreal, Dec. 1, 1849.

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MEDICO-CHIRURGICAL SOCIETY.

THE next Monthly Meeting of this Society will be held at the Rooms of the Mechanics' Institute, on Saturday Evening April 6, at 8 o'clock P.M.

GEORGE D. GIBB, M.D.,

Montreal, April 1, 1850.

Secretary.

COLLEGE OF PHYSICIANS AND SURGEONS OF LOWER CANADA.

THE BY-LAWS of the COLLEGE having received the sanction of the Executive, its BOOKS are NOW OPEN for the REGISTRATION of MEMBERS.

It is required of such as desire to register, that they forward to the undersigned (post-paid) their name, legibly written in full, their age, birthplace, date of Provincial License, and the College Fee, viz., Ten Dollars in current money of this city.

All such as signed the Petition to the Legislature for the Act of Incorporation, are entitled to Register forthwith, provided that at the time of their signing they were in possession of a Provincial License to practice Medicine, &c., &c.; and in virtue of the By-Law which refers to Membership, the Books of the College shall be kept open during a period of Six Months from the time of the passing of the said By-Laws, viz., the Tenth day of October, 1848, for the Registration of every Member of the Profession who desires so to do, provided such Member has been in possession of a Provincial License to practice Medicine, &c., &c., Four Years at the time of the passing of the Act of Incorporation, viz., 27th July, 1847.

FRANCIS C. T. ARNOLDI, M. D.

Registrar & Treasurer,
Coll. Ph. & Surg., L. C.

58, CRAIG STREET,
Montreal, 1st Dec., 1848.

THE
BRITISH AMERICAN JOURNAL
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VOL. V.]

MONTREAL, APRIL, 1850.

[No. 12

ART. LX.—CASES OF THE ENDEMIC FEVER OF CANADA, WITH UNUSUAL COMPLICATIONS.

By JOHN JARRON, Surgeon, Dunnville.

(Concluded from page 259.)

In this neighbourhood we have the endemic of the country usually prevailing to a great extent in the months of August, September, and October, and not unfrequently in its worst forms. We had no cases of cholera during this season, though it was general and fatal at Buffalo, only about forty miles distant, and with which we had daily communication; but the modification of the common fevers was so decided, that I would not be far wrong in saying that I had not seen a simple case of intermittent or remittent fever since the cholera began to prevail in Buffalo and Toronto. Both forms of fever were irregular, and attended with great depression, and a more than usual depraved state of the secretions. The congestive symptoms were decided, sometimes with the "damp relaxed," and at others, with the "dry and withered skin" of Armstrong; and each followed by its usual characteristic class of symptoms. Both forms exhibited many of the early appearances of cholera; more especially when the skin was "damp and relaxed," and diarrhoea present. The "dry state of skin" was generally attended with many of the symptoms of the latter stage of typhus; sometimes with, and at other times without the dry incrustated state of the tongue, even during a first paroxysm of fever—they would readily yield to calomel purges and quinine; but would likely return with a recurrence of ague. Picking at the bed clothes was an early and nearly constant attendant on such cases, and often the first symptom that alarmed friends.

I had one case that commenced with bowel complaint early in the summer, followed by congestive remittent, with costive bowels, and severe pains in the sacrum and coccyx: it became intermittent, and was partially relieved by purgatives and quinine. Copious perspirations came on, and lasted for ten days or a fortnight, resembling in appearance and smell, the last stage of ague; but attended with great prostration of strength and small irregular pulse, and accompanied by a scarlet eruption and crop of miliary pimples,

ending in desquamation over the whole body. This state was relieved by quinine and iron, but was almost immediately followed by affection of the head and spine, and other appearances of congestive fever, with "dry and withered skin;" this again passed into the "sweating state," with the eruption and pimples as before; and again, under the use of quinine, passed into the state of the "dry withered skin" with the other symptoms, attended with temporary fits of coma, which were relieved by the recurrence of the original bowel complaint, showing the two forms of congestive fever, passing and re-passing into each other, exhibiting throughout, the depraved secretions and tendency to sinking, common to both; as well as many of the usual appearances of cholera.

I find this excessive sweating has been noticed in the late epidemic fevers in Dublin, and Scotland; and generally as a bad symptom; one gentleman comments on the cholera appearances of such cases, and attributes them to the same cause as the algide symptoms, viz., "the draining away of the serum of the blood."

In the cases of infantile remittent fever, with diarrhoea and affection of the head, the same unusual appearances were manifest; the tendency to sinking was great, and it was often difficult to keep the little patients warm; they would assume a waxy appearance with rather a bluish cast, and in some of these cases, the cholera blueness of the face, hands, and nails, some hours before death was decided, without the slightest cause to attribute it to asphixia.

Dr. S. Newburn, of Stamford, told me of a case of his, where a child died of fits, and the blueness of the face and body excited quite an alarm of cholera in the neighborhood, though none of the other symptoms were present.

With respect to the treatment of the bowel complaints of the season, I have great pleasure in corroborating the statement made in your November number, by Dr. Goldstone, of Cobourg, respecting the effects of calomel, opium, and purgatives in them, whether they be designated diarrhoea, common, or Asiatic cholera. I have seldom found it necessary to increase the quantity of calomel beyond his dose of ten

grains, though, generally, giving only one grain of opium with it; and have universally found the effect of a subsequent dose of oil to be as stated, and without any of the so much dreaded consequence of purgatives. My worst cases were contracted in Buffalo and Toronto, during the prevalence of cholera there, and they often exhibited a tendency to pass into an irregular form of remittent. Such cases seem to depend on an altered and depraved state of the secretions of the stomach and small intestines; and the most rational explanation of the effects of calomel in them seems to be that given by Annesly of its effects in cholera, supported as it is, by his course of experiments. "It appears to me that this preparation (calomel) produces a chemical action on these secretions, and that in consequence of this action, their mechanical properties and appearances become greatly altered." With this change, the frequent purging and tendency to Algide symptoms vanish, and will not return, unless the secretions assume their former depraved appearance.

We find modern authors ascribing the symptoms of the latter stages of typhus, typhoid, and remittent fevers, as well as of Asiatic cholera, to an altered state of the blood. Such a theory seems much more rational and in accordance with observations, than the spasms of Cullen, or the minute anatomical changes of others, and capable of affording as satisfactory an explanation of the early, as the latter stages of fevers.

Observation has long since convinced me that ague is not the immediate effect of marsh miasma on the human frame, but only secondary to an altered state of the intestinal secretions, and consequently of the blood, and may even be looked on as Nature's own mode to relieve herself of the poison by sweating, that is so profuse, and of an odor quite characteristic, in every fit of simple intermittent fever.

{ Hon. East India Co.'s Ship, George 4th, Sagour,
Mouth of the Ganges, July 29, 1829.

John Williams, seaman, æt. 24, was taken from his work at noon, being found with purging, of a white watery matter, and slight sickness at the stomach; no tenesmus; tongue foul; pulse and skin natural, but the countenance depressed, and the eyes sunk.

Hab. Hydrarg. Submur. ℥j.

℞ Tinct. Opii ʒss.

Aquæ Ment. pip. ʒi. Statim.

2½ P. M.—Felt better until noon, when cramps of the abdominal muscles, coldness of the extremities, and sinking of the pulse, suddenly came on, with frequent sighing and oppression of breathing. Had three scanty watery stools since taking the calomel, and vomited once.

V. S. ʒxxiv.

℞ Tinct. Opii.

Spt. Æther, Vitriol, aa. ℥ij.

Aquæ Ment. pip. ʒi. m.

Warm fomentations to be applied to the chest and belly, and bottles of warm water to the legs and arms.

5 P. M.—The blood flowed freely and was of the natural color and consistency. No cramps since. Says he has no pain but cannot lie in one position any time; constantly throwing his arms and legs about. No pulse at the wrist, and the coldness of the extremities has increased notwithstanding the constant applications of warm bottles and blankets, and repeated frictions; the hands are shrivelled like a washerwoman's—the nails purple and the whole body covered with a clammy perspiration.

Two or three scanty watery stools since last report.

℞ Hydrarg. subm. ℥i. et. cont. haust.

℞ Tinct. opii. ℥ij.

Spt. vitriol com. ʒi.

Ol. ment. pip. gtts x.

Aquæ. ʒi. m.

Continue the frictions with oil of turpentine to the arms and legs, and apply the warm bottles and blankets. He has taken frequent draughts of warm brandy and water, and will continue them frequently.

7 P. M.—No vomiting or purging since he took the last medicine; the heat of the body seems increased and the action of the heart continues regular. Still restless, but without pain or spasms. The extremities are still cold and shrivelled; without pulse; the eyes are more sunk and the countenance much collapsed.

℞ Tint. opii. ʒss.

Spt. vitriol comp.

— Ammon. aromat. a a ʒi.

Aquæ ment. piper. ʒi. m. ft. haust.

To continue the frictions and brandy and water.

The heat of the body seemed to increase after this, and he became quieter, when difficulty of breathing suddenly came on after drinking; increased rapidly, and he died at 8½ p. m., being six hours after the algide symptoms came on, and about nine from the indication of the disease by the cholera expression of the countenance.

Dunville, 1850.

ART. LXI.—SEVERE AND FATAL INJURY TO THE PELVIS AND ITS VISCERA.

By FRANCIS W. SHIRRIFF, M.D., HUNTINGDON.

On the evening of the 18th December I received a hasty message to visit James Arthur, who, I was told, had that afternoon been severely injured on horseback. The distance was about five miles. On arriving the patient gave me the following account of his

accident:—He stated that he was riding on horseback and returning home; his horse shied and bounded suddenly to the other side of the road; he lost his stirrups and was nearly thrown; he however partially recovered his seat, and perceiving that the horse was galloping towards a dangerous bridge, he pulled him in suddenly and he was thrown with great violence on the pommel of the saddle. He said that he heard a loud crack, and felt something warm and scalding instantly diffused over the lower part of the abdomen; he still retained his seat, but finding himself unable to proceed he alighted at a house close by; he walked into the house unsupported, and after remaining there an hour returned home in a sleigh. Said that he received the blow on the perineum anterior to the anus. Is 42 years of age, very muscular and a mason by trade. His countenance was pale and anxious; pulse rapid and very feeble; lower part of abdomen hard and very painful on pressure; penis scrotum and perineum swelled and livid; motions of the trunk and limbs painful, and complains of great pain in lower part of back and loins, particularly on the left side; could not remember when he had last emptied the bladder, and felt no desire to do so at that time. I ordered cooling applications to the parts affected, which he thought gave him relief; I also administered three grains of opium.

19th.—Returned at 9 a.m.; my patient was not suffering so much pain, and had slept occasionally; swelling every where much increased; abdomen very hard and painful on pressure; pulse 100 weak; countenance more natural; had not micturated and had but little inclination; I introduced a catheter without difficulty, and about two ounces of a dark colored grumous fluid came away, which was partly composed of blood. I remained two or three hours and again introduced the catheter, when about the same quantity of a lighter colored fluid was discharged. I was now obliged to leave, but left the catheter in charge of an intelligent person, with orders to introduce it every three or four hours. I made an incision into the penis which discharged bloody fluid; I ordered the cold applications to be continued and left some opium powders, one to be given every six hours.

20th.—Returned at 9 a.m. I found my patient comparatively easy, but countenance much changed. Had rested well during night. The penis, scrotum and perineum were now enormously distended, and very livid. I made several free scarifications, from which bloody serous fluid was copiously discharged. The catheter had been used several times, but never more than two ounces could be obtained at a time.

No evacuations from the bowels having as yet been

obtained, I administered a large enema, but without effect. The patient being unable, from the pain in his abdomen, to exert the slightest pressure. I may here mention that he always retained the power and sensibility of his limbs. I again introduced the catheter and withdrew, as usual, two ounces of natural urine. I remained in attendance four hours, and left the catheter in the urethra. The anodynes and cold applications still continued.

21st.—Visited my patient at 11 a.m. Found him rapidly sinking, but quite sensible; pulse scarcely perceptible. Has little pain; abdomen very livid, much softer, and has little tenderness; sensation in other parts nearly gone, scarifications having discharged very freely; catheter was removed about 6 a.m., as it had ceased to discharge fluid; I introduced it but nothing came away. Had slept soundly for a considerable period. He continued easy all day, and very tranquil; and expired about 11 p.m.

Post Mortem Examination.—On the 22d, about 16 hours after death, with much difficulty I succeeded in obtaining leave to make only a partial examination. I introduced a bougie into the urethra, and raised a triangular flap, the base at the pubis. On cutting into the soft parts, a considerable discharge of bloody serous fluid took place; after lifting up the flap, I discovered that the ossa pubis were separated at the symphysis about half an inch, and that a laceration about two inches long had taken place in the bladder and urethra. I made no further examination. The laceration in the urethra and the bladder I expected to find, and at the first, gave an unfavorable prognosis, formed on the certainty that such a laceration had occurred; but the rupture of the symphysis I had never thought of, and was much surprised when I made the discovery. Mr. Arthur was fully convinced that he received the blow on the perineum, and it is probable that the pommel of the saddle struck him side ways, on the left ischium from within, outwards. You are better able to judge than I am, whether or not such an apparently trifling cause could produce such severe injury.

ART. LXII.—AN ANOMALOUS CASE OF INVOLUNTARY MOVEMENT OF THE HEAD AND NECK, WITH OBSERVATIONS.

By WILLIAM WRIGHT, M. D.

Licentiate of the Royal College of Surgeons, Edinburgh; Associate Member of the Surgical Society of Ireland, &c.

(Read before the Montreal Medico-Chirurgical Society, 2nd March, 1850.)

On the evening of the 13th April, 1848, I was summoned to visit Miss ——— without delay; having done

so, I found her confined to bed, and the dorsal debility subject to a perpetuation of these phenomena in this order:—The rapid elevation of the head and neck from the pillow, directly in the mesian line, and not inclined to either side; their regression without unnecessary depression of the occiput or anterior projection of the throat; and their quiescence. Regression always followed immediately upon the completion of elevation; but both elevation and quiescence were of varying extent, as the former ranged from a few inches above the pillow, till the chin nearly touched the sternum, and the latter from one to six seconds. The greater the elevation the sooner, they were succeeded by others; and when the first was extensive the next would be less than it; so that occasionally there was a series of them, in which each successive one was shorter in height, and longer in recurring than its predecessors. The more moderate elevations were usually repeated in equal periods for a comparatively long time, as every three or four seconds during a minute. During each elevation the sterno-mastoid muscles increased in breadth and prominence; in addition, the major were marked by depression of the lower jaw, and the maximum by a sudden inspiration; there was no evidence of congestion, either extra or intra cranium, and the skin had no unusual appearance nor sensibility. During regression and quiescence she could move her head and neck and the rest of her body freely, as in health. Speech, respiration, and deglutition were unaffected; there was no visible abnormality of the face or neck, and irritation of the skin produced no uncommon effect, although any excitement, as loud or sudden noises, talking, change of posture, &c., induced the elevations. The phenomena created fatigue and discomfort, but no pain; they were involuntary, not controllable by volition.

For the last ten months she had paroxysms of involuntary bowing of the head and neck, at irregular times, and from nervous shocks, but were always slight, and with the exception of one which lasted "off and on" for four days, seldom of an hour's duration, and at most, only occurred weekly. This return was said to have been coming on for two months, from her having been extra nervous, and had a trifle of it every day and night, whether erect or recumbent. Previous to this she had been free from them for some months. Since the 10th, there has been a constant shake in her neck and nodding of her head, which for "an hour and more" before my visit, was exaggerated to the state I have described. For some time she had occasionally complained of borborygmi, globus, clavus, side aches, and other attendants of hysteria; but she never had a fit. She

never had amenorrhœa; catamenia naturally scanty, and latterly accompanied with slight lumbar weakness. The periods and paroxysms are not related; bowels have a costive tendency, and appetite has been very defective. Never had been troubled with worms; secondary dentition completed. Never had chorea or convulsions, and it is not known that she ever took, or was in any way exposed to the effects of mercury, arsenic, lead, &c. She was 22 years of age, of small stature, spare habit and nervous diathesis.

The only symptoms in addition to the phenomena that I discovered during my visit were, that she looked pale and anguished, had latterly passed restless nights, but was without head-ache or any cerebral symptom. She had anorexia and nausea, but a clean tongue; a natural stool that day, and no fever. She had no palpitations of the heart; did not feel flurried, unless suddenly excited; pulse small, weak and quick—its natural characters; no indications of spinal irritation, and the usual hysterical symptoms absent.

I sent an antispasmodic draught, and returning in an hour, was told that soon after I left, the spasms became more violent, but that they ceased two or three minutes after the medicine was taken. She was now lying motionless, and during a stay of a quarter of an hour, I only saw momentary quivers of the neck thrice, at intervals of about three minutes—the sole vestiges of the spasms observed by her friends since their cessation. Another draught was sent for immediate use.

14TH APRIL, 12½ A. M.—Has only had slight spasms since, when excited by noise or speaking. Shortly after my arrival a violent paroxysm occurred, marked by successive stikings of the chin on the breast bone, and occiput on the pillow with hardly any interruption. The draught was given, and these ceased almost as soon as it had entered the stomach; bowels not opened to-day, and other symptoms as yesterday. 2 p. m. ℞ ol Ricini, ʒij., ol Terebinth, ʒij., misce. It did not operate, and was vomited in half an hour. 4½ p. m. Had had only noddings of the head and neck when disturbed, till lately, when they have happened frequently and spontaneously. The castor oil, with double the quantity of turpentine, was repeated, but with no better effect, and she remained much in the same state till 9½ p. m., when she had a paroxysm, identical with that of mid-day. The draught was administered with the same result, and after it a pill, containing one drop of ol Tiglii.

15TH, 11 A. M.—Slept till this morning, when disturbed by medicine, which purged mildly three times; but vomited repeatedly, leaving her very weak. Catamenia appeared last night—their proper time; per-

fectly tranquil during sleep, as she always is; since awake has only had a few noddings, and after motion, sudden noise, &c. At 6½ p. m., they seemed to increase, and a draught was taken; neck and upper part of spine to be well rubbed with the linim. ammoniæ et opii. Has hitherto taken very little nourishment, and now expressed a wish for salt food and a little wine, which were allowed.

16TH.—Had slept pretty well; bowels moved once, and was tranquil till about 11½ a. m., when one of the most violent paroxysms commenced, but was checked *in limine* by the draught R of Ricini, of Terebinth aa. ʒvj. *m.* This only caused vomiting. Only marks of spasms, were occasional quivers till 11 p. m., when there was a paroxysm as bad as that of the morning. The draught was given, and followed by the usual effect.

17TH.—At different periods had partial contractions, and twice feared they would increase; but thwarted them by the medicine. At night she looked unusually dejected; stated she had not slept since the morning of the 16th, but had neither head-ache nor pain; an hypnotic was added to the antispasmodic, after drinking which she had a long and refreshing sleep.

18TH, 12 A. M.—There has not been further involuntary movement of the head and neck; feels better, but weak and dull; bowels not been opened since 16th; no appetite; tongue clean; R Ext. Rhei., Pil Hydrarg. aa, gr. v. Pulv aloes gr. iij, P. capsici, gr j, ft. pil vj, ij, om 3h. 6 p. m. A slight tremor, and a draught was taken.

19TH.—Slight tremors, one which disappeared after a draught.

21ST.—No indications of spasms since; appetite returning, spirits good, feels weak, but otherwise "has not been so well since last summer." Measures calculated to invigorate the nervous system were recommended to be adopted and continued some time.

23RD.—Easter Sunday, quite well; went to church.

In the ensuing June I attended her, for the first return of the spasms since the 19th April; indications of them existed three days, and were accompanied by globus hystericus and neuralgia of the left side; but further than this, there was no difference between the attacks. The treatment was confined to the antispasmodic draught when necessary, and the croton oil pill once. The restorative measures formerly recommended were not perseveringly used. She did not menstruate in May, but did in June; some days after the spasms disappeared.

From that time to this, March 1850, she has not been my patient; but I am informed that now and then she has had involuntary movements of the head and neck,

after unaccustomed excitement; but they are usually milder, and never exceed the types described in the earliest part of their history.

OBSERVATIONS.—Involuntary movements of the head and neck are exceedingly curious phenomena, and possess great interest from their rarity. They occur in various directions, and are usually associated with, or interrupted by, movements of other parts, there very seldom being a movement of the head and neck directly forwards and downwards, which exists per se. Even in the few examples of this kind that are recorded, there is only an identity of external features, beyond which there are such dissimilarities as to warrant their reduction to the heads of chronic chorea, paralysis agitans, and salaam convulsions. These differ from the present case, by several particulars, of which the following are the most leading, and sufficiently powerful, to stamp it with novelty:—

Thus the cases of chronic chorea, familiarly known as "shakes of the head," vide Watson, et al., and of paralysis agitans, in which the head only is disturbed—vide Elliotson, et al.

A. Last for years, or end only with life.

B. Of an unvarying character, neither subject to remission nor to intermissions.

C. Not accompanied by any derangement of the general health.

D. Not benefited by treatment.

Salaam convulsions of Sir C. Clarke, et al.—Eclampsia Nutans of Newnham:—

A. Begin in infancy, and are diseases of childhood.

B. Exist for years, unrelieved by treatment.

C. As a rule end in idiocy, paralysis or death.

The movements are remarkable in all these, for their repetition in an unvarying way and in this case, also, for their recurrence in such regular times and rates as to admit of classification, a circumstance which associates it with the cases which have been termed by Dr. Pagel of Cambridge, "Morbid rythmical movements," and collected from the practice of himself, Sir Charles Bell, Dr. Conolly and others, some of which had been considered by Laycock as "Anomalous phenomena of hysteria." With these I enroll this case, not because it is the representation of any of them, for among them there is no example of the head and neck being solely affected in a vertical direction; but because it was that of a young female, with disordered menstruation, who had had hysterical symptoms, but never had any evidence of organic lesion, and because it was relieved by hysterical remedies, effected by pschical influence, and unattended by closure of the larynx.

While it is certain that the muscular action producing the movements, was that of clonic spasms, the particularization of the muscles engaged, admits of speculation, so that as determinative, I offer the following, which has been founded upon a correspondence of effects from known causes with the phenomena :—

The elevations or bowing forwards of the head and neck, were of three degrees; in each there was a simultaneous contraction of the sterno-mastoid muscles, which in the slighter existed singly, but in the greater, jointly, with those of the sterno-hyoid, sterno-thyroid, thyro-hyoid and omohyoid, which bend the neck, and offer points d'appui for the digastricus, mylohyoid, geniohyoid and geniohyoglossus, which acted, producing with bowing of the head and neck, depression of the lower jaw. In the maximum, all the above having greatly contracted, such a fixture of the head and neck would have resulted, that further contraction of the sterno-mastoids occurring, the capacity of the thorax would have been enlarged, and a sudden inspiration produced. The phenomena consisted of constant and occasional portions; the former being due to the sterno-mastoids, the latter to the deeper muscles, which, while they made it, contributed to the former, and may have been due to an extension of nervous impression.

The regression or backward return of the head and neck, was due to the relaxation of the muscles which had moved them forwards, and to the normal action of the muscles of the back of the neck and head, for these were not convulsed, as the forehead was never rapidly brought behind the mesian line, nor the chin elevated.

The absence of local pain shews the origo mali to have been in a motor nerve, and it would seem from the preceding, that the contractions always arose from implication of the spinal accessory nerve, the most numerous from this only, and the most forcible from the coadjuvancy of the branches of the cervical plexus, which communicate with the spinal accessory in the sterno mastoid, and both before and after it has perforated it. Thus the irritation left the spinal accessory nerve, shortly after that nerve leaves the sterno mastoid, and was reflected along the cervical nerves, which communicate with it.

As some medicines act by nervous agency, the instantaneous effect of the draught in subduing the phenomena, may be explained by an antispasmodic impression made by it on the final branches of the pneumogastric, which are distributed to the stomach, having been transmitted to the sensorium, and thence along the spinal accessory, and the nerves communicating with it, which supplied the offending muscles. External applications

to the neck were useless, probably because they could not act by reflexion along the proper nervous course, so that they were not used during my second attendance, and were soon abandoned during the first, when the case did as well without as with them. The efficacy of ol Terebinth in the neuroses, and the supposition that if latent verminatio existed, it would have been anthelmintic, urged its use; but as it was inoperative, it does not need further attention. Independently of the good from ol croton, by its more ordinary effects, I believe that it was beneficial as a couuter-irritant in the stomach, as it always irritated it very much, and after this, abatement and declension of the spasms ensued, so that an irritation exemplified at the periphery of branches of the spinal accessory and cervical nerves, was controlled by that at the periphery of the pneumogastric. In the first attack, the return of the spasms after the operation of the oil, was consequent upon gross dietetic errors. In the second attack these were avoided, and the recovery after the oil was uninterrupted. These views, moreover, tend to exhibit the development of the complaint, by shewing that impressions from gastric derangement applied to the gastric branches of the par vagum, could be conveyed to the spinal accessory, effect its excitability, an augmentation of which gave this affection its character. That there was derangement of the stomach is evident from its state before, and during the existence of the disease, and from the efficacy of alterative medicines upon it. This mode of development assimilates the case to those diseases of the trunk, and extremities which Hoffman, Boerrhave, and indeed others, both before and after them, pointed out, as arising from disorders of the digestive organs, affecting different portions of the medulla spinalis.

From the preceding, the conclusion follows, that this case was one of hysteria, exhibiting itself as unilocular convulsions of voluntary muscles, by involving certain nerves of animal life at the instigation of an eccentric cause.

ART. LXIII.—EXPERIMENTS WITH STRYCHNIA ON A HORSE.

By ARCHD. HALL, M.D., Lecturer on Materia Medica,
McGill College.

The horse experimented on was 24 years of age, in good health and spirits, the property of Mr. Mason, V. S., who was desirous of killing him for the purpose of making a skeleton, as well for pathological as anatomical purposes, as the animal had suffered some years ago from certain diseases implicating some of the joints of both the fore and hind extremities. Mr.

Mason offered no objection to, but, on the contrary, did everything to facilitate the experiment. Failing in obtaining *glonoine* for the purposes of the experiment, strychnia was resorted to; and the object was to determine, if possible, the minimum quantity capable of inducing death. Accordingly, in conjunction with Dr. David, and Messrs. Lyman and Cary, I went to the livery stables of Mr. Mason, on January 31st, and at 3h 24m administered 2 grains of strychnia, dissolved in ʒij. of whisky, and ʒiv. of water. The pulse, examined before the exhibition of the strychnia, was 40 in the minute, and the animal was in full spirits.

3h 30m. The pulse was now 44. This might have been due to the exercise of walking, which we made him undergo.

3h 35m. No apparent effects perceptible. Two grains more were exhibited in the same manner.

3h 41m. Pulse 40.

3h 46m. The horse cheerful, disposed to play, and to kick when teased.

3h 49m. No apparent effects perceptible. Two additional grains were administered under like circumstances to the former; the horse still as active and fresh as before, the poison not having taken the slightest effect; kicking and attempting to bite when teased; and was made to leap several times over a bar placed for the purpose. During the half hour now intervening, he escaped from the yard, and trotted actively up to the Place d'Armes, a distance of about 350 or 400 yards, whither he was followed and brought back. He had now taken six grains of the strychnia, without the slightest perceptible effect, and I resolved to double the dose now taken. Accordingly at

4h 19m, six additional grains of strychnia were given, at one dose, under the same circumstances as the preceding ones, and the effects of the poison now soon began to manifest themselves.

4h 25m. Slight trembling of the tail. The animal otherwise cheerful.

4h 26m. Trembling of the tail more marked; pulse 60; the animal still disposed to eat.

4h 30m. Belly drawn up; loins hooped; abdominal muscles slightly convulsed, with convulsive twitches of the forelegs, stiffness of the joints, and difficulty of locomotion; the latter apparently depending on commencing muscular rigidity.

4h 33m. Sides and belly as hard as a drum, due to apparent tonic spasm of the abdominal muscles; trembling very much increased, and perceptible over the whole body; tail shaking very much. Pulse 64. Animal still sensible, and disposed to kick when teased,

although unable, from the affected condition of the muscles of the hind legs.

4h 36m. The trembling more increased, and the animal evidently in a state of alarm. On attempting to walk, was scarcely able to move a leg. All the other symptoms still existent.

4h 40m. In attempting to reach the stable door, the horse slipped his foot and fell, and shortly afterwards had a general, but not severe, attack of spasm, in which the hind legs seemed chiefly engaged. The respiration was laborious and forced; a copious sweat broke out over his whole body. His alarm was excessive, almost hydrophobic; the waving of a handkerchief, or even the hand, at the distance of several feet from the eyes, excited an apparent desire of escape; the faculties were therefore still unclouded. Two attempts to raise him to the erect posture were unavailingly made. On the first occasion, he was put on his legs, but immediately fell. In the course of about five minutes, a tetanic spasm affected the whole body, in which, for the first time, the muscles of the face participated. The lips were drawn tightly backwards, the eyeballs retracted; the *membrana nictitans* closed over the eyes, and gradually returned; the eyeballs became fixed, and at 4h 55m the animal ceased to live, exactly 36 minutes after the exhibition of the six grain dose, and 1h 30m after the exhibition of the first. In all he had taken twelve grains; the first six grains of which did not appear to have been productive of the slightest apparent influence, even after the lapse of half an hour.

A post mortem examination was out of the question, as the chief parts of interest, viz., the brain and spinal column, in this examination, would have interfered with Mr. Mason's intentions in the sacrifice of the animal.

Montreal, February, 1850.

PRACTICE OF MEDICINE AND PATHOLOGY.

The Three Kinds of Cod Liver Oil.—By J. L. de Jongh, M.D. of the Hague.—We always hail with lively satisfaction the addition, to our stock of armour, of a new weapon, with which we may successfully do battle with the king of terrors. To snatch a single victim from his relentless grip, is a great triumph to our divine art. But if it be accounted a victory to rescue a certain number from impending death, in diseases indiscriminately, how much more signal must be the victory, if we can stay the progress of that increasing scourge of our race, tubercular phthisis. All eyes are now directed to the cod liver oil, as the forlorn hope the great agent by means of which this grand and desirable result is to be accomplished. First employed about the middle of the last century, in the treatment of gout, and afterwards by Percival, in that of chronic rheumatism, this therapeutic agent has gradually risen in importance as its value in the treatment of other affections has become known, until it now occupies a very prominent position among the articles of the *materia medica*; enjoying, as it does,

the reputation, if not of curing, at least of arresting the progress, nay, even of preventing the development, of scrofulosis and tuberclosis, against which all our remedial means have hitherto proved impotent. From time to time, during the last ten years, we have had accounts of its marvellous efficacy especially in these diseases, so that now the evidence in its favor has accumulated to a very considerable amount. Anfeld, Schroder vander Kolk, de Jongh, Shenck, and a host of others, of equally high authority, in Germany; Williams, Bennett, Pereira, Donovan, and others, in Great Britain, and a number in France, concur in pronouncing it a remedy of great power in many diseases. We must not, however, be led into the error of supposing that it is universally extolled by the profession; for it has its detractors, as well as other remedies. Nevertheless, presented with such high claims to our consideration, it is our duty to discuss, unbiassed, its merits.

The *oleum jecoris asselli*; *sive jecoris asselli*, *oleum morrhue*, *levertram*, *huile de morrhue*, *cod oil*, *olio de becalhao*, *olio di bacala*, are the synonymous appellations of an oil obtained particularly from the livers of several species of *gadus*, a genus of fish, of the order *thoracici*, family *malacopterygii*, found in the Northern Atlantic, Levant and Mediterranean Seas. The species which furnish the oil of commerce, are the following: 1. *Gadus morhua*, (cod-fish,) otherwise called stock-fish, Aberdeen fish, torsk or thorsk; caught in immense numbers on the Irish, Scotch, and Norwegian coasts. 2. *Gadus molva* (Ling); met with on the English coasts. 2. *Gadus carbonarius* (coal-fish) Norwegian *seij*. 4. *Gadus calarius* (Dorse.) 5. *Gadus polachius*, (Norwegian *Haakjenny*, or *haai-fisch*.) 6. *Gadus malangus*, (Whiting) found on the English and French coasts. Authorities differ, as to which species furnishes the official cod liver oil. All, however, agree that the several species are used every where, indiscriminately, for its production.

Opinions are divided, as to the method of preparing the three kinds of oil; some allowing the oil to exude from the livers, exposed to the action of the sun; others resorting to the process of boiling; others, again, to that of roasting, &c. &c.

With the view of obtaining certain information, respecting the source and method of preparation of the real Bergen oil, Dr. de Jongh availed himself of the opportunity afforded him by his father, a wholesale dealer in Bergen oil, to forward a recommendation through two respectable merchants of Amsterdam, to the Consul of Holland, Charles Konow, in Bergen, and to Messrs. Mack & Brothers, in Tromsøe, requesting those gentlemen to communicate what they knew respecting the species of fish used, and the method of preparation of the three kinds of oil.

From replies received from both these sources, the following facts may be gathered: That the Norwegian liver oil is principally prepared from the *dorse*, as also from the coal-fish; *the clear pale*, by the spontaneous flow from the putrescent livers; *the brown*, by the boiling, or roasting of the livers; from which, at an ordinary temperature, nothing is obtained. *The light-brown oil* is a clear pale oil, which either has stood long on the livers, or has got old in the warehouse. No other entrails but the liver, are used for the liver oil. The difference between the method of preparation, in the two cities, consists chiefly in this, that in Tromsøe, the livers of the pollack, or *dorse*, are used together, indiscriminately; while, as the oil is given off with great difficulty, a light brown color is produced, by heating the fresh livers. In this way, the method of obtaining, and the source of, the medicinal liver oil, is sufficiently explained.

The three kinds of real Bergen oil used by Dr. de Jongh, in his researches, possesses the following properties:

1. *Oleum jecoris asselli fuscum*. Color, dark brown; by a reflected light, green; in small portions, transparent; a peculiar, disagreeable, and empyreumatic smell, bitter and empyreumatic taste, strongly irritating the fauces; slightly acid with litmus paper.

2. *O. jecoris asselli subfuscum*. Color, like malaga sherry; smell peculiar, not disagreeable, stronger than the following sort; taste fishy, bitterish, acid; slightly acid with litmus paper.

3. *O. jecoris asselli flavum, sive album*. Color, gold-yellow; smell peculiar, not disagreeable; taste, fishy, not bitter, slightly acid.

Such is the account of the sources, methods of preparation, appearances, and physical properties of the oil, as given by our author in the first section of his treatise.

J. H. Bennett, of Edinburgh, describes four kinds of oil, the

pale, yellow, red and brown; and, according to him, it is difficult to find in France or England, a perfectly pure and clear article. Herein lies the secret cause of the ill-success which has attended the trials made with this substance, by the majority of the physicians of Great Britain and the United States, in phthisis, and scrofulous diseases generally. It, as is acknowledged, not only all the species of the genus *gadus*, are used for the production of the oil, but likewise other fish, the discrepancies in the statements of writers are readily accounted for. But the evil does not end here. Such is the increasing demand for the oil that its sophistication is carried on by unscrupulous druggists to an unlimited extent. Even lard and whale, olive and train oils are *iodinized*, and sold as cod liver oil. Success in the administration of this medicinal agent will, it is evident, depend mainly on the proper selection of the oil. So convinced is Dr. de Jongh of this fact, that after having made a voyage to Bergen, where he spent two years in making chemical analyses of, and experiments with, the oil obtained there, he has effected a permanent arrangement with two of the first mercantile houses at Bergen, for a regular supply of it; the Dutch Consul having kindly offered to affix his seal to every cask shipped, as a guaranty of its purity. The prices at which the genuine oil may be obtained at Rotterdam, the Hague, or Copenhagen, is about 8s. the gallon. That stamped with Dr. de Jongh's signature, commands a higher price. In England, it is sold at 1s. 6d. to 2s. the quart; and in this country at from 75 cents to \$1 a pint.

We pass next to the consideration of the chemical composition of the oil. The analyses of Wurter, Wasser and Marder being imperfect, our author instituted a careful analysis, which exhibited the following constitution:

100 parts of Cod Liver Oil contain

	Brown.	Light-brown.	Pale.
Oleic acid, with brown substance, (Gaduline and two peculiar bodies.	69.78500	71.75700	74.03300
Margaric acid	16.14500	15.42100	11.75700
Glycerine,	9.71100	9.07300	10.17700
Butyric acid,	0.15875	...	0.07436
Acetic acid,	0.12506	...	1.04571
Fellic and cholic acids, with some oleine, margarine, and bilifulvin	0.29900	0.06200	0.04300
Bilifulvin, and bilifellinic acid, and two peculiar substances,	0.87600	0.44500	0.26800
A peculiar substance, insoluble in alcohol of 30 degrees,	0.03800	0.01300	0.00600
A peculiar substance, insoluble in water, alcohol, and ether	0.00500	0.00200	0.00100
Iodine,	0.02950	0.04060	0.03740
Chlorine, with some bromine,	0.08400	0.15880	0.14880
Phosphoric acid,	0.05365	0.07890	0.09135
Sulphuric acid	0.01019	0.08595	0.07100
Phosphorus,	0.00754	0.01136	0.02125
Lime,	0.08170	0.16780	0.15150
Magnesia,	0.00380	0.01230	0.00880
Soda,	0.01190	0.06810	0.05546
Iron	a trace		
Loss,	2.56900	2.60319	3.00343

100.00000 100.00000 100.00000

Long before the chemical composition of cod liver oil was accurately determined, Kopp suggested that its therapeutic action depended on the iodine which it contained. This opinion, as we shall hereafter see, is not entertained by all who have had experience with the oil. The iodine is not found free, but in organic combination, perhaps with a fatty substance. The reason why Marder, Huberchmann, Potempa and Sarphat did not detect it, and consequently denied its existence, is to be found in the fact of their not having pursued the only mode by which it can be detected, viz: by the saponification of the oil with potash or soda.

"It is evident," says our author, "that cod liver oil may be found, in which no iodine is contained, and which may occur, perhaps, from adulteration with ordinary oil, or by previous refining with sulphuric acid and bleaching, for use in the arts. That, however, real and unrefined Bergen oil contains iodine is certain, and the presence of iodine is a proof of its being a genuine oil, and as such, approved of for its medicinal properties."

From the analysis given above, it appears that the pale and light-brown oils are very similar to each other in chemical constitution, containing a larger quantity of iodine, salts, phosphorus and inorganic substances generally, than the dark-brown; a fact which goes to prove that the light-brown is formed from the pale, by being kept long. The dark-brown, which comes off with the assistance of heat, appears to dissolve the substance of the bile somewhat more copiously.

Form of prescribing the Oil.—As the unpleasant taste of all the three kinds of oil render them very repugnant to most individuals, it becomes a matter of great importance to discover some means by which it may be disguised. With this view, it is given mixed with wine, coffee, the aromatics, such as aniseed, cinnamon, and orange-flower waters, &c.; or, it may be made into an emulsion with gum, with peach water, or creasote, may be added. Lately Mr. Frederiq has recommended that a piece of orange or lemon peel be chewed for a short time, then the oil swallowed, and the peel replaced in the mouth; this acting on the known principle of the impression of the gustatory nerve, by one sapid body, preventing the perception of another, until the first has been effaced. Care should be taken not to prescribe it with peppermint, for fear of exciting eructations, which would recall the taste of the oil. The retention of the oil by the stomach, will depend, in a great measure, on the proper time for administering it, which should, as a general rule, be immediately after a meal. Much of the after taste is thus, in some degree, avoided. Dr. C. J. B. Williams says that the fittest time for taking the oil, is from one to two hours after each meal. "At this time, the chyme is beginning to pass from the stomach into the duodenum; and it would appear that the oil passes quickly with it. There is nothing in the oil for the stomach to digest; and the less it is brought into contact with it, and the sooner it passes out of it, the better." If it should produce constipation, (which is seldom the case) Panck recommends that it be combined with castor oil. As a substitute for the oil, a soap is proposed by Deschamps, which is made by the saponification of 600 parts of the oil, with 80 of caustic soda, and 20 of water. This is formed into pills, with tragacanth and honey. We have prescribed the oil recently in ten cases, in only two of which was it tolerated by the stomach for any length of time. In two of the others, it was taken for a week or ten days, before it excited such disgust that it was necessary to discontinue it. In the remainder, the utmost aversion to it was created by the first dose. It may be that the oil prescribed by us, was not genuine, or was rancid. Be that as it may; we repeat our assertion, that the unpleasant taste is, and, we fear, will continue to be, a serious obstacle to its general use among adults. Such does not, however, appear to be the case with children. According to Dr. Carey, the fact is as extraordinary as it is undeniable, that they not only make no objection to it, but really ask for it at the stated time, and feel disappointed if refused. In the cases of adults, as well as children, when, from feebleness of the digestive organs, it is rejected, it should be given with Bordeaux, Madeira, or Sherry wines, or with brandy; and in extreme cases, it may be administered as an enema, in the form of emulsion.

Chronic Rheumatism.—All who have used the cod liver oil in cases of chronic rheumatism, concur in the opinion that this is a remedy of great efficacy; being superior to the most hitherto celebrated anti-rheumatic medicinal agents. Brefeld, Knood von Helmsreit, Rust, Amelung, Schenck, Sattinger, Spitta, &c., have brought forward innumerable cases of undoubted cure, in which patients had suffered for many years, and had experienced no relief from the ordinary remedies. Haas has reported forty-two cases, treated with cod liver oil, in which he found it very useful; but the effects, he thought, were less marked than they are in scrofula. Cod liver oil is contra-indicated in general rheumatic fever, but may be administered without any danger in cases where the fever proceeds from local inflammation. It is in cases of rheumatism, occurring in a scrofulous diathesis, or in a cachectic habit of body, that its effects are so evident.

In *ischias rheumatica*, *cardialgia* and *hemiplegia*, and *proso-palgia rheumatica*, it has been used in a few cases with success.

Chronic Arthritis.—There is a difference of opinion in relation to the virtues of the oil in this disease. While fifteen physicians prize it as highly in chronic gout as in chronic rheumatism, forty deny to it any efficacy in the treatment of the former. The evidence on this point is so unsatisfactory, that we must defer our judgment until it shall have been more extensively used, for it

may be that many cures of chronic gout, or its consequences, reported to have been performed by this therapeutic agent, were simply cases of chronic rheumatism, which were mistaken for it.

Rheumatic Paralysis.—The effects of the oil are equally manifest in this affection, characterised by swelling and stiffness of muscles, provided no change has taken place in the cellular tissue, tendons and muscles, or that ankylosis has not occurred. In another form of paralysis the result of rheumatic inflammation of the sheath of the nerves, where the plastic deposit presses upon the nervous trunks, the virtues of this substance are clearly exhibited.

Scrofula.—In all the various and manifold forms which this disease assumes, whether in the most severe and confirmed cases, or the local manifestations of the diathesis, this remedial agent is considered by the majority of those who have tested it, almost as a specific. On this subject Brefeld uses the following strong language:—

"There is no remedy which at all approaches the cod liver oil, in its therapeutic properties in scrofulous diseases; it is an undoubted powerful medicine, operating in a peculiar, specific manner, and affording relief where, to all appearance, and according to former experience, it was beyond the reach of medicine."

Kopp is equally explicit:—

"The first time the cod liver oil is prescribed for a scrofulous patient, its favorable effects are soon apparent, and which can alone be attributed to its use, frequently acting in a truly wonderful manner. It is especially efficacious in scrofula, which has not existed long; it effects a change in the general appearance, the cachectic color is lost, the flabby flesh becomes firm, the chain of swollen glands diminish and separate, ulcers and even fistulas put on a healthy character and heal. The enlargement of the epiphyses of the bones becomes less visible. I even found that scrofulous caries was, by its use, brought to a favorable issue."

And our author states that all who have prescribed cod liver oil in every form of scrofula, have publicly and unanimously acknowledged its virtues, and bestowed upon it the highest praise, which has secured it the first place among anti-scrofulous remedies. After making due allowance for the enthusiasm of Dr. de Jongh, on the subject of the oil, we must say that the testimony in favor of its efficacy, in the whole class of scrofulous affections is overwhelming.

To particularize, its effects in *intumescence of the lymphatic glands* are wonderful. All these glandular swellings, whether of the neck, axillæ, throat, groin, &c., subside under its administration; this must be kept up, in some cases, for months. Its internal use can be much assisted by its external application, in these cases, by rubbing it on the inflamed and painful tumors. In atrophy attendant on *swelling of the mesenteric glands*, it is equally powerful.

In *scrofulous ulcers* its internal and external use is recommended. Brefeld prescribes an ointment, with the addition of acetate of lead, to be applied to the ulcer.

Chronic Eruptions occurring in a scrofulous state of the system, readily yield, as a general rule, to this remedy. Among them may be enumerated *tinea favosa*, the *milk scab*, *psoriasis*, *syphilitic eruptions*, *irritable humid tetter*, *chronic scabies*, &c. &c., in which it was used externally and internally with satisfactory results.

In *Scrofulous Ophthalmia*, it has been prescribed by Schutte, Brefeld, Carron du Villards, Haas and Bennett, with the happiest effects. In conjunction with its internal exhibition, Brefeld besmeared the edges of the lids with the pale oil twice or three times daily with the aid of a camel's hair pencil, or a small feather.

Atrophia Infantum is one of the frightful forms of scrofula, in which its virtues are truly astonishing. By the following graphic picture which our author draws, no one can fail to recognise the disease:—

"Old features, hollow eyes, pale grey skin, which hangs in wrinkles on the scarce-covered bones; flabby, powerless muscles; the belly swollen, often very hard, and sometimes allowing the enlarged glands to be felt through the abdominal parietes; craving for farinaceous food and mealy vegetables, which they devour with true voracity, which are, however, always badly digested, and the consequence of which are sour eructations, flatulence, and often vomiting."

Care, however, should be taken that it be not confounded with other forms of disease, as ulceration of the bowels, dropsy, &c.,

In conjunction with the internal administration of the oil, Brefeld advises the daily rubbing of it upon the tumid belly, which accelerates the cure. According to Kléncke and Rosch, it is contra-indicated by the very tender age of the patient, they having seen an aggravation of the symptoms, and a disposition to atrophy brought on, when it was given to children before the end of the seventh month.

In the treatment of *rachitis*, characterized by atrophy, swollen joints, bent ankles, and crooked legs, our author states that the cod liver oil will supersede every other means of cure, and will accomplish whatever can be expected or hoped for from any medicine; and Pruyss Van der Høven confesses that he knew of no remedy against this disease which at all approaches it. Brefeld, who has treated upwards of a hundred cases of this disease, says that the healing property of the oil is as incredible as it is unlimited in its effects. Even in the very extremity of life, where the patient appears to be sinking, and death is inevitable, it affords relief as a matter of certainty; he knows nothing to controvert this, except an intervening attack of acute fever and the termination of life.

Phthisis Tuberculosa.—As our readers are presumed to have seen accounts of the cases of this disease, treated with cod liver oil, in the medical journals of the last few years, we shall not go into particulars, but content ourselves with a general statement of the success which has followed its administration. Our author's individual experience with it amounts almost to nothing, he having treated but one case, which, although apparently benefited, yet terminated fatally. As his experience was so very limited, he applied to several of the most celebrated physicians of his country for their opinions of, as well as the result of their trials with, this remedy. Suermann, Schroder Van der Kolk, Loucq, Alexander, Pruyss Van der Høven, Sebastiani, and Springar, concur in opinion as to its wonderful efficacy in promoting the absorption of the crude tubercles in some cases; in preventing their softening; in others; in causing the disease to remain stationary, in a third class of cases; and, finally, in a fourth class, where it does not avert the fatal termination, in prolonging life. The opinions of different observers, in different countries, we may add, agree in the main with what has just been stated; but it is a matter of regret that we have not the means of making a numerical classification of the cases, not having access to the works in which these observations have been recorded.

Dr. Williams is the only author who has given us a series of cases that are susceptible of analysis. He has treated about four hundred cases; out of this number he has presented a tabular statement of two hundred and thirty-four, which are recorded in his note books. For the analysis of these cases we acknowledge our indebtedness to the British and Foreign Medico-Chirurgical Review. Among the 234, there were 9 cases in which the oil disagreed, 19 in which it appeared to do no good, and 206 in which its use was followed by marked and unequivocal improvement. Of the 206 patients, 62 had cavities; all of these improved materially under the use of the oil; in 34 the improvement has continued; in 11 the improvement was only temporary; in 17 the patients were lost sight of. In 100 patients the tubercles had commenced to soften, but actual cavities had not formed, and both physical and general symptoms materially and rapidly changed for the better. The process of softening seemed arrested, as the moist trachei in the supra, or infra-clavicular, or the supra-spinous regions gradually ceased, the dulness more or less disappeared, and, at last, vesicular breath sound returned, and no physical signs whatever remained, except a little prolonged and, perhaps, tubular expiration. Coincidentally with these changes, the constitutional symptom disappeared. In the remaining 44 patients, the disease was in the early stage, and the results were not less satisfactory. Eleven of the advanced cases are related as illustrations of the degree of improvement. Thus, it will be seen, that the results vary in degree from the mitigation of the distressing symptoms, up to an apparently complete restoration to health. "The power of staying the demon of destruction," says Dr. Williams, "sometimes displayed by the cod liver oil is marvellous." In estimating the value of this evidence, a reviewer correctly remarks, there must be subtracted a certain per centage of improvement, which occurs from the employment of any judicious treatment, such as a regulated temperature, change of air, proper diet, regular habits, &c. &c.; for Dr. Walshe has

shown that the improvement in phthisis under various modes of treatment, is greater than was anticipated.

In respect to the *kind* of oil to which the preference should be given, there is a diversity of opinion. From a series of comparative experiments instituted for the purpose, our author concludes that the brown oil is the best. The patients chosen appeared to be in the same conditions as far as regarded the diseases, external circumstances, &c., and the oil was the only remedy employed. The cures were effected by the dark brown in half the time required by the light brown and pale oils. Dr. Williams has, in all cases, prescribed the oil as *free from taste and smell* as could be procured, and so little difficulty has been experienced in its administration, he says that the proportion of cases in which it has decidedly disagreed, has not amounted to four per cent. All that is required is to procure it *pure and fresh*, as it existed in the hepatic cells of the healthy fish when alive, without being subjected to the process of putrefaction, roasting or boiling.

Rules to be observed in prescribing Cod Liver Oil.—It has been stated above that intercurrent inflammation, during the treatment of any disease, by this agent, requires its suspension until that pathological condition shall have subsided. If the digestive organs are disordered, particularly if in an irritable state, the oil is apt to excite pain, vomiting, diarrhoea, &c., wherefore it should be omitted for a time. It is contraindicated when congestion or inflammation of the intestines, or indigestion, &c., is present.

Mode of operation of Cod Liver Oil.—Kopp first suggested that the efficacy of the oil depended upon the existence in it of iodine, before chemical analysis had ascertained the fact of its being one of the ingredients. The opinion that this substance is the active constituent of the oil, has been adopted by many physicians, who found their arguments upon the fact that other fish oils, the animal oils, and olive oil, that do not contain iodine, exert by no means such well marked effects as those which are seen to follow the exhibition of the genuine cod liver oil. This view of the subject has been rejected by Dr. C. J. B. Williams, who maintains that the amount of iodine is so minute as hardly to admit of quantitative measurement; and that to ascribe virtues to such infinitesimal fractions, when ordinary doses have no corresponding activity, is to adopt the fanciful and mischievous speculations of the homœopathist, which cannot be too strongly deprecated by the scientific and conscientious practitioner. He administered iodine in various combinations, in several cases, without any perceptible amelioration, which were afterwards materially benefited by the cod liver oil. Mr. Donovan and Dr. Taufflied coincide in the main with Dr. Williams; the former contending that the tendency of iodine is to render the person thin, whilst that cod liver oil is to fatten. Without adopting either of the above opinions, we are inclined to believe that the iodine does exert some effect, how slight soever it may be; for it has been ascertained by several German physicians, whose names have been mentioned in the preceding pages, that the beneficial operation of the oil is promoted by the addition of the iodide of potassium. The iodine may be detected in the urine of the patients who have been treated with the oil, and the same unpleasant taste is left after it, as after taking iodine.

The active principle cannot alone be the fat contained in the oil; for it has been satisfactorily proved that other oils or fats are not substitutes for the cod liver oil. Neither is it ascribable to the phosphorus, the butyric acid, gaduine, &c. alone. The latter element being insoluble, Dr. de Jongh thinks that it is wholly inactive.

Upon a careful review of the whole subject, our author arrives at the conclusion that the properties of the oil do not depend upon any single constituent, but on the combination of all the constituents, an effect being thereby produced which cannot be caused by them singly. In this respect may we not liken its action to that of the waters of mineral springs, whose virtues depend upon the complexity of the compound.

Dr. de Jongh very justly remarks, that in all diseases in which cod liver oil is found to be efficacious, many indications are to be fulfilled simultaneously, if the perfect restoration of the patient is to be expected.

"In general, the weakened digestion is to be corrected, the secretions must be restored, and the lymphatic system brought to a higher state of activity; besides which, and what seems the most important of all, the tone of the nervous system is to be

improved. The slightest reflection will show that neither biliary matter, nor the fatty substance, nor the iodine, nor any one single constituent part of the cod liver oil, is able, of itself, to fulfil these indications. Consequently its power as a remedy, is not to be ascribed exclusively to one only, but to the united operation, if not of all, still of the greater part."

Each constituent part, he thinks, fulfils a peculiar indication; nevertheless, they are not all equally powerful. The superior efficacy of the dark brown oil, which he regards as established by his experiments, is, he thinks, attributable to the greater quantity of biliary matter and butyric acid contained in it, than in the light brown and pale oils.

It is not our intention to take a survey of the various speculations which have been made in reference to the action of the oil in the several diseases in which it has been used. We cannot but regard them as unsatisfactory in the present state of our knowledge of the pathology of those diseases, and of our acquaintance with the remedy which, it must be admitted, is very limited. For a very ingenious hypothesis in relation to its *modus operandi* in tuberculosis, we refer our readers to an elaborate paper from the pen of Dr. C. J. B. Williams, in the London Journal of Medicine, for January, 1849, of which a large extract is contained in the sixth volume of Braithwaite's Retrospect. We must content ourselves with laying before them the most obvious effects which have been observed by different physicians to follow its administration.

The consideration of the nature of the diseases, in which it has been found of greatest utility, will lead us to the conclusion that it acts by correcting the defect of secondary assimilation, in which they originate. In the various forms of dyspepsia, (diseases resulting from primary malassimilation,) it is possessed of very little power. But in those, mentioned in the preceding pages, the result of secondary malassimilation it is highly serviceable. Among the first effects noticed, after the oil has been taken a certain length of time, is the improvement of the appetite and the increase of flesh and strength. This increase of weight does not consist solely in the deposit of fat, but there is an increase in the muscular substance. The oil is, in other words, a highly nutritious material, and "possesses" to borrow Dr. Williams' language, "in a pre-eminent degree, the property of fattening those who take it for any length of time." Hematosis seems to be promoted, as denoted by the change in the colour of the cheeks and lips. Dr. Williams states that the analysis of the blood in one case of phthisis which had been under treatment by the oil, showed a most remarkable increase of the animal principles of the blood, especially the albumen, which amounted to thirteen per cent, being nearly double its usual amount, whilst the fat was not materially augmented, and the fibrin, which is generally high in phthisis, was reduced below the normal proportion.

Of its power of checking the night sweats, diminishing the expectoration, &c., in phthisis, we have already spoken. Its effects on the chylopoietic functions are no less manifest. Most authors agree in the opinion, that the influence which it exerts in restoring the biliary secretion to a healthy state, where it had been depraved, is due to the biliary principle which it contains. The flow of bile is generally free and uniform, as shown by the colour of the feces. Dr. Williams says that he has noticed, in numerous instances, that the bulk of the liver (as determined by percussion) becomes augmented during its use; yet, without tenderness, or any other sign of disorder. Dr. W. has used it in several cases of functional and structural disease of the liver, with the most satisfactory results, especially in one of habitual formation of gall-stones, which had resisted all kinds of treatment, and was rapidly destroying the health. The use of the oil entirely stopped the attacks, and restored the patient to good health.

In concluding our notice of cod liver oil, we must acknowledge that, from a perusal of all that has been written on the subject of its virtues, it is now an agent of very considerable power, and fully merits the high encomiums that have been lavished on it. In its property of modifying, if not preventing, the tendency to cacoplastic and aplastic formations, it is far superior to any other agent, whether medicinal, dietetic or regiminal.—*Charleston Medical Journal, January, 1850.*

On the Functions of the Pancreas.—M. Bernard concludes from his researches into the composition of the pancreatic secretion, that it is the agent whereby the assimilation of fatty matters is effected. He shows that this fluid is alkaline, that it is capable, when obtained pure, of forming an emulsion with oily or fatty substances; he points out that the chyle does not appear in the lacteals above that portion of the intestines in which the pancreatic secretion is poured out, while in morbid states of the pancreas, where its secretion is deficient, fatty matters are voided undigested.

M. Bernard's conclusions have been adopted by a commission of the Academy of Sciences, Paris.—*Comptes Rendus.*

SURGERY.

On the Treatment of Lupus.—By M. M. Devergie and Petrequin.—M. Devergie states that M. Emery has somewhat overestimated the beneficial effects of cod-liver oil in lupus (p. 279); and he considers it a great mistake to depend upon any one remedy for the cure of diseases, especially of the skin, which may be simple or complicated in their nature, though still bearing the same name. With respect to lupus, there are two genera, the *tuberculous*, which affects the deeper parts, and the *serpiginous* or *herpetic* form, which affects the surface. If it has gone on to ulceration it is termed *exedens* and *vortex* when this proceeds rapidly. Of all these it is the *serpiginous* form, prior to ulceration, that best yields to cod-liver oil, to which remedy lupus of the limbs and trunk is more amenable than is that of the face. In a case under treatment, in which the disease existed both on the body and on the face, the latter alone has not yielded. Many cases of limited *tubercular* lupus may yield to measures which exert a general modificatory power upon the constitution, and to the use of Canquoin's caustic, which M. Devergie much employs in these cases. *Herpetiform* lupus that has ulcerated is very advantageously modified by the application of juniper oil to its edges. M. Devergie is far from underrating the beneficial effects of the cod-liver oil, preferring it, indeed, to any other separate remedy. He does not, however, approve of its exclusive use, believing a combination of means, both external and internal, to be the most judicious procedure. To this end he lays down the following as being the principles of treatment which should guide us:—1. To endeavor to establish the regularity of the menstrual functions by means of the syrup of the iodide of iron. 2. To administer cod-liver oil internally. 3. To employ sulphureous or iodine baths. 4. To touch the lupus frequently, as every third day, for example, with the oil of juniper. 5. To apply Canquoin's caustic tubercles which, during the process of cure, become isolated, but which still are dissipated with difficulty, and to ulcers which will not cicatrize. 6. To apply in some cases a slightly resolvent ointment, or a rubefacient preparation of iodine, to produce a modification in the more obstinate portions of the disease.—(*Bulletin de Thérapeutique*, tom. xxxv. p. 466.)

M. Chavannes, a pupil of M. Petrequin of Lyons, furnishes a statement of the great success that practitioner has met with in treating the ulcerated form of lupus—*lupus exedens*—by means of the *chloride of gold*, which is also of great utility in other forms of skin disease when they take on an ulcerated form, as carcinoma of the face, eczema, tuberculous syphilis, &c. The caustic is composed of *very pure laminated gold* 1 part, *hydrochloric acid* 3 parts, *nitric acid* 1 part. It produces a temporarily sharp pain, and coagulation of the albuminous matters on the surface of the ulcer, which changes in color successively from an orange yellow to a purple, violet and black. A thick crust is the ultimate result, which, however, is no eschar, for there is no mortification, no loss of substance; but on the contrary, a vigorous reproduction. If after a while the crust be raised, we see under it a delicate, reddish, newly-formed skin, which needs the strengthening attainable by another slight cauterization. The healing takes place without cicatrix, unless the tissues of the part have already been deeply destroyed; and even the cicatrices, produced by other caustics may in some degree be arrested by the application of this one. Next to this caustic the *acid nitrate of mercury* is perhaps the best; but if applied over too large a surface, it may

give rise to poisonous effects, while it produces much more pain and a very inferior degree of cicatrization.—(*Revue Médicale*, 1848, tom. iii. pp. 45-70.)

MATERIA MEDICA AND CHEMISTRY.

Poisoning by Oil of Cedar, (*Juniperus Virginiana*).—*Report of Four Cases.*—By S. C. Wait, M. D.—(*Bost. Med. and Surg. Jour.*)—The rarity of poisoning by this substance, and the absence of any notice being taken of the same in Toxicological works, etc., has led Dr. Wait to report the particulars of four cases which have within a few years come under his own personal observation. The subjects were all females, and in three of the instances it was taken for the purpose of producing abortion. The symptoms manifested in all may be looked upon as somewhat characteristic. Convulsions of a "tonic" character affecting the whole body; eyes very glaring and still; jaws set; hands clenched; breathing, struggling, choking and strangling; countenance bloated and livid; pulse from 45 to 60 per minute; vomiting of a fluid having a strong odor of the oil. As soon as the convulsions ceased the patients passed into a profound coma. Stertorous breathing, however, continued but for a short time, being soon followed by a peculiar kind of breathing, the chief character of which was "an unsuccessful heaving of the chest in inspiration, and a limpsy dropping together of the chest in expiration." The countenance assumed a venous aspect; pulse sank and soon became intermittent; pupils dilated; soft parts about the neck sunk down at every inspiration, the whole indicating that venous congestions were taking place in the large venous trunks behind the heart, and that the balance between the circulation and respiration was lost.

Two of the four cases proved fatal. The quantity taken in each was from half an ounce to an ounce. The post-mortem appearances were the odor of cedar oil given forth on opening the stomach presented several small red patches as large as the fingernail upon its upper and anterior surface; for some distance around these patches the mucous membrane had lost its usual polished appearance; the duodenum showed marked signs of inflammation. The uterus in each instance was in a healthy gravid state. The usual treatment in cases of poisoning from narcotic irritants was pursued. In one instance marked benefit followed free bleeding.

Lupulin as an Anaphrodisiac.—(*Amer. Jour. Med. Sci.*)—Dr. Page called the attention of the Philadelphia College of Physicians to the lupulin as a means of controlling the painful erections occurring in venereal cases. He has employed it now for two years, and has found it a better and more effectual remedy than any other he has tried. He gives it in the dose of from five to ten grains, and has never known an instance in which the second dose did not succeed in subduing the painful erections, so troublesome in cases of gonorrhœa. It does not cause the headache, constipation, and other unpleasant effects consequent upon the use of camphor and opium. He has found the remedy useful also in cases of involuntary seminal emissions. It will not cure the disease, but prevents the discharges, so long as the patient remains under its influence.

Dr. Edward Hartshorne has employed it successfully in one case to destroy venereal appetite in a man addicted to onanism.

New Preparation of Morphine.—At a meeting of the "Suffolk District Medical Society," Dr. Fisher called attention to a new preparation of morphine, with which he is at present experimenting. He dissolves morph-culph. 2 grs. 1 2/3 of chloroform; ten drops, inhaled by the mouth, in cases of phthisis, will give immediate relief to the harassing cough, and sleep follows, which lasts from an hour to an hour and three-quarters. More largely administered, it checks diarrhœa in phthisis, and in doses of from ten to twenty drops restrains the action of the bowels in dysentery.—*Boston Med. and Surg. Jour.*

MEDICAL JURISPRUDENCE.

REPORT OF A TRIAL FOR RAPE AND MURDER, WITH MEDICO-LEGAL REMARKS ON THE CAUSE OF DEATH. BY F. OGSTON, M. D., ABERDEEN.

(Continued from page 301.)

The medical evidence which completes the history of this trial I shall adduce at length from notes obligingly furnished me by the counsel and agent for the prisoner, as taken by them at the time. It is to the following purport.

John Abercrombie Gordon, surgeon, Fyvie, examined—I know Mary Smith's house. I had occasion to pass it on the morning of the 10th of April. I heard of her death, and went into the house. This was about half-past nine in the morning. I understood I was the first medical man who was there. I found the woman lying on her back, with her head to the back corner of the head of the bed. Her limbs were apart. I cannot say that her position was such as a woman would be in when having connection with a man. There was a frothy bubble about her mouth. I left the situation of the body unaltered. I merely put my hands upon the woman. The bedclothes were in a wrinkled condition. I returned to meet Dr. Davidson, and I left the body still undisturbed. I signed a report along with Mr. Davidson. (Here read his report, which was short, and only embraced the points brought out on his examination, with the addition of the following particulars—viz., right knee bent; ecchymosis on right side of neck, in a position precluding the possibility of hypostasis; tongue protruded; external parts of generation exposed, and blood issuing from the vagina.) From the appearance of the bed I should suppose there had been a struggle upon it.

James Shand, surgeon in Turiff, examined—I am surgeon to the poor in Auchterless. The inspector of the poor directed me to go to Mary Smith's on the 10th of April last. I arrived at her house about eight o'clock at night. I observed that two of the tenors keeping the back corners at the head of the bed together were drawn out. I reported on the superficial appearances. I left the body undisturbed. (Here Mr. Shand read his report, which enumerated the facts and observations already detailed in the notes of the inspection, with the following additions—viz., the lower lip covered with froth; bluish discoloration of the right side of the neck; and two bluish spots on the back of the right hand, which might have been produced by the pressure of the thumb, if shifted from its first position, or by the points of two fingers.—) The report concluded with the following statement of opinion:—"Considering the above appearances, it appears to me highly probable that rape has been committed, and death occasioned either by strangulation or suffocation." I still adhere to that report, judging from external appearances. It is possible that the appearances might have been produced if she had consented.

Francis Ogston, physician in Aberdeen, examined.—I inspected the body of Mary Smith along with Drs. Jamieson and Davidson, on the 11th of April. The body was lying in bed when we found it. I drew up a report of the state of the body (report read, see ante.) I cannot speak with certainty as to the cause of death.—I found a clot of blood under the integuments on the left side of the forehead. This was on the side next the back of the bed.—I cannot speak as to how it was produced. It might have been produced by a blow, or by the woman knocking her head against the bed. The appearances about the genitals were such as might have been produced by a forced connection. These appearances might have taken place independently of a sexual connection.—A foreign body of equal size with a man's private part might have produced the appearances. I cannot say if the woman had died during the act of connection, assuming the connection to have taken place. Asphyxia means a stoppage of the breathing. Stoppage of the breathing may be produced either directly or indirectly. Direct asphyxia may occur naturally or by violence. Indirect asphyxia may be caused by disease in the brain. There were two states of the heart in Smith's case which might have favored such indirect asphyxia. Indirect asphyxia may be caused by violence. In every case of apoplexy there is indirect asphyxia. Apoplexy may be caused by violence. Smith's death must have been caused by suffocation or by disease of the brain. The brain in this case was loaded with blood. I saw no other means than

violence for accounting for her death, if it took place by direct asphyxia. Pressure on the mouth and nose, and a weight on the chest, would bring on direct asphyxia. A weight on the chest alone, if sufficiently great, would cause direct asphyxia. If there had been determination of blood to the head that would increase the operation of the violence in producing direct asphyxia. Convulsions might have taken place before the woman's death. They form usually a part of the train of symptoms in direct asphyxia. I saw no reason to believe that in this case there had been convulsions from natural causes. There was no wound, properly so called, within Smith's private parts. If sexual intercourse had taken place there was nothing to have hindered it from being complete. Assuming connection to have happened, the flow of blood from Smith's genitals would likely have been gradual. It would have required something equally large with a man's private part to have caused the genital appearances. The mark on the man's private part was such as might have been caused by intercourse.

Cross-examined.—I did not find any marks on the lower part of Robb's shirt. There was organic disease of Smith's heart.—Such disease would have predisposed the party to sudden death. The heart was morbidly thickened on one side and morbidly thinned on the other. The brain was unusually firm, but I do not say that it was morbidly firm.

Re-interrogated.—The appearances of the heart in Smith's case were scarcely such in themselves as to show that the disease had been fatal. This state of the heart would have made any violent attack on her the more dangerous. Agitation would have been bad for her. The abrasions on Robb's face would have readily been caused by a person's nails.

James Jamieson, physician in Aberdeen, examined.—I inspected the body of Mary Smith along with Drs. Ogston and Davidson (see report.) From the appearance of the private parts penetration was apparent from some body about the size of a man's private part. I did not see any appearance that the woman had died from natural convulsions. The fluid in the belly afforded a slight corroboration of the other appearances. A weight on the chest or belly might have produced asphyxia. The fluid in the chest and belly was merely an accompaniment of asphyxia. A hand on the woman's mouth, and the weight of the body of a man on her chest, would have accelerated asphyxia rather than any one of these singly.

Cross-examined.—The countenance of the woman was natural. Even if a struggle had taken place we might have found her features placid. There was nothing in her countenance which was inconsistent with death by violence. I consider Beck's opinion sound. Death by strangulation is caused by asphyxia.

Re-interrogated.—Smith had been dead about thirty hours when I saw her. If her features had been distorted at death they would have remained distorted. I think she had died from violence.—There had been a struggle previous to her death.

As reporters were excluded from the court during the trial, I have no means of giving, without injustice, even the shortest outline of the able pleadings of the advocate depute (E. F. Maitland, Esq.,) on the crown side, and of the counsel for the prisoner (C. F. Shand, Esq.,) on the other, or of the summing up by the eminent judge (Lord Cockburn) who tried the case. Suffice it to say that both the public prosecutor and the bench considered that Smith had died from suffocation, as set forth in the indictment.

The jury, after consultation, returned a verdict of Guilty against Robb on both counts, as libelled; coupled, however, with a recommendation to mercy, "as they did not think that he had any intention of committing the crime of murder."

REMARKS.—Such is a pretty full outline of the whole history of this important trial, presenting, as it does, not only circumstances of unusual atrocity, but also several points of peculiar interest to the medical profession; to a few of which I would here take leave to advert.

As to the first charge against the culprit, or the crime of rape, little need be said. The proof of this offence in Scotland has of late been very much simplified, it being only required to constitute it, that there has been "penetration," to however small an extent, even in adult females. Such was the legal decision laid down in

very distinct terms in the Court by Lord Cockburn, on the day previous to Robb's trial on the occasion of a rape case then before him. In regard to the position of the medical witness in such an instance as the one we are considering, where "the female is found dead," and he "is required to determine whether her person has or has not been violated before death," there is little or no room for difference of opinion. "He can seldom do more," says Dr. Taylor, "than express a conjectural opinion from the discovery of marks of violence on the person, and about the genital organs.—Even," he adds, "if spermatozoa were detected in the liquid of the vagina, this would merely prove that there had been intercourse; whether violent or not must depend on circumstantial evidence." (Op. cit. 642.)

In the case before us the evidence was wanting which the discovery of spermatic matter sometimes affords, as well as other proofs frequently available on occasions of forcible violation; such as seminal and blood stains on the linen of one or both of the parties, and marks of blows on the breasts or limbs of the female. Yet, notwithstanding this, the person of this woman presented indications of a forced connection before death sufficient to meet the requirements of the law of this country. The position was precisely such as the body would have retained had complete insensibility come on while a male was in the act of making entry within her body. The abrasion of the fourchette, the bruising of the caruncule myrtiliformes, and the flow of blood from the vulva, were all such occurrences as would have followed the entrance to at least a certain extent of some such body as the male penis within the vagina. In addition to this we have the scratches on Robb's face, and these all on the left side of it, where they would most likely have been, if produced by a woman's nails in her resistance to violence of this sort; and also such an abrasion on the inside of his prepuce, as would have been readily caused in his attempting to effect an unwilling connection. All these circumstances, together, certainly point to a forced sexual intercourse, as the explanation which would naturally present itself to most minds on considering their direct bearing; and though not in themselves absolutely demonstrative of such an occurrence, or otherwise inexplicable, they are perhaps to be regarded as being as strongly corroborative of the weighty proof from other circumstantial evidence laid before the jury in this instance, as any that could have been expected to be furnished from purely medical sources.

Taking leave, therefore, of the first charge as being clearly proven, the second charge, or that of murder, appears to me to demand a fuller consideration. The point which on medical grounds seems to me to be *not unassailable*, regards the conclusion come to by the bench and the public prosecutor, as to the *immediate cause* of the woman's death. Assuming, as they were fully entitled to do from the evidence before them, that she had died under circumstances of violence, it is not by any means so clear that her death was undoubtedly caused by suffocation.* Even now that the whole of the circumstances of the case are before us, we are still met with the same difficulties which the inspection of the body set in array against the formation of an *unqualified and perfectly satisfactory opinion* on the subject in discussion.—It still appears to me to be a question open to consideration whether the asphyxia which was indicated by the appearances in the body had in this particular instance been *direct* or *indirect*, primary or secondary; *i. e.* whether the conclusion justified by the premises is, that the victim of Robb perished from violent and direct interference with her breathing, or that her struggles had induced such a comatose state of the brain from inter-cranial congestion as to have produced indirect arrest of the respiration.—Neither of these suppositions is, it is conceived, inconsistent with the facts of the case considered either morally or medically, nor does there appear to be such a preponderance of evidence in favor of the one as to negative the possibility of the other, or to authorize an unqualified decision in either direction.

* In the remarks which follow it is not intended to interfere with the legal merits of the decision of the Court or Jury, while it is as little intended to argue that they were not entitled to act on the more probable opinion in regard to the cause of death.—The question is meant to be taken up and argued merely as a *medical one*, on which a hasty and dogmatic opinion is calculated to lead to injurious consequences on medico-legal science.

In the first place, the obvious consideration occurs, that between death by coma and death by asphyxia in the restricted sense of the word, there exists in many cases no further recognisable distinction than that in the one mode of decease respiration is arrested "through the intervention of insensibility," and that in the other mode of death it is arrested by a "direct impediment to the access of air to the lungs." (Alison's Physiology, p. 327), and that consequently on many occasions the one form of the fatal event cannot be distinguished from the other on a post-mortem inspection. The exceptions to this state of matters which occasionally arise in practice originate in one or other of the following specialities. Either from circumstances the comparative amount of congestion of the heart and lungs is so marked on the one hand, or that of the brain on the other, as to lead at once to the conclusion that in the former case the death has proceeded from direct asphyxia, and in the latter case from coma; or we find in either case appearances *superadded* which are sufficiently characteristic of some of the special modes of sudden death in either of these two ways. Thus, in the case of direct asphyxia, hanging or strangulation is characterized by the mark of the ligature and the local violence about the neck to which it gives rise, and drowning by the light watery froth, and the water which may be found in the air-passages, lungs, and stomach. But that the case before us does not belong to either of these categories will be evident on a little consideration. In Smith's body there was not that decided preponderance of congestion within the head, and comparative absence of it in the heart and lungs, which would have justified, on good grounds, an unqualified decision in favor of death by coma; neither was there here that marked degree of comparative congestion of the right heart and lungs,* as contrasted with the state of the brain, which would have authorized a positive opinion on the side of death by ordinary asphyxia. Equally observable was the absence, if not entirely, yet to a considerable extent, of those *superadded* appearances decidedly indicative of coma or of direct asphyxia, and the want of which throws us back to the more general inference of asphyxia in its wider sense, as not excluding either supposition. There was no effusion of blood or of serum within the head serving to suggest the existence of sanguineous or serous apoplexy. If, then, the woman died by coma, it must have been by the congestive form of this last disease. By the application of the same test—viz. the characteristic appearances—we get rid of several of the forms of direct asphyxia, leaving only that one of them which so seldom presents us with any distinctive signs—i. e. death by suffocation. Between these two possible modes of death—apoplexy and suffocation—it appears to me that we must be prepared to choose and to discriminate, if we are to arrive at any certainty as to the cause of Smith's death. Let us consider, then, the circumstances brought out on Robb's trial, with the view of deciding on the probabilities in favor of one or other of the two occurrences.

One of the leading features of the case in hand was the strong proof it offers of a severe struggle having taken place between the parties. This in itself might easily have led to cerebral congestion, but obviously not by any means so readily to direct asphyxia. Again, the state of the heart in Smith would have facilitated the same occurrence: the attenuation of its right walls retarding the return of blood from the head, and the hypertrophy of its left ventricle accelerating the circulation within the cerebral vessels.† The tendency to this form of disease would have also

been the greater in the present instance, as the brain itself, though not probably to be set down as hypertrophied to any marked extent, was noticed to be "unusually firm," and the party had reached a period of life when dangerous consequences from this condition of the central organ of the circulation might have been justly dreaded from the application of such exciting causes as either sudden excitement or violent corporeal struggles, not to speak of the combined and simultaneous operation of both on the same occasion. To this might be added the effect of the emphysematous state of the lungs—a position of matters not unlikely to favor the production of coma under a sudden acceleration of the circulation. But to this last I would not attach any undue importance, as this condition of the lungs would obviously have been almost equally operative in facilitating death by a direct stoppage of the breathing.

There is one circumstance, however, to be observed in the case before us which may at first sight seem to negative the possibility of death by congestive apoplexy. I allude to the bloodless state of the scalp,—a condition the very opposite of that which is usually encountered to a greater or less extent in all plethoric individuals who perish in this way. The absence of this appearance, I may observe, nevertheless may be explained when it is taken into account that this woman was not at all plethoric; and, further, that her head, prior to the time of our examination of it, had remained elevated on a pillow for a period of at least thirty-six hours—a position of the head which would have favored the gravitation of the blood, fluid as it was, to the dependent parts of the body. Besides, a gorged state of the scalp is not a constant phenomena in undoubted instances of death by apoplexy.* With this exception, then, giving it all the weight which can be reasonably claimed for it, the other appearances within the body were quite consistent with the assumption of death in this particular mode. The sinuses and veins within the head were unusually loaded with dark fluid blood; the pia mater was minutely injected; the interior of the brain was closely studded with bloody points, and its cortical and grey matter generally presenting a rose hue, while the internal jugular, and especially the vertebral veins, poured out blood in considerable quantity on the removal of the encephalic mass;—circumstances which, though not inconsistent with the idea of death by direct asphyxia, were all of them indicative rather of death by coma than in this last way.

The above remarks have not been adduced with the view of proving that death in this case certainly took place by coma, but merely in order to show that such a mode of death was not impossible, or even unlikely, in the circumstances under which Smith must have been placed at the time of her decease; and, besides, that such an explanation of the manner of its occurrence is not incompatible, if it is not to some extent confirmed by the state of the body of the woman at the period of its inspection.

The other point to which I would call attention is the consideration of the facts in the evidence which are in favor of the assumption of the Court, corroborated, as it was, to some extent, by the opinion of myself and colleague, and more fully, though still cautiously, and with a prudent reserve, by another of the medical witnesses—viz. that death here was caused by one at least of the forms of direct asphyxia, i. e. by suffocation. In proceeding to do so, I shall first notice the circumstances present in

* The bloody serum in the chest and belly certainly pointed, so far, to such a congestion of the veins of these cavities as to have led to the escape of its thinner portions after death by exsanguis: and its presence had some influence with myself in inclining me to the probability being in favor of direct rather than indirect asphyxia. That the fluid was not dropsical appeared from its red color. Its inflammatory origin was here out of the question.

† The influence of certain diseased states of the heart in favoring, not to say causing, apoplexy, has been admitted by most pathologists, and is sanctioned by experience. Thus, omitting some instances of valvular diseases of a doubtful character, in 30 cases of pure congestive apoplexy suddenly fatal which I have had occasion to examine during upwards of twenty years of medico-legal practice, I find that in eight of these cases (i. e. in 26-6 per cent. of the whole) such diseased states of the heart were no-

ticed as under: viz. attenuation of the right with hypertrophy of the left heart, 3 cases; attenuation of the right heart, 1 case; attenuation (flaccidity) of both sides, 1 case; hypertrophy generally, 2 cases; and hypertrophy of the left heart, 1 case.

* In the 30 cases of congestive apoplexy previously referred to, a bloodless state of the scalp was noticed in 5 instances, or in 16-6 per cent. of the whole; while in one other instance it was noticed as being only "somewhat bloody."

† Have we a congestive form of spinal as of cerebral apoplexy? In four instances of what was considered the latter disease, I have seen a great accumulation of fluid blood about the top of the spinal canal, as compared with its amount within the cranium, and in these death was almost instantaneous. In a fifth instance of the same kind, the addition to this of a large clot within the spine settled the point in favor of spinal apoplexy.

Smith's case which might serve to indicate generally that direct asphyxia was probable, and which, consequently, would militate against the possibility of her death having been owing to coma or indirect arrest of the breathing. These circumstances, which seem to have weighed strongly with the Court, were the position of the tongue, the froth at the lips, the lividities at the fore parts of the body, the expulsion of the fæces, and the unnatural position of the limbs,—phenomena, without doubt, more frequently to be met with after death by direct than by indirect asphyxia. This, in common fairness, is all the degree of consideration which, as I conceive, they are entitled to claim from us. They are not, either singly or in combination, so peculiar to the former of these modes of the termination of life, as to settle the point in its favor with unhesitating certainty in an otherwise doubtful case. Thus, in actual practice, while I have seen the tongue protruding from betwixt the teeth in seventeen out of thirty cases of direct asphyxia,* which I have had occasion to examine (*i. e.* in 56.6 per cent. of these), I have also met with the tongue in the same position sufficiently often after death by congestive apoplexy, to weaken my reliance on it as an infallible distinctive sign: in fact, it has been so encountered by me in seven out of thirty such cases, or in 23.3 per cent. of the whole.

Froth about the lips or nostrils, and in the air passages, and in the air cells of the lungs, is even a more equivocal sign of primary asphyxia than the protrusion of the tongue. Thus, although it was present in seventeen of the thirty cases of asphyxia referred to, it was also detected in the same situation in ten of the thirty cases of apoplexy, or in the ratio of 56.6 per cent. of the former to 33.3 per cent. of the latter.†

Lividities in front of the body are still less to be trusted to as a distinctive test of direct or primary asphyxia, having been noted in eleven of the thirty cases of this form of death, and in as many as eight of the cases of apoplexy,—*i. e.* in the proportions of 36.6 per cent. of the one, and 26.6 per cent. of the other—a difference too inconsiderable to be relied on in a case of this sort.

Again, as to the expulsion of the fæces in each of the contrasted forms of death, the number of instances in which this occurrence was observed were exactly equal, being but three in each, or six in all.

Once more, the unnatural position of the limbs does not appear to me to have any special bearing on the mode of Smith's death. It indicated that the cadaveric spasm, which had fixed the limbs at death in the position they had previously occupied, had persisted, and so retained them until the usual cadaveric rigidity had developed itself in the body. Now, although this phenomenon is one which is found after death by drowning, and oftener still after death from the inhalation of irrespirable gases, it is not at all very uncommon after death from different diseases, particularly

phthisis, apoplexy, and other diseases of the nervous system. I once encountered the immediate passage of cadaveric spasm into cadaveric rigidity in the body of a common prostitute, who was found in the same position as Smith, having died in the act of sexual connection, and who, on a medico-legal inspection, was proved to have perished from pneumonia, under which, in an aggravated form, she had been labouring for some time. The result of this examination led to the immediate liberation of three young men who had been with this woman at the time of her death, and who had been apprehended on suspicion of having been concerned in it. With the view of inculcating proper caution in dealing with cases of this sort, and in drawing inferences from such circumstances as we have been considering, in proof of death by violence, and in one mode rather than in another, I would take leave to refer to one other instance where cadaveric spasm was met with on an occasion which gave rise to suspicion of unfair dealing:—Hugh Gauld, a spirit dealer here, one night last month was found by a policeman lying dead in his back shop, and precisely in the same position as Smith, except that he was stretched on the floor. His small clothes were unfastened, and his head doubled up against the foot of a heavy wooden table, which lay overturned at his left side. When seen immediately after, I found froth about his nostrils, his tongue protruded, and his face, and the fore part of the neck, very livid. The lividity, at the inspection of the body on the following day, was found to have increased in intensity, and to have extended to the upper and fore parts of the chest. The air cells of the lungs were filled with mucous froth. From the state of degeneration of the coats of the arteries at the base of the brain, and the very congested and loaded condition of the scalp and encephalon, no doubt was left on the minds of the examiners that Gauld had died from apoplexy, occurring in the natural way. This view was confirmed by the inquiries of the legal authorities, who discovered that the man had been alone at the time of his sudden death. The state of his clothes is readily accounted for by supposing that he had gone into the room to pass his urine, a vessel half full of which was discovered there in a cupboard. This man was strongly built, and very powerful, and latterly well known as a pugilist.

Notwithstanding these admissions, which deduct from the value of the circumstances just noticed, as pointing rather to death by direct than by indirect asphyxia, still the weight to be assigned to them is such as is not to be concealed or evaded. But before we can admit their application to the case in hand, and give our assent to the admission to which they would lead us, a little further consideration must be given to the difficulties in the way of our coming to even this qualified decision. For if, on the one hand, it must be conceded that there were no absolutely certain data on which to rest the proof of direct asphyxia, were there, it may be asked, on the other hand, any circumstances in this case hostile to such an assumption, or calculated to diminish its probability? To this inquiry we now turn.

The form of direct or primary asphyxia, which the public prosecutor wished to bring out at the trial, was that of suffocation; and to this form of asphyxia I shall limit my further remarks. But how stands the evidence in proof of this mode of homicide in Smith's case? "Homicide by suffocation," says Dr. Taylor, "Would not be attempted in healthy adult persons, unless they were in a state of intoxication, and thereby rendered defenceless." And again, "it is certain that most individuals" so situated "would have it in their power, unless greatly incapacitated by disease or intoxication, to offer such a degree of resistance as would leave upon their persons indubitable evidence of murderous violence" (*Op. cit.* p. 726). None of these favouring circumstances,—greatly incapacitating disease or intoxication,—were present in this instance; while it was very evident that, notwithstanding the necessarily attendant surprise and terror which must have accompanied the assault, whatever its nature, the woman had been at the time in a condition to offer, and had actually offered, such a degree of resistance to her assailant as would have left on her body "indubitable evidence of murderous violence," had suffocation been attempted.* Such, at least, is a propable

* I have known in practice attempts at both homicidal suffocation and strangulation; but in these the assailants were successfully foiled, not, however, without leaving indications on the

* These cases will be allowed to be adduced in perfect fairness, when it is mentioned that only two of them occurred under circumstances of violence, and that, consequently, they cannot be regarded as picked illustrations: seven of the cases were children who had been suffocated or smothered from accidental overlaying or overwrapping; seven were adults, suffocated from their faces getting buried in bedclothes or in pillows while in an unnatural position when in drink; six were also adults, who had perished from the inhalation of irrespirable gases; two more were likewise adults, asphyxiated from mechanical compression of the chest; and the remaining eight, adults too, were instances of suicidal hanging, in six of which the bodies had only been partially suspended on the ligature, parts of their bodies having been found resting on the ground.

† The situations and relative frequency of this appearance in these will be seen as under, viz.—

	In Apoplexy.	In Asphyxia.
	Cases.	Cases.
Froth about the lips	2	3
Froth about the nostrils	2	1
Froth in the mouth	3	1
Froth in the larynx, trachea, or bronchi (once copiously)	3	12
Froth in the air cells (in 3 copiously)	6	10 (once sparingly.)

inference, though I agree with Dr. Christison in thinking that we are not entitled "to expect strongly marked appearances in every case of death by suffocation" (Ed. Med. and Surg. Journ. xxxi. 213). Some such local injuries, it must be observed, however, were present in all the reported cases of homicidal suffocation, or even of smothering, that are to be met with in medico-legal works. There is a difficulty, too, in our getting rid of the improbability of Robb's attempting two apparently incompatible objects at one and the same time.

In common fairness, I do not press into this discussion a few minor points, the absence of which, as was attempted to be shown on the defence, might be seized on as bearing against the probability or possibility of death by suffocation,—such as lividity and turgidity of the face, distortion of the features, prominence or protrusion of the eyes, and effusion on the surface of the brain. I do so for the obvious reason that no great importance is to be attached to them either one way or the other,* although their absence in a case of supposed homicidal suffocation is *pro tanto* unfavourable to such an assumption.

I have thus endeavoured to point out, as fairly as I could, the difficulties in this important case which stood in the way of our forming a very decided opinion in favor of either of the two modes of death which the evidence of the post-mortem inspection of it showed to be possible, and to be consistent with all the facts elicited by us at the time.

Such a course as was followed by my colleague and myself at the recognition and on the trial (when almost nothing further was elicited than at the outset) may appear to have been a very unsatisfactory proceeding in a case of such consequence, but it is a course which the imperfect state of medical science must occasionally render inevitable on the part of the medical jurist, if he conscientiously endeavors to adjudicate honestly between the rights of the subject on the one hand, and the requirements of the law on the other. "In medical jurisprudence," writes Dr. Taylor, "there is not, perhaps, an instance in which we have fewer medical data upon which to base an opinion than in the case of alleged death from suffocation. The inspection of the body of a person suffocated presents so little that is peculiar, that a medical man, unless his suspicions were roused by circumstantial evidence, or by the discovery of foreign substances [about the mouth or throat], would probably pass it over as a case of death without any assignable cause,—in other words, from natural causes" (Op. cit. 723).

With this remark from the highest quarter,—a remark which might be extended to many cases,—I should have taken leave of the case of the Crown v. Robb, but that one further opening has been left for assisting in the solution of the mystery necessarily attendant on Smith's death. I am aware that the dying declarations of criminals are far from being conclusive evidence; still, such declarations, uttered and recorded with due solemnity in the immediate prospect of death, if consistent with the circumstances otherwise known, are not to be thrown aside as utterly worthless in a case like the present. Such a dying declaration was committed to writing by Robb, and read by his desire at his meeting with the public authorities on his way to the scaffold. By

party assaulted to show the nature of the attempt which had been made, and to corroborate their statements. Thus, in one woman, who had been seized by the throat with one hand, while her mouth and nostrils were closed with the other, she readily extricated herself, but not without abrasions of the throat, epistaxis to some extent, and bleeding from the mouth.

* In the cases of suffocation already referred to in previous notes, distortion of the features and prominence of the eyes were met with in the six individuals who died from the inhalation of noxious gases, while in five of these there was blood effused between the membranes of the brain. Such appearances are, however, now admitted to be rare in other forms of direct asphyxia. I only observed an anxious state of the countenance in two out of the seven children who died from overlaying or over-wrapping, and in one of the seven adults who had perished while in drink from getting into such a position in bed as to interrupt their breathing. I have seen the features placid in three cases of violent hanging.

this document, which is subjoined,* it will be seen that no hint is given at any attempt at suffocation; so that, after all, though the death of his victim by direct asphyxia had the balance of probabilities in its favour, the verdict of "Not proven" is the one for which we are still entitled to contend in respect to this assumed mode of Smith's death. With regard to the affirmation of Robb, that "the crime of rape was not committed" by him, this apparent suppression of the truth must evidently be understood to imply that *full sexual intercourse*, or perhaps even *full penetration*, had not been accomplished,—an additional proof of the involuntary nature of the connection, as far as the woman was concerned, and one more instance in illustration of the difficulty in the way of the complete violation of the person of an adult female who is both able and determined to defend her chastity.

Aberdeen, Oct. 31st, 1849.

THE
British American Journal.

MONTREAL, APRIL 1, 1850.

THE BRITISH AMERICAN JOURNAL.

With the present number the fifth volume is brought to a close, and with it will terminate the present series. In calmly reviewing the occurrences of the past period, we find much to rejoice at; Canadian medical literature was almost uncultivated; a local journal was wanting, wherein to record the results of Canadian medical experience, and to enregister the medical and physical observations of explorers in these paths of science. The means were furnished, the observations were recorded, and they stand embodied in these pages, the monument of Canadian present progress. A large, a very large number of the original papers, are, we have some pride in stating, of high order; it would be invidious to indicate in special manner their authors, but their appearance has secured for this journal an established character, which, for the sake of our common professional character, must and should be, not only maintained, but if possible enhanced. Among the contributors to the physical department of the work, inasmuch as the contributors were not so numerous, we are under less apprehension of offence; and to Capt. Lefroy, R.E., Mr. Skakel, and Mr. Justice M'Cord, we feel ourselves under especial obligations. To the first men-

* "I hereby confess that I entered the house of Mary Smith when I was under the influence of drink, with the intention of ravishing her; that while struggling with her, in order to accomplish my purpose, she coughed twice or thrice, and then ceased to breathe. And I hereby declare that the crime of rape was not committed.

"This confession, made and written in the presence of Mr. Strahan [the chaplain of the prison], this 10th day of October, 1849.

"(Signed)

JAMES ROBB."

tioned gentleman we are indebted for the highly scientific and valuable meteorological reports from the Magnetic Observatory at Toronto, regularly and gratuitously furnished since October, 1845. To Mr. Skakel, of this city, we are also indebted for the equally valuable reports of the same character for this city; the table of the winds having been furnished in the kindest manner by Dr. Fenwick, who has supplanted Dr. Gibb's services in this respect: and to Mr. Justice McCord, for a number of truly valuable miscellaneous papers on meteorological subjects. A number of other laborers in this department have also co-operated, among whom we may mention the Rev. Dr. Leach, Dr. Craigie, Mr. Thompson, Dr. Rae, &c. To all we tender our warmest thanks, and bespeak for the new series a continuance of their favors. Of our own labors we say nothing; that they have been onerous will be readily admitted; but, nevertheless, even when proving most burthensome at times, when professional avocations pressed heavily, we are constrained to acknowledge that they also proved pleasurable.—We have labored, not for ourselves, but for the benefit of the profession of the Province; we have succeeded to a certain extent—we have not *wholly* succeeded, inasmuch as the profession of Upper Canada has not yet obtained its rights; that of Lower Canada has obtained its just demands, and this instalment is but the earnest and certain pledge of the obtention of the other. Until these great objects are both accomplished this journal *must not cease* to exist; it has been instrumental in effecting the one; it will prove, we hope, equally so in effecting the other. But the journal, to represent the profession, *should belong to the Profession*. It has been "*mediately*" its organ hitherto, it should become "*immediately*" so, for the time to come.

Under the *proposed* new arrangement, the journal will be in other hands than ours. The accounts of the past series must be immediately closed; this is a matter of necessity. Under the alternative of the selection of another publisher the affairs of the last volumes must be settled; and if our labors, up to this moment, a positive personal pecuniary loss, be worthy of being sustained, our *professional* brethren will *instantly* respond to the call. Under any circumstances an *Accountant* will close the transactions of the past five years as speedily as possible, that the future series may proceed upon a surer, a firmer basis.

BOTANIC MEDICINE.

DR. LAWSON

Respectfully informs the habitants of St. Catharines and surrounding country, that he has located in this town, and will be

prepared, at all times to attend to calls, and furnish Medicines for all diseases, (except Liver complaint and Consumption, after the first stage, which he considers as robbery to sell Medicine for,) composed entirely of Roots and Herbs, according to the Botanic system.

Dr. Lawson can ascertain the diseases of patients by the *pulse* or the *water*, alone, without their telling him any of their sensations or feelings whatsoever. He uses no kind of *minerals*, not even Salts, &c. in his practice; but performs all his cures with Medicine obtained from the garden of nature. God says, in Genesis, 1st chap. latter part of 30th verse—"I give every green herb for meat," &c. which, I think, if you search that book, you will find they were also intended for the "*healing of the nations*."

Dr. L. professes to cure *Cancers*, without the use of instruments. He will also keep constantly on hand, an assortment of Medicines, suitable for most of the diseases incident to the human system—which are offered for sale, at reduced prices, by wholesale; or he will sell the herbs, &c. they are made of, and give directions for their use.

Dr. Lawson was born in the county of Lincoln, State of North Carolina, and was bound an apprentice at the age of nine years, to Doct. Goodrich, a celebrated Dutch Doctor, of that place.—Dr. L. was three years learning the different roots and herbs, and two years studying the *infant* system—two years and nine months studying the *male* system, and three years and nine months studying the *female* system. He practiced in the Cholera, with Doct. Goodrich, in New Orleans in 1832, and at St. Louis, in 1833, during his apprenticeship; and since that time he has had eight years practice, alone—five years of which were spent in Anherstburgh, C.W., where he was examined by Dr. W. Simpson, Staff Surgeon, in June, 1847.

The principal inducement of his settling in St. Catharines, at the present time, is the fact of his having discovered many of the most useful roots and herbs required in his practice, growing spontaneously in abundance, on the mountains near Davids—some of which he formerly used to travel nearly 900 miles every year to obtain. Doct. Lawson is willing to have any Dutch Doctor examine him, and his Shop, and will answer any question concerning any disease incident to the human system. Any person wishing further satisfaction, can have it by calling on him, at any time.

The foregoing is taken from a recent number of the *St. Catharines Journal*. As a specimen of the Beauties of Quackery it probably stands unrivalled. St. Catharines seems to be blessed with quacks of the first water. But what says the law, which permits these fellows, who are generally as supremely conceited as they are besottedly ignorant, to tamper with the lives of the public. Verily the profession of Upper Canada should unite, and join hand to hand, in securing a medical bill at the next Session of the Legislature. If an argument is wanting in favor of the measure, the above advertisement will supply, not one, but fifty.

The Cholera in America.—This disease has again re-appeared on this Continent. A short time ago news reached us that a number of cases had occurred at the Quarantine Station near New York, and that some cases had also shewn themselves in Philadelphia. The following extracts indicate its further progress:—

CHOLERA AT NATCHEZ.—The Natchez *Courier* of the 26th ult., says that a few days previous, a boat landed above Natchez, densely filled with several families from Murray county, Ga., all belonging to one neighborhood, and nearly all related by marriage. They were on their way to seek a new home in Texas. The

whole company numbered 48, including five negroes. The cholera developed itself among them this side of Vicksburgh, and on the 18th ult., a negro man died. And by the 24th, ten additional cases had occurred among the whites. At noon, on 25th, there were no hopes for the life of another infant.

THE CHOLERA IN LOUISIANA.—THE TOWN OF TRINITY DEPOPULATED!—The Natchez *Free Trader* of the 27th ult., announces the entire depopulation of the thriving village of Trinity, in Louisiana, at the junction of the rivers Tensas, Black and Ouchila, 30 miles distant from Natchez. That awful scourge, the Asiatic cholera, descended upon the population with a fatality almost unheard of. Ten or twelve physicians resident there, or called in from the adjacent country, were scarcely able to save a patient who had been taken sick. Flight was the only safety for the well, and death only reigned in Trinity! Mr Snyder, formerly a resident of Natchez, kept a boarding house there with 25 or 30 boarders, all of whom, who did not run away, died. Mr. Snyder staid and took care of them until the last one died, then descended to the mouth of Red River, and he too, died on the steamer going to Natchez.

CHOLERA IN MEXICO.—The cholera rages in many parts of Mexico. At the town of Vernado, on the 4th of February, there were 48 cases, 9 of which proved fatal. At the village of Buena Vista, in the state of Michocan, the greater part of the inhabitants fled through fear.

Of seventy persons who were attacked in one day, none recovered.

The papers think that the epidemic is not of so alarming a character as that of 1832 and 1833.

Licentiate, Medical Board, Canada East.—The name of the following gentleman, with the date and year of his license, was omitted in its proper place:—

William Stuart, 8th May, 1840.

The Lunatic Asylum, Toronto.—His Excellency the Governor General has been pleased to make the following appointments, viz.:—

Hon. Christopher Widmer, M.D.,
George Gurnett, Esq., Mayor of Toronto,
Rev. Henry J. Grasscutt,
“ John Carroll,
“ John Roaf,
James G. Chewett, Esquire,
John Eastwood, Esquire,
Martin J. O'Beirne, Esquire,
Hon John Elmsley,
James Beaty, Esquire,
William Mathers, Esquire, and
William McMaster, Esquire.

To be the Board of Directors for visiting, inspecting, and superintending the Lunatic Asylum at Toronto, under Act 2 Vict. chap. 11, sec. 3.

At a meeting of the Board of Directors, held at the commencement of April, Dr. Scott of Toronto was appointed Physician to the Asylum.

Refusal to attend Inquests in Upper Canada.—At an Inquest held at Bowmansville on the 23rd February, by the Coroner Mr. Neville, Dr. Low was summoned as

medical witness. Dr. Low refused to give his professional opinion until the Coroner guaranteed the payment of the fee, which was done by the Coroner. We are much afraid that the Coroner will have to pay it himself. But the evil will cure itself, and a Bill must be introduced for the regulation of Coroners' Courts, and remuneration of medical witnesses, without whose attendance all proceedings at them would prove a nullity.

The British American Medical and Surgical Association.—Since the proposal contained in our last number, we understand that the committee appointed by the Medico-Chirurgical Society has received flattering letters of encouragement from various quarters. The objects contemplated by the formation of an association such as that proposed, are of great importance. If there is any truth in the aphorism that “Union is strength,” then, by the formation of such an association, shall we become strong indeed, equal to any pressing emergency; possessing centres of action, through the various branches, making their voices rapidly heard and felt, at proper times and occasions. This would be one grand object achieved, and one, of great moment, causing a consentaneous and an energetic appeal. This, for medico-political purposes, is an object of the greatest moment. But, secondly, may be mentioned, an object of almost equal moment, annual meetings of the whole profession for scientific objects: thirdly, the establishment of benefit societies: and, fourthly, the maintenance of a journal, their own, to be their organ, expressive of their desires. If such objects are worth supporting, then let the Medical Societies of the Province, now formed, at once second the move.

The following members of the profession have signified their approval of this scheme for forming a Provincial Medical and Surgical Association, as enunciated in the prospectus published in the last number of this Journal by the Committee appointed by the Medico-Chirurgical Society of this city. We have no doubt that during the present month, many others of our confrères in both sections of the Province, satisfied of the advantages to be derived from such a union, and that it will be anything but creditable to them to permit a Journal, which has contributed so much towards obtaining the great reforms which have taken place in all the matters appertaining to the science and practice of medicine, to expire, will authorise their names to be appended to the list. We again commend to the careful perusal

and consideration of our professional brethren, the article on the subject published in the last number of this journal.

Drs. Nelson,
Crawford,
Sutherland,
M'Culloch,
Badgley,
David,
Arnoldi,
Mount,
Campbell,
Howard,
M'Donnell,
Fisher,
Hall,
Howard,
Scott,
Fenwick.

Drs. Wright,
Schmidt,
Gibb,
Smith,
Pellier,
Boyer,
Leprohon,
Vallec,
Morrin,
Marsden,
Von Iffland, } Quebec.
Smallwood, St. Martin's.
Dickinson, Cornwall,
Abbott, Granby,
Rees, Toronto,
Mason, St. Ann's.

—Communicated.

The Boston Tragedy.—The trial of Dr. Webster for the murder of Dr. Parkman has been going on in Boston since the 23rd ult. By a telegraphic despatch received this evening (April 1st) Dr. Webster has been found guilty, and sentenced to be executed. The rank of the parties implicated, and the various incidents unfolded in the course of the trial, together

with the fame of Dr. Webster in the paths of science, render this trial one of peculiar and painful interest to the profession. It is impossible, in this number, to give a *resumé* of the trial, but we will endeavor to do so in our next, merely premising, that our report will be as condensed as possible, consistently with accuracy of circumstances; and that the medical evidence, in this case of peculiar moment, will be given in full.

Bibliographical Notices.—We are reluctantly compelled to postpone several notices until our next number, in consequence of the space in this one occupied by the index.

ERRATA in Dr. Von Iffland's Paper in our last.—Page 288, line 27—For "epigastric" read *epizootic*. Page 288, line 40—For "that in default of timely energetic reduction of vascular action, which in its inception would induce the most acute disease, &c.," read "*that in default of the timely energetic reduction of vascular action, which its inception would indicate, the most acute disease, &c.*"

MONTHLY METEOROLOGICAL REGISTER AT MONTREAL FOR FEBRUARY, 1850.

DATE.	THERMOMETER.				BAROMETER.				WINDS.			WEATHER.		
	7 A.M.	3 P.M.	10 P.M.	Mean.	7 A.M.	3 P.M.	10 P.M.	Mean.	7 A.M.	Noon.	6 P.M.	7 A.M.	3 P.M.	10 P.M.
1,	+20	+23	+8	+21.5	30.03	30.17	30.12	30.11	N W	N W	N W	Fair	Fair	Fair
2,	-1	"12	"10	"5.5	30.05	29.84	29.65	29.85	N E	N N E	N N E	Fair	Fair	Fair
3,	+14	"16	"0	"15.	29.27	29.25	29.72	29.41	E N E	S S W	S W	Snow	Stormy	Fair
4,	-9	-1	-12	-5.	29.99	30.03	30.16	30.06	W	W	W	Fair	Fair	Fair
5,	-14	-1	-5	-7.5	30.30	30.41	30.50	30.40	W	W	N W	Fair	Fair	Fair
6,	-19	+6	0	-6.5	30.55	30.60	31.40	30.52	N W	N W	N W	Fair	Fair	Fair
7,	-2	"12	+10	+5.	30.36	30.17	30.14	30.22	N W	N W	N W	Fair	Fair	Fair
8,	+13	"32	"32	"22.5	30.07	29.74	29.60	29.80	S	S	S	Fair	Snow	Fair
9,	"33	"41	"35	"37.	29.60	29.41	29.24	29.42	S	S	S	Rain	Fair	Fair
10,	"35	"36	"32	"35.5	29.08	29.02	29.09	29.06	S S W	S S W	S S W	Rain	Snow	Fair
11,	"24	"28	"20	"26.	29.13	29.29	29.50	29.31	S W	S W	W S W	Snow	Fair	Fair
12,	"22	"29	"21	"25.5	29.68	29.78	29.91	29.79	W	W	W	Fair	Fair	Fair
13,	"15	"29	"20	"22.	30.00	29.90	29.75	29.89	S W	S W	S W	Fair	Fair	Fair
14,	"13	"26	"25	"19.5	29.70	29.40	29.10	29.40	S W	S W	S W	Fair	Fair	Snow
15,	"28	"31	"15	"29.5	28.90	29.05	29.43	29.13	N	N	N	Snow	Fair	Fair
16,	"5	"21	"19	"13.	29.69	29.72	29.70	29.70	N N W	N N W	S W	Fair	Fair	Fair
17,	"17	"34	"27	"25.5	29.72	29.44	29.46	29.54	S	S	W	Fair	Fair	Fair
18,	"30	"44	"31	"37.	29.48	29.33	29.35	29.39	W	W	W N W	Fair	Fair	Cloudy
19,	"32	"31	"19	"31.5	29.42	29.47	29.58	29.49	W N W	W	W	Fair	Fair	Fair
20,	"7	"25	"24	"16.	29.63	29.51	29.27	29.47	S S W	S S W	S S W	Fair	Fair	Snow
21,	"21	"32	"19	"26.5	29.09	29.40	29.71	29.40	W N W	W by N	N W by N	Snow	Fair	Fair
22,	"5	"20	"9	"12.5	30.08	30.17	30.24	30.16	W by N	W by N	N W by N	Fair	Fair	Fair
23,	-4	"23	"23	"9.5	30.26	30.04	29.93	30.08	W by N	W by N	N S W	Fair	Fair	Fair
24,	+25	"35	"32	"30.	29.92	29.65	29.30	29.62	W	W	S	Fair	Fair	Fair
25,	"29	"38	"34	"33.5	29.16	29.10	29.28	29.18	S	S W	S W	Snow	Fair	Fair
26,	"33	"45	"36	"39.	29.32	29.28	29.42	29.34	S W	S W	S W	Fair	Fair	Fair
27,	"28	"30	"18	"29.	29.60	29.75	29.90	29.75	W by N	W by N	N W by N	Fair	Fair	Fair
28,	"3	"17	"18	"10.	30.00	29.81	29.37	29.73	N N E	N N E	N N E	Fair	Fair	Snow

Therm. } Max. Temp., +45° on the 26th
 } Min. " -19° " 6th
 Mean of the Month, +29.98

Barometer, } Maximum, 30.60 In. on the 6th
 } Minimum, 28.90 " 15th
 Mean of Month, 29.686 Inches.

MONTHLY METEOROLOGICAL REGISTER AT H. M. MAGNETICAL OBSERVATORY, TORONTO, C. W.,—FEBRUARY, 1850.
 Latitude 43°. 39'. 4. N. Longitude 79°. 21'. 5. W. Elevation above Lake Ontario, 108 Feet.—(For the Brit. Amer. Jour. of Med. and Phys. Science.)

DAY.	Barometer at Temp. of 32° C.			Temp. of the Air.			Tension of Vapour.			Humidity of the Air.			Wind.			Inches of Snow.	WEATHER.						
	7 A.M.	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.								
1	30.003	29.992	29.865	29.924	28.6°	29.3°	25.3°	27.7	122.119	116	127	77	73	83	83	W N W	N W	W N W	W N W	—	0.2	Overcast, light clouds and haze	
2	29.730	29.552	29.405	29.613	27.6	32.5	30.2	24.6	129.143	133	115	84	78	79	79	Calin.	S E by S	E N E	N E	2.6	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm		
3	29.772	29.578	—	—	12.5	11.1	—	—	067.019	—	—	80	63	80	80	N W by W	N W by W	W N W	W N W	—	0.4	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
4	29.772	29.578	—	—	12.5	11.1	—	—	067.019	—	—	80	63	80	80	N W by W	N W by W	W N W	W N W	—	0.4	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
5	30.199	30.236	30.289	30.261	1.3	18.2	14.4	24.6	055.062	051	052	81	80	80	80	N W by W	N W by W	W N W	W N W	—	0.1	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
6	30.257	30.142	30.008	30.103	9.6	24.0	24.6	24.6	066.100	101	098	81	75	80	80	Calin.	S E by E	S S W	S S W	1.5	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm		
7	29.932	29.844	29.793	29.829	24.0	34.8	32.8	31.9	121.162	165	158	92	80	80	80	W by N	S by E	S S W	S S W	—	0.1	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
8	29.590	29.391	29.372	29.409	35.4	37.4	36.6	36.6	136.213	208	207	95	95	96	96	S E by E	S S W	S S W	S S W	—	0.1	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
9	29.256	29.028	29.082	29.163	35.6	37.2	34.8	35.3	203.108	180	185	98	90	90	90	S by W	N by W	W N W	W N W	—	0.1	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
10	28.998	29.028	—	—	33.4	34.1	—	—	168.155	—	—	88	78	—	—	S W	S W	W N W	W N W	—	0.1	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
11	29.804	29.481	29.677	29.557	30.6	38.8	29.4	29.2	140.148	113	131	81	91	81	81	S W by W	W by S	W N W	W N W	—	0.1	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
12	29.879	29.908	29.968	29.934	23.6	35.8	26.1	27.3	106.169	109	116	83	80	75	77	W	W	W N W	W N W	—	0.1	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
13	29.968	29.788	29.635	29.729	17.3	31.7	26.7	27.7	091.133	131	129	91	75	89	84	N W by N	N	N E by N	N	—	18.0	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
14	29.833	29.962	28.814	28.995	29.0	28.3	27.2	27.6	144.154	146	144	90	99	97	94	N E by N	N E by N	N W	N W	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
15	29.699	29.350	29.591	29.399	12.8	18.7	15.0	14.2	075.089	067	072	91	83	73	81	N W by N	N W by N	N W	N W	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
16	29.644	29.543	29.607	29.543	10.4	32.0	25.7	27.9	068.134	118	133	93	74	85	85	W by S	S S W	S W by S	S W by S	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
17	29.460	29.342	29.292	29.356	33.3	38.0	33.2	32.6	180.201	169	168	95	88	80	89	S	W	S S W	S S W	—	0.2	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
18	29.295	29.158	29.292	29.356	33.3	38.0	33.2	32.6	180.201	169	168	95	88	80	89	S	W	S S W	S S W	—	0.2	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
19	29.555	29.605	29.643	29.613	18.3	32.8	8.6	15.9	083.097	056	077	80	73	83	81	N W by W	N W by W	N W	N W	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
20	29.478	29.151	29.043	29.180	9.7	37.5	37.2	33.7	070.165	187	160	98	74	85	80	N by W	W	S E	S W	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
21	29.299	29.569	29.832	29.663	36.6	32.4	23.0	23.0	010.127	091	121	98	70	72	75	W	W	W	W	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
22	30.086	30.133	30.114	30.109	8.8	19.6	12.2	12.2	056.670	055	060	64	64	68	74	N W by N	N W	N W	N W	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
23	30.068	29.928	29.851	29.709	2.8	30.1	23.1	23.1	049.109	093	116	90	64	64	78	N W	N W	S S W	S W by W	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
24	29.592	29.274	—	—	22.4	31.1	—	—	104.165	—	—	84	95	—	—	N W	E N E	S S W	S S W	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
25	29.051	29.191	29.210	29.182	35.8	38.4	34.1	35.4	166.170	170	161	84	73	87	80	S W by W	S W	S S W	S S W	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
26	29.366	29.370	29.508	29.432	33.2	47.9	37.7	38.8	159.191	185	161	81	58	82	82	W by N	W by S	W N W	W N W	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
27	29.673	29.704	29.705	29.705	25.2	38.2	29.6	32.4	123.149	135	151	88	65	82	80	N W by W	S S E	N E by N	N E by N	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
28	29.608	29.135	29.033	29.033	30.6	33.6	36.0	34.7	141.161	197	170	82	83	91	85	E by N	N E by E	N N E	N N E	—	—	Overcast all day; snowing from 9 pm to 11 pm; light clouds, drizzle from 11 pm to 12 pm; snowing from 12 pm to 1 am; mostly clear; snowing from 1 am to 2 pm	
Mean	29.634	29.589	29.586	29.5945	21.9	30.8	26.2	26.56	116.139	127	126	88.1	78	82	82	7.60 miles, S. 90 miles, 6.50 miles, 23.1	—	—	—	—	—	—	High winds on the following days—16th 12.19 miles per hour, 11th 13.67 49.14th 16.75 49. 15th 11.88 do, 21st 15.22 do, and 25th 13.15 do.

Highest Barometer, 30.302 at 5 a.m. on 6th. } Monthly Range, 1.707
 Lowest do, 28.631 at 6 a.m. on 1st March. }
 Highest Temperature 49.6 at 4 p.m. on 26th. } Monthly Range, 48.1
 Lowest do, 1.2 at 6 a.m. on 6th. }
 Mean Max. Therm., 33°.62 } Mean Daily Range, 19°.4
 Mean Min. do, 17°.11 }
 Greatest Daily Range, 49.2 } from an of 21st to an of 22nd
 Warmest Day, 26th. Mean Temperature, 39°.82 }
 Coldest Day, 4th. do }
 Warmest Hour, 3 p.m. do }
 Coldest Hour, 6 a.m. do }
 Mean Diurnal }
 Coldest }
 Warmest }
 Mean }
 Diurnal }
 Variation, }
 3.62 miles.
 (February was the most windy month of the last three years, 1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 245

AMENDEMENTS PROPOSES

AUX

REGLEMENTS DU COLLEGE DES MEDECINS ET CHIRURGIENS DU BAS-CANADA.

L'AVIS suivant est donné conformément aux statuts du Collège, qui exigent que les amendements proposés à ces mêmes statuts, soient publiés durant six mois, avant l'assemblée Triennale où ils seront pris en considération.

A une assemblée du Bureau des Directeurs du Collège des Médecins et Chirurgiens, tenue dans la Cité de Montréal le neuvième jour d'octobre, mil huit cent quarante-neuf, il fut

Proposé par A. Hall, M. D., secondé par A. H. David, M. D., et résolu, que les amendements suivants aux statuts du dit collège, seraient proposés pour être adoptés à la prochaine assemblée Triennale de la corporation, qui a ura lieu dans la ville des Trois-Rivières, le second mercredi de juillet prochain, étant le dixième jour de juillet mil huit cent-cinquante.

AMENDEMENTS.

BUREAU DES DIRECTEURS.

§ 1 Au § 1, substituez le suivant—“Les affaires du collège seront conduites par un Bureau de Directeurs, au nombre de trente-six, dont quinze seront élus d'entre les membres du Collège dans les Districts de Québec et de Gaspé—quinze d'entre ses membres, dans le District de Montréal, trois d'entre ses membres dans le District des Trois-Rivières, et trois d'entre ses membres dans le District de St. François, et pas plus ni moins de huit membres de ce dit Bureau de Directeurs, ne pourront résider dans la cité de Québec, et ni plus ni moins de huit ne pourront résider dans la cité de Montréal.”

§ 9. Après les mots “certificats” ajoutez “et des licences” et pour “jusqu'à ce qu'elles aient été dûment terminées” substituez “durant le premier jour de sa session.”

OFFICIERS DU COLLEGE.

§ 1. Ajoutez ce qui suit, “Et qu'il soit entendu que si le Président réside dans l'une ou l'autre cité, le Vice-Président peut être élu d'entre les directeurs résidant hors de la ville; et vice versa, si le Vice-Président réside dans l'une ou l'autre cité, le Président peut être élu d'entre les membres du Bureau non résidants dans les villes.”

DES MEMBRES.

Retranchez le préambule.

§ 1. Remplacez le § 1 par le suivant, “aucun de ceux qui ont obtenu une licence depuis la passation de l'acte en amendement (30 mai 1849) ne pourra être reçu membre du Collège des Médecins et Chirurgiens, avant l'expiration de quatre années.

§ 2. Ajoutez ce qui suit, “lequel document sera présenté au secrétaire, au moins dix jours avant l'assemblée semi-annuelle.”

§ 5. Au § 5 substituez le suivant, “Toute personne proposée comme membre, sera considérée élue, si elle reçoit la majorité des votes des Directeurs présents au Bureau.”

§ 7. Au lieu de “certificat d'agrégation” lisez “Diplôme d'agrégation.”

DES LICENCIES.

§ 1. Au § 1 substituez le suivant, “Les licenciés ont droit à la qualification de Licenciés du Collège des Médecins et Chirurgiens du Bas-Canada.”

§ 3. Au § 3 substituez le suivant, “Le Diplôme des Licenciés sera signé par le Président et le Régistrateur et par le Vice-Président et le Secrétaire du District où se tiendra l'assemblée, et sera revêtu du sceau du Collège.”

DES ASSEMBLEES.

§ 1. Pour “Québec” substituez “Montréal” et pour “Montiéal” substituez “Québec.” Ajoutez le statut suivant.

§ 4. Le Bureau des Directeurs pourra, s'il le juge à propos, députer des comités, composés de pas moins de trois membres du Bureau, dans les Districts de Québec et de Gaspé, de Montréal, des Trois-Rivières et de St. François, pour former des Bureaux d'Examen relativement aux qualifications préliminaires des candidats pour l'admission à l'étude de la médecine, et les dits Bureaux d'Examens tiendront leurs séances dans le but spécifié, dans le temps et au lieu qu'ils jugeront convenables, en donnant avis de leur intention au moins quinze jours d'avance, dans quelque journal public du District, avec les circonstances mentionnés dans le troisième règlement. La dite notification de l'assemblée devra être signée par l'un des secrétaires de District.

DES HONORAIRES.

Ligne 2, pour “certificat” lisez “Diplôme.” Retranchez in toto la ligne 3 ayant rapport à l'enregistrement des membres.

Ligne 5, pour “certificat recommandant pour licence” lisez “honoraires pour licence.”

Ajoutez le statut suivant.

§ 2. Tous candidats pour licence ou tous étudiants se proposant de subir leur examen préliminaire devront, en présentant leurs titres au secrétaire, déposer entre ses mains le montant des honoraires dûs au Collège dans le cas d'un examen satisfaisant.

REGLEMENTS.

§ 1. Pour “un certificat de licence” substituez “licence.”

PROPOSED AMENDMENTS

TO THE

BY-LAWS OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF LOWER CANADA.

IN accordance with the provision of the By-Laws of the College, requiring six month's publication of proposed amendments to any of the By-laws, previous to the Triennial meeting of the College, at which they will be considered, due notice of the following is hereby given.

At a meeting of the Board of Governors of the College of Physicians and Surgeons, held in the city of Montreal, on the ninth day of October, one thousand eight hundred and forty-nine; it was

Proposed by A. Hall, M.D., seconded by A. H. David, M.D., and resolved, that the following amendments to the By-Laws of the said College, be submitted for adoption at the ensuing Triennial meeting of the Corporation, to be held in the town of Three Rivers, on the Second Wednesday of July next ensuing, being the tenth day of July, one thousand eight hundred and fifty.

AMENDMENTS.

BOARD OF GOVERNORS.

§ 1. In place of § 1, substitute the following—"The affairs of the College shall be conducted by a Board of Governors, thirty-six in number, fifteen of whom shall be elected from among the members of the College resident in the District of Quebec and Gaspé—fifteen from among its members resident in the District of Montreal—three from among its members resident in the District of Three Rivers, and three from among its members resident in the District of St. Francis; and of the said Board of Governors, neither more nor less than eight shall be resident in the city of Quebec, and neither more nor less than eight shall be resident in the city of Montreal."

§ 9. After the words "certificates" insert "and licenses;" and for "until it shall have been duly closed," substitute "during the first day of its session."

OFFICERS OF THE COLLEGE.

§ 1. Add the following, "It being understood that when the President resides in either city, the Vice-President may be elected from among the Governors residing out of the city; and vice versa, if the Vice-President resides in either of the cities, the President may be elected from among the members of the Board not resident in the cities."

OF MEMBERS.

Omit the preamble.

§ 1. Instead of § 1, substitute the following, "No one who has obtained a license since the passing of the act of amendment (May 30. 1849), shall be admitted a member of

the College of Physicians and Surgeons, until after the expiration of four years."

§ 2. Add the following, "which document must be handed to the secretary, at least ten days before the semi-annual meeting."

§ 5. Instead of § 5, substitute the following, "Every person proposed as a member, shall be considered elected, by receiving a majority of the votes of the Governors, present at the Board."

§ 7. For "certificate of membership," read, "diploma of membership."

OF LICENTIATES.

§ 1. For § 1 substitute the following, "Licentiates are entitled to the appellation of Licentiates of the College of Physicians and Surgeons of Lower Canada."

§ 3. For § 3 substitute the following, "The Diploma for Licentiates shall be signed by the President and Registrar, and by the Vice-president, and Secretary of the District in which the meeting is held, and shall have the seal of the College affixed thereto."

OF THE MEETINGS.

§ 1. For "Quebec" substitute "Montreal," and for "Montreal" substitute "Quebec."

Add the following By-law.

§ 4. The Board of Governors may, if they see fit, depute Committees, consisting of not less than three members of the Board, in the districts of Quebec and Gaspé, Montreal, Three Rivers, and St. Francis, to be Boards of Examination in regard to the preliminary qualifications of candidates for admission to the study of Medicine; and the said Boards of Examination, shall hold their sessions for the purpose specified, at such time and place as they shall see fit, giving at least fifteen days notice of their intention so to do, in some public journal published in the District, with the circumstances specified under by-law 3. The said notification of meeting to be signed by either of the District Secretaries.

OF THE FEES.

Line 2, for "Certificate" read "Diploma."

Line 3, omit in toto, having reference to the enregistration of members.

Line 5, for "certificate recommending for License," read "fee for Licentiates."

The following to be a By-law.

§ 2. All candidates for license, or intending students proposing to pass their preliminary examination, shall deposit with the secretary the amount of fees due to the College in the event of successful examination, at the time that they hand in their credentials.

REGULATIONS.

§ 1. For "a certificate of license," substitute, "license."