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THE  
BRITISH AMERICAN JOURNAL.

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ORIGINAL COMMUNICATIONS.

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MEDICAL DEPARTMENT.

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ART. VIII.—*Removal of the inferior maxilla, for a malignant osteo-sarcoma.*  
By JOHN R. DICKSON, M.D., Professor of Surgery, University of Queen's College, Kingston, C.W.

Francis Kain, a native of Ireland, but residing in Canada for the last 28 years, was admitted into the Kingston General Hospital, on the 8th of June 1855, in order that he might be treated for a rapidly increasing tumour within the mouth. He was 60 years old, a shoemaker by trade, of a florid complexion, fair hair, large heavy eyebrows, was somewhat disposed to corpulency, and had been apparently of a robust constitution, but for some time had been much addicted to intemperance.

He stated that, on the 10th of November last, he first observed a small ridge upon his gums along the molar teeth of the left side, which caused him a great deal of uneasiness and alarm. In February following, some of the molar teeth were extracted, after which, the tumour increased a good deal, and seemed to sprout from the sockets of the extracted teeth. His medical attendant ordered him to live on milk diet; but did nothing more for him until the end of May, when he ordered the occasional application of the acid nitrate of mercury, and prescribed the syrup of the Iodide of iron.

On his admission into Hospital, there was an irregular fungoid like tumour extending along the entire left half of the inferior maxilla. It projected into the mouth, displacing the tongue, somewhat impairing the speech, and impeding to a considerable extent mastication and deglutition. One or two of the molar teeth remained, but, they were almost covered by the tumour. He complains of a severe intermittent pain, especially at night, in the whole of the left side of the face, shooting along the cheek towards the left ear and temple. The tumour is very much disposed to bleed, and there is a dark coloured, thin, fœtid, ichorous discharge, which is not only unpleasant to himself, but also to all who approach him.

The maxillary glands are not enlarged. He cannot assign any cause for the complaint, never received a blow on his jaw, is much addicted to smoking, general health good.

As the tumour was now evidently increasing rapidly, and had reached the symphysis menti, it was resolved to remove it, and with it, the left half of the inferior maxilla.

On the 18th of June, he was brought into the operating theatre and was strapped in a chair. Local anæsthesia having failed to produce the desired effect, the patient insisted that, chloroform should be administered to him, which was very reluctantly done, but not carried to the extent however, of producing total insensibility, so that, he could spit out the blood when directed to do so. A curved incision was commenced at the angle of the jaw, carried along its base to the chin, and thence upwards near the mesial line, as far as practicable, without totally severing the lower lip. The flap was dissected upwards along with the masseter muscle. The jaw was sawed near the symphysis. The muscles and other soft parts were cautiously dissected from before backwards. A strong ligature was firmly tied to the free end of the bone, which facilitated the remaining part of the operation very much, as traction could thus be exercised in any required direction, during the disarticulation of the jaw. Three ligatures were employed, and a piece of sponge was placed in the wound until reaction was established, which took place five hours afterward, when it was found necessary to apply another ligature to arrest the hemorrhage. The wound was then closed by sutures, and supported by an appropriate bandage.

On the 22nd the bandages were changed, there was then a free secretion of healthy pus. Union to the extent of an inch had taken place at the upper end of the wound.

He continued to progress satisfactorily. On the 18th July the wound had united in its whole extent. He was then permitted to visit his friends in the city occasionally; but continued in the Hospital until the 23rd July, on which day, he was discharged, much pleased with having got relieved of such a loathsome disease.

He presented himself again at the Hospital on the 10th September following, when the cicatrix and surrounding parts maintained a healthy appearance.

Dr. Dickson was assisted at the operation by Drs. Stewart and Fowler, in the presence of Staff Surgeons Mair and Smith, Drs. Yates and Baker, and a large number of medical students.

P. S.—The subject of the above report presented himself again at the Kingston General Hospital on the 13th December 1855, for re-admission. On examination it was discovered that the cicatrix internally was studded with a chain of fungoid projections, an ulcer of malignant aspect was also apparent beneath the chin. The lungs afforded unmistakable evidence of disease. It was therefore deemed inexpedient to adopt any other than a palliative mode of treatment.

The disease progressed steadily until the 16th of March 1856, on which day the patient died, having survived the operation nine months lacking three days.

Kingston, January 10, 1861.

ART. IX.—*Will a child born after the mother has had Small Pox, and contracted after she has conceived, be liable to contract the disease?* By ARCHIBALD HALL, M.D., Professor of Midwifery, University of McGill College, Associate of the College of Physicians of Philadelphia, Physician-Accoucheur to the University Lying-in Hospital, &c., &c.

The number of the Medical and Surgical Reporter of Philadelphia, of date January 26th, contains the following important query, put to the Profession in a letter, by Dr. Trimmer of Whitehaven, Pa.

“ Will a child born after the mother has had Small Pox, and contracted after she has conceived, be liable to contract the disease? Would the period of pregnancy have any thing to do with the disease? ”

These are important questions, and to which the attention of the profession has not been hitherto directed. Indeed the cases offering, which might tend to elucidate them, are, if not rare, seldom watched; while the practice of vaccination, as commonly pursued, is seldom accompanied with questions (if the parties are unknown,) as to the existence of Small Pox in the mother during the period of gestation. Such cases are however admittedly rare, and if a chance of making such an investigation did arise, it would be, more than likely, overlooked. A case has lately occurred within my practice, which enables me to give some kind of reply to Dr. Trimmer's first question.

I imagine it may be laid down as a general rule that pregnant women attacked with eruptive fevers are exceedingly apt to miscarry, probably in consequence of the death of the child, although there exist many exceptions. Again it is well recognised as a fact, that one attack of an eruptive fever, by no means, as is commonly supposed, exempts the individual from a subsequent one. I have seen instances of persons, pockmarked, suffer under a subsequent one, and I distinctly remember of having seen a man who was suffering under a third attack of the same loathsome affection; and parallel observations are very common with regard to Rubeola and Scarlatina. All that we can affirm with regard to the influence of primary attacks of these diseases is, that the individuals are rendered thereby *less* obnoxious to subsequent ones, but nothing more. With regard to variola vaccination acts in a similar manner, and not improbably to an equal degree. As regards the fœtus, we can hardly suppose that the infant in the uterus of a pregnant woman should not be influenced by those diseases, under which the mother's system is suffering, and that it should not participate in all those protective effects, which, if any, a primary attack commonly entails. That this is more than probable, the following case will tend to shew.

About four or five months ago I was requested to prescribe for a Mrs. B., aged 18, a strong healthy young woman, pregnant with her first child, and then about the sixth month of utero-gestation. She had been vaccinated when an infant, but was now labouring under a sharp attack of modified Small Pox, this disease having been then prevalent in that part of the town in which she resided. There were unmistakable signs of incipient uterine action, and I anticipated premature labour as the inevitable result of the disease. The symptoms were calmed, however, by the administration of a full dose of the Solut. Morph. Mur.

The mother passed through the disease in the most favourable manner, but as evidence of it, she retains several distinctive marks on her face.

I was exceedingly curious to ascertain the effects of the Small Pox on the child, which I firmly expected to be pockmarked at its birth from head to foot; and my curiosity was gratified on the 16th of December, when I was summoned to attend her in accouchement. After a perfectly natural labour, of ordinary duration, she was safely delivered of a fine boy, whose skin did not exhibit the slightest indications of its having suffered from the disease which had affected its mother a few months previously. There was not a single mark upon its body.

Now arises the question of susceptibility.

When the child was a month old, in consequence of the still existing prevalence of the Small Pox in the same neighbourhood, even although the infant was so young, I deemed it advisable, as an act of prudence, to vaccinate it. The operation was accordingly performed on the 22nd January. On examining the arm on the 26th, four days afterwards, there was not the slightest appearance of irritation on it. I repeated the operation on the same day, and up to the moment of writing, for I have seen the child this day, February 4th, the ninth from the date of the revaccination, the arm appears as if nothing had been done to it; the operation of vaccination having therefore totally failed.

Now there cannot exist the least doubt as to the genuineness of the vaccine matter employed on these occasions. I had vaccinated two children previously to, and one on the same day as, that on which I first vaccinated Mrs. B's child. In fact a portion of the same scab had been used in all the cases, and the operation had been uniformly successful on the three other children. Besides it is commonly believed, and not without reason, that the operation is likely to prove the more successful the earlier the age of the infant. There was every thing, therefore, in favour of the operation proving entirely successful in this particular case.

To what then are we to attribute the failures? It appears to me, and the idea had impressed my mind before I saw Dr. Trimmer's questions, that it could only be attributable to the protective influence afforded by the mother's blood, when circulating through the infant's system during its intra-uterine existence, and while the mother was suffering under the disease, operating upon the constitution of the child, and producing its effects, precisely as it is doing on the constitution of the mother. We cannot, of course, explain how this protective agency is exerted, although we can appreciate the positive existence of such a preventative or protective influence in its effects, and I feel bound to consider, that in this instance the protective influence of the attack of variolous disease on the mother, prevented the impregnation of the infant's system by the vaccine virus, exactly as it would have done in the mother herself.

I am fully aware that we cannot build up an hypothesis on a single fact, any more than a single swallow can make a summer, but there is so much, consonant with every day's experience, in the idea that the unborn infant should be influenced by its mother's diseases, and partake to the fullest extent in all their effects on her system, that we cannot but admit it, as a fact.

In this case however, the child did not present the slightest evidence of a cicatrix on any part of its body; and hence arises another curious question which however it is impossible to answer. Could it have had the disease in utero, and the formation of the ordinary pockmarks prevented by the continual application to its surface, or the juxtaposition, of the Liquor Amnii. My own opinion is that it had not the disease, or I should in all probability have had a case of premature labour to manage as the consequence of its death. But if it had had it, it would have been a convincing proof of the truth of the theory, that to prevent pitting in Small Pox we should exclude from the pustules all contact with the air.

If the inference drawn from the foregoing fact be a fair one, the second question submitted by Dr. Trimmer is one of easy answer. I can see no reason why like influences should not be exerted at all stages of intra-uterine existence. There is nothing more common than to meet with cases of abortion, at early periods of gestation, the inevitable consequence of the venereal impregnation of the mother's system; and if the unviable fœtus is thus influenced in one way, why not in another. No corollary to my mind can be more clear.

Since the foregoing was written, and after the manuscript had been placed in the printer's hands, I have learned from Dr. Stranaghan, Staff Assistant surgeon, attached to the Royal Canadian Rifles, that a case similar to mine had lately occurred in one of the soldiers' wives of the Rifle Regiment, who had been attacked by Small Pox, between the 7th and 8th month of utero-gestation, and recovered. In due time she was delivered, and when the child (which also had no vestige of the disease about it) was about a month old, in consequence of the prevalence of Small Pox among the soldiers' families in the regiment, he thought it advisable to vaccinate it. In this case also, although there could not have existed the slightest doubt as to the freshness and purity of the vaccine matter employed, the operation utterly failed.

Montreal, February, 1861.

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ART. X.—*Grooving of the Tarsal Fibro-Cartilage, (Streatfield's Operation), for Entropion and Trichiasis.* By ROBERT L. MACDONNELL, M.D.

When several operations are recommended for the cure of the same disease, it may be inferred that the disease is difficult to treat, or that the operations are of equal value and not very successful, and this remark applies in a peculiar manner to the disease above-named; for even at the present day we find the old operation of Crampton for Entropion recommended by one of our ablest ophthalmic surgeons,\* although every one who has paid attention to this branch of surgery must have seen numerous instances of its complete failure.

As I have not obtained as much success from any of the old operations as from the one recently recommended by Mr. Streatfield, of the London Ophthalmic Hospital,† the particulars of the following case may prove useful to the readers of this journal.

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\* That eminent oculist, Dr. Jacob, of Dublin, recommends this operation in a recent clinical lecture.

† London Ophthalmic Hospital Reports, p. 121.

Before detailing the case, it will be well to quote the remarks of Mr. Streetfield in explanation of his operation :

"*Basis of the new operation.*—Considering the nature of cases of entropion and trichiasis as far as they are associated, and the incomplete success of the present surgical treatment, I have adopted a new operation of which I can say that, excepting some cases for which it is not adapted, and which may be identified, its success has already been marked. I anticipated for it some advantages, chiefly as I have observed after deep wounds of the scalp, *with loss of substance*, when the occipito-frontalis has become adherent to the pericranium, that a *firm and depressed* cicatrix is formed, which limits the action of the free portion of the muscle to the boundary of the scar, and that the growth of the hair, at this part, is directed *towards* it.

"*Method of operating.*—The operation has been performed thus : The lid is held with Desmarre's forceps, the flat blade passed under the lid, and the ring fixed upon the skin so as to make it tense and expose the edge of the lid. An incision with the scalpel is made of the desired length, just through the skin, along the palpebral margin, at the distance of a line or less, so as to expose but not to divide the roots of the lashes ; and then just beyond them the incision is continued down to the cartilage (the extremities of this wound are inclined towards the edge of the lid) : a second incision farther from the palpebral margin is made at once down to the cartilage, in a similar direction as the first, and at a distance of a line or more, and joining it at both extremities ; these two incisions are then continued deeply into the cartilage in an oblique direction towards each other. With a pair of forceps the strip to be excised is seized and detached with the scalpel."

When this portion of skin and subjacent fibro-cartilage are removed, the wound assumes a gaping appearance, and, contrary to what might be supposed, the edges of the wound *must not be brought together, but be allowed to separate as far as possible from one another, and to heal by cicatrization*, for on this depends the success of the operation.

*Case.*—A French Canadian girl, aged 18, was placed under my care for a severe form of entropion of both eyes. The lids were so much inverted and curled up that it was not without difficulty that I could obtain a view of the eye balls which presented the appearance usually noticed in such cases, and not being able to open her eyes, she had to be led about by her friends, and was regarded by them as incurably blind. The case appeared a good one for the trial of Mr. Streetfield's operation, and I proceeded to perform it on the right eye first. I found it easy of execution. The eye-lid was fixed by a Desmarre's forceps of larger size than the one in ordinary use, and the incisions were made with a small French scalpel such as I use in plastic operations about the face. In one week this girl could see with comfort, the opacity of the cornea gradually cleared away, and she was so much pleased with her improved condition, that she requested that there should be no delay in resorting to the operation on the left eye, which was accordingly performed three weeks after that upon the right. A similar result followed, with this exception, that though her attention was directed to keep the edges of the wound apart,

yet on the third day I had to separate them and interpose a strip of lint, as they had become united by plastic effusion. This was the only thing that occurred worthy of note. I may mention that I was assisted in the first operation by Dr. David, and in the second by Dr. Jones. During the process of cure, I paid particular attention to the condition of the eyelashes, and I can confirm the statement of Mr. Streatfield that they not only take a direction forward clear of the eye ball, but they turn upwards and backwards towards the cicatrix. I was prepared to see them take a direction forward, but I must confess I was astonished to perceive the disposition they evinced to turn upwards towards the eye brows.

After the operation, the wound should be bathed with cold water, and slight water dressing kept to it till cicatrization takes place.

This girl remained under my observation for a couple of months, and her eyesight became strong and good; she soon began to read and sew, which she had not done for three years.

Montreal, February, 1861.

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ART. XI.—*Angina Pellicularis*. By P. G. FARNSWORTH, Esq., Philipsburg, C. E.

As much interest exists in regard to malignant Angina or Diphtheria at present, I take the liberty of sending the following brief report of cases occurring in our practice, the first that have appeared here or anywhere among neighbouring practitioners, as far as I am able to learn.

I was called Dec. 19th to see Anna H—, aged 8 years, who had complained of sore throat and headache three days before, and of chills; was kept from school. This morning was taken with vomiting, and the neck was swollen largely on the right side, below the angle of the jaw. The voice was unchanged and there appeared but little difficulty in deglutition. The countenance was pale and anxious, the skin moist, the pulse 100. The tongue was loaded with a thick white fur, breath very disagreeable. On depressing the tongue which was swollen at its base, the velum palati was found covered with irregular patches of dirty white membrane, looking like pieces of thick pasteboard stuck upon the mucous surface. The tonsils were also covered, and the uvula, but uniformly. The palate was somewhat inflamed, and the fissures between the membrane were livid.

Applied, with the sponge probang, a solution of Argent. Nit. (gr. xl to aqua ℥j), which not seeming to affect the membrane or edges, applied the solid Argent. Nit., with the caustic holder. Left the solution with directions to apply every six hours. Ordered Potass. Chlorat. in solution in three gr. doses every three hours, and gutt. v of Tinct. Fer. Muriat., every alternate three hours. The bowels to be moved gently with Ol. Ricini. Warm fomentations to be applied to the neck externally.

Dec. 20. Passed a comfortable night, tongue cleaning off, pulse 100. The membrane presented a uniform appearance over the velum palati and tonsils; no fissures in it. Could not perceive that it had extended any further down the pharynx. Continued the use of the Argent. Nit. in solution and also the Potass. Chlorat and the Tinct. Fer. Mur.



Dec. 21. Membrane in patches. The right tonsil uncovered, a slough or cast having been thrown off during the night. The patient having, as was said, "several attacks of choking, until the face was purple." Pulse 80, tongue cleaned off. Seeming very weak, ordered beef tea, and ʒ ii. of brandy every four hours. Continued the Potass. Chlorat. and Tinct. Fer. Mur.

Dec. 22. Membrane has reformed on the right tonsil, but has been thrown off the left. The velum palati was covered on the right side, the uvula looking as if it was enclosed in a sheath.

The bowels were moved by Ol. Ricini. ʒ ss and Ol. Terabinth, gutt. x, bringing away a large number of worms (*Ascaris lumbricoides*). Slight bronchial cough with a mucous rale; slight expectoration.

Dec. 22. Passed an uncomfortable night having had several paroxysms of dyspnoea. The velum palati covered in patches, the uvula covered, the tonsils both uncovered. The breathing was somewhat impeded, but could not discover that the membrane was forming in the air passages. The pulse was slow, say 65, and feeble, but regular. Continued the broth and brandy, and the Tinct. Fer. Muriat. Discontinued the Argent. Nit.

The external tumefaction of the neck had subsided, so that the fomentations were discontinued. The fœtor of the breath was much less, as if corrected by the chlorine liberated by combining the Tinct. Fer. Chlo. and the Potas. Chlorat.

Dec. 25. Membrane entirely disappeared, tongue clean, pulse normal, countenance still unusually pale; some craving for food. Had tested the urine several times, but had not detected albumen in it. Ordered Quinine, gr. ii., three times a day and the Tinct. Fer. Muriat. continued.

Jan. 1. Child able to sit up, considerable Bronchitis with a considerable amount of expectoration. The parents are alarmed at the almost total loss of voice and the difficulty of swallowing, most fluids regurgitating through the nostrils. Gave Tinc. Fer. Muriat. gut. ʒ, with Strychnia gr. ʒ $\frac{1}{2}$  every four hours.

Jan. 15. Health improving. Paralysis of fauces and chordæ vocales still manifest, but disappearing. The anæmic look is quite apparent.

Jan. 30. The child is getting quite well.

In regard to the treatment of the case, it was one suggested on the spur of the moment; various others are every where suggested; no doubt good as far as they adopt a sustaining treatment from the beginning, as the disease seems one of debility from the first. I have some doubts in regard to the caustic, it seeming in this case to have had little influence over the membrane or the spread of it, as though cauterized with the solid Argent. Nit. and diligently washed with the strong solution, the membrane re-formed several times, and when fully formed was totally impervious to any effect of the caustic.

Jan. 16. I was called to see a child two years old, that had been sick with sore throat, since the 9th January. The pulse was 120, the countenance had the livid appearance indicating the unæration of the blood. The uvula was covered with the diphtheritic membrane, the tonsils were gangrenous in appearance and the breath terribly fœtid, the urine highly albuminous. The neck

was swollen externally. The child had passed a large number of worms. It seemed too far gone for much treatment and died in two hours afterwards.

These are all the cases we have heard of in this vicinity.

Philipsburg, Jan. 30th, 1861.

## REVIEW DEPARTMENT.

ART. XII.—*Recherches sur la substitution graisseuse du Rein.* Par le Docteur ERNEST GODARD, Interne des Hopitaux de Paris, Membre de la Société Anatomique; Paris, Victor Masson, 1859, pamph. 8 vo, pp. 29 et trois planches.

*Researches on fatty substitution of the Kidney, by Doctor Ernest Godard, &c.*

Such is the title of a pamphlet lately received from the above well known publisher of Paris. The author having met with an interesting example of partial atrophy with fatty accumulation in and about the Kidney, decides upon publishing a description of it, and at the same time collecting, from the leading writers upon Pathological Anatomy and renal diseases, such notices of the alteration in question, as they might contain. Had he confined himself to this labour, we believe he would have presented a more acceptable brochure than that before us, and would have avoided the injurious custom of the age, the reproduction of the well known views of previous authors, and the infliction of another essay upon the studious, with no originality of thought or independent personal observation to recommend it. Instead of doing so, however, the author enters into some vague generalities about adipose tissue, makes some common-place remarks upon what he calls *fatty infiltration*, corresponding to the "fatty degeneration" of English authors; reproduces illustrations from Bowman and Johnson of this change, as it affects the epithelial cells of the liver and kidney; insists, as though he were doing some new thing, upon the distinction existing between "fatty degeneration" and what he styles "fatty substitution," a condition that English authors recognise as "fatty growth" or "fatty accumulation."

The following are the chief facts of the case which M. le docteur E. Godard observed. A man aged 58, was taken to "l'Hopital de la Charité" dying, and he died the next day apparently from the effects of charcoal gas. The left kidney presented a considerable accumulation of fat at its lower extremity; this adhered intimately to the renal capsule; the part of the organ surrounded by the fat was very much atrophied; and there was a deposit of free fat under the mucous lining of the pelvis continuous with the accumulation upon the outside. The upper part of the organ, being devoid of fat, preserved its normal character. The pelvis of the kidney was enormously dilated, and contained some purulent fluid and a calculus about the size of an almond. The calculus lay upon the orifice of the ureter, whose calibre was so reduced as barely to transmit a bristle.

The above is simply an interesting example of fatty growth about the kidney,

occurring as it frequently does in connexion with renal calculi and obstruction of the ureter; as was pointed out by Cruveilhier and Rokitausky.

Like fatty accumulation about the heart, it may occur coincidentally with a general increase of the fat of the body, or it may be the only instance of fatty growth in the economy. It doubtless in some instances impairs the nutrition of the organ in which it grows, as is well seen in "fatty growth" of the heart; and in others, it is perhaps itself secondary to suspended function and atrophy of the organ, as is observed in the mammae of old and fat women.

Fortunately, this pathological condition usually obtains but in one kidney, and as it is perhaps most frequently met with in those cases in which renal calculus has led to pyelitis, obstruction of the ureter, hydronephrosis, and destruction of the secreting substance of the gland, it is probably in such instances, secondary to the alteration in the renal structure. Fatty growth in and about the kidney cannot yet be recognised during life.

ART. XIII.—*On Diseases peculiar to Women, including displacements of the uterus.* By HUGH L. HODAR, M.D., Professor of Obstetrics and Diseases of Women and Children in the University of Pennsylvania. Philadelphia: Blanchard and Lea; Montreal: Dawson & Son, 1860. 8vo. pp. 469.

The work before us is an eminently practical one, written by one of the veterans of the profession, and who, having devoted great attention to the diseases of the formative organs of generation in the female, finally concluded, at the solicitation of friends, to give his opinions to the world, which he certainly has done in one of the most original volumes which it has been our fortune to peruse.

When we consider the extreme importance of the diseases in question, their frequent obscurity, their distressing influence upon the system of the suffering female, the difficulties in their treatment, their frequency of recurrence, the nicety in diagnosis which they require, and, lastly, the obstinacy or inveteracy with which they maintain their ground, and very commonly advance despite the best and most scientific treatment,—we are disposed to welcome this book as a valuable acquisition to the library of the physician, as it embodies the ideas and views of one who has enjoyed no mean opportunities for pursuing his inquiries.

We have to remark that the author by no means has proposed to consider all the diseases of which the formative organs of generation in the female may prove the origin or the seat. He has devoted his pages rather to a consideration of the latter; and in the outset has divided them into two groups,—1st, those of irritation, and, 2nd, those of sedation,—and he starts with strictly defining the meaning to be attached to these terms.

Under the former, or irritable diseases of women are included those which more or less directly involve the cerebro-spinal system. Of course they are numerous and diversified; but nevertheless they so often, indeed so generally, depend on some local irritation, that their apparently varied, complicated, and mysterious character, will be, in some degree, dissipated by a close analysis of their phenomena." And this remark is undoubtedly true, for we very frequently witness phenomena of a generally nervous character, completely alleviated by

devoting our remedial measures to some distant organ, whose sympathetic connections have given origin to the whole train of symptoms.

In defining the terms "irritability and sedation," as they are employed in the volume, and to convey the idea of the meaning to be attached to them, the author uses the following language:

"By the *irritability* of tissues is simply meant a capability of receiving impressions from surrounding agents, and thus producing phenomena, and is only to be observed when these tissues are alive. It is the "capability of being acted upon." It of course belongs to everything which has life; to plants as well as animals; to the organic molecular cell as truly as to the most complicated and perfect structure," and in continuation, and by way of distinction he remarks, "the agents which excite or disturb the irritability of tissues are termed *Irritants*. Those which depress or diminish its intensity, are called *Sedatives*. An irritant, acting on the irritability of a part, produces an *irritation*. A sedative causes a state of *sedation*. The one is an exaltation, the other a diminution of vital excitations, but by no means implying on the part or parts a loss of power or debility.

The only disease treated of under the latter, is that variety of *amenorrhœa*, when it is not connected with or dependent upon organic alterations of the uterus or appendages, but whose chief characteristics are *anœmia* emaciation and even chlorosis. While under the heading of the former, and general type of irritable uterus, the author has considered the other common disorders of the catamenial function, as well as those peculiar conditions which are the result of either uterine congestion or uterine inflammation; and as contingent upon such conditions of the uterus and its appendages, he has devoted a chapter to the consideration of those reflex<sup>r</sup> or sympathetic irritations whether noticed in the rectum, vulva and vagina, bladder and urethra, lymphatic glands or pelvic nerves, which are so commonly encountered.

But the principal part of the work is occupied with the consideration of displacements of the uterus, whether these assume the form of anti or retro flexion, or anti or retro version, or whether they exist in the form of lateral displacements. Indeed although no part of the volume is not eminently deserving of perusal and study, we think that the nine chapters devoted to this subject, are especially so, and we know of no more valuable monograph upon the symptoms, prognosis, and management of these annoying maladies than is constituted by this part of the work. It is true, that upon this subject, as well as upon several others, there are points upon which we may not be mutually agreed, and indeed in several instances it has appeared to us that the author has pushed his conclusions too far, but nevertheless, considering the work as a whole, we cannot but regard it as one of the most original and most practical works of the day; one which every accoucheur and physician should most carefully read; for we are persuaded that he will arise from its perusal with new ideas, which will induct him into a more rational practice in regard to many a suffering female, who may have placed her health in his hands.

We congratulate the author on this his first production, and the publishers on the excellent manner in which their duties have been discharged.

ART. IV.—*A Handbook of Hospital Practice, or an introduction to the practical study of medicine at the bedside.*—By ROBERT D. LYONS, K.C.C., M.B., T.C.D., &c. &c. New York: Samuel S. & William Wood; Montreal, B. Dawson & Son. 1861. 12mo. pp. 185.

We have examined this little work, and find it one which should be in the hands of every medical student. We think that the author has done, in the publication of this volume, a valuable service to every student of medicine, who after a careful study of it, must become directed into the proper mode of examining the cases in the wards of an hospital, and while it thus simplifies his method of investigation, his knowledge of, or acquaintance with, disease must become proportionally augmented.

In the commencement of the work, the author gives a systematic table of the various diseases, as adopted in the system of nosology or classification of them, proposed and employed by Dr. Wm. Farrer, the Registrar General, in the registration of deaths in England, which has been placed under his well known superintendence. He then details the chief external features of a case to which the student should direct his attention, and finally the principal internal ones, and gives explicit directions for the management of the stethoscope, percussion, palpation of the abdomen &c., all of which require so much tact on the part of the physician. The last part of the volume contains the rules for conducting post-mortem examinations, which with the former, we consider the most valuable part of the work. The book finally concludes with blank forms for the detail of cases, for the purpose of showing the students the way in which cases should be drawn up or reported.

We do not know a more valuable work which could be placed in the hands of a student: indeed it contains lessons, from which many a practising physician might derive advantage and, perchance, instruction. Every student, in attendance at an hospital, should possess himself of a copy as a guide to his investigations there, as well as for the purpose of systematizing his clinical studies, and he should have its contents as familiar in his memory as those of a "Dublin Dissector." We most cordially commend this work to the attention of our young friends in attendance at the hospitals, assuring them that they will never regret the small outlay demanded for its purchase.

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## PERISCPIC DEPARTMENT.

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### MEDICINE.

#### HISTORY OF THE CHOLERA AT MONTREAL.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—Some time ago I applied to my friend A. F. HOLMES, M.D., of Montreal for certain information respecting the Cholera Asphyxia as it has occurred in that city, and have lately received from him a very ample and interesting reply. It is submitted entirely to your judgment, whether the following abbreviation of the material facts may be acceptable to the profession.

Dr. H. having methodically replied to each enquiry, I shall not depart from this arrangement, but endeavour merely to adapt his statement to the limits of your journal.

Query I. related to the state of the weather during the two weeks preceding the irruption of the epidemic.

In answer to which he obliged me with the following extract from a meteorological journal kept by Dr. Robertson, of Montreal.

Date.	Thermometer		Barometer.		Inches of rain.	Wind at noon.	
	7 A.M.	3 P.M.	A.M.	P.M.			
May .....	25	46	60	29.95	29.85	.02	E.
	26	54	69	29.70	29.70		N. E.
	27	46	56	29.75	29.78		N. N. E.
	28	52	72	29.84	29.85		W. N. W.
	29	55	78	29.88	29.85		E. W.
	30	50	58	29.60	29.75		.80
31	52	60	29.94	29.99	N. E.		
June .....	1	62	78	29.92	29.92	.15	S.
	2	56	70	29.99	29.88		N. E.
	3	53	68	29.87	29.80		N. E.
	4	51	66	29.84	29.80		N. E.
	5	52	67	29.84	29.85		N. N. E.
	6	53	69	29.88	29.88		N. N. E.
	7	56	76	29.91	29.85		E. S. E.
	8	56	69	29.92	29.90		N. N. E.
	9	64	79	29.93	29.93		N. E.
	10	69	76	29.93	29.92		E. S. E.

Also an extract from a meteorological journal kept at Black-bonny Garden, near Montreal, as to the state of the weather.

Date.	Morning.	Noon.	Evening.	Date.	Morning.	Noon.	Evening.
May 27*	dull	dull	clouds	June 4	dull	dull	dull
28	fine	sun	clear	5	dull	blinks	dull
29	fine	sun	clear	6	dull	sun	cloudy
30	rain	rain	dull	7	fine	sun	clear
31	fine	sun	clear	8	fine	sun	clear
June 1	fine	sun	clear	9	dull	blinks	clear
2	fine	sun	clear	10	dull	dull	cloudy
3	dull	dull	dull				

Query II.—What diseases prevailed before the epidemic, and to what extent?

Answer.—The spring of the year 1832 has been one of the most unhealthy ever known in this city. In addition to ordinary complaints, of various characters, typhous fever prevailed to a considerable extent. Inflammatory complaints, especially among children, were extremely rife. Measles were very common; and in the neighbouring country, malignant scarlatina committed great ravages, though the city itself suffered but little from it.

Query III.—Did the disease appear to have been introduced, and do you think it propagated by contagion, and what is the common sentiment of physicians in your neighbourhood on that subject?

Answer.—In answer to the first enquiry, I beg leave to refer you to the Report of the Philadelphia Medical Commission, appointed to investigate the introduction, &c., of the disease in Canada. The facts therein stated are, I believe entirely correct, and prove in my opinion that the disease must have originated in the country, independent

of emigration, and I am of opinion, that the fact of emigrants having been the first in whom the disease appeared, arose from the peculiar circumstance in which they were placed. The first case that occurred in Montreal was that of an Irish emigrant from Cork, whose brother informed me, while visiting the sick man, that only two had been sick on board during the voyage, both of whom had landed in health. The ship *Curricks*, which by some is thought to have brought the disease, was from Dublin; and at the time the cholera commenced, the passengers by that vessel were in a state of quarantine at Grosse Isle, 39 miles below Quebec. The rapidity of its spreading over the whole city, its simultaneous appearance in different parts of it, its attacking those who could have had no communication with the port, and the class first more particularly attacked, viz., the French Canadians, form in my estimation sufficient ground to repudiate the idea of its having spread from one point, or its having been introduced by emigrants from Quebec.

With regard to the second clause, I must say there is something not explicable in the mode of its extension along the great commercial thoroughfares, unless we adopt the idea of infection; but notwithstanding this difficulty, there are facts of a different description, sufficient in my mind to warrant the opinion of its propagation having been in some other mode than by infection. It may be said the peculiar circumstances of the emigrants can account for this—their sufferings during the voyage, fatigue, want of cleanliness, deficient nourishment, &c.; yet, notwithstanding there is no sufficient explanation why the disease in Canada, at least, (along the routes,) only made its appearance after the arrival of emigrants from infected places, unless we adopt the opinion of its being communicable by infection. Thinking the facts on the other side far more conclusive, I leave the subject without attempting to solve the problem. There is however, another mode in which to view the subject, and which your query bears upon. Is cholera ever communicable from one individual to another in the manner of typhus? Here, I must confess, I have seen reason to alter the opinion which I originally held, and which was founded on the writings of European authors. I was at first firmly persuaded that in no case could the occurrence of cholera in one individual, residing in a certain locality, prove a cause of its accession in another; and that if that second individual should be attacked, the cause would require to be looked for in the circumstances of his locality, independent of the occurrence of the previous case, except so far as moral causes might prove operative. Having had occasion to see frequent instances of two, three, or frequently several individuals being attacked in the same house, and not simultaneously, but successively, as they became exposed to the apparent action of morbid matter, about the sick, I have felt myself obliged to give up my former opinion; and I now believe that under the circumstances in which typhus and other infectious disorders become virulent, cholera will assume an infectious character; and the arguments that would tend to oppose the doctrine, would go, I conceive, an equal length in opposition to that of the infectious nature of typhus. The opinion which I have hazarded above, I know, is not new. I have, however, adopted it from personal observation, and I have found several of my professional friends brought to similar conclusions.

The last clause of this query refers to the common sentiment of physicians on the subject of its contagiousness. Here there is the same diversity of opinion as in other places: some physicians altogether deny its contagion; others regard it as eminently contagious; and a third set, among whom I must rank myself, consider it as generally devoid of infectious power, but subject, under circumstances favourable to it, to acquire that power.

Soon after writing the preceding remarks, Dr. Holmes received from C. S. Forbes, Esq., Assistant Deputy Commissary General, and President of the Montreal Citizen's Sanitary Committee, a statement that cholera appeared at Grenville, on the Ottawa, before the arrival of any emigrants. He says, 'its first appearance at Grenville was amongst raftsmen, coming down the Ottawa from above Bytown, and out of the small

rivers communicating with the Ottawa below Bytown, amongst whom, and emigrants no connection could have existed. Many of the sufferers died upon the rafts before they reached Grenville.'

Query IV.—Was the cholera preceded by premonitory symptoms, and what were their character and duration?

Answer.—'In the great majority of instances, premonitory symptoms appeared, and perhaps very few cases occurred in which they might not have been detected by close observation. The symptoms which appeared premonitory of an attack were various. A very common form was a sudden feeling of faintness, or sense of depression about the præcordia, or anxiety, attended frequently with coldness of the extremities. Another common feeling was a sensation of stricture in the epigastric region; sometimes with, sometimes without pain. Now and then attacks commenced by cramps in the extremities. Various uneasy feelings in the bowels announced, in other cases, an attack, as sense of fulness, horborygni, feeling as if of diarrhoea supervening, slight pains, &c. These generally resulting in some looseness of the bowels. A sense of sickness and vomiting were sometimes the first symptoms; but by far the most common precursor of an attack of cholera, was diarrhoea. When attacks occurred without previous warning, they might generally be traced to some imprudence on the part of the patient, producing disturbance of the digestive organs.

'In regard to what may be considered really premonitory symptoms of cholera, it deserves consideration, that during the prevalence of the epidemic a variety of anomalous symptoms arise from nervous agitation and fear of the complaint; and some discrimination is required to ascertain whether certain feelings are really part of the disease, for premonitory symptoms must certainly be looked upon as the incipient disease itself.'

Dr. Holmes then very justly adverts to a prevailing error of regarding every affection of the digestive organs, during the epidemic, as premonitory of cholera, or as constituting that disease in its incipient state; but misapprehends the import of some of my own remarks, in my published letter on the subject of 'Premonitory symptoms.' As my opinion, however, is distinctly explained in the letters which were subsequently published, I will now only say, that I never considered any combination of symptoms, in what I regard the local stage of the disease, as indicating conclusively an approaching development of the constitutional affection. Still, the particular combinations to which I specifically alluded, were so frequently antecedent, that when they did exist in that relation I had little doubt of a common predisposing cause in many instances; but that in all cases the disease was 'local till the general development, and that the premonitory symptoms were rather the exciting cause, than an integral part of the constitutional affection.' Very many, if not all, of the symptoms which I denominated 'premonitory' in compliance with common usage, were often found, as at all other times, to occur without any connection with a predisposition to cholera; yet when existing in the combinations which I indicated, they rarely failed, when neglected, to become the exciting cause of the malignant disease.

Query V.—What was your treatment of premonitory symptoms, and were they soon subdued?

To this enquiry Dr. Holmes replies that his treatment was determined by the nature of the symptoms—restraining diarrhoea by moderate quantities of opium, more or less modified by small quantities of ipecac., calomel, camphor, or aromatic spirit of ammonia, and subsequently exhibiting either castor oil, Epsom salts, or tart. potass and rhubarb.

In reply to the latter clause of the query, he says that 'in nearly all cases, the means indicated were sufficient to remove the symptoms in a very short time.'

Query VI.—What were the usual symptoms that distinguished the stage of asphyxia or collapse?

Answer.—'Coldness, more or less marked, of the extremities especially, and frequently of the whole surface; often, though not always, accompanied by a clammy and co-



pious exudation; the tongue is cold, and the breath also becomes so; a bluish tinge more or less deep of the skin, sometimes confined to the extremities (especially affecting the nails and fingers) and the palpebrae, sometimes diffused over the whole surface. A shriveling of the skin, of the fingers, hands and feet, caused by a shrinking of the parts adjacent, by which the skin falls into folds or becomes loose, as in a limb macerated for some time. A remarkable sinking of the eyes, probably from the same cause, and which, attended by the dark areola around them, gives an expression to the countenance at once announcing the disease. Pulse small, weak, and scarcely perceptible; though commonly something like an undulatory vibration, even at the wrist, can be perceived till near the approach of death. When sufficiently distinct, it was too rapid to be counted, and has been frequently made above 160 in the minute. The respiration is often not at all affected; at other times is oppressed, obliging the patient to relieve himself by long-drawn inspirations, and causing him to complain of an indescribable and agonizing feeling within the chest. It is this feeling which apparently gives rise to another marked symptom of the second stage, and one of the most certainly mortal signs, a constant jactitation or change of posture, even when the head becomes so much affected as to divest the sufferer of apparent consciousness.

'The head is frequently scarcely at all affected, no headache, and no aberration of intellect; at other times, stupor and lethargy, often proceeding to complete coma. No urine is secreted; often no desire of micturition is expressed, but frequently a feeling like strangury is perceived.

'Such are the principal symptoms of the stage of collapse, as I have seen them in Montreal. These vary however considerably in degree; in some fatal cases the degree of coldness is by no means great, and it is not uncommon to find an apparent effort to rally previous to death, the hands and extremities becoming warmer. The degree of blueness varies very much, from a slight tinge perceptible only under the nails, to a deep purple affecting not only the fingers, but colouring every feature, and giving an appearance which I cannot better describe than by comparing it to a sketch taken on a white surface by a crayon of indigo. It frequently happened that the patient, instead of becoming more blue as he approached his end, absolutely recovered in a great measure his natural colour, and the blueness did by no means remain always after death, as might have been expected. When the collapse set in, the more violent symptoms commonly abated, and a patient would lie for hours without vomiting or purging or cramps, giving fallacious hopes to his friends.'

Query VII.—Did the subjects of asphyxiated cholera manifest an indifference to their condition, and did this indifference exist during the premonitory stages? How also was the mind affected during the advanced stages of the disease?

The experience of Dr. Holmes in regard to the apathy of the patient did not correspond with ours in New York, and with that of physicians generally. He found the subjects of this disease 'ready to grasp at everything that promised a chance of safety. The latter inquiry is answered in his reply to query VI.

Query VIII.—What treatment did you find most useful after asphyxia had supervened?

Answer.—'I refer you to the reply to query X.

Query IX.—What proportion do you believe may have recovered after the stage of asphyxia had become fully developed?

Answer.—'The proportion of recoveries from the second stage I cannot fix accurately. Much will depend in such averages on the symptoms which are allowed to characterize this stage. If by the second stage, or of collapse, is meant only that condition in which the patient is quite cold and blueish in his extremities, pulseless, with shrivelled and clammy skin and sunken eyes, very few indeed have I seen rally from it. Some cases undoubtedly have. If cases not quite so far gone are included under this second stage, the recoveries will be proportionately more numerous; and as it is difficult to fix a line where the patient may be said to have fallen into this stage, the proportion will vary according to the idea of the practitioner.'

Query X.—What benefit has arisen from the transfusion of salt and water?—what from bloodletting?—what from calomel?—what from opium?—what from camphor?—and what from internal stimulants after asphyxia?

Answer.—‘Regarding these questions as having reference only to the stage of collapse, I would refer you to the enclosed statements published by Dr. Stevenson and myself in relation to the effects of transfusion. Of the six patients therein enumerated, five died. The most interesting of these cases, Mrs. T., lived eight days, but finally expired with symptoms of oppressed brain. Subsequent experience in six or seven more cases has not proved the method beneficial, notwithstanding the astonishing effects produced by it in the first instance. None of these cases survived many hours; and out of the twelve or thirteen cases, in which I was concerned, but one is now alive. Transfusion has been tried by other practitioners in this city, with the same wonderful appearances of amendment, but the same fatal termination in all the cases. I have understood that similar results attended its use in Quebec.

‘*Bloodletting.*—In the stage of collapse I found venesection neither to do good nor harm, for the simple reason that no blood, or a very small quantity only could be obtained. In the cases in which I tried it where collapse was only setting in, I invariably found it hurtful, and consider it beneficial only where the circulation is still sufficiently vigorous to allow the blood to flow with some force. Whenever the pulse has begun to flag, I think it does harm; and this is generally the case, when choleraic diarrhoea has continued some time. I recollect one case of diarrhoea without pain, stools extremely frequent and of a watery colour, in which I bled largely, and the patient recovered; though whether other remedies were applied I cannot be sure, as the patient did not return. The blood exhibited in this case as decided a buffy coat as in pleurisy. The cases of cholera in which I have found bloodletting of most utility, were those in which the incursion of the disease was marked with violent cramps or spasms about the præcordia and stomach, and where the patient was seen a short time after the attack.

‘*Calomel* I have tried throughout the whole epidemic; but it was not till after some time, and after I had seen the inutility of other modes, that I came to place my chief reliance on this remedy. I was led to employ calomel nearly to the exclusion of all other remedies, from experience of its benefit in children affected with cholera, in whom under the use of stimulants, I had been uniformly unsuccessful. From this want of success, I was induced to revert to the practice I have followed for several years in infantile cholera—that of giving this medicine in moderate doses, frequently repeated; and finding it of utility, I finally omitted all other means, and increased the doses considerably. From the almost uniform success of this plan in children, when not applied too late, I extended it to adults, and abandoning all fear of its effects in increasing the alvine discharges, I have administered it in large and repeated doses without any corrector. The largest quantity I have given in any one case was three drachms and a half in twenty-four hours; a portion of which, however, was rejected from the stomach. This patient, though not collapsed, yet from his advanced age of seventy-eight years, was considered as past all hope. He has, however, recovered, and the mercurial affection of the mouth has been very trifling.

‘*Opium.*—In collapsed cases I have seen no good effect from this remedy; and though I have frequently given it in small doses to correct the purgative action of calomel, I have become more and more averse to its employment at such times. In more recent cases, to control the vomiting, it may be usefully employed; and as an injection with starch, it may be employed to moderate the diarrhoea, but is only an auxiliary to more efficient means.

‘*Camphor.*—Of this medicine I have made no trial.’

*Stimulants.*—Dr. H. employed the most active of this class of remedies at the irruption of the epidemic; but from their constant failure, and other opportunities of knowledge, he was led to abandon them. In regard to charcoal, which acquired so much

celebrity in Canada, Dr. H. supposes, from his observation of its effects, that nature was wholly entitled to the credit.

Query XI.—What do you consider the proximate cause or nature of the disease?

Answer.—‘As my ideas on this point are either borrowed, or entirely hypothetical I shall not attempt to answer the question.’

*To be continued.*

## DIPHTHERIA; ITS HISTORY, CAUSES, SYMPTOMS, DIAGNOSIS, PROGNOSIS, AND TREATMENT:

By JAMES WINNE, M.D.

The earliest medical records contain accounts of a disease which prevailed in Egypt, Syria, and other parts of the East, having many of the characteristics of diphtheria. Aretæus, among the ancient writers, gives the most accurate descriptions of this disease, and clearly identifies that which he witnessed with the present affection. Epidemics of this disease prevailed in Rome, A. D. 380; in Holland, in 1337; at Paris, 1576; at Naples, 1618-19; at Kingston, Jamaica, 1636; at Boston, 1736; at New York, 1770. It was not until it appeared at Tours in 1818, that it received the name diphtheria from Bretonneau. From that period to the present it has prevailed extensively in France, England, and the United States, and often as at Albany, N. Y., with great fatality. The first death from diphtheria, reported to the office of the City Inspector in New York, occurred on the 20th of February, 1859, in the practice of Dr. Maxwell. The residence of the child, who was three and a half years old, was in 38th St., near 5th Avenue. The second death occurred at Manhattanville, on the 25th of February. On the same day a third fatal case was reported from Stanton street: on the 5th of March, the fourth case was reported from Vesey street; on the 10th of March, the fifth from the lower end of 28th street; on the 23rd of March, the sixth from Grand street, near the East River; and on the 28th of March, the seventh from Varick street.

During the month of April, three deaths were reported; in May, three, in June, two; in July, two; in August, four; in September, five; in October, nine; in November, seven; and in December, ten. The whole number of deaths for 1859, was 53; of which, 30 were males and 23 females. During the present year, 1860, the number of fatal cases has considerably increased, and the prevalence of the disease, as reported at the various Dispensaries, has largely augmented. From the 1st to 28th January, 1860, fourteen deaths were reported; for the week ending February 4th, ten deaths; for that ending the 11th, twelve deaths; week ending 18th, ten deaths; for week ending 25th, fourteen deaths; for week ending 3rd March, nineteen deaths; for week ending 10th, nine deaths; for week ending 17th, thirteen deaths.

Previous to the report of the cases above alluded to, some deaths from diphtheria were returned to the City Inspector, but were reported under the head of Croup. The number of cases included in the category, it is not possible to determine; but it may be fairly inferred, that they were not numerous. During the latter part of 1858, and the early part of 1859, a remarkable tendency to affections of the mucous membrane, especially of the throat, was observed, and this became so general as to constitute an important element in the medical man's daily practice. Nor was this confined to any particular part of the city, or class of persons, but seemed to pervade alike the habitations of the opulent, and the confined, ill ventilated apartments of the poor. As yet, however, no diphtheria had been observed, and it was not until about the month of March, that medical practitioners here and there, especially among the poor, observed a thin pellicular covering over the tonsils, interspersed here and there with white star-like specks, which cover the whole of the tonsils and extend over the other soft parts of the throat into the larynx on the one side and the nares on the other. This film-like substance could be easily removed with the sponge in its earlier stages; but became

dense and closely adherent as the disease progressed. This disposition to laryngeal affections was noticed in many other places. The progress of the disease in France, as traced by Guersant, leaves room for the most lively apprehension as to its future in the United States, and seems to demand of medical men the most careful study of its phenomena, and mode of treatment. Most practitioners who have any experience in the disease, agree in the opinion that it is one with which they are not at all familiar, and that it now appears among them for the first time. The writer has conversed with a number of eminent practitioners in New York and elsewhere, who have been engaged in the active duties of their profession for a period varying from a quarter to half a century, and with here and there an exception, they have declared the disease unknown to them. The inference is fair, that if these gentlemen, whose position in the medical world is undoubted, have not met with the disease, it could not have prevailed in this country during the last fifty years.

The experience in France, England, and the United States, goes to show that the disease, like most epidemics, is largely dependant upon a depraved condition of the atmosphere. "Zymotic disease," says Dr. Hart, "is mostly bred by poverty out of uncleanliness; and diphtheria follows a general law of what may be called the pathogenesis of zymotic poisons. In this respect it takes up its abode by preference in the hovel of the poor, where the stagnant and pent up air reeks with animal effluvia—where human beings and domestic animals "pig" together; above all—and this is the centre to which all sanitary precautions should tend—where the poisons cess-pool and the unflushed privy taint the air with subtle effluvia that seize their victims by the throat, and bring death with foul touch." These remarks are forcibly sustained by the prevalence of the disease at the present time in New York. Dr. Jacobi informed the Academy of Medicine, at its meeting on January 18th, that 122 cases had been reported on the books of the Canal Street Dispensary on occurring within the year, while many members of the Academy engaged in a fashionable practice had not met with a single case. It is not, however, confined alone to this class of patients, but occasionally shows itself under circumstances apparently least favourable for its development, and among these was the child of the secretary of the Academy, who unfortunately became a victim to this malady. It is but just to remark that at the other Dispensaries the disease had not presented itself in the same numbers, as in that under the charge of Dr. Jacobi; and in some, but very few cases were observed, amid a large amount of other diseases. This might be accounted for either, by supposing that it had become localised as it progressed, or that cases were reported as diphtheria at one dispensary, which were not considered so at another.

The case of the 75th Regiment of Infantry of France, furnishes a remarkable example of the local effect of the disease. This regiment, which had been located in three separate garrisons at Bourdeaux, Angoulême, and Rochefort, was ordered to rendezvous at Avignon. The three battalions were engaged in a fatiguing march during the month of April, May, and June, and reached Avignon in July, where they were placed in a part of the ancient Palace of the Popes. From the 14th of August to the 31st of October, 1853, the regiment was nearly disabled by an attack of diphtheria. The effective force of the regiment consisted of 1,686, men, of whom 200 were attacked as follows: of

77 officers, .....	5 were attacked.
22 children, .....	4 " "
134 sub-officers, .....	10 " "
110 workmen and musicians, .....	5 " "
1343 corporals and soldiers, .....	175 " "

During this attack a battery of artillery stationed at Avignon entirely escaped, and with the exception of a few isolated cases among the inhabitants of the town, the disease was exclusively confined to the 75th regiment.

In considering the causes of diphtheria, the writer touches the question of contagion,

and concludes that the appearance of the disease at various and remote parts of the American continent about the same period of time, and the absolute impossibility of communication between the first cases of the disease in the various places where it has manifested itself, clearly establish the fact that its introduction into every locality where it has appeared is not due to contagion. The author is inclined to the belief, that under certain favourable conditions, after being introduced, it is susceptible of transmission by contagion. In the report of the French Academy of Medicine on the Epidemics of 1858, read by Trousseau, and just issued, it is stated; "It appears to us incontrovertible that the epidemic of 1858 furnishes numerous examples, where the contact of healthy individuals with those ill of diphtheria was one of the causes of the development of the malady." The case of the lamented Dr. Frick, of Baltimore, as given by his friend and biographer Dr. Donaldson (*Gross' Med Biography*) is in point:—On Tuesday, 20th March, 1860, he performed at the Infirmary, the operation of tracheotomy upon a negro woman, who was sinking from epidemic diphtheria. From early childhood he had shown a peculiar susceptibility to idiopathic poisons. He never attended a case of scarlet fever, that he did not suffer with his throat. So in this instance, in attempting to save the life of this poor creature, he apparently, at least, inhaled the poison, and the next day complained of soreness about his throat. That night he had a severe chill. The next morning the membranous diphtheria was manifest. Friday and Saturday were days of intense agony. Tracheotomy furnished some relief, but he died on Monday.

Dr. Wynne then entered at length into the symptomatology of the disease, its diagnosis, pathology, complications, and prognosis; and concluded with a consideration of the various methods of treatment.

[As the present paper of Dr. Wynne is silent as regards the symptoms, we quote these from Dr. Slade's essay on Diphtheria, which received the Fiske fund prize last year.—ED. B. A. J.]

"Two principal forms of the disease exist, the mild and the severe.

"The mild form is usually preceded by more or less fever, by some loss of appetite, a slight difficulty in deglutition, with perhaps, some discomfort about the fauces. The tongue presents a thick whitish coat. On examination at the very outset of the disease, the velum palati, uvula, and pharynx, are of a bright red colour. The tonsils are slightly swollen and of the same red hue. In a short time, generally from 12 to 36 hours after the attack, upon one tonsil and sometimes on both, are seen distinct white patches of exudation of false membrane. These soon extend over the uvula, and posterior wall of the pharynx. The exudation adheres more or less firmly to the adjacent mucous surface, and cannot be easily removed. In a few cases, the exudation remains confined to the tonsils, and neither grows black nor putrefies. The surrounding mucous membrane is swollen and projecting. The parotid and sub-maxillary glands are not much swollen. The duration of the mild form of the disease, is from 6 to 9 or 10 days.

"In the severe form, the disease is ushered in by intense headache, hot pungent skin, and rapid feeble pulse; there is great difficulty in deglutition, and the respiration is much hurried. The tongue is covered by a thick, dirty brownish coat. On examination of the throat, the tonsils are found enormously swollen, and covered with a thick ash coloured membrane, which has also extended to the uvula, and to the posterior walls of the pharynx, and not unfrequently gives out a fetid odour. Unless arrested by treatment, all the symptoms increase in severity, the respiration becomes much oppressed; there is a barking cough, and a change in the voice, which becomes hoarse and indistinct; the deglutition becomes so painful, that children refuse to swallow even liquids; the saliva dribbles from the corners of the mouth, and an acrid discharge flows from the nares. The glands of the neck are greatly swollen and harder. The patient is restless to an extreme degree, turning about, and then sinking into a semi-comatose condition. These cases when they prove fatal, as is the general rule, termi-

nate either by rapid prostration of the vital powers, or by an extension of the diphtheritic membrane into the air passage."

The practitioner has three important indications to fulfill in the treatment of diphtheria. 1st. To arrest the spread of the pseudo-membrane; 2d. To alter the character of morbid action, upon which the formation of this membrane depends; and 3d. To sustain the patient until these shall have been accomplished. These necessarily involve both local and general treatment.

The local treatment consists chiefly in the application of caustic and astringent substances in one form or another, to the affected part. Of those the most usual are nitrate of silver, either solid or in solution; powdered alumina, chloride of lime, chloride of soda, sesquichloride of iron, and hydrochloric acid.

M. Bretonneau almost invariably employs the last of these remedies as a local application in his own practice with the most marked success. The hydrochloric acid may be employed very nearly to the strength of the dilute acid of the shops, or considerably reduced in strength, dependent upon the severity or mildness of the attack. The best method of applying it is to moisten a small sponge attached to a probing or a camel's hair pencil with the fluid; and, while depressing the tongue with the left hand, to carry the brush forward with the right until the fauces are reached; when these parts of the tonsils, uvula, or palate, on which the membranous deposit appears, may be moistened with the fluid and the instrument withdrawn. The hydrochloric acid should be applied not only on the membranous surface but to the parts immediately surrounding it, by which means the spread of the membrane is often arrested. The application should be renewed several times a day; care however must be taken not to apply it of too great strength, or too often at the onset of the disease, especially if the symptoms are not of an aggravated character; otherwise the local disease may be enhanced by the unnecessary injury inflicted upon the surrounding parts. The symptoms often appear momentarily aggravated by the local application, which is not unfrequently followed by an attempt to dislodge the membrane, by vomiting. Should this latter result follow, the tonsils and palate will appear as if shrunken in substance, and spotted here and there with a few drops of blood upon the surface formerly occupied by the membrane.

When this does occur the application may be renewed directly upon the surface of the gland, in order to arrest the almost invariable disposition of the membrane to renew itself upon the abraded part. As the disease progresses and the membrane extends towards or into the pharynx, the difficulty in making local applications becomes greatly enhanced, but the practitioner should not hesitate for fear of inflicting temporary pain from thoroughly exploring and covering the parts affected with the solution of hydrochloric acid. For the purpose of effecting this, it is often necessary to place the head upon the knee of an assistant, and with a spatula to depress the tongue and the lower jaw firmly at the same time, by which means a view of the whole fauces may be obtained, and an opportunity afforded of making a thorough application of the local remedy.

Nitrate of silver has been warmly recommended by Trousseau, Guersant, and Val-leix, in France, and was the application almost universally resorted to in England at the commencement of the epidemic in that country. The usual mode of using nitrate of silver in England was in solution. Dr. Kingsland advised a solution of 16 grains in an ounce of distilled water as of more avail than a milder one. The mode of its use resembles that of the hydrochloric acid. When the local application of nitrate of silver is made in a solid form, care should be taken that it does not slip from the holder or break, as in such an event it might fall into the stomach. Such an accident actually happened to M. Guersant; fortunately however, the stomach rejected it: but this might not always occur, and few medical men would be willing to take so hazardous a risk. Dr. Haunour, of Austria, considers nitrate of silver as the very best local application to the diseased surface, and advises its use in a solution of from a scruple to half a drachm, in an ounce of water. Subsequent experience did not confirm the good opin-

ion entertained for nitrate of silver among the English practitioners, and many who were at first loud in its praises came to disuse it altogether. A substitute for this was found in the sesquichloride of iron, which is recommended by Dr. Rankin as being very efficacious in its effect upon the false membrane. He advises to use it in the form of a gargle of the strength of two drachms to eight ounces of water to be applied to the throat by means of a brush.

In the United States, opinion appears to be divided as to the best local application. Dr. Blake of Sacramento, has found the greatest benefit resulting from an application of strong hydrochloric acid; a view in which he is sustained by Dr. Bynum and Dr. Thomas, both of whom have had much experience in the treatment of the disease. Prof. Comegys, of Cincinnati, is in the habit of applying nitrate of silver, either in substance or strong solution in water. Sometimes when the ulcerations are deep he touches them with strong nitric acid by means of a brush. In some cases he has employed with considerable benefit inhalations of tannic acid dissolved in sulphuric ether applied by means of a cloth wetted with it to the mouth. The formula is

℞ Tannic Acid f. ʒ ij.

Sulph. Ether f. ʒ j. M.

Dr. Jacobi, of New York, who, as physician of the Canal Street Dispensary which treats a large number of German children, has had a very large experience, is not disposed to place much reliance on local applications, and confines them to an injection of a solution of chlorate of potash or chlorate of soda, when the running from the nose is excessive or offensive.

Alum, chloride of lime, and calomel are sometimes recommended. When their use is deemed advisable, they may be applied by dipping a brush or the finger into a dry powder, and carrying it directly to the affected part.

When there is a considerable accumulation in the nares, and behind the velum, the debris and foul secretions may be removed, and much temporary relief obtained, by an injection in infusion of chamomile with a few drops of creasote, which may be best effected by a laryngeal syringe. The syringe of Dr. Warren of Boston answers a very good purpose for injecting fluid either into the nares or below the epiglottis. It, however, is liable to the objection that it is likely to produce irritation by coming into contact with the irritable portion exactly at the opening of the glottis, which is found by the researches of Prof. Horace Green to be the seat of sensibility instead of the epiglottis, as has heretofore been supposed. The common glass syringe, with either a curved extremity or a straight one, dependent upon the part to be reached, answers all ordinary purposes, and possesses the advantage of being easily obtained at the apothecaries', and is of slight cost. When a local application either of hydrochloric acid or a solution of nitrate of silver is intended to be applied below the epiglottis, the best mode is to introduce a gum elastic catheter into the larynx, and inject through it the fluid, by means of a glass syringe, placed at the upper extremity of the catheter. This operation, which requires some dexterity, is effected in the following manner:—An assistant fixes the head of the patient while the tongue is depressed by the operator, until a full view of the epiglottis is obtained. The catheter, is then passed gently down until it reaches the epiglottis, over which it is passed downwards and forwards, directly into the larynx to the point intended to be reached by the injection. Great care should be taken that the injection be not of too great strength at first. For correcting the fœtor of the secretions, the chloride of sodium, in the proportion of one drachm, to six ounces of water, may be used with much benefit. Dr. Ranking suggests; on the supposition of the presence of some vegetable parasite, the usual sulphurous acid and hyposulphite of soda, in the form of a saturated solution. "The powder of the latter," he adds, "in destroying the fungoid growth of favus, as well as the oidium which invests the vine, I have myself experienced, and I strongly recommend it, provided the vegetable origin of diphtheria be confirmed by further observations."

Much relief is often afforded by inhalation, especially after the second or third day

of the attack. An excellent means of fumigation is to pour boiling water upon the catnip, or the leaves of any similar plant, with the addition of a little vinegar, and to allow the patient to inhale the fumes, either by enclosing the head under a blanket or by applying the mouth to a tube connected with a close vessel containing the materials from which the vapor is generated. The immediate effect of fumigation is extremely grateful to the patient. Dr. Gordon Buck advises the addition of Labarraque's solution of chloride of sodium, in successive portions of a teaspoonful each, to the liquid used for fumigation. Mr. C. F. Holston recommends the inhalation of boiling water to which has been added a teaspoonful of chlorinated lime.

*General Treatment.*—The general treatment must be regulated by the type of the disease. Shortly after the appearance of M. Bretonneau's treatise, a great variety of treatment was recommended by different practitioners, all, however, with a view to arrest inflammatory action: leeches to the neck, counter-irritation especially by means of blisters, active mercurialization, and purgative medicines furnished the basis of most all the plans advised; calomel especially obtained great celebrity, and was at one time considered as the most effective remedy in arresting the progress of the disease. It was first prescribed by Dr. Conolly, who was residing at Tours, at the appearance of the disease, and was so efficient in his hands in minute doses, as speedily to find favour with the French practitioners. But whatever may have been the success attendant upon its administration at the time, it is now found to require great caution in its administration. Blisters are contra-indicated; and so far from furnishing relief, they tend to increase the danger, by assuming an unhealthy, and frequently sloughy appearance. The bites of leeches often give rise to passive bleeding, extremely difficult to arrest, which greatly reduces the already exhausted energies of the patient. Every thing in fact, which tends to lower the powers of life, or induce prostration, should be sedulously avoided in the type of disease which at present prevails, and certainly differs from that for which Bretonneau, Conolly, and other medical men in France, at that period, were called upon to prescribe.

The type of the disease, as it now prevails, exhibits a tendency to extreme prostration from the very beginning, and requires a tonic treatment to sustain the patient. The most effectual method of accomplishing this is by means of quinine, and various preparations of iron and steel, stimulants in the form of brandy, milk punch, and wine whey, and a generous diet consisting of beef tea, Liebig's extract from meat, and a strong decoction of coffee. Sulph. quinine may be administered in grain doses conjoined to two grains of the sulph. of iron, repeated as often as the symptoms appear to require, usually every three hours. It is well to alternate this remedy, with doses of potassa, which appears to exercise a beneficial influence upon the disease of the mouth and throat. Chlorate of Potassa may be given in doses of from five to ten grains in distilled water or a bitter infusion. Prof. Baker of New York advises the chlorate of potassa in doses from ʒss. to ʒj. The chlorate of soda has been recommended with the same intention, but does not appear to be equally efficacious with the chlorate of potassa.

The tincture of the sesquichloride of iron has met with much favour among the English practitioners as a tonic. Dr. Ranking gives it the preference to other tonics, although he frankly admits, that it matters but little which of this class of medicines is used, provided the strength of the patient be sustained. "Personally," he remarks, "I give the preference to the tincture of the sesquichloride of iron, not only from the analogy of its unquestionable usefulness in the more asthenic forms of erysipelas, but also from the positive evidence of its benefit derived from the experience of several gentlemen in the country, amongst whom I may mention Mr. Dix, of Smallburgh, Mr. Prentice, of North Waltham, and Mr. Cowels, of Stalham, each of whom has had unusual opportunities of testing its advantages." The tincture of the sesquichloride of iron may be administered in doses of from eight to sixteen drops in a little water.

Whatever may be the success or ultimate failure of this remedy, its first introduction



into the treatment of this disease is undoubtedly due to Professor Thomas P. Heslop, of Queen's College, Birmingham, who, after repeated trials in his own practice, brought it to the attention of his clinical class at Queen's Hospital and the Medical-Chirurgical Society of Queen's College. His own success appears truly astonishing. "I have given in this disease," he "says, "to an adult twenty-five years old, minims of the London tincture of the sesquichloride of iron every two, three or four hours, and have conjoined a few drops of dilute hydrochloric acid. I have also applied daily, sometimes twice a day, by means of sponges, a solution of hydrochloric acid, but little weaker than the dilute acid of the London Pharmacopœia, and have always enjoined the regular use of weak gargles of the same acid. This, with the constant administration of stimulants, beef-tea, milk and jellies, has constituted my treatment; and I repeat here, what I have already stated in other quarters, that since I have become aware of the value of this medication, nearly ten months, I have not lost one case." An excellent formula for administering a combination of chlorate of potassa and the sesquichloride of iron, is: chlorate of potassa from eight to twenty grains, tincture sesquichloride of iron ten to twenty-five drops; rose water or orange syrup, one drachm; water, four ounces. When there is difficulty in administering medicine, the bulk may be reduced by omitting the water altogether, and increasing at pleasure the amount of syrup. The success which has attended the use of this remedy in England, warrants a careful trial of its merits at the hands of practitioners in the United States.

Where the disturbance of the secretions appears to indicate the use of mercurial preparations, and they are not positively contraindicated by the depressed state of the patient, calomel may be administered in doses of one-tenth of a grain, mixed with sugar and placed dry upon the tongue. Dr. Bigelow has found this remedy valuable in the disease as it prevails at Paris, and Mr Thompson was equally successful with it at Launceston, England. Dr. Anderson of New York, and Dr. Briggs of Richmond, have employed calomel with marked benefit. It is a question when calomel and chlorate of potassa are administered conjointly, whether the effects of potassa do not entirely annul those of the calomel. Dr. Bigelow, as the result of some very recent observations, says that although it may retard or prevent the specific effects on the salivary glands, it does not in any way modify its action upon the secretions. It may be well, however, when the effect of the calomel is important, to intermit the use of chlorate of potassa for twenty-four hours, or to alternate the use of these medicines at wide intervals between the administration of the two.

Emetics are serviceable when the portions of the detached membrane are lodged in the throat without being expelled, or when the disease is making rapid progress, and threatens to invade the larynx. The action of the emetic in this instance is frequently to detach the pellicle and dislodge the pseudo-membrane. At the same time that the membrane is thus ejected, the throat is relieved of the foul secretions which might otherwise be received into the stomach, to the great detriment of the patient.

But whatever treatment may be adopted, the fact should never be lost sight of that the system is labouring under the influence of a powerful and most depressing poison, and it matters but little so far as the constitutional treatment is concerned, whether this poison be at first local, and afterwards disseminated through the system, or is from the beginning of a general character and incidentally developed in the mucous membranes of the air passages. In the performance of her functions in the elimination of this poison nature requires to be sustained, not only by the free use of the tonics, already indicated, but by a liberal allowance of the most concentrated and nutritious articles of diet, in which beef-tea, milk, eggs, brandy, wine, and coffee, stand prominent. When there is difficulty in swallowing, not only these articles of diet, but quinine may be introduced by means of injection, a resort to which should not be deferred until it is impossible to administer medicines by the mouth; but whenever the difficulty of swallowing becomes at all a prominent feature in the complaint, injections should not be administered in greater quantities than two ounces at a time, and should be often repeat-

ed, otherwise they will give rise to a local irritation in the rectum, which will prevent their retention.

After the violence of the disease had been checked a continuance of tonic treatment should be persevered in for some time, not only to prevent the sequel, liable to follow, but a recurrence to the attack. The disease often reappears after an interval of several weeks, especially where the patient is exposed to those depressing influences which are too frequently attendant upon poverty and uncleanness.—*American Medical Times.*

### ON CERTAIN POINTS CONNECTED WITH DIABETES.

By F. W. PAVY, M.D., Professor of Physiology, Guy's Hospital.

*Abridged from the London Lancet.*

Dr. Pavy has given in the Gullstonian lectures the results of a series of very ingenious and protracted experiments in connection with the gluco-genic theory, a theory propounded by Bernard in 1848. He was led to investigate the subject from a result which did not accord with the preconceived views. At first he supposed that some source of fallacy existed in the experiment; he found upon further trial that no fallacy did exist; step by step he has been led, however involuntarily, from the position of a strong advocate to that of an adversary of the Gluco-genic theory.

Willis discovered in 1679 that the urine of diabetes was sweet. A century later, in 1778, Cowley isolated the saccharine principle. Sugar was found in the blood by Rollo a few years after. He considered diabetes to be due to imperfect digestion, a peculiar alteration of the gastric juice which had the morbid property of changing all vegetable ingesta into sugar. Tiedmann and Gmelin showed that sugar was formed in the intestines during the digestion of starch. Magendie and others proved that sugar entered the blood during the digestion of amylaceous matter. Hence diabetes could not be looked upon as caused by the formation and absorption of sugar during the digestion of vegetable materials, because it was proved to be a physiological process. Bernard commenced the experiments which led him to discover that sugar can be formed in the system upon a purely animal diet. After an attentive examination of the circumstances connected with Diabetes, Bernard was led to infer that there must be something besides amylaceous matter, something unknown to chemists and physiologists, which gave rise to the production of sugar in the body. This inference was drawn from the fact that a diabetic patient under a mixed diet passed a larger quantity of sugar than could be accounted for by the starch and sugar ingested, and also that although saccharine and amylaceous matter was abstained from, still sugar did not cease to appear in the urine.

In his first experiment, animals were fed upon a strongly saccharine diet, with a view of ascertaining how far the sugar could be traced in the circulation after its absorption into the branches of the portal vein. His results led to the conclusion that it might be detected as far as between the liver and the right side of the heart. Starch and sugar were now excluded with the expectation of obtaining a negative result: to his great astonishment sugar was found as before. He next fed a dog for some time on a purely animal diet thereby excluding the reception of sugar from any external source. Its life was suddenly destroyed. The abdomen opened and the portal vein ligatured, the vessel below the ligature became distended with blood; the blood in the distended vessel was tested, but gave no reaction, proving the absence of sugar. The blood from the hepatic vein on the other side of the liver was found highly impregnated with sugar, as was also the liver tissue itself. Nothing certainly seems more conclusive; there is no sugar in the blood going to the liver, there is abundance in that escaping from it, as also in the tissue of the organ itself. This established the theory which has given to the liver a gluco-genic function.

These experiments of Bernard proved beyond a doubt that sugar can be formed in the

animal system without being derived directly from the food. But the great point of interest as regards physiology, and also the pathology of diabetes, is whether this production is really taking place during life, or does this examination as performed by Bernard represent a post-mortem condition. In 1855, Bernard announced that the formation of sugar in the liver might take place after death. He passed a stream of water through the vessels of a portion of liver, all the sugar which impregnated the tissue was washed out, and no reaction occurred with the copper and fermentation tests. He placed it aside, and after the lapse of some time, upon a re-examination, a strong indication of the presence of sugar was obtained. Still the source of the sugar remained a mystery; it must be in the liver, and must consist of something not easily taken up by water.

In 1857 this sugar-forming material was isolated, and as sugar formation was supposed to be its physiological destination, it was called by Bernard the Gluco-genic matter of the liver. The gluco-genic theory was considered to be unaltered by these discoveries except in so far as it was rendered more complete by the detection of a recognisable source for the animal glucose. My researches lead me to look upon the term gluco-genic as applied to this substance as objectionable on physiological grounds. It is true that after death and under certain morbid conditions, it is a sugar-forming substance, but under natural circumstances, it does not seem intended for the production of sugar. From its chemical resemblance to a vegetable product, it has been called Amyloid substance. This term might lead to the confusion of this substance with a body of a different nature met with in the system which has had long since the same name. In speaking of it myself I have called it *Hepatine* simply from its connection with the liver. Its situation is in the hepatic cells, it is not present after death from disease, but is always so under healthy circumstances, hence its presence is due to the exercise of the normal functional activity of the liver. *Hepatine* is in its chemical properties allied to starch but more closely so to dextrine. When pure it is colourless, tasteless, and without odor, presenting only an amorphous granular appearance under the microscope. It is largely soluble in water, a highly concentrated solution is transparent, on dilution the fluid becomes milky. It is insoluble in alcohol and glacial acetic acid, unaffected at boiling heat by caustic potash. It is devoid of nitrogen being composed of  $C_{12} H_{12} O_{12}$ . With iodine it produces a deep wine red color, but its most important property is its susceptibility of transformation into sugar. At a moderately elevated temperature, if brought in contact with some animal products as saliva, blood, liver tissue, pancreatic juice, &c., the characteristic indications of glucose are discernible.

(To be continued)

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## MEDICAL JURISPRUDENCE.

### A DEATH-BED WILL.

The law of testamentary disposition, which allows a testator on his death-bed to dispose of the whole of his estate and effects, has received a very strong illustration in the case of "Potts against Potts," heard before Sir Crosswell Crosswell, in the Court of Probate, on the 20th inst. There the Plaintiff, Mrs. Elizabeth Potts, propounded the will of her late husband, John Narney Potts, who died on the 23rd February last at Oak Villa, Stophord's bush, at the age of 26, having three hours before his death executed his will in these words:—"This is the last will and testament of me, John Narney Potts. I give and bequeath unto Elizabeth Rattay all my property, real and personal, except five hundred pounds a-year, which I give and bequeath unto my cousin, Rowley Hill." The defendants—the mother, the stepfather and the sister of the deceased—opposed

probate of the will, on the ground that it was not duly executed; that it was not the will of the deceased; that the deceased was not of sound mind at the time of the execution; and that it was procured by the undue influence of the plaintiff. In support of the will, Mr. Day, a surgeon at Acton, was examined, and after deposing to various preliminary facts, stated that he saw the deceased about 12 o'clock at night of the 22nd February, and then recommended that Dr. Budd should be sent for; that Dr. Budd arrived at two in the morning; that the deceased had then shown no symptoms of failure of memory or understanding, and had stated his firm conviction that he should die; that the deceased asked Dr. Budd whether it was likely he should recover, and that the Doctor's answer clearly showed that he did not think the deceased would recover. The deceased then said, "I have made no will, can I do it now? I can sign it, if I cannot write it." That Dr. Budd then asked him questions about his property and his family, and the deceased told him what relations he had, and when Dr. Budd asked "what he wished to leave to his mother and sisters," the deceased replied, "Nothing." "What," said the Doctor, "will you not leave anything to your sister?" to which he answered, "No." The question was repeated by Dr. Budd, when the deceased said "I am quite sensible." Dr. Budd also asked what property he had, and the deceased described it, and in reply to the question, "To whom do you leave your property?" the deceased turned to his wife and said, "To Lizzie." Dr. Budd then proceeded to write out the will, speaking aloud the words as he wrote them. Dr. Budd asked Mrs. Potts her name, and she having stated it, he wrote "Elizabeth." It was then hinted to Dr. Budd that there was a report that she was not married. Dr. Budd asked "are you married?" and Mrs. Potts replied "I was married in Scotland, but I cannot prove that now;" the deceased then said "Put Elizabeth Rattay." The deceased then said he would leave £500 a-year to his cousin Rowley. When the will was finished, Dr. Budd read it over and said, "is that what you wish?" and the deceased replied "It is." The will was then signed and attested, and the deceased died three hours afterwards, having remained perfectly sensible up to the moment of his death. Dr. Budd's evidence was as follows; "I arrived at Mr. Pott's residence about half-past two in the morning of the 23rd February last. He looked very ill, as if he would not live long; Mrs. Potts was lying by his side on the bed dressed, with her arm under his neck. I put a few questions to him which he answered. I gave him stimulants, as the heart's action was very feeble. Mrs. Potts asked me whether there was any hope of his recovery; I said I was afraid very slight hopes. I asked whether his relations were aware of his state, and who they were, and she named them, and stated that she had sent for them all. Mr. Potts frequently said he hoped his cousin Rowley would come before he died. The deceased expressed his desire to make his will; and to ascertain whether his mind was sufficiently clear, I put several questions to him about his family and his property, which he answered." Dr. Budd then gave a similar account as Mr. Day, of the manner in which the will was drawn up and executed, and concluded his evidence by stating that "he had not the slightest doubt that the deceased was perfectly sensible, and quite competent to execute his will." On the conclusion of Dr. Budd's evidence, the counsel for the defendant said his client would consent to a verdict for the plaintiff, Sir Cresswell Cresswell then said that the counsel for the defendants had taken a very proper course and that no one who had heard Dr. Budd's evidence and who knew that gentleman's position, would entertain a doubt that the will was executed in a proper manner, and that the testator was perfectly competent to make a will. The verdict was then entered for the plaintiff on all the issues and the defendants were condemned in costs.—*Medical Times and Gazette.*

## A POLICY OF ASSURANCE.

Ralph Samuels, of Liverpool, watch-case maker, effected a policy of assurance on his own life with the Mutual Assurance Company for £500, and, becoming indebted to his

Medical Attendant, Dr. Cohen, of Liverpool, he some time before his death handed over the policy to Dr. Cohen, as a security for his account. Mr. Samuels committed suicide in February last, when Dr. Cohen applied to the office for payment of the amount assured, and, the office having requested to be furnished with an account of his claim, Dr. Cohen accordingly wrote, stating that his bill against Mr. Samuels extended from 1854 up to the time of his death. Dr. Cohen afterwards wrote another letter, in which he stated that his claim amounted to £712, and that his services extended from 1838. The office refused payment, on the ground that the assured had committed suicide, and that the charges made against Mr. Samuels were exorbitant. Dr. Cohen then brought an action in the name of the executrix of Mr. Samuels against the office, and the case came on for trial at the Liverpool Assizes, before Mr. Justice Keating, on Saturday last. The declaration was upon the policy, and it claimed £645, being the amount insured, together with the bonuses declared by the office in respect of the policy; and the office pleaded that the policy contained a stipulation that in case the insured died by his own hand the policy should be void, and that the deceased did in fact die by his own hand. To this plea the plaintiff replied that the assured during his lifetime had delivered the policy to Dr. Cohen as a security; that Dr. Cohen had rendered professional aid and services to Mr. Samuels for a number of years; and that the policy was transferred to Dr. Cohen to secure the payment of his account in case of Mr. Samuels' death; and the question for the jury was whether Dr. Cohen had or had not, at the time the deceased committed suicide, a lien upon the policy in question. It was contended for the defendants that Dr. Samuels having committed suicide the office was only liable to pay under the policy such an amount, not exceeding the sum assured, as was actually secured by its transfer to Dr. Cohen; that Dr. Cohen's charges were excessive; and that if they had been reasonable they would not have reached the amount payable upon the policy. It appeared from the evidence that Dr. Cohen was brought to Liverpool by Mr. Samuels, in 1838, as his medical attendant, and that he continued to act in that capacity until 1854, when Mr. and Mrs. Samuels went to the continent, for the purpose of having their marriage ratified according to the rites of the Hebrew church; that Dr. Cohen was asked to accompany them, as Mr. Samuels was in a weak condition; but having a large amount standing against him for professional services, Dr. Cohen declined to proceed until he received a portion of the amount of his claim. Ultimately, however, Dr. Cohen went, Mr. Samuels promising to give him one hundred guineas for his services during the journey, which only extended over a fortnight. On his return Mr. Samuels became ill, and continued at times very unwell, until 1857, when he became insane, and was taken to a lunatic asylum. Dr. Cohen, however, continued his services both to Mr. Samuels and his family, and to the workmen of Mr. Samuels, for whom he promised to be responsible. Subsequently Mr. Samuels returned to his residence at Wavertree, where Dr. Cohen wrote to him several letters demanding payment of his claim, and thereupon Mr. Samuels gave him the policy in question as a security for his account. Dr. Cohen again commenced his services, and continued them up to the time of Mr. Samuels' death. It also appeared that a portion of the claim was for sixteen years' medical attendance upon the workmen of the deceased, and that Dr. Cohen had, upon payment of two guineas by the workmen, given a receipt, which, it was argued, was in full of all demands. The Jury, however, returned a verdict for £500, thus reducing the claim on the policy by £145.—*Medical Times and Gazette.*

## MISCELLANEOUS.

### THE ADULTERATION OF FOOD AND DRINK.

The new act for preventing the adulteration of articles of food and drink, has been printed, but, before it can be of public service, "Analysts" must be appointed. In the

City of London, the Commissioners of Sewers, and in all other parts of the metropolis the vestries and district boards, acting in execution of the Local government act, and the court of sessions and borough councils in other parts, may appoint one or more persons possessing competent medical, chemical, and microscopical knowledge, as analysts of all articles of food and drink purchased within such places. Any person selling articles of food and drink, knowing the same to be injurious to health, may be fined £5 with costs; and, on a second conviction, the justice may cause the offender's name to be published in a newspaper, or in such other manner, "at the expense of such offender," as to them seems desirable. There is a provision giving protection against articles being tampered with by the purchaser. A purchaser, in a district "where there is an analyst appointed under this act" may have an article of food or drink analysed for a sum not less than 2s. 6d., nor more than 10s. 6d., and to receive a certificate admissible in evidence. The justices, on complaint, may order an article to be analysed by a skilled person. An appeal is given to the quarter sessions. Persons convicted of selling adulterated patent articles may have a case stated for the opinion of the superior courts. The expenses of the act are to be borne by the city of London, out of the metropolis local Management rates, and elsewhere by the county and borough rates.

#### POISONED HARPOONS FOR THE CAPTURE OF WHALES.

The experience of harpooners shows that the major number of escapes effected by whales both in the northern and southern latitudes, arises from the fleetness with which they run after being struck. In the Arctic seas they make rapidly for the nearest mass of ice, and diving beneath its edge emerge only at some distant blow hole, and most frequently are lost. The spermuceti whale of the South seas runs straight ahead, and several boats are necessary to maintain the communication between the ships and the harpooners. It was desired then to employ some means of striking into the whale a rapid and powerful poison, which, if it did not destroy life, should at once paralyze motion. Dr. Christison selected hydrocyanic acid as the substance which best answered these requirements. The average maximum bulk of the whales caught was estimated at about forty tons weight and forty feet in length, for each animal. It remained, therefore, to provide poison in doses subtle to such a living mass. Considering that one drop of pure hydrocyanic acid, if struck in the flesh of a man weighing about two hundred weight, would suffice to procure instant death, Dr. Christison calculated that two ounces, or 480 drops, would be a sufficient dose for a whale of forty feet and forty tons. The preparation of large quantities of pure hydrocyanic acid offered at that time some difficulties which were successfully overcome, and means were devised for introducing the poison into the barbs of the harpoon in such a manner that any strain upon the weapon when plunged into a whale would fracture the bottle, and let free the poison. A whaler was provided with these poisoned weapons, but the only effect of this first stock of poison was nearly to kill the chemist of the ship; for an eight ounce bottle broke while he was manipulating it, and it was only by rapidly fishing him up through the hatchway with a boat hook and promptly applying restoratives, that his consciousness was slowly restored, and his life saved. The ship was well nigh crushed between two fields of ice and the experiment ended. Subsequently, in 1832, the Clarendon was despatched, also armed with poisoned harpoons. On this occasion the Messrs. Young did not consult Dr. Christison, and he does not possess accurate information; but from accounts received through Dr. Patterson, of Leith, and through Dr. Andrew Fleming, of this and other vessels, he is disposed to believe, that the proceeding was attended with a considerable share of success. Twenty-four whales were killed by the Clarendon and six lost; she returned with a larger cargo than any whaler had brought in for many years. The report of an eye-witness, of the first harpoon used

in this vessel states, that when the whale was struck she "sounded"—that is dived perpendicularly downward to a great depth, and presently reappeared, floating on the surface and dead. The effects are described as being tremendous, but the men were afraid of cutting up their capture. Various rumors of similar and successful attempts have from time to time reached home, bearing a considerable degree of circumstantiality but no ascertained results exist.—*Dublin Medical Press.*

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#### TOBACCO IN CAMP AND COLLEGE.

The deepening conviction that the habitual use of tobacco is a source of physical and mental degeneration has steadily obtained a firmer hold of the public mind since the thorough exposition of the opinions of the medical profession upon it. Certain statistical results have been obtained at the Ecole Polytechnique and other public schools and colleges, attesting that the smokers were all the dunces, and the intellectual as well as the physical development of the students was checked by the use of tobacco. The Minister of Public Instruction has published a circular addressed to the directors of Schools and colleges in France forbidding the use of tobacco and cigars by the students. The Minister of Public Instruction and the Préfet of the Seine are said to be "unceasing in their exertions to remedy the evil." As Paris alone contains 29,000 pupils the edict applies to a large population. It would be well could the authorities of the English colleges and universities decree the same abstinence for all students in residence or otherwise under control. There are two classes of men in England who at this moment are addicted to frightful excess in tobacco-smoking, and suffer the evil consequences in depression, debility, hebetude, and nervousness. These are students at college, and officers in barrack, garrison and camp. The latter especially smoke incessantly, beginning early in the day and continuing until the night has fallen. The dulness of barrack life, which incites to the excess, is deepened by the habitual depression which tobacco in the end produces. The depressed and debilitated condition of numbers of these young men, who, from such depots as the camp at Aldershot, visit London, has long been the subject of observation, amongst the surgeons who are called to treat their complaints, and have the opportunity of comparing their nervous force with the standard of civil life.—*Lancet.*

Our contemporary does not say so much, but we conclude from his argument that medical students are not exempted from the consequences here enumerated when they err in the same way. Other cases equally potent may be in operation to produce the symptoms of physical prostration observed in certain cases; but "the pipe" with its accompaniments is doing its work slowly and surely.—*Dublin Medical Times.*

Horticulturists are in the habit of using tobacco-smoke for the purpose of destroying the aphides upon their plants, can it be, that smokers employ the fumes for a like purpose, as far as they themselves are concerned?—*Ed. B. A. J.*

THE  
British American Journal.

MONTREAL, FEBRUARY, 1861.

THE MORTALITY OF THE CITY OF MONTREAL DURING THE YEAR 1860.

No more important document has appeared lately in the columns of the local press, than what was published in those of the *Montreal Herald* on the 9th of January last, viz. a record of the mortality of this city during the year just closed, and the diseases, as far as cognizable. The document reflects the highest credit on the Editor of that paper, as none but those accustomed to work of this nature can appreciate the amount of labour expended in its preparation. But if this document proves anything, it demonstrates that the vital statistics of a city or country should be in charge of a person thoroughly acquainted with a knowledge of the manner of conducting such investigations. Indeed a government can acquit itself of no higher duty than an investigation into the causes of the deaths of the people over whom it is placed. The highest prerogative of every government is to preserve and protect life, and unless the causes indicative of mortality become recognized, all efforts to diminish it will be fruitless. Hence there can be no surer method than an inquiry into the causes of death in particular localities. If a majority of the diseases of which death is the result be of local origin, as in the instance of endemic diseases, our enquiries become at once directed into the proper channel; and upon the principle, *sublata causa tollitur effectus*, preventive or mitigating measures become properly directed or guided.

About ten years ago our City Council instructed the clerks of the different burial grounds in the town to obtain from the friends of those whom they interred the names of the diseases from which they died. The Council had previously issued blank forms to the physicians of the city to be filled up with like information. We regret to say that although for several years the causes of mortality were faithfully given, the clerk of one of the cemeteries refused any longer to prepare his weekly reports unless remunerated for his trouble. It is certainly hard to expect that people will work for nothing; nevertheless great credit was due to the clerks of the several cemeteries for the great care which they had taken to secure, as far as possible, a correct registration of the diseases, imperfect though their work confessedly was. A like system now obtains, and



imperfect though the returns yet are, the clerks of the Roman Catholic and Protestant cemeteries deserve the thanks of the citizens for their weekly reports. The imperfections are the fault of the system, not of the agents, who, we feel satisfied, would make the returns, as far as they are concerned, as accurate as possible. But as an example of inaccuracy, it is only requisite to point to the 1375 deaths recorded under the heading of "debility." In truth, never until the question of vital statistics is taken up by the Government, and made not a decennial, but a daily, weekly, monthly, and annual business, under the direction of a competent person, as is now done in England and in the continental countries of Europe, will or can anything like accuracy be obtained. The precision with which the vital statistics of Great Britain are managed reflects the highest credit upon Dr. Farre, the able Director General, and his reports invariably furnish the basis upon which sanitary reforms are continually being carried out. We think that our own Government could scarcely occupy itself with any more important subject. As far, however, as our own city is concerned, the matter is one deserving of the highest and most earnest consideration of the City Council, as the development of endemic diseases in particular localities would be its best guide to the adoption of proper sanitary measures, whether these assume the form of drainage or otherwise. A glance at the table of diseases furnished by the *Herald*, will show the enormous preponderance of diseases of this type.

Unfortunately the table supplied by the *Herald* does not furnish us with the ages at death. This is much to be regretted, as it would tend to prove, what we have always maintained as the result of our own observation, that the chief mortality in this city is met with under the age of 5 years. In fact in 1846 we published a paper in the old series of this journal on the mortality of this city for that year, which showed that the deaths at that age and under were not less than 64.8 per cent, an astounding condition of matters, but one which will be sustained by the experience and observation of every physician. It is not our present purpose to enquire into the causes of such an enormous and undue infantile mortality; still, however it is a fact, and we may recur to it on some future occasion; but we must record our regret that, for the purposes of comparison, the ages at death have not been detailed.

The following is a condensation of the table as furnished by our city contemporary:

Number of interments in the Roman Catholic Cemetery.....	2561
"        "        "    Protestant        "        .....	611
"        "        "    Jewish                "        .....	2
	—— 3174
Number of males.....	1628
"        females .....	1546
	—— 3174
DISEASES.	
Diseases of the lungs .....	450
Endemic and contagious diseases.....	513
Diseases of the nervous system.....	170
Dropsy, cancer, and diseases of uncertain seat.....	215
Diseases of stomach and digestive organs.....	139
Violence, privation, &c.....	54
Old age .....	79

Diseases of the heart and blood-vessels.....	69
Childbirth and diseases of the uterus, &c. ....	75
Rheumatism and diseases of the bones .....	15
Diseases of the kidneys .....	6
Cellular diseases of the skin .....	14
Causes not specified (debility) .....	1375

— 3174

In the list from which the foregoing is condensed, we find deaths enumerated from the following diseases—Whooping-cough, 87; Scarletina, 33; Typhus fever, 16; Variola, 143; Rubeola, 36; Croup, 78; Bronchitis and Pneumonia, 46; Consumption, 290; Croup, 76; and from pulmonary diseases of all kinds Consumption, Croup, Inflammation, Pleurisy, Bronchitis, 535, a ratio immensely beneath that of London.

As already remarked, we may take an early opportunity of returning to this subject.

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THE MEDICAL SCHOOLS OF CANADA.

We have endeavoured to ascertain from reliable sources the numbers of students in attendance at the several medical schools of this Province, and their numbers stand relatively thus, so far as answers have been returned to our enquiries:—

Toronto School of Medicine—Toronto,.....	81
Victoria College (Rolph's School) “ ,.....	
Queen's College—Kingston,.....	
University of Laval—Quebec,.....	32
University of McGill College—Montreal,.....	124
Montreal School of Medicine (French Canadian)—Montreal,....	43

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THE MEDICAL SOCIETY OF TORONTO.

We are pleased to observe that steps have been taken to organize a Medical Society in Toronto. A meeting was lately held in the Temperance Hall, at which, on motion, Dr. Hodder was called to the chair, and Dr. Bull appointed secretary. The following resolution was then unanimously proposed and adopted.

“That in the opinion of this meeting a medical society similar to those already in existence in other countries, having for its object to unite the members of the profession in this city, the promotion of good-will and friendly intercourse, the discussion of, and free interchange of opinion on, all subjects brought before its members, is highly desirable, and would much add to our importance as well as much individual benefit.”

A committee was appointed to draft a constitution and by-laws, to be submitted to an adjourned meeting. We wish the Society all success.

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THE BOTANICAL SOCIETY OF CANADA.

This Society met in the Chemistry Class Room of Queen's College on Friday evening, 11th instant—Rev. Principal Leitch, D.D., in the chair. There was a large attendance of Fellows and Subscribers. A large number of names were added to the list of Fellows and Subscribers.

Letters, expressing a warm interest in the Society's proceedings were read from numerous botanists in Canada and the United States.

The meeting then proceeded to the election of office bearers, when the following were elected :

*President*—Rev. Principal Leitch, D.D.

*Vice-Presidents*—Rev. Professor Williamson, LL.D., and Professor Fowler.

*Council*—Dr. Litchfield, Dr. Yates, M. Flanagan, Wm. Ferguson, J. J. Burrowes, H. Skinner, George Baxter, Dr. Dickson, Dr. Marshall, J. Brown, Thos. Briggs, jr., Ed. Berry, Dr. Lavell, Prof. Weir, W. G. Hinds, John Duff, Dr. Octavius Yates, Dr. O'Sullivan, Dr. Trousdale, Aug. Thibodo, J. Creighton.

*Secretary*—Professor Lawson.

*Treasurer*—Andrew Drummond, Montreal Bank.

*Curators*—A. T. Drummond, jr., B.A., J. McCammon, A. O'Reilly, Wm. Ferguson, jr.

*Librarian*—R. V. Rogers.

The committee appointed at last meeting to suggest a list of botanists suitable for election as honorary and corresponding members presented their Report, in accordance with which the following honorary members were elected, viz :—

HONORARY MEMBERS—CANADIAN (LIMITED TO FOUR.)

J. W. Dawson, LL.D., Principal of McGill College, Montreal.

William Hicks, F.L.S., F.B.S.E., Professor of Natural History, Toronto University.

Sir W. E. Logan, F.R.S., Director of the Geological Survey of Canada.

BRITISH (LIMITED TO SIX.)

J. H. Balfour, A.M., M.D., F.R.S., L. & E., Professor of Medicine and Botany in the Edinburgh University.

R. C. Grenville, LL.D., Edinburgh.

Sir Wm. J. Hooker, K.H., D.C.L., Oxon., LL.D., F.R.S., L. & E., Director of the Royal Gardens, Kew.

John Lindley, Ph.D., F.R.S., F.L.S.

J. T. Syme, F.L.S., Lecturer on Botany, London.

Dr. W. Lauder Lindsay, F.L.S.

CORRESPONDING MEMBERS—COLONIAL (LIMITED TO FOUR.)

Dr. Muller, Government Botanist, Melbourne.

Mr. Thwaites, Botanic Garden, Peradenia, Ceylon.

AMERICAN, U.S., (LIMITED TO FOUR.)

Prof. Geo. Blackie, A.M., M.D., University of Nashville.

Prof. Asa Gray, M.D., Harvard University.

Prof. John Torrey, M.D., State Assayer, New York.

FOREIGN (LIMITED TO SIX.)

Math. N. Blytt, Prof., Christiania, Norway.

Prof. Alph. DeCandolle, Geneva.

Fred. Traugott Kützing, M.D., Prof., Nordhausen.

M. N. Pringsheim, Roy. Pr. Ac., Berlin.

Dr. Ludovic R. Tulasne, Paris.

Corresponding members were also elected.

Numerous exceedingly valuable donations to the Society's Library were announced, the chief contributors having been Dr. W. L. Lindsay, F.L.S., Perth, and Herr Johan Nicolaus Hoage, Erfurt, Prussia. Some new Botanical works were laid on the table, and several botanical specimens exhibited, as well as photographs of "nature prints of ferns" which we suspect to be graptolites or manganesiate

of Iron in chrystallized form, as occasionally met with in the old red sandstone formation, if we mistake not.

An address was delivered by the President and the following papers were afterwards read :

1. On *Cornus florida*, L. By Professor Blackie, University of Nashville, Tennessee. Read by the Rev. Prof. Williamson, LL.D. Specimens were exhibited.
2. On the Botany of the Red River Settlement, and the Old Red River Trail. By John C. Schultz. Specimens of the plants were exhibited.
3. Contributions to the Local Flora of Kingston. By A. T. Drummoud, B. A.

The above mentioned papers will be published.

The Society's next meeting will be held on the second Friday of February, at the usual hour—half-past seven o'clock, P.M.

We do most sincerely trust that the Society will long maintain the vigour which it now exhibits.

MONTREAL GENERAL HOSPITAL.

The following is the Report of the Montreal General Hospital for the quarter ending 31st January, 1861:—

Sex—			
Patients remaining from last quarter, .	69	Died during the quarter,.....	12
“ admitted during the present		Now in Hospital,.....	82
quarter,.....	183	Discharged .....	158
	252		252
<i>In-door Patients.</i>		<i>Out-door Patients.</i>	
Males,.....	110	Males,.....	680
Females,.....	73	Females, .....	810
	183		1490

DISEASES.

Abscessus, .....	2	Fractura Composita,...	1	Phymosis,.....	2
Ambustio, .....	1	“ Comp. Com-		Pleuritis, .....	2
Aneurismus,.....	1	minuta.....	3	Pneumonia, .....	3
Anthrax,.....	2	“ Simplex,.....	4	Porrigo Senilis,.....	1
Bronchitis,.....	8	Gelatio,.....	6	Prolapsus Uteri,.....	1
Bursitis,.....	1	Gonorrhœa,.....	1	Prostatitis,.....	1
Cancer, .....	1	Hœmiplegia, .....	2	Psora,.....	1
Caries, .....	1	Hœmorrhoides,.....	2	Purpura Pœmorr.....	1
Caries Spinee,.....	2	Hepatitis .....	2	Rheumatism Ac.....	10
Cataracta,.....	1	Hyperdermatosis Super-		Rupia,.....	1
Cephalalgia,.....	1	ciliarum,.....	1	Sclerotitis,.....	1
Colitis,.....	1	Hypochondriasis, .....	1	Spermatorrhœa, .....	3
Contusio .....	1	Hysteria,.....	3	Subluxatio, .....	3
Corneitis,.....	1	Impetigo .....	1	Synovitis,.....	1
Delirium Tremens,.....	7	Lepra Vulgaris,.....	1	Syphilis, .....	7
Diarrhœa, .....	1	Lupus Non Exedens,...	2	Tonsillitis .....	2
Dysentaria, .....	3	Mammitis,.....	1	Tumor .....	4
Dyspepsia,.....	2	Morbus Brightii,.....	1	Ulcus,.....	11
Eczema .....	1	“ Cordis,.....	4	Varicella,.....	1
Elephantiasis,.....	1	“ Coxar,.....	1	Variola, .....	14
Ephidrosis, .....	1	“ Tarsi,.....	2	Varioloid .....	2
Epilepsia,.....	1	Ophthalmia,.....	8	Vulnus,.....	7
Erysipelas, .....	5	Paralysis,.....	1		
Febr. C. C.,.....	3	Paronychia,.....	2		
Fractura Commi.....	1	Phthisis,.....	4	Total,.....	183

Of the deaths there were, from

Ambustio,.....	1	Phthisis,.....	3
Caries,.....	1	Pneumonia,.....	1
Cerebritis,.....	1	Variola,.....	1
Febr. Typhoid,.....	1		
Fractura Comp. Comminuta,.....	2	Total,.....	13
Hepatitis,.....	1		

OPERATIONS, &c., DURING THE QUARTER.

*Major.*—Amputation of arm, 1; ditto of forearm, 1; ditto of Penis, 1; ditto of Great Toe, 1; Circumcision, 3; Keratonyxis, 2; Removal of super-abundant portion of upper eyelid, 2; Excision of Uvula, 1; Hydroceles tapped, 3. Total, 17.

*Fractures treated.*—*Indoor.*—Simple, 4; Compound, 1; Comminuted, 1; Compound Comminuted, 3; *Outdoor.*—Simple, 1. Total, 10.

*Dislocations reduced.*—Humerus into axilla, 3; ditto on dorsum scapulae, 1; of Carpus, 1. Total, 5.

*Minor.*—Extraction of teeth, 119; Abscesses opened and other incisions, 80; Wounds dressed, 82; Issue, 1; Setons, 4; Cupping, 6; Venesection, 3; Hypodermic Injections, 14; Vaccinations, 18. Total, 329.

By Dr. Reddy, Ligature of internal Haemorrhoids, 2.

Physicians attending during the quarter, Drs. McCallum and Jones.

THE KINGSTON HOSPITAL.

We have before us a report of the working of this Institution for the past year. The report says, without specifying the names of the medical officers, that "the Hospital, in the excellency of its appointments and management, is a credit to Kingston and to Canada. Its financial and general management are in the hands of a Board of Governors, selected by the Crown for their social standing, intelligence and philanthropy. The four medical attendants are among the leading practitioners of the city. There is a resident House Surgeon, who is an undergraduate in Medicine. His period of residence is for one year, when a new appointment is made. The present house surgeon is Mr. Alfred Oliver, of whom the medical officers and the governors speak in the highest terms, both as to his natural and acquired abilities, and his unremitting and judicious attendance to the necessities of the patients." To him our readers are indebted for the following carefully prepared:—

MEDICAL REPORT FOR 1860.

SEX—		Moderate drinkers,.....	102
Males,.....	256	Temperate,.....	72
Females,.....	165		
		Died during the year,.....	26
Of Medical cases,.....	229	Discharged cured,.....	268
Of Surgical cases,.....	155	"    improved,.....	69
Of Lying-in cases,.....	24	"    for breach of rules, and left,	13
		Remaining Dec. 31, 1860.....	45
Of 324 adults there were,			
Drunkards,.....	105		

Among the admissions were, from

Abscess,.....	6	Burn.....	5	Cholera, Sporadic,.....	1
Aneurism,.....	1	Cancer,.....	2	Concussion,.....	2
Asthma,.....	1	Childbed,.....	3	Consumption,.....	12
Bronchitis,.....	4	Chorea,.....	1	Debility,.....	11

Delirium Tremens,.....	13	Erysipelas,.....	1	Paralysis,.....	1
Diarrhoea,.....	2	Fever, Intermittent,...	3	Phlebitis,.....	1
Diseases and injuries of the joints,.....	11	" Remittent,.....	7	Polypus,.....	1
Do. peculiar to women..	10	" Scarlet,.....	6	Pneumonia,.....	5
Do. and injuries of the Eye,.....	31	" Typhoid,.....	2	Pregnant,.....	15
Do. of brain,.....	7	Fistula,.....	1	Purpura,.....	1
Do. of Abdominal Via- cera,.....	11	Fracture and diseases of bone,.....	15	Rheumatism,.....	19
Do. of the heart,.....	3	Frostbite,.....	4	Tumor,.....	1
Dropsical,.....	2	Hæmorrhoids,.....	2	Ulcer,.....	21
Dysentery,.....	5	Hernia,.....	1	Veneral Diseases,....	19
Dyspepsia.....	4	Influenza,.....	12	Whooping cough,....	1
Epilepsy,.....	3	Insanity.....	2	Wounds, Incerated, con- tused, incised, and punctured.....	25
		Neuralgia,.....	8		
		Opium eating,.....	1		

Of the deaths there were, from

Aneurism,.....	1	Purpura,.....	1
Brought in Dying,.....	5	Scarlet Fever,.....	1
Cancer,.....	1	Still-born,.....	2
Consumption,.....	5	Suicide,.....	1
Disease of the Brain,.....	4	Tetanus,.....	1
" of the heart,.....	2		
" of the liver,.....	1	Total,.....	26
Debility,.....	1		

EFFERVESCENT CITRATE OF MAGNESIA.

We have received from Messrs. Lamplough & Campbell, a specimen of this newly prepared preparation of theirs. It supplies a manifest desideratum in the variety of the Magnesian salts, as it is not so subject to deterioration from exposure to moisture, as the ordinary effervescing Citrate is, while at the same time the solution is rendered more perfect. We cannot doubt that it will prove a mild but efficacious laxative, far more pleasant than the ordinary Seidlitz powder; and is in reality an elegant compound, reflecting in its mode of preparation great credit on the pharmaceutic capabilities of that firm.

THE YORKVILLE POISONING CASE.

We give insertion to the following distressing case of poisoning from strychnine, as a matter of duty, although we have nothing to advance in favour of the party implicated in the transaction. Independently of the crime for which the guilty party will receive punishment, which was unquestionably due to the grossest carelessness, or the condition in which he probably was at the time of his compounding the prescription, sufficient evidence was elicited at the trial to demonstrate that he had been for years living in open breach of the medical laws of Upper Canada, in unlicensed practice of medicine. Although nominally an apothecary, he yet did not scruple to attend as a medical practitioner upon such patients as chose to employ him, either in his own or their houses.

We cannot avoid a reflection upon the nature of the defence set up by the prisoner's advocate. It was certainly one *sui generis*. What does Mr. Cameron know of the nature of the examinations either undergone at the present day by candidates for their license to practice, or that was undergone thirty years ago at the different Halls or Colleges in Great Britain? Of them all, that at the

Apothecaries' Hall in those days was regarded as a shame, and favouritism had more to do with success, than learning. Happily these things are now altered; but to compare the examinations at any of the Boards of Upper Canada, with those which have obtained at Apothecaries' Hall, and to assert the superior strictness of the latter, was an exhibition on this point of supreme ignorance, only matched by the vulgar flippancy with which he alluded to our profession, as a profession, in the persons of several members of it then present. We could hardly have expected this from Mr. Cameron. As a profession we can afford to pity the questionable taste which such insinuations would indicate on the part of the party making them.

#### TORONTO WINTER ASSIZES.

Before the Hon. Mr. Justice McLEAN.

FRIDAY, Feb. 1.

RICHARD C. HOARE, druggist, Yorkville, was placed in the dock to answer a charge of manslaughter in carelessly administering poison in medicine, in consequence of which a little boy named Franklin Alfred Taylor lost his life. The Court-room was crowded during the progress of the trial, which lasted from half-past nine in the morning till four o'clock in the afternoon.

Mr. Dempsey prosecuted on behalf of the Crown, and Mr. M. C. Cameron appeared for the defence.

The first witness called was—

JOHN BURGESS, who said:—I live on Yonge-street, near Yorkville, and next door to Mr. and Mrs. Taylor, the parents of deceased. On the night of the 18th of January, between twelve and one o'clock, Mrs. Taylor called upon me to go for a doctor. She informed me her child was in convulsions, and wished me to go for Dr. Hoare. I went to Dr. Hoare's house and knocked at his door. He looked out at the window and asked me what I wanted. I told him my errand, and he said he would come down immediately to the house. I went back to Mr. Taylor's and found the boy in great agony. He was raising his chest and throwing his hands backward. His eyes rolled in his head. The father had hold of the child and was holding him in his arms in bed. The child drew up his limbs frequently and then stretched them out again. I do not think the child lived fifteen minutes after my return from Dr. Hoare's. The father said frequently to the child, "Is Franky sick?" to which the child would reply, "Yes, very sick!" Upon seeing the condition of the child I again went for Dr. Hoare. I told him that the child was in fits, and to bring something with him that would relieve the child. He told me to get some hot water ready. I returned to the house and Mrs. Taylor got the hot water ready. When Dr. Hoare reached the house the child was dead. The child appeared to be in great pain and agony. He was between four and five years of age. I saw the child running about in the afternoon, and he appeared lively and healthy.

WM. TAYLOR, the father of the deceased, said:—My son, had he lived, would have been five years of age on the 28th May next. He was very healthy; I have never known him to be an hour sick, with the exception of last spring, when he had the measles. On the 17th January he passed a worm, and my wife went to Dr. Hoare's for some medicine, between six and seven in the evening of that day, and got some powders. One of these powders was given to the child about five minutes to twelve o'clock. It was administered in blackberry jam. My wife brought four powders in all from Dr. Hoare's. About fifteen minutes after the deceased took the medicine I heard him scream, as if he was in great pain. My wife got up and took the child in her arms; he clung to her as if in pain. She placed him in my arms, got a light, and ran off to call Mrs. Barton. The child appeared to be in convulsions, and only lived fifteen or twenty minutes after

he took the medicine. He was perfectly conscious, and when asked where the pain was he replied in his belly. Mr. Burgess went for Dr. Hoare, but he did not arrive till after the child was dead. My wife gave me the three powders, and I handed them at the inquest to Dr. Scott, the coroner. The defendant asked when he came to the house, where the powders were; but did not ask to have them given to him.

To Mr. Cameron.—One of my children died in 1854, but not suddenly. My wife told me that the child had a short convulsive fit on the Sunday previous to his death. We had got castor oil at Dr. Hoare's, and, on one occasion, when Dr. Philbrick was attending my wife, the medicine prescribed was got at Dr. Hoare's, Dr. Philbrick told me to get the medicine there.

MARGARET TAYLOR, mother of the child, said:—My deceased child passed a worm on the evening before his death, and I went to Dr. Hoare's and asked for "Cherokee worm powder." He said that he had none in stock, and that he was in the habit of giving children a powder of his own preparation. He made up four powders, and directed me to give one to the child every five hours, to be followed by a dose of castor oil. I did not administer the powder on my return, but waited till 12 o'clock, as I would be more likely to be awake five hours after to give him the second. I mixed the powder in blackberry jam. I intended giving my little girl one of the powders, but waited to see how the one I had given to my little boy would operate. In about a quarter of an hour after my son took the powder he commenced to scream and said that he had great pain in his stomach. I took him up and put him in my bed. When I picked him up he put his arms round me and complained of pain in his stomach. I gave him to my husband and went to call Mrs. Barton. The child was conscious. He had a convulsion fit on Sunday for a short time. He moved his mouth but was unable to speak.

To Mr. Cameron.—It was after dark when I went for the powders. The gas was lighted in the store. Dr. Hoare took the medicine out of three different bottles. A young man came in while I was there. I cannot tell where the bottles were standing from which he took the medicine. I have got oil and pills in Mr. Hoare's store before. I have lived 15 or 18 months in the neighbourhood. Dr. Hoare has lived there all that time. I have never seen any one attending the shop but himself.

Dr. Scott said.—I officiated as Coroner at the inquest on the body. At the inquest Mr. Hoare made the following voluntary statement, and which I reduced to writing. Mr. Hoare was on oath. He was not accused of anything at the time; and made the statement against the wish of his counsel and my own remonstrance. It is as follows:—

"RICHARD COLLIER HOARE, apothecary and druggist—I have no license to practise medicine or surgery in this Province. I hold a diploma as a licentiate from the Apothecaries' Company of London, England. The medicines I prescribed and dispensed for the deceased, Franklin Alfred Taylor, I have frequently ordered on previous occasions under similar circumstances with good effects. The contents of the powders dispensed for the deceased were as follows:—"Six grains of Santonine, six grains of Scammony, two grains of Jalapine, with ten or twelve grains of white sugar, divided into four powders, one to be given every five hours, and when all the powders were given to be followed by a full dose of Castor oil. At near one o'clock on the morning of Friday the 18th inst., I was summoned to see the deceased who was alarmingly ill. I waited on the patient as I learned from the messenger that he was in convulsions. I directed the messenger to have the child placed in a warm bath, and said I would take some medicine with me. On reaching the house I found the child to be dead. The body was warm. I gave instructions to Constable Miller to acquaint Coroner Scott with the circumstances of the child's death, with the view of an inquest being held. I have a dispensary establishment, and none but my wife has access to my drugs. All the medicines in my store have permanent positions, and are not liable to be disturbed, so much so that I believe I could go down in the darkness of the night and put my hand on any bottle I required. I keep poisonous drugs in my store which are kept separate from the others. Laudanum -Oxalic acid, Strychnine, Tincture of Aconite are all labelled "poison." I have no diluted



preparations of any of the foregoing medicines marked as poisons. At the time of the death of the child, the bottle of Strychnine was on the same shelf as that of the bottle of Santonine, separated by some five or six bottles containing pills and a bottle of Nitrate of silver. I have since removed the bottle to an upper shelf where it now stands. The bottles now produced contain respectively Santonine and Strychnine, and were the same as those holding these medicines at the death of deceased. The labels have not been altered. I was induced to alter the positions of the bottles on the suggestion of Dr. Berryman."

WITNESS resumed—After hearing this statement I and jury accompanied by defendant went to the defendant's store to see the position of the bottles in the defendant's store. On our return the defendant did not accompany us, and could not be found that night or the following day. That is the reason the deposition was not signed. (The witness then explained the position of the bottles, and stated that the bottles of strychnine and santonine were on the same shelf separated with some boxes of pills). The defendant stated at the inquest that the bottle of strychnine after the death of the child was removed to a shelf higher up. The bottle containing the strychnine was a small one, and the bottle containing the santonine a large one. Santonine is in the form of crystals, and of a yellowish appearance. I have seen it quite white. Strychnine is a white powder, but sometimes crystalline. It is, however, usually in a powdered state. It is always white. The bottles produced are like the bottles from which santonine and strychnine are usually dispensed from druggists' stores. The bottles produced are not those used by the defendant in his store, but bear, I think, nearly the same relative proportions as to size. Mr. Taylor gave me three powders at the inquest. I sealed them up, and gave them to constable Williams to take to the police station. I called at the station and told the sergeant on duty that in the event of any medical gentleman coming to investigate the case, the powders were to be given up to him. I held the inquest at the request of the child's father. The defendant says in his statement that he sent for me, but the messenger never called.

To Mr. CAMERON.—I am not prepared to say that the strychnine at Dr. Hoare's was in the form of crystals.

Mr. CAMERON.—Then why did you not bring strychnine in crystals.

WITNESS.—Because I had'nt it in my possession.

Mr. CAMERON.—Would not crystallized strychnine and crystallized santonine have been more alike than those produced?

WITNESS.—Yes. Dr. Hoare, in answer to a question, commenced the statement. I believe that the examination at Apothecaries' Hall, London, is very strict. The prescription which Dr. Hoare made up, had he used santonine, would be good for worms. I could make no objection to it.

Constable WILLIAMS proved that he attended the inquest, and received a sealed parcel containing the powders from Dr. Scott, and delivered them to Professor Croft. I received them on the 18th and delivered them on the 21st. I took a receipt from Professor Croft.

Dr. RICHARDSON.—I was called upon to make the post mortem examination upon the body of deceased, by Coroner Scott. I made the examination on the afternoon of the 19th, and completed it on the 22nd. The analysis of the contents of the stomach was made by Professor Croft on the 21st. The body was that of a healthy, well developed boy. I thought the pupils of the eyes were more dilated than they should be. I examined every one of the organs of the body, and found every one of them perfectly healthy. I mean so far as disease is concerned. There were marks of congestion of the brain, and those symptoms which are generally observed in persons who have been poisoned by strychnine. I had no reason to think that deceased died from natural causes. I observed also that the large sigmoid flexure of the large intestine was greatly distended with flatus. I have never seen this alluded to in any work in which the appearances after poisoning by strychnine are mentioned. Four small worms were found in the in-

testines. I also observed that the blood had a dark fluid appearance, and presented the usual appearances of poisoning by strychnine. The bladder was full, which is not common. Taylor reports that the bladder has been found full, as on this occasion. Upon removing the stomach and intestines, I put them in a jar, and conveyed them to Professor Croft for analysis. I was present at the analysis of the stomach, and while Professor Croft was testing the powders. The contents of the stomach were examined on the 21st. The stomach was found to contain strychnine. It was easy of detection, and there seemed to be a large quantity present. There was more than half a grain of strychnine found in one of the powders. There appeared to be more left in the powder. The sixteenth part of a grain has killed a child between two and three years in about twenty-five minutes. Half a grain has been known to kill an adult. The symptoms described were the usual marked symptoms of poisoning by strychnine. I consider that the child died from the effects of poisoning by strychnine. I think the prescription of defendant for worms was, 6 grains of santonine, 6 grains of scammony, 2 grains of jalapine, with 10 or 12 grains white sugar to be made into four powders, one to be given every five hours, to be followed by a dose of castor oil. I suppose that strychnine must have been taken for santonine by Dr. Hoare.

To Mr. CAMERON.—I cannot speak as to the importation of strychnine. I have only seen it in the powdered state. I do not dispense medicines, but I am well acquainted with it. It has generally what I would call a "dim" or "dirty" white appearance. Santonine is also a poison in large doses. Santonine is vegetable, and is extracted from a worm seed.

Prof. Croft said—On the evening of the 21st; I received a small package from Constable Williams, containing three powders, with a request from Coroner Scott to have them analyzed. Dr. Richardson left me the contents of the stomach in a sealed up jar on the night of the 19th. I made a chemical examination of the contents of the stomach of the late Franklin Alfred Taylor, and of some powders said to have been administered to the deceased. The contents of the stomach were small in quantity, thick and ropy, from the presence of a quantity of mucus and undigested food. The whole was digested with water and a little acetic acid and filtered. The filtered solution, made alkaline by ammonia and shaken with ether; the ethereal solution drawn off and evaporated. The residue was tested for strychnine by means of sulphuric acid and bichromate of potassa. Unmistakeable evidences of the presence of strychnine were obtained. No attempt was made to determine the quantity procured, on account of want of time. One of the powders was digested with alcohol. The alcoholic solution left on evaporation a residue weighing rather more than three grains. The residue was tested with water and left an insoluble resinous substance. The filtered solution was tested with ammonia and ether as in the former case, but owing to want of time the whole of the substance soluble in ether was not extracted. The ethereal solution on evaporation left a residue weighing about half a grain. This residue was proved to be strychnine by the same test as that applied to that extracted from the contents of the stomach, and also by the oxide of manganese test. As before mentioned there was not time to extract from the aqueous solution the whole of the strychnine or other poisonous substance by means of ether; a white substance was left, which on examination proved to be strychnine, or at least to contain a considerable quantity of that substance. The quantity of strychnine from one of the powders if carefully extracted must have been considerably over half a grain. I extracted  $1\frac{1}{2}$  grain of strychnine from one of the powders. I could have extracted more from the intestines than I did. Strychnine rapidly absorbs, and is found in the tissues. From the quantity found in the stomach, I could not state the quantity administered, as it is rapidly absorbed. There was sufficient found to cause death. Santonine is almost always crystallized. The usual form of strychnine in the drug shops is in a powdered state. It is also found in a crystallized state.

This closed the case for the Crown.

## THE DEFENCE.

Dr. PHILBRICK, Yorkville, examined by Mr. Cameron, said—I have known the defendant for more than a year; that is all the time he has lived in the village. I identify the diploma from Apothecaries' Hall, London, granted to Richard Collier Hoare, to the effect that he is well qualified to practice as an apothecary. Dr. Hoare is licensed by the Hall to practise in England and Wales. I have ordered Dr. Hoare to make up prescriptions for myself and family. I believe my patients have had prescriptions made up at his shop. I know nothing about his skill in medicine. I have seen strychnine once in crystals. It was a pure white, and the crystals seemed smaller than the santonine now produced. I have seen santonine perfectly white. A man who has passed the Apothecaries' Hall has a legal right to dispense medicines, although he might not be qualified to do so. Some examinations for the practice of medicine in Canada are not examinations at all, and are paltry and low. (Laughter.)

To Mr. Dempsey—I remember Dr. Hoare on one occasion sent different medicines than those ordered, for a patient of mine. The medicines sent would not have done any harm. They were bitter, and if taken would have made the person sick, instead of giving him an appetite as was intended. (Laughter.)

To the Court—I decline answering whether he is a person of steady habits.

Re-examined by Mr. CAMERON.—I have dealt with Dr. Hoare since the time referred to about sending the wrong medicines to my patient.

Dr. BERRYMAN.—I am professor of materia medica in Victoria College. I have been often in Dr. Hoare's establishment, and have always found him very accurate in making up prescriptions. I advised him to change the position of the bottle of strychnine after the first day of the inquest. The strychnine was in a crystallized state. The vials containing strychnine and santonine, produced by Dr. Scott, are disproportionate to those in Dr. Hoare's store. I examined the santonine and strychnine, and they seemed much alike. The case in which the bottles were kept contained a large quantity of poison of various descriptions in bottles; and other medicines. The santonine and strychnine were on the same shelf, and after the accident I suggested their separation.

To Mr. Dempsey.—I had observed the position of the bottles before the death of the child, I did not notice that the strychnine was in a crystallized state until I examined it while the inquest was sitting. Santonine turns yellow on being exposed to light. It is white originally. I cannot swear the strychnine was marked "poison." I think it was not.

To the Court.—I could not have detected strychnine from santonine in Mr. Hoare's shop by candle light.

Mr. ALBERT PRINCE, barrister, said:—I reside in Yorkville, and have known the defendant for about a year and a half. I have always dealt with Dr. Hoare for drugs and medicines. I was recommended to deal with him by Dr. Arnoldi. I had every confidence in Dr. Hoare and had no reason to complain of him.

This finished the defence.

Mr. M. C. CAMERON, in addressing the jury, made a powerful and touching appeal on behalf of his client. He said he was an old man who had not many years to live, and that the only relative he had on this side the Atlantic was his partner in life, equally aged. He said a solemn responsibility rested on the jury, as in the event of their returning a verdict of guilty, the defendant in the dock might be consigned for life to the penitentiary. The parents of the little one, who had gone to another and a better world, had no animosity against his (Mr. Cameron's) client, and if they had their wish he would be removed from the dock, for they know well that no punishment which he might receive would bring back their little child. In a Christian spirit they forgave him, as they well knew that the death of the child had been the result of accident. He (Mr. Cameron) had presented the diploma, which had been issued in the year 1830, to defendant, by the Apothecaries' Hall of London. This he had held for thirty years, and it gave him the privilege to dispense medicines in England and Wales. Before he received

this diploma he had to undergo a searching examination—a much more searching examination than many who were at the present day practising in Canada. It was true he had not, like Dr. Scott and some of the others who were examined to day, a license to kill—(laughter)—his was only to dispense medicine. Mr. Cameron then proceeded to review the evidence at considerable length, and eloquently contended that the case was one which was known in the law as death by misadventure. He cited several cases in support of the view he took of the case, and said he had every confidence in leaving the issue in the hands of the jury.

Mr. DEMPSEY addressed the jury on behalf of the Crown, and contended that the law held persons like the defendant liable for any mistakes which they might commit. A painful duty devolved upon him to prosecute an aged and respectable-looking man like the defendant, but he was determined to perform that duty to the best of his ability. Mr. Dempsey then quoted a number of English authorities to show that it had been held in England that when poison had been administered in a manner similar to that narrated by the witnesses, that the dispensing druggist had been held responsible.

The learned JUDGE briefly summed up.

The Jury retired to their room. After an absence of about half an hour they returned into Court, and gave in a verdict of "guilty," with a strong recommendation to mercy.

His LORDSHIP said he would give the recommendation of the jury due consideration. The prisoner was then removed.

#### EDITORIAL SUMMARY.

*Rape committed during magnetic sleep.*—*La Presse Médical de Marseilles* narrates the case of a girl, aged 18, who being sick consulted a man who professed to cure diseases by the agency of animal magnetism, visited him daily, and after four months, perceiving that she was pregnant, applied to the police authorities, who handed her over to Dr. Costa, a Director of the School of the Medicine and to Dr. Brognier, an eminent surgeon, for an opinion whether she was pregnant, the duration of her pregnancy, and if she could be violated in ignorance, under magnetic influences, who confirmed all the facts. This event proves that young girls should be cautious how they consult "electrobiologists" as they term themselves, as they may receive in exchange for their fees more than they have bargained for.

*Suppression of Quackery in France.*—The Paris Correspondent of the London Lancet states that the local societies for the suppression of Quackery in France are at present very active. The tribunal of Province has lately condemned for illegal exercise of medicine, a somnambulist (an old offender) to the payment of 14 pieces of 10 francs each, for as many delinquencies, besides costs, and 200 francs damages to the local medical society of the district.

*The London Times.*—Young medical fledglings, when they cannot get their lucubrations inserted in any of the medical journals, are now in the habit of sending them to the Times, which affords them the necessary space. The editor of that leading political journal has been lately asked by a country gentleman the quantity of Belladonna he should give his child in scarlatina; and in a late number the same journal has given insertion to a somewhat lengthy paper on amputations. What next?

*Climate of Peking.*—Sir John Herschell states that in Peking the winters are on an average about 10° colder, and the summers 19° warmer than in London. The annual amount of rain is about  $\frac{1}{2}$  greater.

*Sir Henry Marsh, Bart.*—The profession in Dublin is talking about erecting a monument, to this late highly esteemed gentleman, and "Merrion square," near his own late residence, is the proposed intended site for it. We consider this a graceful tribute.

*Committal of a Midwife for Manslaughter.*—Mrs. Webby attended a Mrs. Lawless in

accouchement. Rupture of the uterus occurred with of course cessation of the pains. To reinduce them she administered Ergot. The situation of the woman with absence of the pains alarming the friends, they sent for Mr. Rowton, a surgeon, who immediately delivered her, but she died a few hours afterwards. A coroner's inquest and an autopsy revealed a rupture of the womb, and the jury returned a verdict of manslaughter. The circumstance occurred at Dudley in England, and when committed for trial the midwife said with the greatest apathy: "They could do what they liked with her." The mortality from midwife practice is so great that we wonder women trust themselves in their hands.

*Crimes in New York.*—During the year 1860, according to the American Medical Times, 116 persons died by the hand of violence. Of this number 59 are recorded as homicides, and 57 as suicides, and of the latter 57, twenty-four effected their purpose by poison obtained of course from the druggists. This able periodical has a sharp article on the subject, and in concluding it, calls the druggists to severe account.

*Death from chlorate of potassa.*—This medicine has lately been brought forward again as a remedy in tuberculosis. A fatal case from its employment has lately occurred in Bergen, N. J. The physician's name is not given, but it appears that Mr. Tuttle, labouring under phthisis consulted one, who prescribed eight ounces of chlorate of potassa to be divided into twelve packages, one of which was to be taken daily in a pint of water. The patient took four of the powders, when severe abdominal pains ensued with vomiting, followed by death. A *post-mortem* examination was held, at a coroner's inquest upon the body of the deceased, by Drs. Booth and Alcott of Jersey City. They found the external coat of the stomach in a state of inflammation, the internal coat yellow, and so soft as to be easily scraped off by the handle of a scalpel, leaving the muscular coat bare; the lungs were diseased, but not to any very considerable extent. Dr. Booth stated at the inquest "that he had known bad effects follow from twenty grains given every three hours."

*The Sponge Fishery of the Ottoman Archipelago.*—It appears that 600 boats, and 4200 men are now employed in this fishery. The sponge is found at an average depth of thirty fathoms, and a good diver will make from eight to ten dives in a day.

*The Cinchona barks.*—The increasing demand for these barks is suggesting additional means of supply. The Dutch and English governments have imported the new plants, the former into Java, the latter into India, and the results have been most encouraging. It is stated that already in Java, the young trees have afforded a return of new bark.

*Adulteration of Bread with Alum.*—On Saturday December 15, five bakers were summoned before Mr. Ingham at the Wandsworth Police Court for unlawfully using alum in the manufacture of their bread. The analyses were made by Dr. Normandy, and the proportions were found to vary from 27 to 80 grains of alum in the quarter loaf. The information was laid under the 5 of Geo. 4, cap. 106. The penalties inflicted were £5 and £10 each with costs ranging from £3 5s. to £4 8s.—*Pharmaceutic Journal.*

*Poisoning by Opium.*—An inquest was held at Aldershot on the body of Samuel Wiles Hillier, paymaster in the 9th Lancers, who had shot himself. The following is an extract from a letter addressed to a comrade: "I really believe I am poison proof. About ten days ago I took half an ounce of laudanum, enough to poison a horse. It had no effect on me. After that I took eight grains of opium; again no effect, except a slight drowsiness. Then four grains of morphia; no effect. I then took five grains of liq. opii. sedativus, with the same result. My last mode of exit is a sure one."—*Pharmaceutic Journal.*

*The Etherization Patent.*—However derogatory to Dr. C. T. Jackson and Mr. W. T. Morton it may have been, to have patented their discovery of the employment of Ether as an Anæsthetic in surgical operations, the patent, however, after the lapse of fourteen years expired, and the latter person filed in the office of the Commissioner of Patents lately an application for its renewal, which was very properly rejected. We think that the

rejection and application may be fairly contrasted, as showing as much humanity on the one hand as avarice on the other, an avarice which sought its gratification in human suffering. Mr. Morton's name in connection with Anæsthesia should be handed down to posterity in any thing but a favourable light.

*The Akbare Tuhfat.*—A Medical Journal has been established in Ooroo, East Indies, under the foregoing title. It is intended as a medium of communication between native doctors in government employ, and the native Hakims, for the improvement of Medical and Surgical knowledge, and for the general alleviation of the local diseases.—*Am. Jour. Dent. Science.*

*Chloroform in Itch.*—This remedy is becoming a general favourite among practitioners. Besides killing the Acarus, it at the same time from its sedative properties destroys the excessive irritability or itchiness of the skin.

*The Secession Movement.*—Dr. R. W. Gibbs has been appointed Surgeon General of the State, and Drs. F. P. Porcher, and J. J. Chisholm, Surgeons to the U. S. Marine Hospital, now held by S. Carolina. We are under the impression that their professional services will not be required.

*Faculty of Medicine of Paris.*—This school still, and deservedly, retains its *renomée*. 1196 students have matriculated there this last session.

*The Stomach of London.*—The appetite of London, consumes every year, 271,000 oxen, 30,000 calves, 1,500,000 sheep, and 30,000 swine, and this independent of all meat recognised under the name of poultry, game, lobsters, oysters, &c.—*Lancet.*

*Subile and Infancy.*—The Grand Jury at Warwick lately threw out a bill against Isabella Horton, whose age was stated in the calendar at 11 years, for an attempt at self murder.—*Lancet.*

*Unwholesome Meat.*—At the last City Sewers Commission in the report of the markets and slaughter houses, Dr. Letheby reported that 4132 lbs. or nearly two tons of meat had been seized during the week as unfit for human food. Of this 3080 lbs. had been seized in Newgate Market; 452 lbs. in Leadenhall, and 595 lbs. in Oldgate and Newgate. 2532 lbs. were seized on account of its being diseased; 537 lbs. because of its putridity, and 1002 lbs. by reason of the animals having died from natural causes. All of it had been sent to the boilers, and destroyed as unfit for human food. These events have originated out of the Adulteration of Food act, lately passed by the Imperial Parliament, under which Dr. Letheby has been appointed the chemical examiner.—*Med. Times*

*Influence of Pregnancy on Insanity.*—Dr. Tanner in his recent work on the "Signs and Diseases of Pregnancy," says that in his experience, insanity in women is not benefited by pregnancy, but that in two cases, which came especially under his notice, all the morbid mental symptoms were aggravated.

*The Acclimatization of Animals.*—A paper was read on this subject at a meeting of the Society of Arts in London, held on 28th Nov., by Mr. F. T. Buckland. Among other things he observed that it was remarkable that since the Christian era the only additions to our domesticated animals had been four in number, viz., in 1524, the Turkey; in 1650, the Musk or Muscovy duck; in 1725, the Gold pheasant; and in 1749, the silver pheasant; and that it was most astonishing, that though the world furnished so large a list of animals, we limited our attention to about forty three only. The conclusion of the paper was devoted to a consideration of the acclimatized breeds and animals of Great Britain.

*Gratuitous Medical Nursing in Austria.*—"In the course of the examination into the abuses in the Hospital on the Wieden it has come to light that the "Gray Sisters," who as members of the Order of St. Francis of Assisi, are not allowed to hoard money, had been enriching themselves at the expense of the patients. Each of the 126 sisters, —84 nuns, and 42 novices—receives her board and 200 fr. a year, but the rations of the patients have been greatly reduced in quantity and quality, in order that something

might be saved for religious purposes. The evidence given by the medical men proves that there is one great objection to the introduction of nuns, if not regular Sisters of Charity into Hospitals. They object to perform for the male sex those duties which are every where required of Hospital Nurses. Some Surgeons once complained to the Imperial Inspector of Prisons of the great want of cleanliness of the 'Gray Sisters,' who have the management of all the Austrian prisons, and this gentleman replied "if the soul is well cared for, the state of the body signifies little."—*Med. Times.*

*The Neapolitan Hospitals.*—"I saw no later than three days since, the dirt on the ground of one of the wards in San Sebastian 'caked' half an inch deep, hard dirt, while the attendants were washing pots, and kettles, and plates about the beds. That I may be the more precise, it was the Sala Vittorio Emmanuele. On leaving that *Sala* I went to another, and listened to the whispered complaints of a poor fellow who had been shot through the lungs, that he had been robbed frequently, and had not that frequent attendance necessary, as the discharge from his wound was so great. 'I gave the poor fellow, some money at times,' said a lady to me, 'because they are neglected, if they do not give the *infermieri* something.' 'I was robbed by my *infermieri* of a piastre or two which Victor Emmanuel left to me' said the wounded boy; 'get me into a more central place' and I did. I said the *surveillance* of the Hospitals had been conducted principally if not altogether, by foreigners; some honorable exceptions there have been, but still the rule holds good. English ladies have sacrificed their ease and time, and one has risked her life almost in the battle field, while Neapolitans have for the most part remained at home at ease, apparently indifferent to the sufferings of their brothers.'—*Times Correspondent.*

*Toasts.*—The formula for drinking healths among the Romans was: "Bene mihi, bene vobis, bene amicæ meæ, bene omnibus nobis, bene ei qui non invidit mihi, et qui nostro gaudio gaudet." All which is very much like a paraphrase of "Our noble selves."

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#### THE NEW SYDENHAM SOCIETY.

At length three of the volumes of last year published by this Society have come to hand. We think that it is the duty of this Society to send its volumes to this country, and have them distributed among its subscribers here, as soon as they issue from the press, and are distributed in England. We have heard several complaints about the tardiness with which Canadian subscribers are supplied with their copies, and we must say, that this dissatisfaction is not unfounded, when they are aware that the Year Book, and Frerichs' work on the liver, have reached the United States some months ago. We are informed, moreover, that although a large package of volumes has arrived in this city, yet the imperfect manner in which his orders have been fulfilled, will render the Honorary Secretary unable to comply with the wishes of some new subscribers who have desired a complete set of all the published volumes. There is some mismanagement in London, which the Society would do well to look after.

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#### BOOKS, &c., RECEIVED.

- THERMO THERAPEIA**; the heat cure; or the treatment of disease by immersion of the body in heated air; by Erasmus Wilson, F. R. S., 12 mo. pamph.
- A HAND-BOOK OF HOSPITAL PRACTICE**, or an introduction to the practical study of medicine at the bedside; by Robert D. Lyons, R. C. C., &c., Physician to Jervis Street Hospital, Dublin.—New York, S. S. and W. Wood: Montreal, Dawson and Son; 12 mo. pp. 185. 1861.

*From Dr. Fenwick, Honorary Secretary of the New Sydenham Society, the following publications.*

- A CLINICAL TREATISE ON DISEASES OF THE LIVER, by DR. FREID. THEOD. FRERIGHS, &c., &c. In two vols., vol. I. London, 1860.
- CLINICAL MEMOIRS ON ABDOMINAL TUMOURS AND INLUMESCENCE, by the late DR. BRIGHT. Reprinted from the Guy's Hospital Reports. London, 1860.
- A YEAR BOOK OF MEDICINE, SURGERY, AND THEIR ALLIED SCIENCES, for 1859. London, 1860.

## BIRTHS, MARRIAGES, AND DEATHS.

## BIRTHS.

In Port Hope, on the 17th January, the wife of Dr. N. C. Curry, of a daughter.

At Tweed, on Tuesday, January 22, the wife of Dr. Pomeroy, of a son.

At Hamilton, on the 5th instant, the wife of Dr. Mackintosh, of a daughter.

## MARRIAGES.

In this city, at St. George's Church, by the Rev. Edward Rogers, B.A., Chaplain to the Forces, George Edward Gascoyne, Esq., Staff Assistant Surgeon, only son of George Gascoyne, Esq., of the Hall, Stanwick, Northamptonshire, England, to Clara Strong, eldest daughter of the late James DeLong, Esq., of San Francisco, California.

At Trinity Church, Simcoe, on the 3rd of January, by the Reverend C. Gannette, Rector of Woodhouse, Harvey John Philpot, Esq., M.R.C.S.L., to Caroline, eldest daughter of James W. Ritchie, Esq., of Simcoe.

In Hamilton, C. W., at Reddin Villa, on the 9th of January, by the Rev. Wm. Ormiston, D.D., Wm. Hamilton Taylor, M.D., of Montreal, House Surgeon to the Montreal General Hospital, (second son of Rev. Wm. Taylor, D.D.), to Jeannie, only daughter of the late Wm. Henry Taylor, of Drummondville, Niagara Falls, C. W.

At Berthier, on the 15th of January, by the Rev. Mr. Gagnon, C. D. Paradis, Esq., to Marie L. L. V. Moll, eldest daughter of Dr. L. J. Moll, of Berthier.

On the 8th December last, at Chilver's-Cotton Vicarage, near London, by the Rev. George Mackie, D.D., lately of Quebec, Dr. Francis Bowen, son of Chief Justice the Hon. Edward Bowen, of Quebec, Canada, to Constantia Caroline, second daughter of the late Robert Shore Milnes Sewell, Esq., barrister, and grand-daughter of the late Chief Justice the Hon. Jonathan Sewell, both of Quebec, Canada.

At the residence of the bride's father, Danville, Supton, C. E., on the 4th instant, by the Rev. Mr. Parker, Alfred Earnest Ecroyd, Esq., M.D., Mount Forest, C. W., to Mary youngest daughter of George Nasmith, Esq.

At Laprairie, on the 7th instant, by the Rev. Isidore Gravel, Rector of the Parish, Dr. Richard C. Dufresne, to Miss Marie Louise Alphonse Charlebois.

## DEATHS.

At London, on the 27th December, aged 56 years, Edward Rigby, M.D., President of the Obstetrical Society of London, long and most favourably known as one of the most eminent scientific accoucheurs of the metropolis, and one of the most esteemed writers and authors on obstetric subjects.

At St. Guillaume on the 25th ult., J. H. F. Armand, son of Dr. F. X. Barolette, aged 6 months and 19 days.

On Christmas day, at Granby, after a short illness, Albert Charles, sixth son of W. A. R. Gilmour, M.D., lately of Three Rivers, aged 14 years and 11 months.

At St. Andrews, County of Stormont, C. W., on the 17th January, Jane Hamilton, daughter of Ambrose Blacklock, M. D., M.R.C.S.E., and S.H.P.R.N., much and deservedly regretted.

At Quebec, on the 3rd instant, John R. Cole, Esq., L.R.C.S., Edinburgh, and formerly Army Medical Staff, aged 29 years.



ABSTRACT OF METEOROLOGICAL OBSERVATIONS AT MONTREAL IN JANUARY, 1861.

By Archibald Hall, M.D.

Table with columns: Day, DAILY MEANS OF THE (Barometer, Temperature, Dew Point, Relative Humidity, Ozone, Amount, General description), THERMOMETER (Maximum, Minimum), WIND, RAIN AND SNOW, and GENERAL OBSERVATIONS. Rows 1-31 and S's, M's.

ABSTRACT OF METEOROLOGICAL OBSERVATIONS AT TORONTO IN JANUARY, 1861.

Compiled from the Records of the Magnetic Observatory.

Table with columns: Day, DAILY MEANS OF THE (Barometer, Temperature, Relative Humidity, Amount of Cloudiness, Max/Min at 6 P.M. of next day), THERMOMETER (Max/Min at 3 P.M., Dew Point), WIND (General Direction, Mean Velocity), RAIN AND SNOW (in 24 hours ending at 6 A.M. next day), and GENERAL REMARKS. Rows 1-31 and S's, M's.